

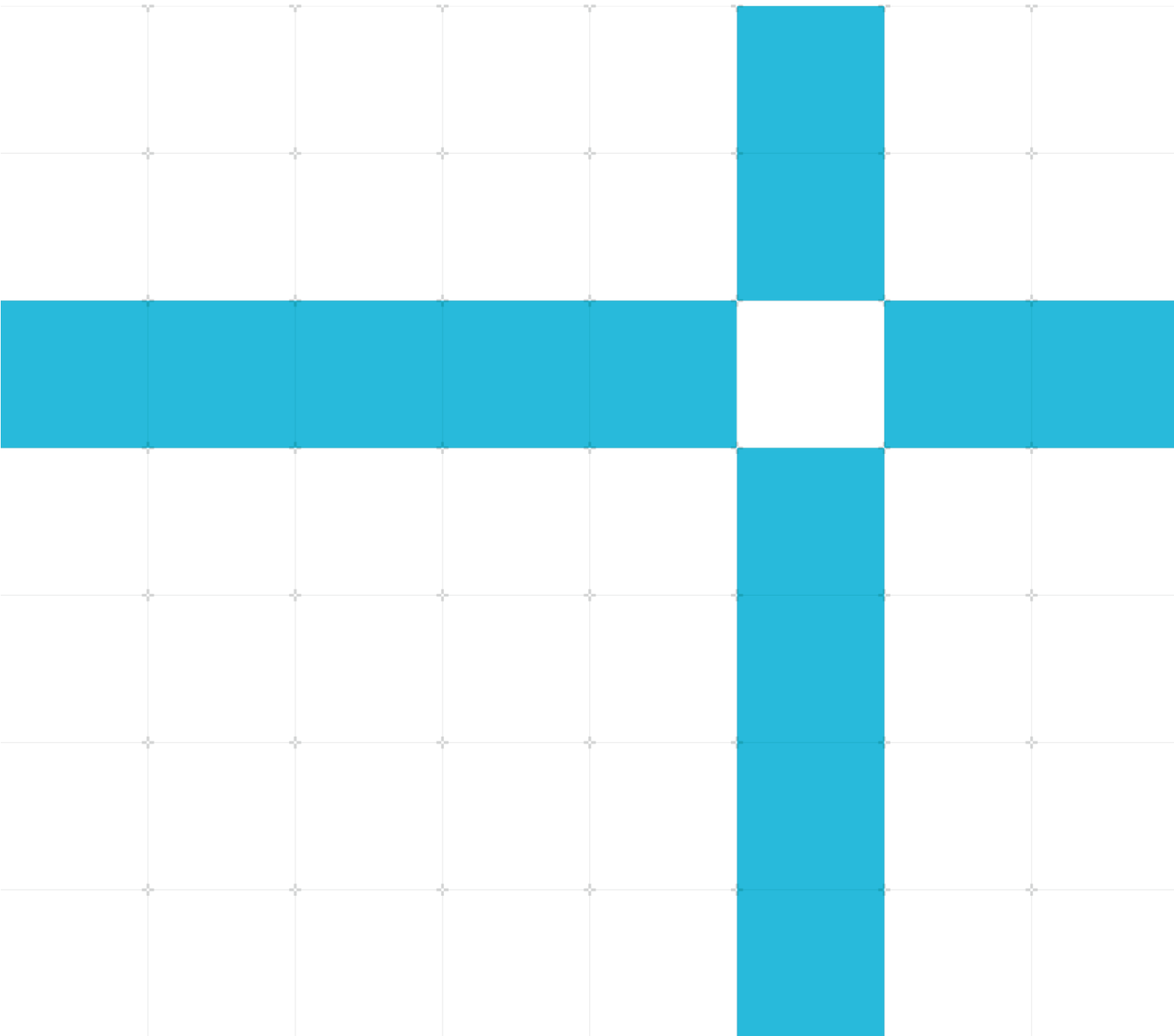


# Arm Neon Intrinsics

## Reference for ACLE Q2 2019

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**Issue D**  
IHI 0073D



## Arm Neon Intrinsic

### Reference

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### Release information

### Document history

Issue	Date	Confidentiality	Change
A	09 May 2014	Non-Confidential	First release
B	24 March 2016	Non-Confidential	Updated for ARMv8.1
C	30 March 2019	Non-Confidential	Version ACLE Q1 2019.
D	30 June 2019	Non-Confidential	Version ACLE Q2 2019.

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## Product Status

The information in this document is final, that is for a developed product.

## Web Address

<http://www.arm.com>.

# About this document

This document is complementary to the main Arm C Language Extensions (ACLE) specification, which can be found on [developer.arm.com](https://developer.arm.com).



# List of Intrinsics

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x8_t vadd_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vaddq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vadd_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	ADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vaddq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	ADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vadd_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	ADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vaddq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	ADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vadd_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	ADD Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vaddq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	ADD Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vadd_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vaddq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vadd_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	ADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vaddq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	ADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vadd_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	ADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vaddq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	ADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vadd_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	ADD Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vaddq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	ADD Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
float32x2_t vadd_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vaddq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vadd_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FADD Dd,Dn,Dm	Dd -> result	A64
float64x2_t vaddq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FADD Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int64_t vadd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	ADD Dd,Dn,Dm	Dd -> result	A64
uint64_t vadd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	ADD Dd,Dn,Dm	Dd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vaddl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SADDL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vaddl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SADDL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vaddl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SADDL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vaddl_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UADDL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vaddl_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UADDL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vaddl_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UADDL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vaddl_high_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SADDL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vaddl_high_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SADDL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vaddl_high_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SADDL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vaddl_high_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UADDL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vaddl_high_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UADDL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vaddl_high_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UADDL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int16x8_t vaddw_s8(int16x8_t a, int8x8_t b)	a -> Vn.8H b -> Vm.8B	SADDW Vd.8H,Vn.8H,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vaddw_s16(int32x4_t a, int16x4_t b)	a -> Vn.4S b -> Vm.4H	SADDW Vd.4S,Vn.4S,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vaddw_s32(int64x2_t a, int32x2_t b)	a -> Vn.2D b -> Vm.2S	SADDW Vd.2D,Vn.2D,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vaddw_u8(uint16x8_t a, uint8x8_t b)	a -> Vn.8H b -> Vm.8B	UADDW Vd.8H,Vn.8H,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vaddw_u16(uint32x4_t a, uint16x4_t b)	a -> Vn.4S b -> Vm.4H	UADDW Vd.4S,Vn.4S,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vaddw_u32(uint64x2_t a, uint32x2_t b)	a -> Vn.2D b -> Vm.2S	UADDW Vd.2D,Vn.2D,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vaddw_high_s8(int16x8_t a, int8x16_t b)	a -> Vn.8H b -> Vm.16B	SADDW2 Vd.8H,Vn.8H,Vm.16B	Vd.8H -> result	A64
int32x4_t vaddw_high_s16(int32x4_t a, int16x8_t b)	a -> Vn.4S b -> Vm.8H	SADDW2 Vd.4S,Vn.4S,Vm.8H	Vd.4S -> result	A64
int64x2_t vaddw_high_s32(int64x2_t a, int32x4_t b)	a -> Vn.2D b -> Vm.4S	SADDW2 Vd.2D,Vn.2D,Vm.4S	Vd.2D -> result	A64
uint16x8_t vaddw_high_u8(uint16x8_t a, uint8x16_t b)	a -> Vn.8H b -> Vm.16B	UADDW2 Vd.8H,Vn.8H,Vm.16B	Vd.8H -> result	A64
uint32x4_t vaddw_high_u16(uint32x4_t a, uint16x8_t b)	a -> Vn.4S b -> Vm.8H	UADDW2 Vd.4S,Vn.4S,Vm.8H	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2_t vaddw_high_u32(uint64x2_t a, uint32x4_t b)	a -> Vn.2D b -> Vm.4S	UADDW2 Vd.2D,Vn.2D,Vm.4S	Vd.2D -> result	A64
int8x8_t vhadd_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SHADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vhaddq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SHADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vhadd_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SHADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vhaddq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SHADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vhadd_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SHADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vhaddq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SHADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vhadd_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UHADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vhaddq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UHADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vhadd_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UHADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vhaddq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UHADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vhadd_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UHADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vhaddq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UHADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int8x8_t vrhadd_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SRHADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vrhaddq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SRHADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vrhadd_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SRHADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vrhaddq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SRHADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vrhadd_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SRHADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vrhaddq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SRHADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vrhadd_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	URHADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vrhaddq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	URHADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vrhadd_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	URHADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vrhaddq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	URHADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2_t vrhadd_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	URHADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vrhaddq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	URHADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int8x8_t vqadd_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SQADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vqaddq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SQADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vqadd_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqaddq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqadd_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqaddq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vqadd_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SQADD Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vqaddq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SQADD Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vqadd_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UQADD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vqaddq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UQADD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vqadd_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UQADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vqaddq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UQADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vqadd_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UQADD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vqaddq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UQADD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vqadd_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	UQADD Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vqaddq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	UQADD Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
int8_t vqaddb_s8(int8_t a, int8_t b)	a -> Bn b -> Bm	SQADD Bd,Bn,Bm	Bd -> result	A64
int16_t vqaddh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQADD Hd,Hn,Hm	Hd -> result	A64
int32_t vqadds_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQADD Sd,Sn,Sm	Sd -> result	A64
int64_t vqaddd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SQADD Dd,Dn,Dm	Dd -> result	A64
uint8_t vqaddb_u8(uint8_t a, uint8_t b)	a -> Bn b -> Bm	UQADD Bd,Bn,Bm	Bd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16_t vqaddh_u16(uint16_t a, uint16_t b)	a -> Hn b -> Hm	UQADD Hd,Hn,Hm	Hd -> result	A64
uint32_t vqadds_u32(uint32_t a, uint32_t b)	a -> Sn b -> Sm	UQADD Sd,Sn,Sm	Sd -> result	A64
uint64_t vqaddd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	UQADD Dd,Dn,Dm	Dd -> result	A64
int8x8_t vuqadd_s8(int8x8_t a, uint8x8_t b)	a -> Vd.8B b -> Vn.8B	SUQADD Vd.8B,Vn.8B	Vd.8B -> result	A64
int8x16_t vuqaddq_s8(int8x16_t a, uint8x16_t b)	a -> Vd.16B b -> Vn.16B	SUQADD Vd.16B,Vn.16B	Vd.16B -> result	A64
int16x4_t vuqadd_s16(int16x4_t a, uint16x4_t b)	a -> Vd.4H b -> Vn.4H	SUQADD Vd.4H,Vn.4H	Vd.4H -> result	A64
int16x8_t vuqaddq_s16(int16x8_t a, uint16x8_t b)	a -> Vd.8H b -> Vn.8H	SUQADD Vd.8H,Vn.8H	Vd.8H -> result	A64
int32x2_t vuqadd_s32(int32x2_t a, uint32x2_t b)	a -> Vd.2S b -> Vn.2S	SUQADD Vd.2S,Vn.2S	Vd.2S -> result	A64
int32x4_t vuqaddq_s32(int32x4_t a, uint32x4_t b)	a -> Vd.4S b -> Vn.4S	SUQADD Vd.4S,Vn.4S	Vd.4S -> result	A64
int64x1_t vuqadd_s64(int64x1_t a, uint64x1_t b)	a -> Dd b -> Dn	SUQADD Dd,Dn	Dd -> result	A64
int64x2_t vuqaddq_s64(int64x2_t a, uint64x2_t b)	a -> Vd.2D b -> Vn.2D	SUQADD Vd.2D,Vn.2D	Vd.2D -> result	A64
int8_t vuqaddb_s8(int8_t a, uint8_t b)	a -> Bd b -> Bn	SUQADD Bd,Bn	Bd -> result	A64
int16_t vuqaddh_s16(int16_t a, uint16_t b)	a -> Hd b -> Hn	SUQADD Hd,Hn	Hd -> result	A64
int32_t vuqadds_s32(int32_t a, uint32_t b)	a -> Sd b -> Sn	SUQADD Sd,Sn	Sd -> result	A64
int64_t vuqaddd_s64(int64_t a, uint64_t b)	a -> Dd b -> Dn	SUQADD Dd,Dn	Dd -> result	A64
uint8x8_t vsqadd_u8(uint8x8_t a, int8x8_t b)	a -> Vd.8B b -> Vn.8B	USQADD Vd.8B,Vn.8B	Vd.8B -> result	A64
uint8x16_t vsqaddq_u8(uint8x16_t a, int8x16_t b)	a -> Vd.16B b -> Vn.16B	USQADD Vd.16B,Vn.16B	Vd.16B -> result	A64
uint16x4_t vsqadd_u16(uint16x4_t a, int16x4_t b)	a -> Vd.4H b -> Vn.4H	USQADD Vd.4H,Vn.4H	Vd.4H -> result	A64
uint16x8_t vsqaddq_u16(uint16x8_t a, int16x8_t b)	a -> Vd.8H b -> Vn.8H	USQADD Vd.8H,Vn.8H	Vd.8H -> result	A64
uint32x2_t vsqadd_u32(uint32x2_t a, int32x2_t b)	a -> Vd.2S b -> Vn.2S	USQADD Vd.2S,Vn.2S	Vd.2S -> result	A64
uint32x4_t vsqaddq_u32(uint32x4_t a, int32x4_t b)	a -> Vd.4S b -> Vn.4S	USQADD Vd.4S,Vn.4S	Vd.4S -> result	A64
uint64x1_t vsqadd_u64(uint64x1_t a, int64x1_t b)	a -> Dd b -> Dn	USQADD Dd,Dn	Dd -> result	A64
uint64x2_t vsqaddq_u64(uint64x2_t a, int64x2_t b)	a -> Vd.2D b -> Vn.2D	USQADD Vd.2D,Vn.2D	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8_t vsqaddb_u8(uint8_t a, int8_t b)	a -> Bd b -> Bn	USQADD Bd,Bn	Bd -> result	A64
uint16_t vsqaddh_u16(uint16_t a, int16_t b)	a -> Hd b -> Hn	USQADD Hd,Hn	Hd -> result	A64
uint32_t vsqadds_u32(uint32_t a, int32_t b)	a -> Sd b -> Sn	USQADD Sd,Sn	Sd -> result	A64
uint64_t vsqaddd_u64(uint64_t a, int64_t b)	a -> Dd b -> Dn	USQADD Dd,Dn	Dd -> result	A64
int8x8_t vaddhn_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	ADDHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
int16x4_t vaddhn_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	ADDHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
int32x2_t vaddhn_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	ADDHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
uint8x8_t vaddhn_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	ADDHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vaddhn_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	ADDHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
uint32x2_t vaddhn_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	ADDHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
int8x16_t vaddhn_high_s16(int8x8_t r, int16x8_t a, int16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	ADDHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
int16x8_t vaddhn_high_s32(int16x4_t r, int32x4_t a, int32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	ADDHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
int32x4_t vaddhn_high_s64(int32x2_t r, int64x2_t a, int64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	ADDHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
uint8x16_t vaddhn_high_u16(uint8x8_t r, uint16x8_t a, uint16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	ADDHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
uint16x8_t vaddhn_high_u32(uint16x4_t r, uint32x4_t a, uint32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	ADDHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
uint32x4_t vaddhn_high_u64(uint32x2_t r, uint64x2_t a, uint64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	ADDHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
int8x8_t vraddhn_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	RADDHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
int16x4_t vraddhn_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	RADDHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
int32x2_t vraddhn_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	RADDHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
uint8x8_t vraddhn_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	RADDHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vraddhn_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	RADDHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
uint32x2_t vraddhn_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	RADDHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16_t vraddhn_high_s16(int8x8_t r, int16x8_t a, int16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	RADDHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
int16x8_t vraddhn_high_s32(int16x4_t r, int32x4_t a, int32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	RADDHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
int32x4_t vraddhn_high_s64(int32x2_t r, int64x2_t a, int64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	RADDHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
uint8x16_t vraddhn_high_u16(uint8x8_t r, uint16x8_t a, uint16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	RADDHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
uint16x8_t vraddhn_high_u32(uint16x4_t r, uint32x4_t a, uint32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	RADDHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
uint32x4_t vraddhn_high_u64(uint32x2_t r, uint64x2_t a, uint64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	RADDHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
int8x8_t vmul_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	MUL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vmulq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	MUL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vmul_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	MUL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vmulq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	MUL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vmul_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	MUL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vmulq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	MUL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vmul_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	MUL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vmulq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	MUL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vmul_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	MUL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vmulq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	MUL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vmul_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	MUL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vmulq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	MUL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vmul_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMUL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vmulq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMUL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
poly8x8_t vmul_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	PMUL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vmulq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	PMUL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x1_t vmul_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FMUL Dd,Dn,Dm	Dd -> result	A64
float64x2_t vmulq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMUL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vmulx_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMULX Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vmulqx_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMULX Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x1_t vmulx_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FMULX Dd,Dn,Dm	Dd -> result	A64
float64x2_t vmulqx_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMULX Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32_t vmulxs_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FMULX Sd,Sn,Sm	Sd -> result	A64
float64_t vmulxd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FMULX Dd,Dn,Dm	Dd -> result	A64
float32x2_t vmulx_lane_f32(float32x2_t a, float32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	FMULX Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
float32x4_t vmulqx_lane_f32(float32x4_t a, float32x4_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	FMULX Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vmulx_lane_f64(float64x1_t a, float64x1_t v, const int lane)	a -> Dn v -> Vm.1D lane == 0	FMULX Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vmulqx_lane_f64(float64x2_t a, float64x2_t v, const int lane)	a -> Vn.2D v -> Vm.1D lane == 0	FMULX Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vmulxs_lane_f32(float32_t a, float32x2_t v, const int lane)	a -> Sn v -> Vm.2S 0 <= lane <= 1	FMULX Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vmulxd_lane_f64(float64_t a, float64x1_t v, const int lane)	a -> Dn v -> Vm.1D lane == 0	FMULX Dd,Dn,Vm.D[lane]	Dd -> result	A64
float32x2_t vmulx_laneq_f32(float32x2_t a, float32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	FMULX Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
float32x4_t vmulqx_laneq_f32(float32x4_t a, float32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	FMULX Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vmulx_laneq_f64(float64x1_t a, float64x2_t v, const int lane)	a -> Dn v -> Vm.2D 0 <= lane <= 1	FMULX Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vmulqx_laneq_f64(float64x2_t a, float64x2_t v, const int lane)	a -> Vn.2D v -> Vm.2D 0 <= lane <= 1	FMULX Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vmulxs_laneq_f32(float32_t a, float32x4_t v, const int lane)	a -> Sn v -> Vm.4S 0 <= lane <= 3	FMULX Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vmulxd_laneq_f64(float64_t a, float64x2_t v, const int lane)	a -> Dn v -> Vm.2D 0 <= lane <= 1	FMULX Dd,Dn,Vm.D[lane]	Dd -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x2_t vdiv_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FDIV Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vdivq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FDIV Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x1_t vdiv_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FDIV Dd,Dn,Dm	Dd -> result	A64
float64x2_t vdivq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FDIV Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int8x8_t vmla_s8(int8x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	MLA Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vmlaq_s8(int8x16_t a, int8x16_t b, int8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	MLA Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vmla_s16(int16x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	MLA Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vmlaq_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	MLA Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vmla_s32(int32x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	MLA Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vmlaq_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	MLA Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vmla_u8(uint8x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	MLA Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vmlaq_u8(uint8x16_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	MLA Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vmla_u16(uint16x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	MLA Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vmlaq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	MLA Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vmla_u32(uint32x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	MLA Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vmlaq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	MLA Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vmla_f32(float32x2_t a, float32x2_t b, float32x2_t c)	a -> N/A b -> N/A c -> N/A	RESULT[I] = a[i] + (b[i] * c[i]) for i = 0 to 1	N/A -> result	v7/A32/A64
float32x4_t vmlaq_f32(float32x4_t a, float32x4_t b, float32x4_t c)	a -> N/A b -> N/A c -> N/A	RESULT[I] = a[i] + (b[i] * c[i]) for i = 0 to 3	N/A -> result	v7/A32/A64
float64x1_t vmla_f64(float64x1_t a, float64x1_t b, float64x1_t c)	a -> N/A b -> N/A c -> N/A	RESULT[I] = a[i] + (b[i] * c[i]) for i = 0	N/A -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x2_t vmlaq_f64(float64x2_t a, float64x2_t b, float64x2_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] + (b[i] * c[i]) for i = 0 to 1	N/A -> result	A64
int16x8_t vmlal_s8(int16x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8H b -> Vn.8B c -> Vm.8B	SMLAL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vmlal_s16(int32x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	SMLAL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vmlal_s32(int64x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	SMLAL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vmlal_u8(uint16x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8H b -> Vn.8B c -> Vm.8B	UMLAL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vmlal_u16(uint32x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	UMLAL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vmlal_u32(uint64x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	UMLAL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vmlal_high_s8(int16x8_t a, int8x16_t b, int8x16_t c)	a -> Vd.8H b -> Vn.16B c -> Vm.16B	SMLAL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vmlal_high_s16(int32x4_t a, int16x8_t b, int16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	SMLAL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vmlal_high_s32(int64x2_t a, int32x4_t b, int32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	SMLAL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vmlal_high_u8(uint16x8_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.8H b -> Vn.16B c -> Vm.16B	UMLAL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vmlal_high_u16(uint32x4_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	UMLAL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vmlal_high_u32(uint64x2_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	UMLAL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int8x8_t vmls_s8(int8x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	MLS Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vmlsq_s8(int8x16_t a, int8x16_t b, int8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	MLS Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vmls_s16(int16x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	MLS Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vmlsq_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	MLS Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vmls_s32(int32x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	MLS Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vmlsq_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	MLS Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vmls_u8(uint8x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	MLS Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vmlsq_u8(uint8x16_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	MLS Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vmls_u16(uint16x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	MLS Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vmlsq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	MLS Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vmls_u32(uint32x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	MLS Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vmlsq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	MLS Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vmls_f32(float32x2_t a, float32x2_t b, float32x2_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] - (b[i] * c[i]) for i = 0 to 1	N/A -> result	v7/A32/A64
float32x4_t vmlsq_f32(float32x4_t a, float32x4_t b, float32x4_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] - (b[i] * c[i]) for i = 0 to 3	N/A -> result	v7/A32/A64
float64x1_t vmls_f64(float64x1_t a, float64x1_t b, float64x1_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] - (b[i] * c[i]) for i = 0	N/A -> result	A64
float64x2_t vmlsq_f64(float64x2_t a, float64x2_t b, float64x2_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] - (b[i] * c[i]) for i = 0 to 1	N/A -> result	A64
int16x8_t vmlsl_s8(int16x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8H b -> Vn.8B c -> Vm.8B	SMLS Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vmlsl_s16(int32x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	SMLS Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vmlsl_s32(int64x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	SMLS Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vmlsl_u8(uint16x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8H b -> Vn.8B c -> Vm.8B	UMLS Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vmlsl_u16(uint32x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	UMLS Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vmlsl_u32(uint64x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	UMLS Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vmlsl_high_s8(int16x8_t a, int8x16_t b, int8x16_t c)	a -> Vd.8H b -> Vn.16B c -> Vm.16B	SMLS2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vmlsl_high_s16(int32x4_t a, int16x8_t b, int16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	SMLSLS2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vmlsl_high_s32(int64x2_t a, int32x4_t b, int32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	SMLSLS2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vmlsl_high_u8(uint16x8_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.8H b -> Vn.16B c -> Vm.16B	UMLSLS2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vmlsl_high_u16(uint32x4_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	UMLSLS2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vmlsl_high_u32(uint64x2_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	UMLSLS2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
float32x2_t vfma_f32(float32x2_t a, float32x2_t b, float32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	FMLA Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vfmaq_f32(float32x4_t a, float32x4_t b, float32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	FMLA Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vfma_f64(float64x1_t a, float64x1_t b, float64x1_t c)	a -> Dd b -> Dn c -> Dm	FMADD Dd,Dn,Dm,Da	Dd -> result	A64
float64x2_t vfmaq_f64(float64x2_t a, float64x2_t b, float64x2_t c)	a -> Vd.2D b -> Vn.2D c -> Vm.2D	FMLA Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vfma_lane_f32(float32x2_t a, float32x2_t b, float32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	FMLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
float32x4_t vfmaq_lane_f32(float32x4_t a, float32x4_t b, float32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	FMLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vfma_lane_f64(float64x1_t a, float64x1_t b, float64x1_t v, const int lane)	a -> Dd b -> Dn v -> Vm.1D lane == 0	FMLA Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vfmaq_lane_f64(float64x2_t a, float64x2_t b, float64x1_t v, const int lane)	a -> Vd.2D b -> Vn.2D v -> Vm.1D lane == 0	FMLA Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vfmas_lane_f32(float32_t a, float32_t b, float32x2_t v, const int lane)	a -> Sd b -> Sn v -> Vm.2S 0 <= lane <= 1	FMLA Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vfmad_lane_f64(float64_t a, float64_t b, float64x1_t v, const int lane)	a -> Dd b -> Dn v -> Vm.1D lane == 0	FMLA Dd,Dn,Vm.D[lane]	Dd -> result	A64
float32x2_t vfma_laneq_f32(float32x2_t a, float32x2_t b, float32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	FMLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x4_t vfmaq_laneq_f32(float32x4_t a, float32x4_t b, float32x4_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	FMLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vfma_laneq_f64(float64x1_t a, float64x1_t b, float64x2_t v, const int lane)	a -> Dd b -> Dn v -> Vm.2D 0 <= lane <= 1	FMLA Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vfmaq_laneq_f64(float64x2_t a, float64x2_t b, float64x2_t v, const int lane)	a -> Vd.2D b -> Vn.2D v -> Vm.2D 0 <= lane <= 1	FMLA Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vfmas_laneq_f32(float32_t a, float32_t b, float32x4_t v, const int lane)	a -> Sd b -> Sn v -> Vm.4S 0 <= lane <= 3	FMLA Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vfmad_laneq_f64(float64_t a, float64_t b, float64x2_t v, const int lane)	a -> Dd b -> Dn v -> Vm.2D 0 <= lane <= 1	FMLA Dd,Dn,Vm.D[lane]	Dd -> result	A64
float32x2_t vfms_f32(float32x2_t a, float32x2_t b, float32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	FMLS Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vfmsq_f32(float32x4_t a, float32x4_t b, float32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	FMLS Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vfms_f64(float64x1_t a, float64x1_t b, float64x1_t c)	a -> Da b -> Dn c -> Dm	FMSUB Dd,Dn,Dm,Da	Dd -> result	A64
float64x2_t vfmsq_f64(float64x2_t a, float64x2_t b, float64x2_t c)	a -> Vd.2D b -> Vn.2D c -> Vm.2D	FMLS Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vfms_lane_f32(float32x2_t a, float32x2_t b, float32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	FMLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
float32x4_t vfmsq_lane_f32(float32x4_t a, float32x4_t b, float32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	FMLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vfms_lane_f64(float64x1_t a, float64x1_t b, float64x1_t v, const int lane)	a -> Dd b -> Dn v -> Vm.1D lane == 0	FMLS Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vfmsq_lane_f64(float64x2_t a, float64x2_t b, float64x1_t v, const int lane)	a -> Vd.2D b -> Vn.2D v -> Vm.1D lane == 0	FMLS Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vfms_lane_f32(float32_t a, float32_t b, float32x2_t v, const int lane)	a -> Sd b -> Sn v -> Vm.2S 0 <= lane <= 1	FMLS Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vfmsd_lane_f64(float64_t a, float64_t b, float64x1_t v, const int lane)	a -> Dd b -> Dn v -> Vm.1D lane == 0	FMLS Dd,Dn,Vm.D[lane]	Dd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x2_t vfms_laneq_f32(float32x2_t a, float32x2_t b, float32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	FMLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
float32x4_t vfmsq_laneq_f32(float32x4_t a, float32x4_t b, float32x4_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	FMLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vfms_laneq_f64(float64x1_t a, float64x1_t b, float64x2_t v, const int lane)	a -> Dd b -> Dn v -> Vm.2D 0 <= lane <= 1	FMLS Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vfmsq_laneq_f64(float64x2_t a, float64x2_t b, float64x2_t v, const int lane)	a -> Vd.2D b -> Vn.2D v -> Vm.2D 0 <= lane <= 1	FMLS Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vfms_laneq_f32(float32_t a, float32_t b, float32x4_t v, const int lane)	a -> Sd b -> Sn v -> Vm.4S 0 <= lane <= 3	FMLS Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vfmsd_laneq_f64(float64_t a, float64_t b, float64x2_t v, const int lane)	a -> Dd b -> Dn v -> Vm.2D 0 <= lane <= 1	FMLS Dd,Dn,Vm.D[lane]	Dd -> result	A64
int16x4_t vqdmulh_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQDMULH Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqdmulh_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQDMULH Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqdmulh_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQDMULH Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqdmulh_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQDMULH Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int16_t vqdmulhh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQDMULH Hd,Hn,Hm	Hd -> result	A64
int32_t vqdmulhs_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQDMULH Sd,Sn,Sm	Sd -> result	A64
int16x4_t vqrdmulh_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQRDMULH Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqrdmulh_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQRDMULH Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqrdmulh_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQRDMULH Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqrdmulh_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQRDMULH Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int16_t vqrdmulhh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQRDMULH Hd,Hn,Hm	Hd -> result	A64
int32_t vqrdmulhs_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQRDMULH Sd,Sn,Sm	Sd -> result	A64
int32x4_t vqdmulal_s16(int32x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	SQDMLAL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2_t vqdmmlal_s32(int64x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	SQDMLAL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int32_t vqdmmlalh_s16(int32_t a, int16_t b, int16_t c)	a -> Sd b -> Hn c -> Hm	SQDMLAL Sd,Hn,Hm	Sd -> result	A64
int64_t vqdmmlals_s32(int64_t a, int32_t b, int32_t c)	a -> Dd b -> Sn c -> Sm	SQDMLAL Dd,Sn,Sm	Dd -> result	A64
int32x4_t vqdmmlal_high_s16(int32x4_t a, int16x8_t b, int16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	SQDMLAL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vqdmmlal_high_s32(int64x2_t a, int32x4_t b, int32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	SQDMLAL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int32x4_t vqdmmlsl_s16(int32x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	SQDMLSL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmmlsl_s32(int64x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	SQDMLSL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int32_t vqdmmlslh_s16(int32_t a, int16_t b, int16_t c)	a -> Sd b -> Hn c -> Hm	SQDMLSL Sd,Hn,Hm	Sd -> result	A64
int64_t vqdmmlsls_s32(int64_t a, int32_t b, int32_t c)	a -> Dd b -> Sn c -> Sm	SQDMLSL Dd,Sn,Sm	Dd -> result	A64
int32x4_t vqdmmlsl_high_s16(int32x4_t a, int16x8_t b, int16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	SQDMLSL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vqdmmlsl_high_s32(int64x2_t a, int32x4_t b, int32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	SQDMLSL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int16x8_t vmull_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SMULL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vmull_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SMULL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vmull_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SMULL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vmull_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UMULL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vmull_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UMULL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vmull_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UMULL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
poly16x8_t vmull_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	PMULL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int16x8_t vmull_high_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SMULL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vmull_high_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SMULL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2_t vmull_high_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SMULL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vmull_high_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UMULL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vmull_high_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UMULL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vmull_high_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UMULL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
poly16x8_t vmull_high_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	PMULL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vqdmull_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQDMULL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmull_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQDMULL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int32_t vqdmullh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQDMULL Sd,Hn,Hm	Sd -> result	A64
int64_t vqdmulls_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQDMULL Dd,Sn,Sm	Dd -> result	A64
int32x4_t vqdmull_high_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQDMULL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vqdmull_high_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQDMULL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int8x8_t vsub_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SUB Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vsubq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SUB Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vsub_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vsubq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vsub_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vsubq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vsub_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SUB Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vsubq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SUB Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vsub_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	SUB Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vsubq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	SUB Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vsub_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	SUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vsubq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	SUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2_t vsub_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	SUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vsubq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	SUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vsub_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	SUB Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vsubq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	SUB Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
float32x2_t vsub_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vsubq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vsub_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FSUB Dd,Dn,Dm	Dd -> result	A64
float64x2_t vsubq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FSUB Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int64_t vsubd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SUB Dd,Dn,Dm	Dd -> result	A64
uint64_t vsubd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	SUB Dd,Dn,Dm	Dd -> result	A64
int16x8_t vsubl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SSUBL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vsubl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SSUBL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vsubl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SSUBL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vsubl_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	USUBL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vsubl_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	USUBL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vsubl_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	USUBL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vsubl_high_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SSUBL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vsubl_high_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SSUBL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vsubl_high_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SSUBL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vsubl_high_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	USUBL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vsubl_high_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	USUBL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vsubl_high_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	USUBL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int16x8_t vsubw_s8(int16x8_t a, int8x8_t b)	a -> Vn.8H b -> Vm.8B	SSUBW Vd.8H,Vn.8H,Vm.8B	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vsubw_s16(int32x4_t a, int16x4_t b)	a -> Vn.4S b -> Vm.4H	SSUBW Vd.4S,Vn.4S,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vsubw_s32(int64x2_t a, int32x2_t b)	a -> Vn.2D b -> Vm.2S	SSUBW Vd.2D,Vn.2D,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vsubw_u8(uint16x8_t a, uint8x8_t b)	a -> Vn.8H b -> Vm.8B	USUBW Vd.8H,Vn.8H,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vsubw_u16(uint32x4_t a, uint16x4_t b)	a -> Vn.4S b -> Vm.4H	USUBW Vd.4S,Vn.4S,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vsubw_u32(uint64x2_t a, uint32x2_t b)	a -> Vn.2D b -> Vm.2S	USUBW Vd.2D,Vn.2D,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vsubw_high_s8(int16x8_t a, int8x16_t b)	a -> Vn.8H b -> Vm.16B	SSUBW2 Vd.8H,Vn.8H,Vm.16B	Vd.8H -> result	A64
int32x4_t vsubw_high_s16(int32x4_t a, int16x8_t b)	a -> Vn.4S b -> Vm.8H	SSUBW2 Vd.4S,Vn.4S,Vm.8H	Vd.4S -> result	A64
int64x2_t vsubw_high_s32(int64x2_t a, int32x4_t b)	a -> Vn.2D b -> Vm.4S	SSUBW2 Vd.2D,Vn.2D,Vm.4S	Vd.2D -> result	A64
uint16x8_t vsubw_high_u8(uint16x8_t a, uint8x16_t b)	a -> Vn.8H b -> Vm.16B	USUBW2 Vd.8H,Vn.8H,Vm.16B	Vd.8H -> result	A64
uint32x4_t vsubw_high_u16(uint32x4_t a, uint16x8_t b)	a -> Vn.4S b -> Vm.8H	USUBW2 Vd.4S,Vn.4S,Vm.8H	Vd.4S -> result	A64
uint64x2_t vsubw_high_u32(uint64x2_t a, uint32x4_t b)	a -> Vn.2D b -> Vm.4S	USUBW2 Vd.2D,Vn.2D,Vm.4S	Vd.2D -> result	A64
int8x8_t vhsb_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SHSUB Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vhsbq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SHSUB Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vhsb_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SHSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vhsbq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SHSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vhsb_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SHSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vhsbq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SHSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vhsb_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UHSUB Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vhsbq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UHSUB Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vhsb_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UHSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vhsbq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UHSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vhsb_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UHSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vhsbq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UHSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x8_t vqsub_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SQSUB Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vqsubq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SQSUB Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vqsub_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqsubq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqsub_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqsubq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vqsub_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SQSUB Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vqsubq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SQSUB Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vqsub_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UQSUB Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vqsubq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UQSUB Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vqsub_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UQSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vqsubq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UQSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vqsub_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UQSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vqsubq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UQSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vqsub_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	UQSUB Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vqsubq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	UQSUB Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
int8_t vqsubb_s8(int8_t a, int8_t b)	a -> Bn b -> Bm	SQSUB Bd,Bn,Bm	Bd -> result	A64
int16_t vqsubh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQSUB Hd,Hn,Hm	Hd -> result	A64
int32_t vqsubs_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQSUB Sd,Sn,Sm	Sd -> result	A64
int64_t vqsubd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SQSUB Dd,Dn,Dm	Dd -> result	A64
uint8_t vqsubb_u8(uint8_t a, uint8_t b)	a -> Bn b -> Bm	UQSUB Bd,Bn,Bm	Bd -> result	A64
uint16_t vqsubh_u16(uint16_t a, uint16_t b)	a -> Hn b -> Hm	UQSUB Hd,Hn,Hm	Hd -> result	A64
uint32_t vqsubs_u32(uint32_t a, uint32_t b)	a -> Sn b -> Sm	UQSUB Sd,Sn,Sm	Sd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64_t vqsubd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	UQSUB Dd,Dn,Dm	Dd -> result	A64
int8x8_t vsubhn_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SUBHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
int16x4_t vsubhn_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SUBHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
int32x2_t vsubhn_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SUBHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
uint8x8_t vsubhn_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	SUBHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vsubhn_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	SUBHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
uint32x2_t vsubhn_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	SUBHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
int8x16_t vsubhn_high_s16(int8x8_t r, int16x8_t a, int16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	SUBHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
int16x8_t vsubhn_high_s32(int16x4_t r, int32x4_t a, int32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	SUBHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
int32x4_t vsubhn_high_s64(int32x2_t r, int64x2_t a, int64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	SUBHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
uint8x16_t vsubhn_high_u16(uint8x8_t r, uint16x8_t a, uint16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	SUBHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
uint16x8_t vsubhn_high_u32(uint16x4_t r, uint32x4_t a, uint32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	SUBHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
uint32x4_t vsubhn_high_u64(uint32x2_t r, uint64x2_t a, uint64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	SUBHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
int8x8_t vrsbhn_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	RSUBHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
int16x4_t vrsbhn_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	RSUBHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
int32x2_t vrsbhn_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	RSUBHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
uint8x8_t vrsbhn_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	RSUBHN Vd.8B,Vn.8H,Vm.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vrsbhn_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	RSUBHN Vd.4H,Vn.4S,Vm.4S	Vd.4H -> result	v7/A32/A64
uint32x2_t vrsbhn_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	RSUBHN Vd.2S,Vn.2D,Vm.2D	Vd.2S -> result	v7/A32/A64
int8x16_t vrsbhn_high_s16(int8x8_t r, int16x8_t a, int16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	RSUBHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
int16x8_t vrsbhn_high_s32(int16x4_t r, int32x4_t a, int32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	RSUBHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vrsubhn_high_s64(int32x2_t r, int64x2_t a, int64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	RSUBHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
uint8x16_t vrsubhn_high_u16(uint8x8_t r, uint16x8_t a, uint16x8_t b)	r -> Vd.8B a -> Vn.8H b -> Vm.8H	RSUBHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B -> result	A64
uint16x8_t vrsubhn_high_u32(uint16x4_t r, uint32x4_t a, uint32x4_t b)	r -> Vd.4H a -> Vn.4S b -> Vm.4S	RSUBHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H -> result	A64
uint32x4_t vrsubhn_high_u64(uint32x2_t r, uint64x2_t a, uint64x2_t b)	r -> Vd.2S a -> Vn.2D b -> Vm.2D	RSUBHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S -> result	A64
uint8x8_t vceq_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	CMEQ Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vceqq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	CMEQ Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vceq_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	CMEQ Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vceqq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	CMEQ Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vceq_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	CMEQ Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vceqq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	CMEQ Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vceq_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	CMEQ Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vceqq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	CMEQ Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vceq_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	CMEQ Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vceqq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	CMEQ Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vceq_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMEQ Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vceqq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMEQ Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint32x2_t vceq_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCMEQ Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vceqq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCMEQ Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vceq_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	CMEQ Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vceqq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	CMEQ Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vceq_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	CMEQ Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vceqq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	CMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vceq_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	CMEQ Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vceq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	CMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64x1_t vceq_p64(poly64x1_t a, poly64x1_t b)	a -> Dn b -> Dm	CMEQ Dd,Dn,Dm	Dd -> result	A32/A64
uint64x2_t vceq_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	CMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A32/A64
uint64x1_t vceq_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FCMEQ Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vceq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64_t vceqd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	CMEQ Dd,Dn,Dm	Dd -> result	A64
uint64_t vceqd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	CMEQ Dd,Dn,Dm	Dd -> result	A64
uint32_t vceqs_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FCMEQ Sd,Sn,Sm	Sd -> result	A64
uint64_t vceqd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FCMEQ Dd,Dn,Dm	Dd -> result	A64
uint8x8_t vceqz_s8(int8x8_t a)	a -> Vn.8B	CMEQ Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vceqz_s8(int8x16_t a)	a -> Vn.16B	CMEQ Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint16x4_t vceqz_s16(int16x4_t a)	a -> Vn.4H	CMEQ Vd.4H,Vn.4H,#0	Vd.4H -> result	A64
uint16x8_t vceqz_s16(int16x8_t a)	a -> Vn.8H	CMEQ Vd.8H,Vn.8H,#0	Vd.8H -> result	A64
uint32x2_t vceqz_s32(int32x2_t a)	a -> Vn.2S	CMEQ Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vceqz_s32(int32x4_t a)	a -> Vn.4S	CMEQ Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint8x8_t vceqz_u8(uint8x8_t a)	a -> Vn.8B	CMEQ Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vceqz_u8(uint8x16_t a)	a -> Vn.16B	CMEQ Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint16x4_t vceqz_u16(uint16x4_t a)	a -> Vn.4H	CMEQ Vd.4H,Vn.4H,#0	Vd.4H -> result	A64
uint16x8_t vceqz_u16(uint16x8_t a)	a -> Vn.8H	CMEQ Vd.8H,Vn.8H,#0	Vd.8H -> result	A64
uint32x2_t vceqz_u32(uint32x2_t a)	a -> Vn.2S	CMEQ Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vceqz_u32(uint32x4_t a)	a -> Vn.4S	CMEQ Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint32x2_t vceqz_f32(float32x2_t a)	a -> Vn.2S	FCMEQ Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vceqz_f32(float32x4_t a)	a -> Vn.4S	FCMEQ Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint8x8_t vceqz_p8(poly8x8_t a)	a -> Vn.8B	CMEQ Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vceqz_p8(poly8x16_t a)	a -> Vn.16B	CMEQ Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint64x1_t vceqz_s64(int64x1_t a)	a -> Dn	CMEQ Dd,Dn,#0	Dd -> result	A64
uint64x2_t vceqz_s64(int64x2_t a)	a -> Vn.2D	CMEQ Vd.2D,Vn.2D,#0	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vceqz_u64(uint64x1_t a)	a -> Dn	CMEQ Dd,Dn,#0	Dd -> result	A64
uint64x2_t vceqz_u64(uint64x2_t a)	a -> Vn.2D	CMEQ Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint64x1_t vceqz_p64(poly64x1_t a)	a -> Dn	CMEQ Dd,Dn,#0	Dd -> result	A32/A64
uint64x2_t vceqz_p64(poly64x2_t a)	a -> Vn.2D	CMEQ Vd.2D,Vn.2D,#0	Vd.2D -> result	A32/A64
uint64x1_t vceqz_f64(float64x1_t a)	a -> Dn	FCMEQ Dd,Dn,#0	Dd -> result	A64
uint64x2_t vceqz_f64(float64x2_t a)	a -> Vn.2D	FCMEQ Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint64_t vceqzd_s64(int64_t a)	a -> Dn	CMEQ Dd,Dn,#0	Dd -> result	A64
uint64_t vceqzd_u64(uint64_t a)	a -> Dn	CMEQ Dd,Dn,#0	Dd -> result	A64
uint32_t vceqzs_f32(float32_t a)	a -> Sn	FCMEQ Sd,Sn,#0	Sd -> result	A64
uint64_t vceqzd_f64(float64_t a)	a -> Dn	FCMEQ Dd,Dn,#0	Dd -> result	A64
uint8x8_t vcge_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	CMGE Vd.8B,Vm.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcgeq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	CMGE Vd.16B,Vm.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vcge_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	CMGE Vd.4H,Vm.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcgeq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	CMGE Vd.8H,Vm.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vcge_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	CMGE Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcgeq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	CMGE Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vcge_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	CMHS Vd.8B,Vm.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcgeq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	CMHS Vd.16B,Vm.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vcge_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	CMHS Vd.4H,Vm.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcgeq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	CMHS Vd.8H,Vm.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vcge_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMHS Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcgeq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMHS Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint32x2_t vcge_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCMGE Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcgeq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCMGE Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vcge_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	CMGE Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcgeq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	CMGE Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vcge_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	CMHS Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcgeq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	CMHS Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcge_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FCMGE Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcgeq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCMGE Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64_t vcged_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	CMGE Dd,Dn,Dm	Dd -> result	A64
uint64_t vcged_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	CMHS Dd,Dn,Dm	Dd -> result	A64
uint32_t vcges_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FCMGE Sd,Sn,Sm	Sd -> result	A64
uint64_t vcged_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FCMGE Dd,Dn,Dm	Dd -> result	A64
uint8x8_t vcgez_s8(int8x8_t a)	a -> Vn.8B	CMGE Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vcgezq_s8(int8x16_t a)	a -> Vn.16B	CMGE Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint16x4_t vcgez_s16(int16x4_t a)	a -> Vn.4H	CMGE Vd.4H,Vn.4H,#0	Vd.4H -> result	A64
uint16x8_t vcgezq_s16(int16x8_t a)	a -> Vn.8H	CMGE Vd.8H,Vn.8H,#0	Vd.8H -> result	A64
uint32x2_t vcgez_s32(int32x2_t a)	a -> Vn.2S	CMGE Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vcgezq_s32(int32x4_t a)	a -> Vn.4S	CMGE Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vcgez_s64(int64x1_t a)	a -> Dn	CMGE Dd,Dn,#0	Dd -> result	A64
uint64x2_t vcgezq_s64(int64x2_t a)	a -> Vn.2D	CMGE Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint32x2_t vcgez_f32(float32x2_t a)	a -> Vn.2S	FCMGE Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vcgezq_f32(float32x4_t a)	a -> Vn.4S	FCMGE Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vcgez_f64(float64x1_t a)	a -> Dn	FCMGE Dd,Dn,#0	Dd -> result	A64
uint64x2_t vcgezq_f64(float64x2_t a)	a -> Vn.2D	FCMGE Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint64_t vcgezd_s64(int64_t a)	a -> Dn	CMGE Dd,Dn,#0	Dd -> result	A64
uint32_t vcgezs_f32(float32_t a)	a -> Sn	FCMGE Sd,Sn,#0	Sd -> result	A64
uint64_t vcgezd_f64(float64_t a)	a -> Dn	FCMGE Dd,Dn,#0	Dd -> result	A64
uint8x8_t vcle_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	CMGE Vd.8B,Vm.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcleq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	CMGE Vd.16B,Vm.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vcle_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	CMGE Vd.4H,Vm.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcleq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	CMGE Vd.8H,Vm.8H,Vn.8H	Vd.8H -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2_t vcle_s32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMGE Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcleq_s32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMGE Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vcle_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	CMHS Vd.8B,Vm.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcleq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	CMHS Vd.16B,Vm.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vcle_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	CMHS Vd.4H,Vm.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcleq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	CMHS Vd.8H,Vm.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vcle_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMHS Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcleq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMHS Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint32x2_t vcle_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCMGE Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcleq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCMGE Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vcle_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	CMGE Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcleq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	CMGE Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcle_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	CMHS Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcleq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	CMHS Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcle_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FCMGE Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcleq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCMGE Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64_t vcled_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	CMGE Dd,Dm,Dn	Dd -> result	A64
uint64_t vcled_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	CMHS Dd,Dm,Dn	Dd -> result	A64
uint32_t vcles_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FCMGE Sd,Sm,Sn	Sd -> result	A64
uint64_t vcled_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FCMGE Dd,Dm,Dn	Dd -> result	A64
uint8x8_t vclez_s8(int8x8_t a)	a -> Vn.8B	CMLE Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vclezq_s8(int8x16_t a)	a -> Vn.16B	CMLE Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint16x4_t vclez_s16(int16x4_t a)	a -> Vn.4H	CMLE Vd.4H,Vn.4H,#0	Vd.4H -> result	A64
uint16x8_t vclezq_s16(int16x8_t a)	a -> Vn.8H	CMLE Vd.8H,Vn.8H,#0	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2_t vclez_s32(int32x2_t a)	a -> Vn.2S	CMLE Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vclezq_s32(int32x4_t a)	a -> Vn.4S	CMLE Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vclez_s64(int64x1_t a)	a -> Dn	CMLE Dd,Dn,#0	Dd -> result	A64
uint64x2_t vclezq_s64(int64x2_t a)	a -> Vn.2D	CMLE Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint32x2_t vclez_f32(float32x2_t a)	a -> Vn.2S	CMLE Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vclezq_f32(float32x4_t a)	a -> Vn.4S	FCMLE Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vclez_f64(float64x1_t a)	a -> Dn	FCMLE Dd,Dn,#0	Dd -> result	A64
uint64x2_t vclezq_f64(float64x2_t a)	a -> Vn.2D	FCMLE Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint64_t vclezd_s64(int64_t a)	a -> Dn	CMLE Dd,Dn,#0	Dd -> result	A64
uint32_t vclezs_f32(float32_t a)	a -> Sn	FCMLE Sd,Sn,#0	Sd -> result	A64
uint64_t vclezd_f64(float64_t a)	a -> Dn	FCMLE Dd,Dn,#0	Dd -> result	A64
uint8x8_t vcgt_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	CMGT Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcgtq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	CMGT Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vcgt_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	CMGT Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcgtq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	CMGT Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vcgt_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	CMGT Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcgtq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	CMGT Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vcgt_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	CMHI Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcgtq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	CMHI Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vcgt_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	CMHI Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcgtq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	CMHI Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vcgt_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMHI Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcgtq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMHI Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint32x2_t vcgt_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCMGT Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcgtq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCMGT Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vcgt_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	CMGT Dd,Dn,Dm	Dd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2_t vcgtq_s64(uint64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	CMGT Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64x1_t vcgt_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	CMHI Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcgtq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	CMHI Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64x1_t vcgt_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FCMGT Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcgtq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCMGT Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64_t vcgtd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	CMGT Dd,Dn,Dm	Dd -> result	A64
uint64_t vcgtd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	CMHI Dd,Dn,Dm	Dd -> result	A64
uint32_t vcgts_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FCMGT Sd,Sn,Sm	Sd -> result	A64
uint64_t vcgtd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FCMGT Dd,Dn,Dm	Dd -> result	A64
uint8x8_t vcgtz_s8(int8x8_t a)	a -> Vn.8B	CMGT Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vcgtzq_s8(int8x16_t a)	a -> Vn.16B	CMGT Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint16x4_t vcgtz_s16(int16x4_t a)	a -> Vn.4H	CMGT Vd.4H,Vn.4H,#0	Vd.4H -> result	A64
uint16x8_t vcgtzq_s16(int16x8_t a)	a -> Vn.8H	CMGT Vd.8H,Vn.8H,#0	Vd.8H -> result	A64
uint32x2_t vcgtz_s32(int32x2_t a)	a -> Vn.2S	CMGT Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vcgtzq_s32(int32x4_t a)	a -> Vn.4S	CMGT Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vcgtz_s64(int64x1_t a)	a -> Dn	CMGT Dd,Dn,#0	Dd -> result	A64
uint64x2_t vcgtzq_s64(int64x2_t a)	a -> Vn.2D	CMGT Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint32x2_t vcgtz_f32(float32x2_t a)	a -> Vn.2S	FCMGT Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vcgtzq_f32(float32x4_t a)	a -> Vn.4S	FCMGT Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vcgtz_f64(float64x1_t a)	a -> Dn	FCMGT Dd,Dn,#0	Dd -> result	A64
uint64x2_t vcgtzq_f64(float64x2_t a)	a -> Vn.2D	FCMGT Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint64_t vcgtzd_s64(int64_t a)	a -> Dn	CMGT Dd,Dn,#0	Dd -> result	A64
uint32_t vcgtzs_f32(float32_t a)	a -> Sn	FCMGT Sd,Sn,#0	Sd -> result	A64
uint64_t vcgtzd_f64(float64_t a)	a -> Dn	FCMGT Dd,Dn,#0	Dd -> result	A64
uint8x8_t vclt_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	CMGT Vd.8B,Vm.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcltq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	CMGT Vd.16B,Vm.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vclt_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	CMGT Vd.4H,Vm.4H,Vn.4H	Vd.4H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vcltq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	CMGT Vd.8H,Vm.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vclt_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	CMGT Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcltq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	CMGT Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vclt_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	CMHI Vd.8B,Vm.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcltq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	CMHI Vd.16B,Vm.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vclt_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	CMHI Vd.4H,Vm.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vcltq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	CMHI Vd.8H,Vm.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vclt_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMHI Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcltq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMHI Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint32x2_t vclt_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCMGT Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcltq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCMGT Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vclt_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	CMGT Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcltq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	CMGT Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vclt_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	CMHI Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcltq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	CMHI Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vclt_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FCMGT Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcltq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCMGT Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint64_t vcltd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	CMGT Dd,Dm,Dn	Dd -> result	A64
uint64_t vcltd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	CMHI Dd,Dm,Dn	Dd -> result	A64
uint32_t vclts_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FCMGT Sd,Sm,Sn	Sd -> result	A64
uint64_t vcltd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FCMGT Dd,Dm,Dn	Dd -> result	A64
uint8x8_t vcltz_s8(int8x8_t a)	a -> Vn.8B	CMLT Vd.8B,Vn.8B,#0	Vd.8B -> result	A64
uint8x16_t vcltzq_s8(int8x16_t a)	a -> Vn.16B	CMLT Vd.16B,Vn.16B,#0	Vd.16B -> result	A64
uint16x4_t vcltz_s16(int16x4_t a)	a -> Vn.4H	CMLT Vd.4H,Vn.4H,#0	Vd.4H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vcltzq_s16(int16x8_t a)	a -> Vn.8H	CMLT Vd.8H,Vn.8H,#0	Vd.8H -> result	A64
uint32x2_t vcltz_s32(int32x2_t a)	a -> Vn.2S	CMLT Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vcltzq_s32(int32x4_t a)	a -> Vn.4S	CMLT Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vcltz_s64(int64x1_t a)	a -> Dn	CMLT Dd,Dn,#0	Dd -> result	A64
uint64x2_t vcltzq_s64(int64x2_t a)	a -> Vn.2D	CMLT Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint32x2_t vcltz_f32(float32x2_t a)	a -> Vn.2S	FCMLT Vd.2S,Vn.2S,#0	Vd.2S -> result	A64
uint32x4_t vcltzq_f32(float32x4_t a)	a -> Vn.4S	FCMLT Vd.4S,Vn.4S,#0	Vd.4S -> result	A64
uint64x1_t vcltz_f64(float64x1_t a)	a -> Dn	FCMLT Dd,Dn,#0	Dd -> result	A64
uint64x2_t vcltzq_f64(float64x2_t a)	a -> Vn.2D	FCMLT Vd.2D,Vn.2D,#0	Vd.2D -> result	A64
uint64_t vcltzd_s64(int64_t a)	a -> Dn	CMLT Dd,Dn,#0	Dd -> result	A64
uint32_t vcltzs_f32(float32_t a)	a -> Sn	FCMLT Sd,Sn,#0	Sd -> result	A64
uint64_t vcltzd_f64(float64_t a)	a -> Dn	FCMLT Dd,Dn,#0	Dd -> result	A64
uint32x2_t vcage_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FACGE Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcageq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FACGE Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vcage_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FACGE Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcageq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FACGE Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint32_t vcages_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FACGE Sd,Sn,Sm	Sd -> result	A64
uint64_t vcaged_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FACGE Dd,Dn,Dm	Dd -> result	A64
uint32x2_t vcale_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FACGE Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcaleq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FACGE Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vcale_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FACGE Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcaleq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FACGE Vd.2D,Vm.2D,Vn.2D	Vd.2D -> result	A64
uint32_t vcales_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FACGE Sd,Sm,Sn	Sd -> result	A64
uint64_t vcaled_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FACGE Dd,Dm,Dn	Dd -> result	A64
uint32x2_t vcagt_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FACGT Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcagtq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FACGT Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vcagt_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FACGT Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vcagttq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FACGT Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint32_t vcagts_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FACGT Sd,Sn,Sm	Sd -> result	A64
uint64_t vcagtd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FACGT Dd,Dn,Dm	Dd -> result	A64
uint32x2_t vcalt_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FACGT Vd.2S,Vm.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcaltq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FACGT Vd.4S,Vm.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vcalt_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FACGT Dd,Dm,Dn	Dd -> result	A64
uint64x2_t vcaltq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FACGT Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint32_t vcalts_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FACGT Sd,Sm,Sn	Sd -> result	A64
uint64_t vcaltd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FACGT Dd,Dm,Dn	Dd -> result	A64
uint8x8_t vtst_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	CMTST Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vtstq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	CMTST Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vtst_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	CMTST Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vtstq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	CMTST Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vtst_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	CMTST Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vtstq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	CMTST Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vtst_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	CMTST Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vtstq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	CMTST Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vtst_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	CMTST Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vtstq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	CMTST Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vtst_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	CMTST Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vtstq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	CMTST Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vtst_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	CMTST Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x16_t vtstq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	CMTST Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vtst_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	CMTST Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vtstq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	CMTST Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64x1_t vtst_u64(uint64x1_t a, uint64x1_t b)	a -> Dn b -> Dm	CMTST Dd,Dn,Dm	Dd -> result	A64
uint64x2_t vtstq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	CMTST Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64x1_t vtst_p64(poly64x1_t a, poly64x1_t b)	a -> Dn b -> Dm	CMTST Dd,Dn,Dm	Dd -> result	A32/A64
uint64x2_t vtstq_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	CMTST Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A32/A64
uint64_t vtstd_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	CMTST Dd,Dn,Dm	Dd -> result	A64
uint64_t vtstd_u64(uint64_t a, uint64_t b)	a -> Dn b -> Dm	CMTST Dd,Dn,Dm	Dd -> result	A64
int8x8_t vabd_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SABD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vabdq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SABD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vabd_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SABD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vabdq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SABD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vabd_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SABD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vabdq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SABD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vabd_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UABD Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vabdq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UABD Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vabd_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UABD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vabdq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UABD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vabd_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UABD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vabdq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UABD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vabd_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FABD Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vabdq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FABD Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x1_t vabd_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FABD Dd,Dn,Dm	Dd -> result	A64
float64x2_t vabdq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FABD Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32_t vabds_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FABD Sd,Sn,Sm	Sd -> result	A64
float64_t vabdd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FABD Dd,Dn,Dm	Dd -> result	A64
int16x8_t vabdl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SABDL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vabdl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SABDL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vabdl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SABDL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vabdl_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UABDL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vabdl_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UABDL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vabdl_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UABDL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vabdl_high_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SABDL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vabdl_high_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SABDL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vabdl_high_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SABDL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vabdl_high_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UABDL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vabdl_high_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UABDL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vabdl_high_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UABDL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
int8x8_t vaba_s8(int8x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	SABA Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vabaq_s8(int8x16_t a, int8x16_t b, int8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	SABA Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vaba_s16(int16x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	SABA Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vabaq_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	SABA Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vaba_s32(int32x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	SABA Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vabaq_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	SABA Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8_t vaba_u8(uint8x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	UABA Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vabaq_u8(uint8x16_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	UABA Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vaba_u16(uint16x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	UABA Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vabaq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	UABA Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vaba_u32(uint32x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	UABA Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vabaq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	UABA Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int16x8_t vabal_s8(int16x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8H b -> Vn.8B c -> Vm.8B	SABAL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
int32x4_t vabal_s16(int32x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	SABAL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
int64x2_t vabal_s32(int64x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	SABAL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
uint16x8_t vabal_u8(uint16x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8H b -> Vn.8B c -> Vm.8B	UABAL Vd.8H,Vn.8B,Vm.8B	Vd.8H -> result	v7/A32/A64
uint32x4_t vabal_u16(uint32x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.4H	UABAL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	v7/A32/A64
uint64x2_t vabal_u32(uint64x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.2S	UABAL Vd.2D,Vn.2S,Vm.2S	Vd.2D -> result	v7/A32/A64
int16x8_t vabal_high_s8(int16x8_t a, int8x16_t b, int8x16_t c)	a -> Vd.8H b -> Vn.16B c -> Vm.16B	SABAL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
int32x4_t vabal_high_s16(int32x4_t a, int16x8_t b, int16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	SABAL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
int64x2_t vabal_high_s32(int64x2_t a, int32x4_t b, int32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	SABAL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64
uint16x8_t vabal_high_u8(uint16x8_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.8H b -> Vn.16B c -> Vm.16B	UABAL2 Vd.8H,Vn.16B,Vm.16B	Vd.8H -> result	A64
uint32x4_t vabal_high_u16(uint32x4_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.8H	UABAL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S -> result	A64
uint64x2_t vabal_high_u32(uint64x2_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.4S	UABAL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x8_t vmax_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SMAX Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vmaxq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SMAX Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vmax_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SMAX Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vmaxq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SMAX Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vmax_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SMAX Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vmaxq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SMAX Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vmax_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UMAX Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vmaxq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UMAX Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vmax_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UMAX Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vmaxq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UMAX Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vmax_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UMAX Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vmaxq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UMAX Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vmax_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMAX Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vmaxq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMAX Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vmax_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FMAX Dd,Dn,Dm	Dd -> result	A64
float64x2_t vmaxq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMAX Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int8x8_t vmin_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SMIN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vminq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SMIN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vmin_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SMIN Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vminq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SMIN Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vmin_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SMIN Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vminq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SMIN Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vmin_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UMIN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x16_t vminq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UMIN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vmin_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UMIN Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vminq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UMIN Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vmin_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UMIN Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vminq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UMIN Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vmin_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMIN Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vminq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMIN Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vmin_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FMIN Dd,Dn,Dm	Dd -> result	A64
float64x2_t vminq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMIN Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vmaxnm_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMAXNM Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A32/A64
float32x4_t vmaxnmq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMAXNM Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A32/A64
float64x1_t vmaxnm_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FMAXNM Dd,Dn,Dm	Dd -> result	A64
float64x2_t vmaxnmq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMAXNM Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vminnm_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMINNM Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A32/A64
float32x4_t vminnmq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMINNM Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A32/A64
float64x1_t vminnm_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FMINNM Dd,Dn,Dm	Dd -> result	A64
float64x2_t vminnmq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMINNM Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int8x8_t vshl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vshlq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vshl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vshlq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vshl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vshlq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x1_t vshl_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vshlq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vshl_u8(uint8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	USHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vshlq_u8(uint8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	USHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vshl_u16(uint16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	USHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vshlq_u16(uint16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	USHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vshl_u32(uint32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	USHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vshlq_u32(uint32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	USHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vshl_u64(uint64x1_t a, int64x1_t b)	a -> Dn b -> Dm	USHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vshlq_u64(uint64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	USHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
int64_t vshld_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SSHL Dd,Dn,Dm	Dd -> result	A64
uint64_t vshld_u64(uint64_t a, int64_t b)	a -> Dn b -> Dm	USHL Dd,Dn,Dm	Dd -> result	A64
int8x8_t vqshl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SQSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vqshlq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SQSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vqshl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqshlq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqshl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqshlq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vqshl_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SQSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vqshlq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SQSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vqshl_u8(uint8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	UQSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vqshlq_u8(uint8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	UQSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vqshl_u16(uint16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	UQSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vqshlq_u16(uint16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	UQSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vqshl_u32(uint32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	UQSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vqshlq_u32(uint32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	UQSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vqshl_u64(uint64x1_t a, int64x1_t b)	a -> Dn b -> Dm	UQSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vqshlq_u64(uint64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	UQSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
int8_t vqshlb_s8(int8_t a, int8_t b)	a -> Bn b -> Bm	SQSHL Bd,Bn,Bm	Bd -> result	A64
int16_t vqshlh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQSHL Hd,Hn,Hm	Hd -> result	A64
int32_t vqshls_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQSHL Sd,Sn,Sm	Sd -> result	A64
int64_t vqshld_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SQSHL Dd,Dn,Dm	Dd -> result	A64
uint8_t vqshlb_u8(uint8_t a, int8_t b)	a -> Bn b -> Bm	UQSHL Bd,Bn,Bm	Bd -> result	A64
uint16_t vqshlh_u16(uint16_t a, int16_t b)	a -> Hn b -> Hm	UQSHL Hd,Hn,Hm	Hd -> result	A64
uint32_t vqshls_u32(uint32_t a, int32_t b)	a -> Sn b -> Sm	UQSHL Sd,Sn,Sm	Sd -> result	A64
uint64_t vqshld_u64(uint64_t a, int64_t b)	a -> Dn b -> Dm	UQSHL Dd,Dn,Dm	Dd -> result	A64
int8x8_t vrshl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SRSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vrshlq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SRSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vrshl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SRSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vrshlq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SRSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vrshl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SRSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vrshlq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SRSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vrshl_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SRSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vrshlq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SRSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vrshl_u8(uint8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	URSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vrshlq_u8(uint8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	URSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4_t vrshl_u16(uint16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	URSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vrshlq_u16(uint16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	URSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vrshl_u32(uint32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	URSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vrshlq_u32(uint32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	URSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vrshl_u64(uint64x1_t a, int64x1_t b)	a -> Dn b -> Dm	URSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
uint64x2_t vrshlq_u64(uint64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	URSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
int64_t vrshld_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SRSHL Dd,Dn,Dm	Dd -> result	A64
uint64_t vrshld_u64(uint64_t a, int64_t b)	a -> Dn b -> Dm	URSHL Dd,Dn,Dm	Dd -> result	A64
int8x8_t vqrshl_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SQRSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vqrshlq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SQRSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vqrshl_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SQRSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqrshlq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SQRSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqrshl_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SQRSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqrshlq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SQRSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vqrshl_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	SQRSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vqrshlq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	SQRSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
uint8x8_t vqrshl_u8(uint8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	UQRSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vqrshlq_u8(uint8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	UQRSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vqrshl_u16(uint16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	UQRSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vqrshlq_u16(uint16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	UQRSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vqrshl_u32(uint32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	UQRSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vqrshlq_u32(uint32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	UQRSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
uint64x1_t vqrshl_u64(uint64x1_t a, int64x1_t b)	a -> Dn b -> Dm	UQRSHL Dd,Dn,Dm	Dd -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2_t vqrshlq_u64(uint64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	UQRSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	v7/A32/A64
int8_t vqrshlb_s8(int8_t a, int8_t b)	a -> Bn b -> Bm	SQRSHL Bd,Bn,Bm	Bd -> result	A64
int16_t vqrshlh_s16(int16_t a, int16_t b)	a -> Hn b -> Hm	SQRSHL Hd,Hn,Hm	Hd -> result	A64
int32_t vqrshls_s32(int32_t a, int32_t b)	a -> Sn b -> Sm	SQRSHL Sd,Sn,Sm	Sd -> result	A64
int64_t vqrshld_s64(int64_t a, int64_t b)	a -> Dn b -> Dm	SQRSHL Dd,Dn,Dm	Dd -> result	A64
uint8_t vqrshlb_u8(uint8_t a, int8_t b)	a -> Bn b -> Bm	UQRSHL Bd,Bn,Bm	Bd -> result	A64
uint16_t vqrshlh_u16(uint16_t a, int16_t b)	a -> Hn b -> Hm	UQRSHL Hd,Hn,Hm	Hd -> result	A64
uint32_t vqrshls_u32(uint32_t a, int32_t b)	a -> Sn b -> Sm	UQRSHL Sd,Sn,Sm	Sd -> result	A64
uint64_t vqrshld_u64(uint64_t a, int64_t b)	a -> Dn b -> Dm	UQRSHL Dd,Dn,Dm	Dd -> result	A64
int8x8_t vshr_n_s8(int8x8_t a, const int n)	a -> Vn.8B 1 <= n <= 8	SSHR Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vshrq_n_s8(int8x16_t a, const int n)	a -> Vn.16B 1 <= n <= 8	SSHR Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vshr_n_s16(int16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	SSHR Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vshrq_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	SSHR Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vshr_n_s32(int32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	SSHR Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vshrq_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	SSHR Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vshr_n_s64(int64x1_t a, const int n)	a -> Dn 1 <= n <= 64	SSHR Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vshrq_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	SSHR Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vshr_n_u8(uint8x8_t a, const int n)	a -> Vn.8B 1 <= n <= 8	USHR Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vshrq_n_u8(uint8x16_t a, const int n)	a -> Vn.16B 1 <= n <= 8	USHR Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vshr_n_u16(uint16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	USHR Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vshrq_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	USHR Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vshr_n_u32(uint32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	USHR Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vshrq_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	USHR Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vshr_n_u64(uint64x1_t a, const int n)	a -> Dn 1 <= n <= 64	USHR Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vshrq_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	USHR Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
int64_t vshrd_n_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 64	SSHR Dd,Dn,#n	Dd -> result	A64
uint64_t vshrd_n_u64(uint64_t a, const int n)	a -> Dn 1 <= n <= 64	USHR Dd,Dn,#n	Dd -> result	A64
int8x8_t vshl_n_s8(int8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	SHL Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vshlq_n_s8(int8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	SHL Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vshl_n_s16(int16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	SHL Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vshlq_n_s16(int16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	SHL Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vshl_n_s32(int32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	SHL Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vshlq_n_s32(int32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	SHL Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vshl_n_s64(int64x1_t a, const int n)	a -> Dn 0 <= n <= 63	SHL Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vshlq_n_s64(int64x2_t a, const int n)	a -> Vn.2D 0 <= n <= 63	SHL Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vshl_n_u8(uint8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	SHL Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vshlq_n_u8(uint8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	SHL Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vshl_n_u16(uint16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	SHL Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vshlq_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	SHL Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vshl_n_u32(uint32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	SHL Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vshlq_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	SHL Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vshl_n_u64(uint64x1_t a, const int n)	a -> Dn 0 <= n <= 63	SHL Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vshlq_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 0 <= n <= 63	SHL Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
int64_t vshld_n_s64(int64_t a, const int n)	a -> Dn 0 <= n <= 63	SHL Dd,Dn,#n	Dd -> result	A64
uint64_t vshld_n_u64(uint64_t a, const int n)	a -> Dn 0 <= n <= 63	SHL Dd,Dn,#n	Dd -> result	A64
int8x8_t vrshr_n_s8(int8x8_t a, const int n)	a -> Vn.8B 1 <= n <= 8	SRSR Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16_t vrshrq_n_s8(int8x16_t a, const int n)	a -> Vn.16B 1 <= n <= 8	SRSRHR Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vrshrq_n_s16(int16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	SRSRHR Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vrshrq_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	SRSRHR Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vrshrq_n_s32(int32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	SRSRHR Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vrshrq_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	SRSRHR Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vrshrq_n_s64(int64x1_t a, const int n)	a -> Dn 1 <= n <= 64	SRSRHR Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vrshrq_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	SRSRHR Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vrshrq_n_u8(uint8x8_t a, const int n)	a -> Vn.8B 1 <= n <= 8	URSRRHR Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vrshrq_n_u8(uint8x16_t a, const int n)	a -> Vn.16B 1 <= n <= 8	URSRRHR Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vrshrq_n_u16(uint16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	URSRRHR Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vrshrq_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	URSRRHR Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vrshrq_n_u32(uint32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	URSRRHR Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vrshrq_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	URSRRHR Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vrshrq_n_u64(uint64x1_t a, const int n)	a -> Dn 1 <= n <= 64	URSRRHR Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vrshrq_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	URSRRHR Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
int64_t vrshrd_n_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 64	SRSRHR Dd,Dn,#n	Dd -> result	A64
uint64_t vrshrd_n_u64(uint64_t a, const int n)	a -> Dn 1 <= n <= 64	URSRRHR Dd,Dn,#n	Dd -> result	A64
int8x8_t vsra_n_s8(int8x8_t a, int8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	SSRA Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vsraq_n_s8(int8x16_t a, int8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	SSRA Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vsra_n_s16(int16x4_t a, int16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	SSRA Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vsraq_n_s16(int16x8_t a, int16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	SSRA Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vsra_n_s32(int32x2_t a, int32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 1 <= n <= 32	SSRA Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vsraq_n_s32(int32x4_t a, int32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 1 <= n <= 32	SSRA Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vsra_n_s64(int64x1_t a, int64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SSRA Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vsraq_n_s64(int64x2_t a, int64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	SSRA Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vsra_n_u8(uint8x8_t a, uint8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	USRA Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vsraq_n_u8(uint8x16_t a, uint8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	USRA Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vsra_n_u16(uint16x4_t a, uint16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	USRA Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vsraq_n_u16(uint16x8_t a, uint16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	USRA Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vsra_n_u32(uint32x2_t a, uint32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 1 <= n <= 32	USRA Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vsraq_n_u32(uint32x4_t a, uint32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 1 <= n <= 32	USRA Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vsra_n_u64(uint64x1_t a, uint64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	USRA Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vsraq_n_u64(uint64x2_t a, uint64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	USRA Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
int64_t vsrad_n_s64(int64_t a, int64_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SSRA Dd,Dn,#n	Dd -> result	A64
uint64_t vsrad_n_u64(uint64_t a, uint64_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	USRA Dd,Dn,#n	Dd -> result	A64
int8x8_t vrsra_n_s8(int8x8_t a, int8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	SRSRA Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vrsraq_n_s8(int8x16_t a, int8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	SRSRA Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vrsra_n_s16(int16x4_t a, int16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	SRSRA Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vrsraq_n_s16(int16x8_t a, int16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	SRSRA Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vrsra_n_s32(int32x2_t a, int32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 1 <= n <= 32	SRSRA Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vrsraq_n_s32(int32x4_t a, int32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 1 <= n <= 32	SRSRA Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vrsra_n_s64(int64x1_t a, int64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRSRA Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vrsraq_n_s64(int64x2_t a, int64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	SRSRA Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vrsra_n_u8(uint8x8_t a, uint8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	URSRA Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vrsraq_n_u8(uint8x16_t a, uint8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	URSRA Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vrsra_n_u16(uint16x4_t a, uint16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	URSRA Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vrsraq_n_u16(uint16x8_t a, uint16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	URSRA Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vrsra_n_u32(uint32x2_t a, uint32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 1 <= n <= 32	URSRA Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vrsraq_n_u32(uint32x4_t a, uint32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 1 <= n <= 32	URSRA Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vrsra_n_u64(uint64x1_t a, uint64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	URSRA Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vrsraq_n_u64(uint64x2_t a, uint64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	URSRA Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
int64_t vrsrad_n_s64(int64_t a, int64_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRSRA Dd,Dn,#n	Dd -> result	A64
uint64_t vrsrad_n_u64(uint64_t a, uint64_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	URSRA Dd,Dn,#n	Dd -> result	A64
int8x8_t vqshl_n_s8(int8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	SQSHL Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vqshlq_n_s8(int8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	SQSHL Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vqshl_n_s16(int16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	SQSHL Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vqshlq_n_s16(int16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	SQSHL Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vqshl_n_s32(int32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	SQSHL Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vqshlq_n_s32(int32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	SQSHL Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x1_t vqshl_n_s64(int64x1_t a, const int n)	a -> Dn 0 <= n <= 63	SQSHL Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vqshlq_n_s64(int64x2_t a, const int n)	a -> Vn.2D 0 <= n <= 63	SQSHL Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vqshl_n_u8(uint8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	UQSHL Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vqshlq_n_u8(uint8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	UQSHL Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vqshl_n_u16(uint16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	UQSHL Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vqshlq_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	UQSHL Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vqshl_n_u32(uint32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	UQSHL Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vqshlq_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	UQSHL Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vqshl_n_u64(uint64x1_t a, const int n)	a -> Dn 0 <= n <= 63	UQSHL Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vqshlq_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 0 <= n <= 63	UQSHL Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
int8_t vqshlb_n_s8(int8_t a, const int n)	a -> Bn 0 <= n <= 7	SQSHL Bd,Bn,#n	Bd -> result	A64
int16_t vqshlh_n_s16(int16_t a, const int n)	a -> Hn 0 <= n <= 15	SQSHL Hd,Hn,#n	Hd -> result	A64
int32_t vqshls_n_s32(int32_t a, const int n)	a -> Sn 0 <= n <= 31	SQSHL Sd,Sn,#n	Sd -> result	A64
int64_t vqshld_n_s64(int64_t a, const int n)	a -> Dn 0 <= n <= 63	SQSHL Dd,Dn,#n	Dd -> result	A64
uint8_t vqshlb_n_u8(uint8_t a, const int n)	a -> Bn 0 <= n <= 7	UQSHL Bd,Bn,#n	Bd -> result	A64
uint16_t vqshlh_n_u16(uint16_t a, const int n)	a -> Hn 0 <= n <= 15	UQSHL Hd,Hn,#n	Hd -> result	A64
uint32_t vqshls_n_u32(uint32_t a, const int n)	a -> Sn 0 <= n <= 31	UQSHL Sd,Sn,#n	Sd -> result	A64
uint64_t vqshld_n_u64(uint64_t a, const int n)	a -> Dn 0 <= n <= 63	UQSHL Dd,Dn,#n	Dd -> result	A64
uint8x8_t vqshlu_n_s8(int8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	SQSHLU Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vqshluq_n_s8(int8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	SQSHLU Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vqshlu_n_s16(int16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	SQSHLU Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vqshluq_n_s16(int16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	SQSHLU Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vqshlu_n_s32(int32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	SQSHLU Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vqshluq_n_s32(int32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	SQSHLU Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vqshlu_n_s64(int64x1_t a, const int n)	a -> Dn 0 <= n <= 63	SQSHLU Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vqshluq_n_s64(int64x2_t a, const int n)	a -> Vn.2D 0 <= n <= 63	SQSHLU Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8_t vqshlub_n_s8(int8_t a, const int n)	a -> Bn 0 <= n <= 7	SQSHLU Bd,Bn,#n	Bd -> result	A64
uint16_t vqshluh_n_s16(int16_t a, const int n)	a -> Hn 0 <= n <= 15	SQSHLU Hd,Hn,#n	Hd -> result	A64
uint32_t vqshlu_n_s32(int32_t a, const int n)	a -> Sn 0 <= n <= 31	SQSHLU Sd,Sn,#n	Sd -> result	A64
uint64_t vqshlud_n_s64(int64_t a, const int n)	a -> Dn 0 <= n <= 63	SQSHLU Dd,Dn,#n	Dd -> result	A64
int8x8_t vshrn_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	SHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
int16x4_t vshrn_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	SHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
int32x2_t vshrn_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	SHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
uint8x8_t vshrn_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	SHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
uint16x4_t vshrn_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	SHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
uint32x2_t vshrn_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	SHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
int8x16_t vshrn_high_n_s16(int8x8_t r, int16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	SHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
int16x8_t vshrn_high_n_s32(int16x4_t r, int32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	SHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
int32x4_t vshrn_high_n_s64(int32x2_t r, int64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	SHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
uint8x16_t vshrn_high_n_u16(uint8x8_t r, uint16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	SHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
uint16x8_t vshrn_high_n_u32(uint16x4_t r, uint32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	SHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
uint32x4_t vshrn_high_n_u64(uint32x2_t r, uint64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	SHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
uint8x8_t vqshrun_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	SQSHRUN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
uint16x4_t vqshrun_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	SQSHRUN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
uint32x2_t vqshrun_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	SQSHRUN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8_t vqshrnh_n_s16(int16_t a, const int n)	a -> Hn 1 <= n <= 8	SQSHRUN Bd,Hn,#n	Bd -> result	A64
uint16_t vqshrns_n_s32(int32_t a, const int n)	a -> Sn 1 <= n <= 16	SQSHRUN Hd,Sn,#n	Hd -> result	A64
uint32_t vqshrund_n_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 32	SQSHRUN Sd,Dn,#n	Sd -> result	A64
uint8x16_t vqshrnh_high_n_s16(uint8x8_t r, int16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	SQSHRUN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
uint16x8_t vqshrnh_high_n_s32(uint16x4_t r, int32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	SQSHRUN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
uint32x4_t vqshrnh_high_n_s64(uint32x2_t r, int64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	SQSHRUN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
uint8x8_t vqrshrnh_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	SQRSHRUN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
uint16x4_t vqrshrnh_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	SQRSHRUN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
uint32x2_t vqrshrnh_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	SQRSHRUN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
uint8_t vqrshrnh_n_s16(int16_t a, const int n)	a -> Hn 1 <= n <= 8	SQRSHRUN Bd,Hn,#n	Bd -> result	A64
uint16_t vqrshrns_n_s32(int32_t a, const int n)	a -> Sn 1 <= n <= 16	SQRSHRUN Hd,Sn,#n	Hd -> result	A64
uint32_t vqrshrund_n_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 32	SQRSHRUN Sd,Dn,#n	Sd -> result	A64
uint8x16_t vqrshrnh_high_n_s16(uint8x8_t r, int16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	SQRSHRUN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
uint16x8_t vqrshrnh_high_n_s32(uint16x4_t r, int32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	SQRSHRUN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
uint32x4_t vqrshrnh_high_n_s64(uint32x2_t r, int64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	SQRSHRUN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
int8x8_t vqshrnh_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	SQSHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
int16x4_t vqshrnh_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	SQSHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
int32x2_t vqshrnh_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	SQSHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
uint8x8_t vqshrnh_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	UQSHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
uint16x4_t vqshrnh_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	UQSHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
uint32x2_t vqshrnh_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	UQSHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
int8_t vqshrnh_n_s16(int16_t a, const int n)	a -> Hn 1 <= n <= 8	SQSHRN Bd,Hn,#n	Bd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16_t vqshrns_n_s32(int32_t a, const int n)	a -> Sn 1 <= n <= 16	SQSHRN Hd,Sn,#n	Hd -> result	A64
int32_t vqshrnd_n_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 32	SQSHRN Sd,Dn,#n	Sd -> result	A64
uint8_t vqshrnh_n_u16(uint16_t a, const int n)	a -> Hn 1 <= n <= 8	UQSHRN Bd,Hn,#n	Bd -> result	A64
uint16_t vqshrns_n_u32(uint32_t a, const int n)	a -> Sn 1 <= n <= 16	UQSHRN Hd,Sn,#n	Hd -> result	A64
uint32_t vqshrnd_n_u64(uint64_t a, const int n)	a -> Dn 1 <= n <= 32	UQSHRN Sd,Dn,#n	Sd -> result	A64
int8x16_t vqshrnh_high_n_s16(int8x8_t r, int16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	SQSHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
int16x8_t vqshrnh_high_n_s32(int16x4_t r, int32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	SQSHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
int32x4_t vqshrnh_high_n_s64(int32x2_t r, int64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	SQSHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
uint8x16_t vqshrnh_high_n_u16(uint8x8_t r, uint16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	UQSHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
uint16x8_t vqshrnh_high_n_u32(uint16x4_t r, uint32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	UQSHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
uint32x4_t vqshrnh_high_n_u64(uint32x2_t r, uint64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	UQSHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
int8x8_t vrshr_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	RSHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
int16x4_t vrshr_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	RSHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
int32x2_t vrshr_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	RSHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
uint8x8_t vrshr_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	RSHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
uint16x4_t vrshr_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	RSHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
uint32x2_t vrshr_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	RSHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
int8x16_t vrshrnh_high_n_s16(int8x8_t r, int16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	RSHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
int16x8_t vrshrnh_high_n_s32(int16x4_t r, int32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	RSHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
int32x4_t vrshrnh_high_n_s64(int32x2_t r, int64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	RSHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x16_t vrshrn_high_n_u16(uint8x8_t r, uint16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	RSHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
uint16x8_t vrshrn_high_n_u32(uint16x4_t r, uint32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	RSHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
uint32x4_t vrshrn_high_n_u64(uint32x2_t r, uint64x2_t a, const int n)	r -> 32(Vd) a -> Vn.2D 1 <= n <= 32	RSHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
int8x8_t vqrshrn_n_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	SQRSHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
int16x4_t vqrshrn_n_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	SQRSHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
int32x2_t vqrshrn_n_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	SQRSHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
uint8x8_t vqrshrn_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 8	UQRSHRN Vd.8B,Vn.8H,#n	Vd.8B -> result	v7/A32/A64
uint16x4_t vqrshrn_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 16	UQRSHRN Vd.4H,Vn.4S,#n	Vd.4H -> result	v7/A32/A64
uint32x2_t vqrshrn_n_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 32	UQRSHRN Vd.2S,Vn.2D,#n	Vd.2S -> result	v7/A32/A64
int8_t vqrshrn_n_s16(int16_t a, const int n)	a -> Hn 1 <= n <= 8	SQRSHRN Bd,Hn,#n	Bd -> result	A64
int16_t vqrshrn_n_s32(int32_t a, const int n)	a -> Sn 1 <= n <= 16	SQRSHRN Hd,Sn,#n	Hd -> result	A64
int32_t vqrshrn_n_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 32	SQRSHRN Sd,Dn,#n	Sd -> result	A64
uint8_t vqrshrn_n_u16(uint16_t a, const int n)	a -> Hn 1 <= n <= 8	UQRSHRN Bd,Hn,#n	Bd -> result	A64
uint16_t vqrshrn_n_u32(uint32_t a, const int n)	a -> Sn 1 <= n <= 16	UQRSHRN Hd,Sn,#n	Hd -> result	A64
uint32_t vqrshrn_n_u64(uint64_t a, const int n)	a -> Dn 1 <= n <= 32	UQRSHRN Sd,Dn,#n	Sd -> result	A64
int8x16_t vqrshrn_high_n_s16(int8x8_t r, int16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	SQRSHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
int16x8_t vqrshrn_high_n_s32(int16x4_t r, int32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	SQRSHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
int32x4_t vqrshrn_high_n_s64(int32x2_t r, int64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	SQRSHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64
uint8x16_t vqrshrn_high_n_u16(uint8x8_t r, uint16x8_t a, const int n)	r -> Vd.8B a -> Vn.8H 1 <= n <= 8	UQRSHRN2 Vd.16B,Vn.8H,#n	Vd.16B -> result	A64
uint16x8_t vqrshrn_high_n_u32(uint16x4_t r, uint32x4_t a, const int n)	r -> Vd.4H a -> Vn.4S 1 <= n <= 16	UQRSHRN2 Vd.8H,Vn.4S,#n	Vd.8H -> result	A64
uint32x4_t vqrshrn_high_n_u64(uint32x2_t r, uint64x2_t a, const int n)	r -> Vd.2S a -> Vn.2D 1 <= n <= 32	UQRSHRN2 Vd.4S,Vn.2D,#n	Vd.4S -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vshll_n_s8(int8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	SSHLL Vd.8H,Vn.8B,#n	Vd.8H -> result	v7/A32/A64
int32x4_t vshll_n_s16(int16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	SSHLL Vd.4S,Vn.4H,#n	Vd.4S -> result	v7/A32/A64
int64x2_t vshll_n_s32(int32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	SSHLL Vd.2D,Vn.2S,#n	Vd.2D -> result	v7/A32/A64
uint16x8_t vshll_n_u8(uint8x8_t a, const int n)	a -> Vn.8B 0 <= n <= 7	USHLL Vd.8H,Vn.8B,#n	Vd.8H -> result	v7/A32/A64
uint32x4_t vshll_n_u16(uint16x4_t a, const int n)	a -> Vn.4H 0 <= n <= 15	USHLL Vd.4S,Vn.4H,#n	Vd.4S -> result	v7/A32/A64
uint64x2_t vshll_n_u32(uint32x2_t a, const int n)	a -> Vn.2S 0 <= n <= 31	USHLL Vd.2D,Vn.2S,#n	Vd.2D -> result	v7/A32/A64
int16x8_t vshll_high_n_s8(int8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	SSHLL2 Vd.8H,Vn.16B,#n	Vd.8H -> result	A64
int32x4_t vshll_high_n_s16(int16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	SSHLL2 Vd.4S,Vn.8H,#n	Vd.4S -> result	A64
int64x2_t vshll_high_n_s32(int32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	SSHLL2 Vd.2D,Vn.4S,#n	Vd.2D -> result	A64
uint16x8_t vshll_high_n_u8(uint8x16_t a, const int n)	a -> Vn.16B 0 <= n <= 7	USHLL2 Vd.8H,Vn.16B,#n	Vd.8H -> result	A64
uint32x4_t vshll_high_n_u16(uint16x8_t a, const int n)	a -> Vn.8H 0 <= n <= 15	USHLL2 Vd.4S,Vn.8H,#n	Vd.4S -> result	A64
uint64x2_t vshll_high_n_u32(uint32x4_t a, const int n)	a -> Vn.4S 0 <= n <= 31	USHLL2 Vd.2D,Vn.4S,#n	Vd.2D -> result	A64
int16x8_t vshll_n_s8(int8x8_t a, const int n)	a -> Vn.8B n == 8	SHLL Vd.8H,Vn.8B,#n	Vd.8H -> result	v7/A32/A64
int32x4_t vshll_n_s16(int16x4_t a, const int n)	a -> Vn.4H n == 16	SHLL Vd.4S,Vn.4H,#n	Vd.4S -> result	v7/A32/A64
int64x2_t vshll_n_s32(int32x2_t a, const int n)	a -> Vn.2S n == 32	SHLL Vd.2D,Vn.2S,#n	Vd.2D -> result	v7/A32/A64
uint16x8_t vshll_n_u8(uint8x8_t a, const int n)	a -> Vn.8B n == 8	SHLL Vd.8H,Vn.8B,#n	Vd.8H -> result	v7/A32/A64
uint32x4_t vshll_n_u16(uint16x4_t a, const int n)	a -> Vn.4H n == 16	SHLL Vd.4S,Vn.4H,#n	Vd.4S -> result	v7/A32/A64
uint64x2_t vshll_n_u32(uint32x2_t a, const int n)	a -> Vn.2S n == 32	SHLL Vd.2D,Vn.2S,#n	Vd.2D -> result	v7/A32/A64
int16x8_t vshll_high_n_s8(int8x16_t a, const int n)	a -> Vn.16B n == 8	SHLL2 Vd.8H,Vn.16B,#n	Vd.8H -> result	A64
int32x4_t vshll_high_n_s16(int16x8_t a, const int n)	a -> Vn.8H n == 16	SHLL2 Vd.4S,Vn.8H,#n	Vd.4S -> result	A64
int64x2_t vshll_high_n_s32(int32x4_t a, const int n)	a -> Vn.4S n == 32	SHLL2 Vd.2D,Vn.4S,#n	Vd.2D -> result	A64
uint16x8_t vshll_high_n_u8(uint8x16_t a, const int n)	a -> Vn.16B n == 8	SHLL2 Vd.8H,Vn.16B,#n	Vd.8H -> result	A64
uint32x4_t vshll_high_n_u16(uint16x8_t a, const int n)	a -> Vn.8H n == 16	SHLL2 Vd.4S,Vn.8H,#n	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2_t vshll_high_n_u32(uint32x4_t a, const int n)	a -> Vn.4S n == 32	SHLL2 Vd.2D,Vn.4S,#n	Vd.2D -> result	A64
int8x8_t vsri_n_s8(int8x8_t a, int8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	SRI Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vsriq_n_s8(int8x16_t a, int8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	SRI Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vsri_n_s16(int16x4_t a, int16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	SRI Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vsriq_n_s16(int16x8_t a, int16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	SRI Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vsri_n_s32(int32x2_t a, int32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 1 <= n <= 32	SRI Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vsriq_n_s32(int32x4_t a, int32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 1 <= n <= 32	SRI Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vsri_n_s64(int64x1_t a, int64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRI Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vsriq_n_s64(int64x2_t a, int64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	SRI Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vsri_n_u8(uint8x8_t a, uint8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	SRI Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vsriq_n_u8(uint8x16_t a, uint8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	SRI Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vsri_n_u16(uint16x4_t a, uint16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	SRI Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
uint16x8_t vsriq_n_u16(uint16x8_t a, uint16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	SRI Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vsri_n_u32(uint32x2_t a, uint32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 1 <= n <= 32	SRI Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vsriq_n_u32(uint32x4_t a, uint32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 1 <= n <= 32	SRI Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vsri_n_u64(uint64x1_t a, uint64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRI Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vsriq_n_u64(uint64x2_t a, uint64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	SRI Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
poly64x1_t vsri_n_p64(poly64x1_t a, poly64x1_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRI Dd,Dn,#n	Dd -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly64x2_t vsriq_n_p64(poly64x2_t a, poly64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 1 <= n <= 64	SRI Vd.2D,Vn.2D,#n	Vd.2D -> result	A32/A64
poly8x8_t vsri_n_p8(poly8x8_t a, poly8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 1 <= n <= 8	SRI Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
poly8x16_t vsriq_n_p8(poly8x16_t a, poly8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 1 <= n <= 8	SRI Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
poly16x4_t vsri_n_p16(poly16x4_t a, poly16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 1 <= n <= 16	SRI Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
poly16x8_t vsriq_n_p16(poly16x8_t a, poly16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 1 <= n <= 16	SRI Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int64_t vsrid_n_s64(int64_t a, int64_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRI Dd,Dn,#n	Dd -> result	A64
uint64_t vsrid_n_u64(uint64_t a, uint64_t b, const int n)	a -> Dd b -> Dn 1 <= n <= 64	SRI Dd,Dn,#n	Dd -> result	A64
int8x8_t vsli_n_s8(int8x8_t a, int8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 0 <= n <= 7	SLI Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vsliq_n_s8(int8x16_t a, int8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 0 <= n <= 7	SLI Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vsli_n_s16(int16x4_t a, int16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 0 <= n <= 15	SLI Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
int16x8_t vsliq_n_s16(int16x8_t a, int16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 0 <= n <= 15	SLI Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int32x2_t vsli_n_s32(int32x2_t a, int32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 0 <= n <= 31	SLI Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vsliq_n_s32(int32x4_t a, int32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 0 <= n <= 31	SLI Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int64x1_t vsli_n_s64(int64x1_t a, int64x1_t b, const int n)	a -> Dd b -> Dn 0 <= n <= 63	SLI Dd,Dn,#n	Dd -> result	v7/A32/A64
int64x2_t vsliq_n_s64(int64x2_t a, int64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 0 <= n <= 63	SLI Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
uint8x8_t vsli_n_u8(uint8x8_t a, uint8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 0 <= n <= 7	SLI Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vsliq_n_u8(uint8x16_t a, uint8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 0 <= n <= 7	SLI Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
uint16x4_t vsli_n_u16(uint16x4_t a, uint16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 0 <= n <= 15	SLI Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vsliq_n_u16(uint16x8_t a, uint16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 0 <= n <= 15	SLI Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
uint32x2_t vsliq_n_u32(uint32x2_t a, uint32x2_t b, const int n)	a -> Vd.2S b -> Vn.2S 0 <= n <= 31	SLI Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vsliq_n_u32(uint32x4_t a, uint32x4_t b, const int n)	a -> Vd.4S b -> Vn.4S 0 <= n <= 31	SLI Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint64x1_t vsliq_n_u64(uint64x1_t a, uint64x1_t b, const int n)	a -> Dd b -> Dn 0 <= n <= 63	SLI Dd,Dn,#n	Dd -> result	v7/A32/A64
uint64x2_t vsliq_n_u64(uint64x2_t a, uint64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 0 <= n <= 63	SLI Vd.2D,Vn.2D,#n	Vd.2D -> result	v7/A32/A64
poly64x1_t vsliq_n_p64(poly64x1_t a, poly64x1_t b, const int n)	a -> Dd b -> Dn 0 <= n <= 63	SLI Dd,Dn,#n	Dd -> result	A32/A64
poly64x2_t vsliq_n_p64(poly64x2_t a, poly64x2_t b, const int n)	a -> Vd.2D b -> Vn.2D 0 <= n <= 63	SLI Vd.2D,Vn.2D,#n	Vd.2D -> result	A32/A64
poly8x8_t vsliq_n_p8(poly8x8_t a, poly8x8_t b, const int n)	a -> Vd.8B b -> Vn.8B 0 <= n <= 7	SLI Vd.8B,Vn.8B,#n	Vd.8B -> result	v7/A32/A64
poly8x16_t vsliq_n_p8(poly8x16_t a, poly8x16_t b, const int n)	a -> Vd.16B b -> Vn.16B 0 <= n <= 7	SLI Vd.16B,Vn.16B,#n	Vd.16B -> result	v7/A32/A64
poly16x4_t vsliq_n_p16(poly16x4_t a, poly16x4_t b, const int n)	a -> Vd.4H b -> Vn.4H 0 <= n <= 15	SLI Vd.4H,Vn.4H,#n	Vd.4H -> result	v7/A32/A64
poly16x8_t vsliq_n_p16(poly16x8_t a, poly16x8_t b, const int n)	a -> Vd.8H b -> Vn.8H 0 <= n <= 15	SLI Vd.8H,Vn.8H,#n	Vd.8H -> result	v7/A32/A64
int64_t vsliq_n_s64(int64_t a, int64_t b, const int n)	a -> Dd b -> Dn 0 <= n <= 63	SLI Dd,Dn,#n	Dd -> result	A64
uint64_t vsliq_n_u64(uint64_t a, uint64_t b, const int n)	a -> Dd b -> Dn 0 <= n <= 63	SLI Dd,Dn,#n	Dd -> result	A64
int32x2_t vcvttq_s32_f32(float32x2_t a)	a -> Vn.2S	FCVTZS Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vcvttq_s32_f32(float32x4_t a)	a -> Vn.4S	FCVTZS Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint32x2_t vcvttq_u32_f32(float32x2_t a)	a -> Vn.2S	FCVTZU Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vcvttq_u32_f32(float32x4_t a)	a -> Vn.4S	FCVTZU Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int32x2_t vcvtnq_s32_f32(float32x2_t a)	a -> Vn.2S	FCVTNS Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
int32x4_t vcvtnq_s32_f32(float32x4_t a)	a -> Vn.4S	FCVTNS Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
uint32x2_t vcvtnq_u32_f32(float32x2_t a)	a -> Vn.2S	FCVTNU Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
uint32x4_t vcvtnq_u32_f32(float32x4_t a)	a -> Vn.4S	FCVTNU Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
int32x2_t vcvtnq_s32_f32(float32x2_t a)	a -> Vn.2S	FCVTMS Vd.2S,Vn.2S	Vd.2S -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vcvtmq_s32_f32(float32x4_t a)	a -> Vn.4S	FCVTMS Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
uint32x2_t vcvtm_u32_f32(float32x2_t a)	a -> Vn.2S	FCVTMU Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
uint32x4_t vcvtmq_u32_f32(float32x4_t a)	a -> Vn.4S	FCVTMU Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
int32x2_t vcvtsp_s32_f32(float32x2_t a)	a -> Vn.2S	FCVTPS Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
int32x4_t vcvtspq_s32_f32(float32x4_t a)	a -> Vn.4S	FCVTPS Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
uint32x2_t vcvtsp_u32_f32(float32x2_t a)	a -> Vn.2S	FCVTPU Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
uint32x4_t vcvtspq_u32_f32(float32x4_t a)	a -> Vn.4S	FCVTPU Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
int32x2_t vcvtas_s32_f32(float32x2_t a)	a -> Vn.2S	FCVTAS Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
int32x4_t vcvtasq_s32_f32(float32x4_t a)	a -> Vn.4S	FCVTAS Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
uint32x2_t vcvtu_u32_f32(float32x2_t a)	a -> Vn.2S	FCVTAU Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
uint32x4_t vcvtuq_u32_f32(float32x4_t a)	a -> Vn.4S	FCVTAU Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
int32_t vcvt_s32_f32(float32_t a)	a -> Sn	FCVTZS Sd,Sn	Sd -> result	A64
uint32_t vcvt_u32_f32(float32_t a)	a -> Sn	FCVTZU Sd,Sn	Sd -> result	A64
int32_t vcvtns_s32_f32(float32_t a)	a -> Sn	FCVTNS Sd,Sn	Sd -> result	A64
uint32_t vcvtns_u32_f32(float32_t a)	a -> Sn	FCVTNU Sd,Sn	Sd -> result	A64
int32_t vcvtms_s32_f32(float32_t a)	a -> Sn	FCVTMS Sd,Sn	Sd -> result	A64
uint32_t vcvtms_u32_f32(float32_t a)	a -> Sn	FCVTMU Sd,Sn	Sd -> result	A64
int32_t vcvtps_s32_f32(float32_t a)	a -> Sn	FCVTPS Sd,Sn	Sd -> result	A64
uint32_t vcvtps_u32_f32(float32_t a)	a -> Sn	FCVTPU Sd,Sn	Sd -> result	A64
int32_t vcvtas_s32_f32(float32_t a)	a -> Sn	FCVTAS Sd,Sn	Sd -> result	A64
uint32_t vcvtas_u32_f32(float32_t a)	a -> Sn	FCVTAU Sd,Sn	Sd -> result	A64
int64x1_t vcvt_s64_f64(float64x1_t a)	a -> Dn	FCVTZS Dd,Dn	Dd -> result	A64
int64x2_t vcvtq_s64_f64(float64x2_t a)	a -> Vn.2D	FCVTZS Vd.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcvt_u64_f64(float64x1_t a)	a -> Dn	FCVTZU Dd,Dn	Dd -> result	A64
uint64x2_t vcvtu_u64_f64(float64x2_t a)	a -> Vn.2D	FCVTZU Vd.2D,Vn.2D	Vd.2D -> result	A64
int64x1_t vcvt_n_s64_f64(float64x1_t a)	a -> Dn	FCVTNS Dd,Dn	Dd -> result	A64
int64x2_t vcvt_nq_s64_f64(float64x2_t a)	a -> Vn.2D	FCVTNS Vd.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcvt_n_u64_f64(float64x1_t a)	a -> Dn	FCVTNU Dd,Dn	Dd -> result	A64
uint64x2_t vcvt_nq_u64_f64(float64x2_t a)	a -> Vn.2D	FCVTNU Vd.2D,Vn.2D	Vd.2D -> result	A64
int64x1_t vcvtmq_s64_f64(float64x1_t a)	a -> Dn	FCVTMS Dd,Dn	Dd -> result	A64
int64x2_t vcvtmq_s64_f64(float64x2_t a)	a -> Vn.2D	FCVTMS Vd.2D,Vn.2D	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vcvtm_u64_f64(float64x1_t a)	a -> Dn	FCVTMU Dd,Dn	Dd -> result	A64
uint64x2_t vcvtmq_u64_f64(float64x2_t a)	a -> Vn.2D	FCVTMU Vd.2D,Vn.2D	Vd.2D -> result	A64
int64x1_t vcvtm_s64_f64(float64x1_t a)	a -> Dn	FCVTPS Dd,Dn	Dd -> result	A64
int64x2_t vcvtmq_s64_f64(float64x2_t a)	a -> Vn.2D	FCVTPS Vd.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcvtu_u64_f64(float64x1_t a)	a -> Dn	FCVTPU Dd,Dn	Dd -> result	A64
uint64x2_t vcvtuq_u64_f64(float64x2_t a)	a -> Vn.2D	FCVTPU Vd.2D,Vn.2D	Vd.2D -> result	A64
int64x1_t vcvtu_s64_f64(float64x1_t a)	a -> Dn	FCVTAS Dd,Dn	Dd -> result	A64
int64x2_t vcvtuq_s64_f64(float64x2_t a)	a -> Vn.2D	FCVTAS Vd.2D,Vn.2D	Vd.2D -> result	A64
uint64x1_t vcvtu_u64_f64(float64x1_t a)	a -> Dn	FCVTAU Dd,Dn	Dd -> result	A64
uint64x2_t vcvtuq_u64_f64(float64x2_t a)	a -> Vn.2D	FCVTAU Vd.2D,Vn.2D	Vd.2D -> result	A64
int64_t vcvt_d_s64_f64(float64_t a)	a -> Dn	FCVTZS Dd,Dn	Dd -> result	A64
uint64_t vcvt_d_u64_f64(float64_t a)	a -> Dn	FCVTZU Dd,Dn	Dd -> result	A64
int64_t vcvtnd_s64_f64(float64_t a)	a -> Dn	FCVTNS Dd,Dn	Dd -> result	A64
uint64_t vcvtnd_u64_f64(float64_t a)	a -> Dn	FCVTNU Dd,Dn	Dd -> result	A64
int64_t vcvtmd_s64_f64(float64_t a)	a -> Dn	FCVTMS Dd,Dn	Dd -> result	A64
uint64_t vcvtmd_u64_f64(float64_t a)	a -> Dn	FCVTMU Dd,Dn	Dd -> result	A64
int64_t vcvtpd_s64_f64(float64_t a)	a -> Dn	FCVTPS Dd,Dn	Dd -> result	A64
uint64_t vcvtpd_u64_f64(float64_t a)	a -> Dn	FCVTPU Dd,Dn	Dd -> result	A64
int64_t vcvtad_s64_f64(float64_t a)	a -> Dn	FCVTAS Dd,Dn	Dd -> result	A64
uint64_t vcvtad_u64_f64(float64_t a)	a -> Dn	FCVTAU Dd,Dn	Dd -> result	A64
int32x2_t vcvt_n_s32_f32(float32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	FCVTZS Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
int32x4_t vcvtq_n_s32_f32(float32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	FCVTZS Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
uint32x2_t vcvt_n_u32_f32(float32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	FCVTZU Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
uint32x4_t vcvtq_n_u32_f32(float32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	FCVTZU Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
int32_t vcvt_s_n_s32_f32(float32_t a, const int n)	a -> Sn 1 <= n <= 32	FCVTZS Sd,Sn,#n	Sd -> result	A64
uint32_t vcvt_s_n_u32_f32(float32_t a, const int n)	a -> Sn 1 <= n <= 32	FCVTZU Sd,Sn,#n	Sd -> result	A64
int64x1_t vcvt_n_s64_f64(float64x1_t a, const int n)	a -> Dn 1 <= n <= 64	FCVTZS Dd,Dn,#n	Dd -> result	A64
int64x2_t vcvtq_n_s64_f64(float64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	FCVTZS Vd.2D,Vn.2D,#n	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vcvtn_u64_f64(float64x1_t a, const int n)	a -> Dn 1 <= n <= 64	FCVTZU Dd,Dn,#n	Dd -> result	A64
uint64x2_t vcvtn_u64_f64(float64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	FCVTZU Vd.2D,Vn.2D,#n	Vd.2D -> result	A64
int64_t vcvtd_n_s64_f64(float64_t a, const int n)	a -> Dn 1 <= n <= 64	FCVTZS Dd,Dn,#n	Dd -> result	A64
uint64_t vcvtd_n_u64_f64(float64_t a, const int n)	a -> Dn 1 <= n <= 64	FCVTZU Dd,Dn,#n	Dd -> result	A64
float32x2_t vcvtn_f32_s32(int32x2_t a)	a -> Vn.2S	SCVTF Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vcvtn_f32_s32(int32x4_t a)	a -> Vn.4S	SCVTF Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vcvtn_f32_u32(uint32x2_t a)	a -> Vn.2S	UCVTF Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vcvtn_f32_u32(uint32x4_t a)	a -> Vn.4S	UCVTF Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32_t vcvts_f32_s32(int32_t a)	a -> Sn	SCVTF Sd,Sn	Sd -> result	A64
float32_t vcvts_f32_u32(uint32_t a)	a -> Sn	UCVTF Sd,Sn	Sd -> result	A64
float64x1_t vcvtn_f64_s64(int64x1_t a)	a -> Dn	SCVTF Dd,Dn	Dd -> result	A64
float64x2_t vcvtn_f64_s64(int64x2_t a)	a -> Vn.2D	SCVTF Vd.2D,Vn.2D	Vd.2D -> result	A64
float64x1_t vcvtn_f64_u64(uint64x1_t a)	a -> Dn	UCVTF Dd,Dn	Dd -> result	A64
float64x2_t vcvtn_f64_u64(uint64x2_t a)	a -> Vn.2D	UCVTF Vd.2D,Vn.2D	Vd.2D -> result	A64
float64_t vcvtd_f64_s64(int64_t a)	a -> Dn	SCVTF Dd,Dn	Dd -> result	A64
float64_t vcvtd_f64_u64(uint64_t a)	a -> Dn	UCVTF Dd,Dn	Dd -> result	A64
float32x2_t vcvtn_n_f32_s32(int32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	SCVTF Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
float32x4_t vcvtn_n_f32_s32(int32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	SCVTF Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
float32x2_t vcvtn_n_f32_u32(uint32x2_t a, const int n)	a -> Vn.2S 1 <= n <= 32	UCVTF Vd.2S,Vn.2S,#n	Vd.2S -> result	v7/A32/A64
float32x4_t vcvtn_n_f32_u32(uint32x4_t a, const int n)	a -> Vn.4S 1 <= n <= 32	UCVTF Vd.4S,Vn.4S,#n	Vd.4S -> result	v7/A32/A64
float32_t vcvts_n_f32_s32(int32_t a, const int n)	a -> Sn 1 <= n <= 32	SCVTF Sd,Sn,#n	Sd -> result	A64
float32_t vcvts_n_f32_u32(uint32_t a, const int n)	a -> Sn 1 <= n <= 32	UCVTF Sd,Sn,#n	Sd -> result	A64
float64x1_t vcvtn_n_f64_s64(int64x1_t a, const int n)	a -> Dn 1 <= n <= 64	SCVTF Dd,Dn,#n	Dd -> result	A64
float64x2_t vcvtn_n_f64_s64(int64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	SCVTF Vd.2D,Vn.2D,#n	Vd.2D -> result	A64
float64x1_t vcvtn_n_f64_u64(uint64x1_t a, const int n)	a -> Dn 1 <= n <= 64	UCVTF Dd,Dn,#n	Dd -> result	A64
float64x2_t vcvtn_n_f64_u64(uint64x2_t a, const int n)	a -> Vn.2D 1 <= n <= 64	UCVTF Vd.2D,Vn.2D,#n	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64_t vcvtd_n_f64_s64(int64_t a, const int n)	a -> Dn 1 <= n <= 64	SCVTF Dd,Dn,#n	Dd -> result	A64
float64_t vcvtd_n_f64_u64(uint64_t a, const int n)	a -> Dn 1 <= n <= 64	UCVTF Dd,Dn,#n	Dd -> result	A64
float16x4_t vcvtd_f16_f32(float32x4_t a)	a -> Vn.4S	FCVTN Vd.4H,Vn.4S	Vd.4H -> result	v7/A32/A64
float16x8_t vcvtd_high_f16_f32(float16x4_t r, float32x4_t a)	r -> Vd.4H a -> Vn.4S	FCVTN2 Vd.8H,Vn.4S	Vd.8H -> result	A64
float32x2_t vcvtd_f32_f64(float64x2_t a)	a -> Vn.2D	FCVTN Vd.2S,Vn.2D	Vd.2S -> result	A64
float32x4_t vcvtd_high_f32_f64(float32x2_t r, float64x2_t a)	r -> Vd.2S a -> Vn.2D	FCVTN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
float32x4_t vcvtd_f32_f16(float16x4_t a)	a -> Vn.4H	FCVTL Vd.4S,Vn.4H	Vd.4S -> result	v7/A32/A64
float32x4_t vcvtd_high_f32_f16(float16x8_t a)	a -> Vn.8H	FCVTL2 Vd.4S,Vn.8H	Vd.4S -> result	A64
float64x2_t vcvtd_f64_f32(float32x2_t a)	a -> Vn.2S	FCVTL Vd.2D,Vn.2S	Vd.2D -> result	A64
float64x2_t vcvtd_high_f64_f32(float32x4_t a)	a -> Vn.4S	FCVTL2 Vd.2D,Vn.4S	Vd.2D -> result	A64
float32x2_t vcvtd_f32_f64(float64x2_t a)	a -> Vn.2D	FCVTXN Vd.2S,Vn.2D	Vd.2S -> result	A64
float32_t vcvtd_f32_f64(float64_t a)	a -> Dn	FCVTXN Sd,Dn	Sd -> result	A64
float32x4_t vcvtd_high_f32_f64(float32x2_t r, float64x2_t a)	r -> Vd.2S a -> Vn.2D	FCVTXN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
float32x2_t vrnd_f32(float32x2_t a)	a -> Vn.2S	FRINTZ Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndq_f32(float32x4_t a)	a -> Vn.4S	FRINTZ Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrnd_f64(float64x1_t a)	a -> Dn	FRINTZ Dd,Dn	Dd -> result	A64
float64x2_t vrndq_f64(float64x2_t a)	a -> Vn.2D	FRINTZ Vd.2D,Vn.2D	Vd.2D -> result	A64
float32x2_t vrndn_f32(float32x2_t a)	a -> Vn.2S	FRINTN Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndnq_f32(float32x4_t a)	a -> Vn.4S	FRINTN Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrndn_f64(float64x1_t a)	a -> Dn	FRINTN Dd,Dn	Dd -> result	A32/A64
float64x2_t vrndnq_f64(float64x2_t a)	a -> Vn.2D	FRINTN Vd.2D,Vn.2D	Vd.2D -> result	A32/A64
float32_t vrndns_f32(float32_t a)	a -> Sn	FRINTN Sd,Sn	Sd -> result	A32/A64
float32x2_t vrndm_f32(float32x2_t a)	a -> Vn.2S	FRINTM Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndmq_f32(float32x4_t a)	a -> Vn.4S	FRINTM Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrndm_f64(float64x1_t a)	a -> Dn	FRINTM Dd,Dn	Dd -> result	A64
float64x2_t vrndmq_f64(float64x2_t a)	a -> Vn.2D	FRINTM Vd.2D,Vn.2D	Vd.2D -> result	A64
float32x2_t vrndp_f32(float32x2_t a)	a -> Vn.2S	FRINTP Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndpq_f32(float32x4_t a)	a -> Vn.4S	FRINTP Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrndp_f64(float64x1_t a)	a -> Dn	FRINTP Dd,Dn	Dd -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x2_t vrndpq_f64(float64x2_t a)	a -> Vn.2D	FRINTP Vd.2D,Vn.2D	Vd.2D -> result	A64
float32x2_t vrnda_f32(float32x2_t a)	a -> Vn.2S	FRINTA Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndaq_f32(float32x4_t a)	a -> Vn.4S	FRINTA Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrnda_f64(float64x1_t a)	a -> Dn	FRINTA Dd,Dn	Dd -> result	A64
float64x2_t vrndaq_f64(float64x2_t a)	a -> Vn.2D	FRINTA Vd.2D,Vn.2D	Vd.2D -> result	A64
float32x2_t vrndi_f32(float32x2_t a)	a -> Vn.2S	FRINTI Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndiq_f32(float32x4_t a)	a -> Vn.4S	FRINTI Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrndi_f64(float64x1_t a)	a -> Dn	FRINTI Dd,Dn	Dd -> result	A64
float64x2_t vrndiq_f64(float64x2_t a)	a -> Vn.2D	FRINTI Vd.2D,Vn.2D	Vd.2D -> result	A64
float32x2_t vrndx_f32(float32x2_t a)	a -> Vn.2S	FRINTX Vd.2S,Vn.2S	Vd.2S -> result	A32/A64
float32x4_t vrndxq_f32(float32x4_t a)	a -> Vn.4S	FRINTX Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
float64x1_t vrndx_f64(float64x1_t a)	a -> Dn	FRINTX Dd,Dn	Dd -> result	A64
float64x2_t vrndxq_f64(float64x2_t a)	a -> Vn.2D	FRINTX Vd.2D,Vn.2D	Vd.2D -> result	A64
int8x8_t vmovn_s16(int16x8_t a)	a -> Vn.8H	XTN Vd.8B,Vn.8H	Vd.8B -> result	v7/A32/A64
int16x4_t vmovn_s32(int32x4_t a)	a -> Vn.4S	XTN Vd.4H,Vn.4S	Vd.4H -> result	v7/A32/A64
int32x2_t vmovn_s64(int64x2_t a)	a -> Vn.2D	XTN Vd.2S,Vn.2D	Vd.2S -> result	v7/A32/A64
uint8x8_t vmovn_u16(uint16x8_t a)	a -> Vn.8H	XTN Vd.8B,Vn.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vmovn_u32(uint32x4_t a)	a -> Vn.4S	XTN Vd.4H,Vn.4S	Vd.4H -> result	v7/A32/A64
uint32x2_t vmovn_u64(uint64x2_t a)	a -> Vn.2D	XTN Vd.2S,Vn.2D	Vd.2S -> result	v7/A32/A64
int8x16_t vmovn_high_s16(int8x8_t r, int16x8_t a)	r -> Vd.8B a -> Vn.8H	XTN2 Vd.16B,Vn.8H	Vd.16B -> result	A64
int16x8_t vmovn_high_s32(int16x4_t r, int32x4_t a)	r -> Vd.4H a -> Vn.4S	XTN2 Vd.8H,Vn.4S	Vd.8H -> result	A64
int32x4_t vmovn_high_s64(int32x2_t r, int64x2_t a)	r -> Vd.2S a -> Vn.2D	XTN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
uint8x16_t vmovn_high_u16(uint8x8_t r, uint16x8_t a)	r -> Vd.8B a -> Vn.8H	XTN2 Vd.16B,Vn.8H	Vd.16B -> result	A64
uint16x8_t vmovn_high_u32(uint16x4_t r, uint32x4_t a)	r -> Vd.4H a -> Vn.4S	XTN2 Vd.8H,Vn.4S	Vd.8H -> result	A64
uint32x4_t vmovn_high_u64(uint32x2_t r, uint64x2_t a)	r -> Vd.2S a -> Vn.2D	XTN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
int16x8_t vmovl_s8(int8x8_t a)	a -> Vn.8B	SSHLL Vd.8H,Vn.8B,#0	Vd.8H -> result	v7/A32/A64
int32x4_t vmovl_s16(int16x4_t a)	a -> Vn.4H	SSHLL Vd.4S,Vn.4H,#0	Vd.4S -> result	v7/A32/A64
int64x2_t vmovl_s32(int32x2_t a)	a -> Vn.2S	SSHLL Vd.2D,Vn.2S,#0	Vd.2D -> result	v7/A32/A64
uint16x8_t vmovl_u8(uint8x8_t a)	a -> Vn.8B	USHLL Vd.8H,Vn.8B,#0	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vmovl_u16(uint16x4_t a)	a -> Vn.4H	USHL2 Vd.4S,Vn.4H,#0	Vd.4S -> result	v7/A32/A64
uint64x2_t vmovl_u32(uint32x2_t a)	a -> Vn.2S	USHL2 Vd.2D,Vn.2S,#0	Vd.2D -> result	v7/A32/A64
int16x8_t vmovl_high_s8(int8x16_t a)	a -> Vn.16B	SSHLL2 Vd.8H,Vn.16B,#0	Vd.8H -> result	A64
int32x4_t vmovl_high_s16(int16x8_t a)	a -> Vn.8H	SSHLL2 Vd.4S,Vn.8H,#0	Vd.4S -> result	A64
int64x2_t vmovl_high_s32(int32x4_t a)	a -> Vn.4S	SSHLL2 Vd.2D,Vn.4S,#0	Vd.2D -> result	A64
uint16x8_t vmovl_high_u8(uint8x16_t a)	a -> Vn.16B	USHL2 Vd.8H,Vn.16B,#0	Vd.8H -> result	A64
uint32x4_t vmovl_high_u16(uint16x8_t a)	a -> Vn.8H	USHL2 Vd.4S,Vn.8H,#0	Vd.4S -> result	A64
uint64x2_t vmovl_high_u32(uint32x4_t a)	a -> Vn.4S	USHL2 Vd.2D,Vn.4S,#0	Vd.2D -> result	A64
int8x8_t vqmovn_s16(int16x8_t a)	a -> Vn.8H	SQXTN Vd.8B,Vn.8H	Vd.8B -> result	v7/A32/A64
int16x4_t vqmovn_s32(int32x4_t a)	a -> Vn.4S	SQXTN Vd.4H,Vn.4S	Vd.4H -> result	v7/A32/A64
int32x2_t vqmovn_s64(int64x2_t a)	a -> Vn.2D	SQXTN Vd.2S,Vn.2D	Vd.2S -> result	v7/A32/A64
uint8x8_t vqmovn_u16(uint16x8_t a)	a -> Vn.8H	UQXTN Vd.8B,Vn.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vqmovn_u32(uint32x4_t a)	a -> Vn.4S	UQXTN Vd.4H,Vn.4S	Vd.4H -> result	v7/A32/A64
uint32x2_t vqmovn_u64(uint64x2_t a)	a -> Vn.2D	UQXTN Vd.2S,Vn.2D	Vd.2S -> result	v7/A32/A64
int8_t vqmovnh_s16(int16_t a)	a -> Hn	SQXTN Bd,Hn	Bd -> result	A64
int16_t vqmovns_s32(int32_t a)	a -> Sn	SQXTN Hd,Sn	Hd -> result	A64
int32_t vqmovnd_s64(int64_t a)	a -> Dn	SQXTN Sd,Dn	Sd -> result	A64
uint8_t vqmovnh_u16(uint16_t a)	a -> Hn	UQXTN Bd,Hn	Bd -> result	A64
uint16_t vqmovns_u32(uint32_t a)	a -> Sn	UQXTN Hd,Sn	Hd -> result	A64
uint32_t vqmovnd_u64(uint64_t a)	a -> Dn	UQXTN Sd,Dn	Sd -> result	A64
int8x16_t vqmovn_high_s16(int8x8_t r, int16x8_t a)	r -> Vd.8B a -> Vn.8H	SQXTN2 Vd.16B,Vn.8H	Vd.16B -> result	A64
int16x8_t vqmovn_high_s32(int16x4_t r, int32x4_t a)	r -> Vd.4H a -> Vn.4S	SQXTN2 Vd.8H,Vn.4S	Vd.8H -> result	A64
int32x4_t vqmovn_high_s64(int32x2_t r, int64x2_t a)	r -> Vd.2S a -> Vn.2D	SQXTN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
uint8x16_t vqmovn_high_u16(uint8x8_t r, uint16x8_t a)	r -> Vd.8B a -> Vn.8H	UQXTN2 Vd.16B,Vn.8H	Vd.16B -> result	A64
uint16x8_t vqmovn_high_u32(uint16x4_t r, uint32x4_t a)	r -> Vd.4H a -> Vn.4S	UQXTN2 Vd.8H,Vn.4S	Vd.8H -> result	A64
uint32x4_t vqmovn_high_u64(uint32x2_t r, uint64x2_t a)	r -> Vd.2S a -> Vn.2D	UQXTN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
uint8x8_t vqmovun_s16(int16x8_t a)	a -> Vn.8H	SQXTUN Vd.8B,Vn.8H	Vd.8B -> result	v7/A32/A64
uint16x4_t vqmovun_s32(int32x4_t a)	a -> Vn.4S	SQXTUN Vd.4H,Vn.4S	Vd.4H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2_t vqmovun_s64(int64x2_t a)	a -> Vn.2D	SQXTUN Vd.2S,Vn.2D	Vd.2S -> result	v7/A32/A64
uint8_t vqmovunh_s16(int16_t a)	a -> Hn	SQXTUN Bd,Hn	Bd -> result	A64
uint16_t vqmovuns_s32(int32_t a)	a -> Sn	SQXTUN Hd,Sn	Hd -> result	A64
uint32_t vqmovund_s64(int64_t a)	a -> Dn	SQXTUN Sd,Dn	Sd -> result	A64
uint8x16_t vqmovun_high_s16(uint8x8_t r, int16x8_t a)	r -> Vd.8B a -> Vn.8H	SQXTUN2 Vd.16B,Vn.8H	Vd.16B -> result	A64
uint16x8_t vqmovun_high_s32(uint16x4_t r, int32x4_t a)	r -> Vd.4H a -> Vn.4S	SQXTUN2 Vd.8H,Vn.4S	Vd.8H -> result	A64
uint32x4_t vqmovun_high_s64(uint32x2_t r, int64x2_t a)	r -> Vd.2S a -> Vn.2D	SQXTUN2 Vd.4S,Vn.2D	Vd.4S -> result	A64
int16x4_t vmla_lane_s16(int16x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
int16x8_t vmlaq_lane_s16(int16x8_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
int32x2_t vmla_lane_s32(int32x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
int32x4_t vmlaq_lane_s32(int32x4_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
uint16x4_t vmla_lane_u16(uint16x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
uint16x8_t vmlaq_lane_u16(uint16x8_t a, uint16x8_t b, uint16x4_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
uint32x2_t vmla_lane_u32(uint32x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
uint32x4_t vmlaq_lane_u32(uint32x4_t a, uint32x4_t b, uint32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
float32x2_t vmla_lane_f32(float32x2_t a, float32x2_t b, float32x2_t v, const int lane)	0 <= lane <= 1	RESULT[I] = a[i] + (b[i] * v[lane]) for i = 0 to 1	N/A -> result	v7/A32/A64
float32x4_t vmlaq_lane_f32(float32x4_t a, float32x4_t b, float32x2_t v, const int lane)	0 <= lane <= 1	RESULT[I] = a[i] + (b[i] * v[lane]) for i = 0 to 3	N/A -> result	v7/A32/A64
int16x4_t vmla_laneq_s16(int16x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vmlaq_laneq_s16(int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int32x2_t vmla_laneq_s32(int32x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vmlaq_laneq_s32(int32x4_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
uint16x4_t vmla_laneq_u16(uint16x4_t a, uint16x4_t b, uint16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
uint16x8_t vmlaq_laneq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
uint32x2_t vmla_laneq_u32(uint32x2_t a, uint32x2_t b, uint32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
uint32x4_t vmlaq_laneq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float32x2_t vmla_laneq_f32(float32x2_t a, float32x2_t b, float32x4_t v, const int lane)	0 <= lane <= 3	RESULT[i] = a[i] + (b[i] * v[lane]) for i = 0 to 1	N/A -> result	A64
float32x4_t vmlaq_laneq_f32(float32x4_t a, float32x4_t b, float32x4_t v, const int lane)	0 <= lane <= 3	RESULT[i] = a[i] + (b[i] * v[lane]) for i = 0 to 3	N/A -> result	A64
int32x4_t vmlal_lane_s16(int32x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
int64x2_t vmlal_lane_s32(int64x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
uint32x4_t vmlal_lane_u16(uint32x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	UMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
uint64x2_t vmlal_lane_u32(uint64x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	UMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
int32x4_t vmlal_high_lane_s16(int32x4_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SMLAL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmlal_high_lane_s32(int64x2_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SMLAL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vmlal_high_lane_u16(uint32x4_t a, uint16x8_t b, uint16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	UMLAL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmlal_high_lane_u32(uint64x2_t a, uint32x4_t b, uint32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	UMLAL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vmlal_laneq_s16(int32x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmlal_laneq_s32(int64x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmlal_laneq_u16(uint32x4_t a, uint16x4_t b, uint16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	UMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmlal_laneq_u32(uint64x2_t a, uint32x2_t b, uint32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	UMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vmlal_high_laneq_s16(int32x4_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SMLAL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmlal_high_laneq_s32(int64x2_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SMLAL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmlal_high_laneq_u16(uint32x4_t a, uint16x8_t b, uint16x8_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	UMLAL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmlal_high_laneq_u32(uint64x2_t a, uint32x4_t b, uint32x4_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	UMLAL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vqdmmlal_lane_s16(int32x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQDMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmmlal_lane_s32(int64x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQDMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
int32_t vqdmmlalh_lane_s16(int32_t a, int16_t b, int16x4_t v, const int lane)	a -> Sd b -> Hn v -> Vm.4H 0 <= lane <= 3	SQDMLAL Sd,Hn,Vm.H[lane]	Sd -> result	A64
int64_t vqdmmlals_lane_s32(int64_t a, int32_t b, int32x2_t v, const int lane)	a -> Dd b -> Sn v -> Vm.2S 0 <= lane <= 1	SQDMLAL Dd,Sn,Vm.S[lane]	Dd -> result	A64
int32x4_t vqdmmlal_high_lane_s16(int32x4_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQDMLAL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2_t vqdmmlal_high_lane_s32(int64x2_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQDMLAL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vqdmmlal_laneq_s16(int32x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQDMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmmlal_laneq_s32(int64x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQDMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
int32_t vqdmmlalh_laneq_s16(int32_t a, int16_t b, int16x8_t v, const int lane)	a -> Sd b -> Hn v -> Vm.8H 0 <= lane <= 7	SQDMLAL Sd,Hn,Vm.H[lane]	Sd -> result	A64
int64_t vqdmmlals_laneq_s32(int64_t a, int32_t b, int32x4_t v, const int lane)	a -> Dd b -> Sn v -> Vm.4S 0 <= lane <= 3	SQDMLAL Dd,Sn,Vm.S[lane]	Dd -> result	A64
int32x4_t vqdmmlal_high_laneq_s16(int32x4_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SQDMLAL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmmlal_high_laneq_s32(int64x2_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SQDMLAL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int16x4_t vmls_lane_s16(int16x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
int16x8_t vmlsq_lane_s16(int16x8_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
int32x2_t vmls_lane_s32(int32x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
int32x4_t vmlsq_lane_s32(int32x4_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
uint16x4_t vmls_lane_u16(uint16x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
uint16x8_t vmlsq_lane_u16(uint16x8_t a, uint16x8_t b, uint16x4_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
uint32x2_t vmls_lane_u32(uint32x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
uint32x4_t vmlsq_lane_u32(uint32x4_t a, uint32x4_t b, uint32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x2_t vmls_lane_f32(float32x2_t a, float32x2_t b, float32x2_t v, const int lane)	0 <= lane <= 1	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 1	N/A -> result	v7/A32/A64
float32x4_t vmlsq_lane_f32(float32x4_t a, float32x4_t b, float32x2_t v, const int lane)	0 <= lane <= 1	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 3	N/A -> result	v7/A32/A64
int16x4_t vmls_laneq_s16(int16x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vmlsq_laneq_s16(int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int32x2_t vmls_laneq_s32(int32x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vmlsq_laneq_s32(int32x4_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
uint16x4_t vmls_laneq_u16(uint16x4_t a, uint16x4_t b, uint16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
uint16x8_t vmlsq_laneq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
uint32x2_t vmls_laneq_u32(uint32x2_t a, uint32x2_t b, uint32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
uint32x4_t vmlsq_laneq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float32x2_t vmls_laneq_f32(float32x2_t a, float32x2_t b, float32x4_t v, const int lane)	0 <= lane <= 3	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 1	N/A -> result	A64
float32x4_t vmlsq_laneq_f32(float32x4_t a, float32x4_t b, float32x4_t v, const int lane)	0 <= lane <= 3	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 3	N/A -> result	A64
int32x4_t vmlsl_lane_s16(int32x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SMLS Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
int64x2_t vmlsl_lane_s32(int64x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SMLS Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
uint32x4_t vmlsl_lane_u16(uint32x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	UMLS Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
uint64x2_t vmlsl_lane_u32(uint64x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	UMLS Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vmlsl_high_lane_s16(int32x4_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SMLSLS2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmlsl_high_lane_s32(int64x2_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SMLSLS2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmlsl_high_lane_u16(uint32x4_t a, uint16x8_t b, uint16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	UMLSLS2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmlsl_high_lane_u32(uint64x2_t a, uint32x4_t b, uint32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	UMLSLS2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vmlsl_laneeq_s16(int32x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SMLSLS Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmlsl_laneeq_s32(int64x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SMLSLS Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmlsl_laneeq_u16(uint32x4_t a, uint16x4_t b, uint16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	UMLSLS Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmlsl_laneeq_u32(uint64x2_t a, uint32x2_t b, uint32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	UMLSLS Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vmlsl_high_laneeq_s16(int32x4_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SMLSLS2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmlsl_high_laneeq_s32(int64x2_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SMLSLS2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmlsl_high_laneeq_u16(uint32x4_t a, uint16x8_t b, uint16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	UMLSLS2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmlsl_high_laneeq_u32(uint64x2_t a, uint32x4_t b, uint32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	UMLSLS2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vqdmmlsl_lane_s16(int32x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQDMLSLS Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmmlsl_lane_s32(int64x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQDMLSLS Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
int32_t vqdmmlslh_lane_s16(int32_t a, int16_t b, int16x4_t v, const int lane)	a -> Sd b -> Hn v -> Vm.4H 0 <= lane <= 3	SQDMLSLS Sd,Hn,Vm.H[lane]	Sd -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64_t vqdmmlsl_lane_s32(int64_t a, int32_t b, int32x2_t v, const int lane)	a -> Dd b -> Sn v -> Vm.2S 0 <= lane <= 1	SQDMLSL Dd,Sn,Vm.S[lane]	Dd -> result	A64
int32x4_t vqdmmlsl_high_lane_s16(int32x4_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQDMLSL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmmlsl_high_lane_s32(int64x2_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQDMLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vqdmmlsl_laneq_s16(int32x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQDMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmmlsl_laneq_s32(int64x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQDMLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
int32_t vqdmmlslh_laneq_s16(int32_t a, int16_t b, int16x8_t v, const int lane)	a -> Sd b -> Hn v -> Vm.8H 0 <= lane <= 7	SQDMLSL Sd,Hn,Vm.H[lane]	Sd -> result	A64
int64_t vqdmmlsl_laneq_s32(int64_t a, int32_t b, int32x4_t v, const int lane)	a -> Dd b -> Sn v -> Vm.4S 0 <= lane <= 3	SQDMLSL Dd,Sn,Vm.S[lane]	Dd -> result	A64
int32x4_t vqdmmlsl_high_laneq_s16(int32x4_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.4S b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SQDMLSL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmmlsl_high_laneq_s32(int64x2_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.2D b -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SQDMLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int16x4_t vmul_n_s16(int16x4_t a, int16_t b)	a -> Vn.4H b -> Vm.H[0]	MUL Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
int16x8_t vmulq_n_s16(int16x8_t a, int16_t b)	a -> Vn.8H b -> Vm.H[0]	MUL Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
int32x2_t vmul_n_s32(int32x2_t a, int32_t b)	a -> Vn.2S b -> Vm.S[0]	MUL Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
int32x4_t vmulq_n_s32(int32x4_t a, int32_t b)	a -> Vn.4S b -> Vm.S[0]	MUL Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
uint16x4_t vmul_n_u16(uint16x4_t a, uint16_t b)	a -> Vn.4H b -> Vm.H[0]	MUL Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
uint16x8_t vmulq_n_u16(uint16x8_t a, uint16_t b)	a -> Vn.8H b -> Vm.H[0]	MUL Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
uint32x2_t vmul_n_u32(uint32x2_t a, uint32_t b)	a -> Vn.2S b -> Vm.S[0]	MUL Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
uint32x4_t vmulq_n_u32(uint32x4_t a, uint32_t b)	a -> Vn.4S b -> Vm.S[0]	MUL Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
float32x2_t vmul_n_f32(float32x2_t a, float32_t b)	a -> Vn.2S b -> Vm.S[0]	FMUL Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x4_t vmulq_n_f32(float32x4_t a, float32_t b)	a -> Vn.4S b -> Vm.S[0]	FMUL Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
float64x1_t vmul_n_f64(float64x1_t a, float64_t b)	a -> Dn b -> Vm.D[0]	FMUL Dd,Dn,Vm.D[0]	Dd -> result	A64
float64x2_t vmulq_n_f64(float64x2_t a, float64_t b)	a -> Vn.2D b -> Vm.D[0]	FMUL Vd.2D,Vn.2D,Vm.D[0]	Vd.2D -> result	A64
int16x4_t vmul_lane_s16(int16x4_t a, int16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	MUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
int16x8_t vmulq_lane_s16(int16x8_t a, int16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	MUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
int32x2_t vmul_lane_s32(int32x2_t a, int32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	MUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
int32x4_t vmulq_lane_s32(int32x4_t a, int32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	MUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
uint16x4_t vmul_lane_u16(uint16x4_t a, uint16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	MUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
uint16x8_t vmulq_lane_u16(uint16x8_t a, uint16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	MUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
uint32x2_t vmul_lane_u32(uint32x2_t a, uint32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	MUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
uint32x4_t vmulq_lane_u32(uint32x4_t a, uint32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	MUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
float32x2_t vmul_lane_f32(float32x2_t a, float32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	FMUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
float32x4_t vmulq_lane_f32(float32x4_t a, float32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	FMUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
float64x1_t vmul_lane_f64(float64x1_t a, float64x1_t v, const int lane)	a -> Dn v -> Vm.1D lane == 0	FMUL Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vmulq_lane_f64(float64x2_t a, float64x1_t v, const int lane)	a -> Vn.2D v -> Vm.1D lane == 0	FMUL Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vmuls_lane_f32(float32_t a, float32x2_t v, const int lane)	a -> Sn v -> Vm.2S 0 <= lane <= 1	FMUL Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vmuld_lane_f64(float64_t a, float64x1_t v, const int lane)	a -> Dn v -> Vm.1D lane == 0	FMUL Dd,Dn,Vm.S[lane]	Dd -> result	A64
int16x4_t vmul_laneq_s16(int16x4_t a, int16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	MUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vmulq_laneq_s16(int16x8_t a, int16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	MUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2_t vmul_laneq_s32(int32x2_t a, int32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	MUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vmulq_laneq_s32(int32x4_t a, int32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	MUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
uint16x4_t vmul_laneq_u16(uint16x4_t a, uint16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	MUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
uint16x8_t vmulq_laneq_u16(uint16x8_t a, uint16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	MUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
uint32x2_t vmul_laneq_u32(uint32x2_t a, uint32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	MUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
uint32x4_t vmulq_laneq_u32(uint32x4_t a, uint32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	MUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float32x2_t vmul_laneq_f32(float32x2_t a, float32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	FMUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
float32x4_t vmulq_laneq_f32(float32x4_t a, float32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	FMUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
float64x1_t vmul_laneq_f64(float64x1_t a, float64x2_t v, const int lane)	a -> Dn v -> Vm.2D 0 <= lane <= 1	FMUL Dd,Dn,Vm.D[lane]	Dd -> result	A64
float64x2_t vmulq_laneq_f64(float64x2_t a, float64x2_t v, const int lane)	a -> Vn.2D v -> Vm.2D 0 <= lane <= 1	FMUL Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D -> result	A64
float32_t vmul_laneq_f32(float32_t a, float32x4_t v, const int lane)	a -> Sn v -> Vm.4S 0 <= lane <= 3	FMUL Sd,Sn,Vm.S[lane]	Sd -> result	A64
float64_t vmul_laneq_f64(float64_t a, float64x2_t v, const int lane)	a -> Dn v -> Vm.2D 0 <= lane <= 1	FMUL Dd,Dn,Vm.D[lane]	Dd -> result	A64
int32x4_t vmull_n_s16(int16x4_t a, int16_t b)	a -> Vn.4H b -> Vm.H[0]	SMULL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
int64x2_t vmull_n_s32(int32x2_t a, int32_t b)	a -> Vn.2S b -> Vm.S[0]	SMULL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
uint32x4_t vmull_n_u16(uint16x4_t a, uint16_t b)	a -> Vn.4H b -> Vm.H[0]	UMULL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
uint64x2_t vmull_n_u32(uint32x2_t a, uint32_t b)	a -> Vn.2S b -> Vm.S[0]	UMULL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
int32x4_t vmull_high_n_s16(int16x8_t a, int16_t b)	a -> Vn.8H b -> Vm.H[0]	SMULL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
int64x2_t vmull_high_n_s32(int32x4_t a, int32_t b)	a -> Vn.4S b -> Vm.S[0]	SMULL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
uint32x4_t vmull_high_n_u16(uint16x8_t a, uint16_t b)	a -> Vn.8H b -> Vm.H[0]	UMULL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
uint64x2_t vmull_high_n_u32(uint32x4_t a, uint32_t b)	a -> Vn.4S b -> Vm.S[0]	UMULL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vmull_lane_s16(int16x4_t a, int16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
int64x2_t vmull_lane_s32(int32x2_t a, int32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
uint32x4_t vmull_lane_u16(uint16x4_t a, uint16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	UMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
uint64x2_t vmull_lane_u32(uint32x2_t a, uint32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	UMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
int32x4_t vmull_high_lane_s16(int16x8_t a, int16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmull_high_lane_s32(int32x4_t a, int32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmull_high_lane_u16(uint16x8_t a, uint16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	UMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmull_high_lane_u32(uint32x4_t a, uint32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	UMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vmull_laneq_s16(int16x4_t a, int16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmull_laneq_s32(int32x2_t a, int32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmull_laneq_u16(uint16x4_t a, uint16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	UMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmull_laneq_u32(uint32x2_t a, uint32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	UMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vmull_high_laneq_s16(int16x8_t a, int16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vmull_high_laneq_s32(int32x4_t a, int32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
uint32x4_t vmull_high_laneq_u16(uint16x8_t a, uint16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	UMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
uint64x2_t vmull_high_laneq_u32(uint32x4_t a, uint32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	UMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vqdmull_n_s16(int16x4_t a, int16_t b)	a -> Vn.4H b -> Vm.H[0]	SQDMULL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmull_n_s32(int32x2_t a, int32_t b)	a -> Vn.2S b -> Vm.S[0]	SQDMULL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
int32x4_t vqdmull_high_n_s16(int16x8_t a, int16_t b)	a -> Vn.8H b -> Vm.H[0]	SQDMULL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2_t vqdmull_high_n_s32(int32x4_t a, int32_t b)	a -> Vn.4S b -> Vm.S[0]	SQDMULL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
int32x4_t vqdmull_lane_s16(int16x4_t a, int16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQDMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmull_lane_s32(int32x2_t a, int32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQDMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	v7/A32/A64
int32_t vqdmullh_lane_s16(int16_t a, int16x4_t v, const int lane)	a -> Hn v -> Vm.4H 0 <= lane <= 3	SQDMULL Sd,Hn,Vm.H[lane]	Sd -> result	A64
int64_t vqdmulls_lane_s32(int32_t a, int32x2_t v, const int lane)	a -> Sn v -> Vm.2S 0 <= lane <= 1	SQDMULL Dd,Sn,Vm.S[lane]	Dd -> result	A64
int32x4_t vqdmull_high_lane_s16(int16x8_t a, int16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQDMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmull_high_lane_s32(int32x4_t a, int32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQDMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int32x4_t vqdmull_laneq_s16(int16x4_t a, int16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQDMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmull_laneq_s32(int32x2_t a, int32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQDMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D -> result	A64
int32_t vqdmullh_laneq_s16(int16_t a, int16x8_t v, const int lane)	a -> Hn v -> Vm.8H 0 <= lane <= 7	SQDMULL Sd,Hn,Vm.H[lane]	Sd -> result	A64
int64_t vqdmulls_laneq_s32(int32_t a, int32x4_t v, const int lane)	a -> Sn v -> Vm.4S 0 <= lane <= 3	SQDMULL Dd,Sn,Vm.S[lane]	Dd -> result	A64
int32x4_t vqdmull_high_laneq_s16(int16x8_t a, int16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SQDMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S -> result	A64
int64x2_t vqdmull_high_laneq_s32(int32x4_t a, int32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SQDMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D -> result	A64
int16x4_t vqdmulh_n_s16(int16x4_t a, int16_t b)	a -> Vn.4H b -> Vm.H[0]	SQDMULH Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
int16x8_t vqdmulhq_n_s16(int16x8_t a, int16_t b)	a -> Vn.8H b -> Vm.H[0]	SQDMULH Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
int32x2_t vqdmulh_n_s32(int32x2_t a, int32_t b)	a -> Vn.2S b -> Vm.S[0]	SQDMULH Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
int32x4_t vqdmulhq_n_s32(int32x4_t a, int32_t b)	a -> Vn.4S b -> Vm.S[0]	SQDMULH Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
int16x4_t vqdmulh_lane_s16(int16x4_t a, int16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
int16x8_t vqdmulhq_lane_s16(int16x8_t a, int16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2_t vqdmulh_lane_s32(int32x2_t a, int32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
int32x4_t vqdmulhq_lane_s32(int32x4_t a, int32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
int16_t vqdmulhh_lane_s16(int16_t a, int16x4_t v, const int lane)	a -> Hn v -> Vm.4H 0 <= lane <= 3	SQDMULH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int32_t vqdmulhs_lane_s32(int32_t a, int32x2_t v, const int lane)	a -> Sn v -> Vm.2S 0 <= lane <= 1	SQDMULH Sd,Sn,Vm.H[lane]	Sd -> result	A64
int16x4_t vqdmulh_laneq_s16(int16x4_t a, int16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vqdmulhq_laneq_s16(int16x8_t a, int16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SQDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int32x2_t vqdmulh_laneq_s32(int32x2_t a, int32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vqdmulhq_laneq_s32(int32x4_t a, int32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SQDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
int16_t vqdmulhh_laneq_s16(int16_t a, int16x8_t v, const int lane)	a -> Hn v -> Vm.8H 0 <= lane <= 7	SQDMULH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int32_t vqdmulhs_laneq_s32(int32_t a, int32x4_t v, const int lane)	a -> Sn v -> Vm.4S 0 <= lane <= 3	SQDMULH Sd,Sn,Vm.H[lane]	Sd -> result	A64
int16x4_t vqrdmulh_n_s16(int16x4_t a, int16_t b)	a -> Vn.4H b -> Vm.H[0]	SQRDMULH Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
int16x8_t vqrdmulhq_n_s16(int16x8_t a, int16_t b)	a -> Vn.8H b -> Vm.H[0]	SQRDMULH Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
int32x2_t vqrdmulh_n_s32(int32x2_t a, int32_t b)	a -> Vn.2S b -> Vm.S[0]	SQRDMULH Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
int32x4_t vqrdmulhq_n_s32(int32x4_t a, int32_t b)	a -> Vn.4S b -> Vm.S[0]	SQRDMULH Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
int16x4_t vqrdmulh_lane_s16(int16x4_t a, int16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQRDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	v7/A32/A64
int16x8_t vqrdmulhq_lane_s16(int16x8_t a, int16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQRDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	v7/A32/A64
int32x2_t vqrdmulh_lane_s32(int32x2_t a, int32x2_t v, const int lane)	a -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQRDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	v7/A32/A64
int32x4_t vqrdmulhq_lane_s32(int32x4_t a, int32x2_t v, const int lane)	a -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQRDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	v7/A32/A64
int16_t vqrdmulhh_lane_s16(int16_t a, int16x4_t v, const int lane)	a -> Hn v -> Vm.4H 0 <= lane <= 3	SQRDMULH Hd,Hn,Vm.H[lane]	Hd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32_t vqrdmulhs_lane_s32(int32_t a, int32x2_t v, const int lane)	a -> Sn v -> Vm.2S 0 <= lane <= 1	SQRDMULH Sd,Sn,Vm.S[lane]	Sd -> result	A64
int16x4_t vqrdmulh_laneq_s16(int16x4_t a, int16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQRDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vqrdmulhq_laneq_s16(int16x8_t a, int16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	SQRDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int32x2_t vqrdmulh_laneq_s32(int32x2_t a, int32x4_t v, const int lane)	a -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQRDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vqrdmulhq_laneq_s32(int32x4_t a, int32x4_t v, const int lane)	a -> Vn.4S v -> Vm.4S 0 <= lane <= 3	SQRDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
int16_t vqrdmulhh_laneq_s16(int16_t a, int16x8_t v, const int lane)	a -> Hn v -> Vm.8H 0 <= lane <= 7	SQRDMULH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int32_t vqrdmulhs_laneq_s32(int32_t a, int32x4_t v, const int lane)	a -> Sn v -> Vm.4S 0 <= lane <= 3	SQRDMULH Sd,Sn,Vm.S[lane]	Sd -> result	A64
int16x4_t vmla_n_s16(int16x4_t a, int16x4_t b, int16_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.H[0]	MLA Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
int16x8_t vmlaq_n_s16(int16x8_t a, int16x8_t b, int16_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.H[0]	MLA Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
int32x2_t vmla_n_s32(int32x2_t a, int32x2_t b, int32_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.S[0]	MLA Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
int32x4_t vmlaq_n_s32(int32x4_t a, int32x4_t b, int32_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.S[0]	MLA Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
uint16x4_t vmla_n_u16(uint16x4_t a, uint16x4_t b, uint16_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.H[0]	MLA Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
uint16x8_t vmlaq_n_u16(uint16x8_t a, uint16x8_t b, uint16_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.H[0]	MLA Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
uint32x2_t vmla_n_u32(uint32x2_t a, uint32x2_t b, uint32_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.S[0]	MLA Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
uint32x4_t vmlaq_n_u32(uint32x4_t a, uint32x4_t b, uint32_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.S[0]	MLA Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
float32x2_t vmla_n_f32(float32x2_t a, float32x2_t b, float32_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] + (b[i] * c) for i = 0 to 1	N/A -> result	v7/A32/A64
float32x4_t vmlaq_n_f32(float32x4_t a, float32x4_t b, float32_t c)	a -> N/A b -> N/A c -> N/A	RESULT[i] = a[i] + (b[i] * c) for i = 0 to 3	N/A -> result	v7/A32/A64
int32x4_t vmla_n_s16(int32x4_t a, int16x4_t b, int16_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.H[0]	SMLAL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2_t vmlal_n_s32(int64x2_t a, int32x2_t b, int32_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.S[0]	SMLAL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
uint32x4_t vmlal_n_u16(uint32x4_t a, uint16x4_t b, uint16_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.H[0]	UMLAL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
uint64x2_t vmlal_n_u32(uint64x2_t a, uint32x2_t b, uint32_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.S[0]	UMLAL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
int32x4_t vmlal_high_n_s16(int32x4_t a, int16x8_t b, int16_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.H[0]	SMLAL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
int64x2_t vmlal_high_n_s32(int64x2_t a, int32x4_t b, int32_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.S[0]	SMLAL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
uint32x4_t vmlal_high_n_u16(uint32x4_t a, uint16x8_t b, uint16_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.H[0]	UMLAL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
uint64x2_t vmlal_high_n_u32(uint64x2_t a, uint32x4_t b, uint32_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.S[0]	UMLAL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
int32x4_t vqdmmlal_n_s16(int32x4_t a, int16x4_t b, int16_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.H[0]	SQDMLAL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmmlal_n_s32(int64x2_t a, int32x2_t b, int32_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.S[0]	SQDMLAL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
int32x4_t vqdmmlal_high_n_s16(int32x4_t a, int16x8_t b, int16_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.H[0]	SQDMLAL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
int64x2_t vqdmmlal_high_n_s32(int64x2_t a, int32x4_t b, int32_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.S[0]	SQDMLAL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
int16x4_t vmls_n_s16(int16x4_t a, int16x4_t b, int16_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.H[0]	MLS Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
int16x8_t vmlsq_n_s16(int16x8_t a, int16x8_t b, int16_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.H[0]	MLS Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
int32x2_t vmls_n_s32(int32x2_t a, int32x2_t b, int32_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.S[0]	MLS Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
int32x4_t vmlsq_n_s32(int32x4_t a, int32x4_t b, int32_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.S[0]	MLS Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
uint16x4_t vmls_n_u16(uint16x4_t a, uint16x4_t b, uint16_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.H[0]	MLS Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	v7/A32/A64
uint16x8_t vmlsq_n_u16(uint16x8_t a, uint16x8_t b, uint16_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.H[0]	MLS Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	v7/A32/A64
uint32x2_t vmls_n_u32(uint32x2_t a, uint32x2_t b, uint32_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.S[0]	MLS Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vmlsq_n_u32(uint32x4_t a, uint32x4_t b, uint32_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.S[0]	MLS Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
float32x2_t vmls_n_f32(float32x2_t a, float32x2_t b, float32_t c)	a -> N/A b -> N/A c -> N/A	RESULT[I] = a[i] - (b[i] * c) for i = 0 to 1	N/A -> result	v7/A32/A64
float32x4_t vmlsq_n_f32(float32x4_t a, float32x4_t b, float32_t c)	a -> N/A b -> N/A c -> N/A	RESULT[I] = a[i] - (b[i] * c) for i = 0 to 3	N/A -> result	v7/A32/A64
int32x4_t vmlsl_n_s16(int32x4_t a, int16x4_t b, int16_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.H[0]	SMLS Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
int64x2_t vmlsl_n_s32(int64x2_t a, int32x2_t b, int32_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.S[0]	SMLS Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
uint32x4_t vmlsl_n_u16(uint32x4_t a, uint16x4_t b, uint16_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.H[0]	UMLS Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
uint64x2_t vmlsl_n_u32(uint64x2_t a, uint32x2_t b, uint32_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.S[0]	UMLS Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
int32x4_t vmlsl_high_n_s16(int32x4_t a, int16x8_t b, int16_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.H[0]	SMLS2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
int64x2_t vmlsl_high_n_s32(int64x2_t a, int32x4_t b, int32_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.S[0]	SMLS2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
uint32x4_t vmlsl_high_n_u16(uint32x4_t a, uint16x8_t b, uint16_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.H[0]	UMLS2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
uint64x2_t vmlsl_high_n_u32(uint64x2_t a, uint32x4_t b, uint32_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.S[0]	UMLS2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
int32x4_t vqdmmlsl_n_s16(int32x4_t a, int16x4_t b, int16_t c)	a -> Vd.4S b -> Vn.4H c -> Vm.H[0]	SQDMLS Vd.4S,Vn.4H,Vm.H[0]	Vd.4S -> result	v7/A32/A64
int64x2_t vqdmmlsl_n_s32(int64x2_t a, int32x2_t b, int32_t c)	a -> Vd.2D b -> Vn.2S c -> Vm.S[0]	SQDMLS Vd.2D,Vn.2S,Vm.S[0]	Vd.2D -> result	v7/A32/A64
int32x4_t vqdmmlsl_high_n_s16(int32x4_t a, int16x8_t b, int16_t c)	a -> Vd.4S b -> Vn.8H c -> Vm.H[0]	SQDMLS2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S -> result	A64
int64x2_t vqdmmlsl_high_n_s32(int64x2_t a, int32x4_t b, int32_t c)	a -> Vd.2D b -> Vn.4S c -> Vm.S[0]	SQDMLS2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D -> result	A64
int8x8_t vabs_s8(int8x8_t a)	a -> Vn.8B	ABS Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vabsq_s8(int8x16_t a)	a -> Vn.16B	ABS Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vabs_s16(int16x4_t a)	a -> Vn.4H	ABS Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vabsq_s16(int16x8_t a)	a -> Vn.8H	ABS Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vabs_s32(int32x2_t a)	a -> Vn.2S	ABS Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vabsq_s32(int32x4_t a)	a -> Vn.4S	ABS Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vabs_f32(float32x2_t a)	a -> Vn.2S	FABS Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vabsq_f32(float32x4_t a)	a -> Vn.4S	FABS Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vabs_s64(int64x1_t a)	a -> Dn	ABS Dd,Dn	Dd -> result	A64
int64_t vabsd_s64(int64_t a)	a -> Dn	ABS Dd,Dn	Dd -> result	A64
int64x2_t vabsq_s64(int64x2_t a)	a -> Vn.2D	ABS Vd.2D,Vn.2D	Vd.2D -> result	A64
float64x1_t vabs_f64(float64x1_t a)	a -> Dn	FABS Dd,Dn	Dd -> result	A64
float64x2_t vabsq_f64(float64x2_t a)	a -> Vn.2D	FABS Vd.2D,Vn.2D	Vd.2D -> result	A64
int8x8_t vqabs_s8(int8x8_t a)	a -> Vn.8B	SQABS Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vqabsq_s8(int8x16_t a)	a -> Vn.16B	SQABS Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vqabs_s16(int16x4_t a)	a -> Vn.4H	SQABS Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vqabsq_s16(int16x8_t a)	a -> Vn.8H	SQABS Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vqabs_s32(int32x2_t a)	a -> Vn.2S	SQABS Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vqabsq_s32(int32x4_t a)	a -> Vn.4S	SQABS Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vqabs_s64(int64x1_t a)	a -> Dn	SQABS Dd,Dn	Dd -> result	A64
int64x2_t vqabsq_s64(int64x2_t a)	a -> Vn.2D	SQABS Vd.2D,Vn.2D	Vd.2D -> result	A64
int8_t vqabsb_s8(int8_t a)	a -> Bn	SQABS Bd,Bn	Bd -> result	A64
int16_t vqabsh_s16(int16_t a)	a -> Hn	SQABS Hd,Hn	Hd -> result	A64
int32_t vqabss_s32(int32_t a)	a -> Sn	SQABS Sd,Sn	Sd -> result	A64
int64_t vqabsd_s64(int64_t a)	a -> Dn	SQABS Dd,Dn	Dd -> result	A64
int8x8_t vneg_s8(int8x8_t a)	a -> Vn.8B	NEG Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vnegq_s8(int8x16_t a)	a -> Vn.16B	NEG Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vneg_s16(int16x4_t a)	a -> Vn.4H	NEG Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vnegq_s16(int16x8_t a)	a -> Vn.8H	NEG Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vneg_s32(int32x2_t a)	a -> Vn.2S	NEG Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vnegq_s32(int32x4_t a)	a -> Vn.4S	NEG Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vneg_f32(float32x2_t a)	a -> Vn.2S	FNEG Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vnegq_f32(float32x4_t a)	a -> Vn.4S	FNEG Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vneg_s64(int64x1_t a)	a -> Dn	NEG Dd,Dn	Dd -> result	A64
int64_t vnegd_s64(int64_t a)	a -> Dn	NEG Dd,Dn	Dd -> result	A64
int64x2_t vnegq_s64(int64x2_t a)	a -> Vn.2D	NEG Vd.2D,Vn.2D	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x1_t vneg_f64(float64x1_t a)	a -> Dn	FNEG Dd,Dn	Dd -> result	A64
float64x2_t vnegq_f64(float64x2_t a)	a -> Vn.2D	FNEG Vd.2D,Vn.2D	Vd.2D -> result	A64
int8x8_t vneg_s8(int8x8_t a)	a -> Vn.8B	SQNEG Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vnegq_s8(int8x16_t a)	a -> Vn.16B	SQNEG Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vneg_s16(int16x4_t a)	a -> Vn.4H	SQNEG Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vnegq_s16(int16x8_t a)	a -> Vn.8H	SQNEG Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vneg_s32(int32x2_t a)	a -> Vn.2S	SQNEG Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vnegq_s32(int32x4_t a)	a -> Vn.4S	SQNEG Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int64x1_t vneg_s64(int64x1_t a)	a -> Dn	SQNEG Dd,Dn	Dd -> result	A64
int64x2_t vnegq_s64(int64x2_t a)	a -> Vn.2D	SQNEG Vd.2D,Vn.2D	Vd.2D -> result	A64
int8_t vnegb_s8(int8_t a)	a -> Bn	SQNEG Bd,Bn	Bd -> result	A64
int16_t vnegh_s16(int16_t a)	a -> Hn	SQNEG Hd,Hn	Hd -> result	A64
int32_t vnegs_s32(int32_t a)	a -> Sn	SQNEG Sd,Sn	Sd -> result	A64
int64_t vnegd_s64(int64_t a)	a -> Dn	SQNEG Dd,Dn	Dd -> result	A64
int8x8_t vcls_s8(int8x8_t a)	a -> Vn.8B	CLS Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vclsq_s8(int8x16_t a)	a -> Vn.16B	CLS Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vcls_s16(int16x4_t a)	a -> Vn.4H	CLS Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vclsq_s16(int16x8_t a)	a -> Vn.8H	CLS Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vcls_s32(int32x2_t a)	a -> Vn.2S	CLS Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vclsq_s32(int32x4_t a)	a -> Vn.4S	CLS Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int8x8_t vclz_s8(int8x8_t a)	a -> Vn.8B	CLZ Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vclzq_s8(int8x16_t a)	a -> Vn.16B	CLZ Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vclz_s16(int16x4_t a)	a -> Vn.4H	CLZ Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vclzq_s16(int16x8_t a)	a -> Vn.8H	CLZ Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int32x2_t vclz_s32(int32x2_t a)	a -> Vn.2S	CLZ Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vclzq_s32(int32x4_t a)	a -> Vn.4S	CLZ Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vclz_u8(uint8x8_t a)	a -> Vn.8B	CLZ Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vclzq_u8(uint8x16_t a)	a -> Vn.16B	CLZ Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vclz_u16(uint16x4_t a)	a -> Vn.4H	CLZ Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vclzq_u16(uint16x8_t a)	a -> Vn.8H	CLZ Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vclz_u32(uint32x2_t a)	a -> Vn.2S	CLZ Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vclzq_u32(uint32x4_t a)	a -> Vn.4S	CLZ Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
int8x8_t vcnt_s8(int8x8_t a)	a -> Vn.8B	CNT Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vcntq_s8(int8x16_t a)	a -> Vn.16B	CNT Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vcnt_u8(uint8x8_t a)	a -> Vn.8B	CNT Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vcntq_u8(uint8x16_t a)	a -> Vn.16B	CNT Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
poly8x8_t vcnt_p8(poly8x8_t a)	a -> Vn.8B	CNT Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vcntq_p8(poly8x16_t a)	a -> Vn.16B	CNT Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t vrecpe_u32(uint32x2_t a)	a -> Vn.2S	URECPE Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vrecpeq_u32(uint32x4_t a)	a -> Vn.4S	URECPE Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vrecpe_f32(float32x2_t a)	a -> Vn.2S	FRECPE Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vrecpeq_f32(float32x4_t a)	a -> Vn.4S	FRECPE Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vrecpe_f64(float64x1_t a)	a -> Dn	FRECPE Dd,Dn	Dd -> result	A64
float64x2_t vrecpeq_f64(float64x2_t a)	a -> Vn.2D	FRECPE Vd.2D,Vn.2D	Vd.2D -> result	A64
float32_t vrecpes_f32(float32_t a)	a -> Sn	FRECPE Sd,Sn	Sd -> result	A64
float64_t vrecped_f64(float64_t a)	a -> Dn	FRECPE Dd,Dn	Dd -> result	A64
float32x2_t vrecps_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FRECPS Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vrecpsq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FRECPS Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vrecps_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FRECPS Dd,Dn,Dm	Dd -> result	A64
float64x2_t vrecpsq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FRECPS Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32_t vrecps_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FRECPS Sd,Sn,Sm	Sd -> result	A64
float64_t vrecpsd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FRECPS Dd,Dn,Dm	Dd -> result	A64
float32x2_t vsqrt_f32(float32x2_t a)	a -> Vn.2S	FSQRT Vd.2S,Vn.2S	Vd.2S -> result	A64
float32x4_t vsqrtq_f32(float32x4_t a)	a -> Vn.4S	FSQRT Vd.4S,Vn.4S	Vd.4S -> result	A64
float64x1_t vsqrt_f64(float64x1_t a)	a -> Dn	FSQRT Dd,Dn	Dd -> result	A64
float64x2_t vsqrtq_f64(float64x2_t a)	a -> Vn.2D	FSQRT Vd.2D,Vn.2D	Vd.2D -> result	A64
uint32x2_t vrsqrte_u32(uint32x2_t a)	a -> Vn.2S	URSQRTE Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vrsqrteq_u32(uint32x4_t a)	a -> Vn.4S	URSQRTE Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vrsqrte_f32(float32x2_t a)	a -> Vn.2S	FRSQRTE Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vrsqrteq_f32(float32x4_t a)	a -> Vn.4S	FRSQRTE Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x1_t vrsqrte_f64(float64x1_t a)	a -> Dn	FRSQRTD Dd,Dn	Dd -> result	A64
float64x2_t vrsqrteq_f64(float64x2_t a)	a -> Vn.2D	FRSQRTD Vd.2D,Vn.2D	Vd.2D -> result	A64
float32_t vrsqrtes_f32(float32_t a)	a -> Sn	FRSQRTD Sd,Sn	Sd -> result	A64
float64_t vrsqrtd_f64(float64_t a)	a -> Dn	FRSQRTD Dd,Dn	Dd -> result	A64
float32x2_t vrsqrts_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FRSQRTS Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vrsqrtsq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FRSQRTS Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	v7/A32/A64
float64x1_t vrsqrts_f64(float64x1_t a, float64x1_t b)	a -> Dn b -> Dm	FRSQRTS Dd,Dn,Dm	Dd -> result	A64
float64x2_t vrsqrtsq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FRSQRTS Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32_t vrsqrtss_f32(float32_t a, float32_t b)	a -> Sn b -> Sm	FRSQRTS Sd,Sn,Sm	Sd -> result	A64
float64_t vrsqrtsd_f64(float64_t a, float64_t b)	a -> Dn b -> Dm	FRSQRTS Dd,Dn,Dm	Dd -> result	A64
int8x8_t vmvn_s8(int8x8_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vmvnq_s8(int8x16_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vmvn_s16(int16x4_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int16x8_t vmvnq_s16(int16x8_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int32x2_t vmvn_s32(int32x2_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int32x4_t vmvnq_s32(int32x4_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vmvn_u8(uint8x8_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vmvnq_u8(uint8x16_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vmvn_u16(uint16x4_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint16x8_t vmvnq_u16(uint16x8_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t vmvn_u32(uint32x2_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t vmvnq_u32(uint32x4_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
poly8x8_t vmvn_p8(poly8x8_t a)	a -> Vn.8B	MVN Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vmvnq_p8(poly8x16_t a)	a -> Vn.16B	MVN Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int8x8_t vand_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vandq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vand_s16(int16x4_t a, int16x4_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x8_t vandq_s16(int16x8_t a, int16x8_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2_t vand_s32(int32x2_t a, int32x2_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int32x4_t vandq_s32(int32x4_t a, int32x4_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int64x1_t vand_s64(int64x1_t a, int64x1_t b)	a -> Dn b -> Dm	AND Dd,Dn,Dm	Dd -> result	v7/A32/A64
int64x2_t vandq_s64(int64x2_t a, int64x2_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vand_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vandq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vand_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x8_t vandq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t vand_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t vandq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vand_u64(uint64x1_t a, uint64x1_t b)	a -> Vn.8B b -> Vm.8B	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint64x2_t vandq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.16B b -> Vm.16B	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int8x8_t vorr_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vorrq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vorr_s16(int16x4_t a, int16x4_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x8_t vorrq_s16(int16x8_t a, int16x8_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int32x2_t vorr_s32(int32x2_t a, int32x2_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int32x4_t vorrq_s32(int32x4_t a, int32x4_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int64x1_t vorr_s64(int64x1_t a, int64x1_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int64x2_t vorrq_s64(int64x2_t a, int64x2_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vorr_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vorrq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vorr_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vorrq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t vorrq_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t vorrq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vorrq_u64(uint64x1_t a, uint64x1_t b)	a -> Vn.8B b -> Vm.8B	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint64x2_t vorrq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.16B b -> Vm.16B	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int8x8_t veor_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t veorq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t veor_s16(int16x4_t a, int16x4_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x8_t veorq_s16(int16x8_t a, int16x8_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int32x2_t veor_s32(int32x2_t a, int32x2_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int32x4_t veorq_s32(int32x4_t a, int32x4_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int64x1_t veor_s64(int64x1_t a, int64x1_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int64x2_t veorq_s64(int64x2_t a, int64x2_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t veor_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t veorq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t veor_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x8_t veorq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t veor_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t veorq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t veor_u64(uint64x1_t a, uint64x1_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint64x2_t veorq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int8x8_t vbic_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vbicq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4_t vbic_s16(int16x4_t a, int16x4_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x8_t vbicq_s16(int16x8_t a, int16x8_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int32x2_t vbic_s32(int32x2_t a, int32x2_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int32x4_t vbicq_s32(int32x4_t a, int32x4_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int64x1_t vbic_s64(int64x1_t a, int64x1_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int64x2_t vbicq_s64(int64x2_t a, int64x2_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vbic_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vbicq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vbic_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x8_t vbicq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t vbic_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t vbicq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vbic_u64(uint64x1_t a, uint64x1_t b)	a -> Vn.8B b -> Vm.8B	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint64x2_t vbicq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.16B b -> Vm.16B	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int8x8_t vorn_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vornq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vorn_s16(int16x4_t a, int16x4_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x8_t vornq_s16(int16x8_t a, int16x8_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int32x2_t vorn_s32(int32x2_t a, int32x2_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int32x4_t vornq_s32(int32x4_t a, int32x4_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int64x1_t vorn_s64(int64x1_t a, int64x1_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int64x2_t vornq_s64(int64x2_t a, int64x2_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vorn_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x16_t vorrq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vorn_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x8_t vorrq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint32x2_t vorn_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t vorrq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vorn_u64(uint64x1_t a, uint64x1_t b)	a -> Vn.8B b -> Vm.8B	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint64x2_t vorrq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.16B b -> Vm.16B	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int8x8_t vbsl_s8(uint8x8_t a, int8x8_t b, int8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vbslq_s8(uint8x16_t a, int8x16_t b, int8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vbsl_s16(uint16x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x8_t vbslq_s16(uint16x8_t a, int16x8_t b, int16x8_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int32x2_t vbsl_s32(uint32x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int32x4_t vbslq_s32(uint32x4_t a, int32x4_t b, int32x4_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
int64x1_t vbsl_s64(uint64x1_t a, int64x1_t b, int64x1_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int64x2_t vbslq_s64(uint64x2_t a, int64x2_t b, int64x2_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vbsl_u8(uint8x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vbslq_u8(uint8x16_t a, uint8x16_t b, uint8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vbsl_u16(uint16x4_t a, uint16x4_t b, uint16x4_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x8_t vbslq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2_t vbsl_u32(uint32x2_t a, uint32x2_t b, uint32x2_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint32x4_t vbslq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint64x1_t vbsl_u64(uint64x1_t a, uint64x1_t b, uint64x1_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint64x2_t vbslq_u64(uint64x2_t a, uint64x2_t b, uint64x2_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
poly64x1_t vbsl_p64(poly64x1_t a, poly64x1_t b, poly64x1_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A32/A64
poly64x2_t vbslq_p64(poly64x2_t a, poly64x2_t b, poly64x2_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A32/A64
float32x2_t vbsl_f32(uint32x2_t a, float32x2_t b, float32x2_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
float32x4_t vbslq_f32(uint32x4_t a, float32x4_t b, float32x4_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
poly8x8_t vbsl_p8(uint8x8_t a, poly8x8_t b, poly8x8_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vbslq_p8(uint8x16_t a, poly8x16_t b, poly8x16_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
poly16x4_t vbsl_p16(uint16x4_t a, poly16x4_t b, poly16x4_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
poly16x8_t vbslq_p16(uint16x8_t a, poly16x8_t b, poly16x8_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
float64x1_t vbsl_f64(uint64x1_t a, float64x1_t b, float64x1_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
float64x2_t vbslq_f64(uint64x2_t a, float64x2_t b, float64x2_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int8x8_t vcopy_lane_s8(int8x8_t a, const int lane1, int8x8_t b, const int lane2)	a -> Vd.8B 0 <= lane1 <= 7 b -> Vn.8B 0 <= lane2 <= 7	INS Vd.B[lane1],Vn.B[lane2]	Vd.8B -> result	A64
int8x16_t vcopyq_lane_s8(int8x16_t a, const int lane1, int8x8_t b, const int lane2)	a -> Vd.16B 0 <= lane1 <= 15 b -> Vn.8B 0 <= lane2 <= 7	INS Vd.B[lane1],Vn.B[lane2]	Vd.16B -> result	A64
int16x4_t vcopy_lane_s16(int16x4_t a, const int lane1, int16x4_t b, const int lane2)	a -> Vd.4H 0 <= lane1 <= 3 b -> Vn.4H 0 <= lane2 <= 3	INS Vd.H[lane1],Vn.H[lane2]	Vd.4H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vcopyq_lane_s16(int16x8_t a, const int lane1, int16x4_t b, const int lane2)	a -> Vd.8H 0 <= lane1 <= 7 b -> Vn.4H 0 <= lane2 <= 3	INS Vd.H[lane1],Vn.H[lane2]	Vd.8H -> result	A64
int32x2_t vcopyq_lane_s32(int32x2_t a, const int lane1, int32x2_t b, const int lane2)	a -> Vd.2S 0 <= lane1 <= 1 b -> Vn.2S 0 <= lane2 <= 1	INS Vd.S[lane1],Vn.S[lane2]	Vd.2S -> result	A64
int32x4_t vcopyq_lane_s32(int32x4_t a, const int lane1, int32x2_t b, const int lane2)	a -> Vd.4S 0 <= lane1 <= 3 b -> Vn.2S 0 <= lane2 <= 1	INS Vd.S[lane1],Vn.S[lane2]	Vd.4S -> result	A64
int64x1_t vcopyq_lane_s64(int64x1_t a, const int lane1, int64x1_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.1D lane2 == 0	DUP Dd,Vn.D[lane2]	Dd -> result	A64
int64x2_t vcopyq_lane_s64(int64x2_t a, const int lane1, int64x1_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.1D lane2 == 0	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A64
uint8x8_t vcopyq_lane_u8(uint8x8_t a, const int lane1, uint8x8_t b, const int lane2)	a -> Vd.8B 0 <= lane1 <= 7 b -> Vn.8B 0 <= lane2 <= 7	INS Vd.B[lane1],Vn.B[lane2]	Vd.8B -> result	A64
uint8x16_t vcopyq_lane_u8(uint8x16_t a, const int lane1, uint8x8_t b, const int lane2)	a -> Vd.16B 0 <= lane1 <= 15 b -> Vn.8B 0 <= lane2 <= 7	INS Vd.B[lane1],Vn.B[lane2]	Vd.16B -> result	A64
uint16x4_t vcopyq_lane_u16(uint16x4_t a, const int lane1, uint16x4_t b, const int lane2)	a -> Vd.4H 0 <= lane1 <= 3 b -> Vn.4H 0 <= lane2 <= 3	INS Vd.H[lane1],Vn.H[lane2]	Vd.4H -> result	A64
uint16x8_t vcopyq_lane_u16(uint16x8_t a, const int lane1, uint16x4_t b, const int lane2)	a -> Vd.8H 0 <= lane1 <= 7 b -> Vn.4H 0 <= lane2 <= 3	INS Vd.H[lane1],Vn.H[lane2]	Vd.8H -> result	A64
uint32x2_t vcopyq_lane_u32(uint32x2_t a, const int lane1, uint32x2_t b, const int lane2)	a -> Vd.2S 0 <= lane1 <= 1 b -> Vn.2S 0 <= lane2 <= 1	INS Vd.S[lane1],Vn.S[lane2]	Vd.2S -> result	A64
uint32x4_t vcopyq_lane_u32(uint32x4_t a, const int lane1, uint32x2_t b, const int lane2)	a -> Vd.4S 0 <= lane1 <= 3 b -> Vn.2S 0 <= lane2 <= 1	INS Vd.S[lane1],Vn.S[lane2]	Vd.4S -> result	A64
uint64x1_t vcopyq_lane_u64(uint64x1_t a, const int lane1, uint64x1_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.1D lane2 == 0	DUP Dd,Vn.D[lane2]	Dd -> result	A64
uint64x2_t vcopyq_lane_u64(uint64x2_t a, const int lane1, uint64x1_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.1D lane2 == 0	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A64
poly64x1_t vcopyq_lane_p64(poly64x1_t a, const int lane1, poly64x1_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.1D lane2 == 0	DUP Dd,Vn.D[lane2]	Dd -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly64x2_t vcopyq_lane_p64(poly64x2_t a, const int lane1, poly64x2_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.1D lane2 == 0	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A32/A64
float32x2_t vcopyq_lane_f32(float32x2_t a, const int lane1, float32x2_t b, const int lane2)	a -> Vd.2S 0 <= lane1 <= 1 b -> Vn.2S 0 <= lane2 <= 1	INS Vd.S[lane1],Vn.S[lane2]	Vd.2S -> result	A64
float32x4_t vcopyq_lane_f32(float32x4_t a, const int lane1, float32x2_t b, const int lane2)	a -> Vd.4S 0 <= lane1 <= 3 b -> Vn.2S 0 <= lane2 <= 1	INS Vd.S[lane1],Vn.S[lane2]	Vd.4S -> result	A64
float64x1_t vcopyq_lane_f64(float64x1_t a, const int lane1, float64x1_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.1D lane2 == 0	DUP Dd,Vn.D[lane2]	Dd -> result	A64
float64x2_t vcopyq_lane_f64(float64x2_t a, const int lane1, float64x1_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.1D lane2 == 0	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A64
poly8x8_t vcopyq_lane_p8(poly8x8_t a, const int lane1, poly8x8_t b, const int lane2)	a -> Vd.8B 0 <= lane1 <= 7 b -> Vn.8B 0 <= lane2 <= 7	INS Vd.B[lane1],Vn.B[lane2]	Vd.8B -> result	A64
poly8x16_t vcopyq_lane_p8(poly8x16_t a, const int lane1, poly8x8_t b, const int lane2)	a -> Vd.16B 0 <= lane1 <= 15 b -> Vn.8B 0 <= lane2 <= 7	INS Vd.B[lane1],Vn.B[lane2]	Vd.16B -> result	A64
poly16x4_t vcopyq_lane_p16(poly16x4_t a, const int lane1, poly16x4_t b, const int lane2)	a -> Vd.4H 0 <= lane1 <= 3 b -> Vn.4H 0 <= lane2 <= 3	INS Vd.H[lane1],Vn.H[lane2]	Vd.4H -> result	A64
poly16x8_t vcopyq_lane_p16(poly16x8_t a, const int lane1, poly16x4_t b, const int lane2)	a -> Vd.8H 0 <= lane1 <= 7 b -> Vn.4H 0 <= lane2 <= 3	INS Vd.H[lane1],Vn.H[lane2]	Vd.8H -> result	A64
int8x8_t vcopyq_laneq_s8(int8x8_t a, const int lane1, int8x16_t b, const int lane2)	a -> Vd.8B 0 <= lane1 <= 7 b -> Vn.16B 0 <= lane2 <= 15	INS Vd.B[lane1],Vn.B[lane2]	Vd.8B -> result	A64
int8x16_t vcopyq_laneq_s8(int8x16_t a, const int lane1, int8x16_t b, const int lane2)	a -> Vd.16B 0 <= lane1 <= 15 b -> Vn.16B 0 <= lane2 <= 15	INS Vd.B[lane1],Vn.B[lane2]	Vd.16B -> result	A64
int16x4_t vcopyq_laneq_s16(int16x4_t a, const int lane1, int16x8_t b, const int lane2)	a -> Vd.4H 0 <= lane1 <= 3 b -> Vn.8H 0 <= lane2 <= 7	INS Vd.H[lane1],Vn.H[lane2]	Vd.4H -> result	A64
int16x8_t vcopyq_laneq_s16(int16x8_t a, const int lane1, int16x8_t b, const int lane2)	a -> Vd.8H 0 <= lane1 <= 7 b -> Vn.8H 0 <= lane2 <= 7	INS Vd.H[lane1],Vn.H[lane2]	Vd.8H -> result	A64
int32x2_t vcopyq_laneq_s32(int32x2_t a, const int lane1, int32x4_t b, const int lane2)	a -> Vd.2S 0 <= lane1 <= 1 b -> Vn.4S 0 <= lane2 <= 3	INS Vd.S[lane1],Vn.S[lane2]	Vd.2S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vcopyq_laneq_s32(int32x4_t a, const int lane1, int32x4_t b, const int lane2)	a -> Vd.4S 0 <= lane1 <= 3 b -> Vn.4S 0 <= lane2 <= 3	INS Vd.S[lane1],Vn.S[lane2]	Vd.4S -> result	A64
int64x1_t vcopy_laneq_s64(int64x1_t a, const int lane1, int64x2_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.2D 0 <= lane2 <= 1	DUP Dd,Vn.D[lane2]	Dd -> result	A64
int64x2_t vcopyq_laneq_s64(int64x2_t a, const int lane1, int64x2_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.2D 0 <= lane2 <= 1	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A64
uint8x8_t vcopy_laneq_u8(uint8x8_t a, const int lane1, uint8x16_t b, const int lane2)	a -> Vd.8B 0 <= lane1 <= 7 b -> Vn.16B 0 <= lane2 <= 15	INS Vd.B[lane1],Vn.B[lane2]	Vd.8B -> result	A64
uint8x16_t vcopyq_laneq_u8(uint8x16_t a, const int lane1, uint8x16_t b, const int lane2)	a -> Vd.16B 0 <= lane1 <= 15 b -> Vn.16B 0 <= lane2 <= 15	INS Vd.B[lane1],Vn.B[lane2]	Vd.16B -> result	A64
uint16x4_t vcopy_laneq_u16(uint16x4_t a, const int lane1, uint16x8_t b, const int lane2)	a -> Vd.4H 0 <= lane1 <= 3 b -> Vn.8H 0 <= lane2 <= 7	INS Vd.H[lane1],Vn.H[lane2]	Vd.4H -> result	A64
uint16x8_t vcopyq_laneq_u16(uint16x8_t a, const int lane1, uint16x8_t b, const int lane2)	a -> Vd.8H 0 <= lane1 <= 7 b -> Vn.8H 0 <= lane2 <= 7	INS Vd.H[lane1],Vn.H[lane2]	Vd.8H -> result	A64
uint32x2_t vcopy_laneq_u32(uint32x2_t a, const int lane1, uint32x4_t b, const int lane2)	a -> Vd.2S 0 <= lane1 <= 1 b -> Vn.4S 0 <= lane2 <= 3	INS Vd.S[lane1],Vn.S[lane2]	Vd.2S -> result	A64
uint32x4_t vcopyq_laneq_u32(uint32x4_t a, const int lane1, uint32x4_t b, const int lane2)	a -> Vd.4S 0 <= lane1 <= 3 b -> Vn.4S 0 <= lane2 <= 3	INS Vd.S[lane1],Vn.S[lane2]	Vd.4S -> result	A64
uint64x1_t vcopy_laneq_u64(uint64x1_t a, const int lane1, uint64x2_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.2D 0 <= lane2 <= 1	DUP Dd,Vn.D[lane2]	Dd -> result	A64
uint64x2_t vcopyq_laneq_u64(uint64x2_t a, const int lane1, uint64x2_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.2D 0 <= lane2 <= 1	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A64
poly64x1_t vcopy_laneq_p64(poly64x1_t a, const int lane1, poly64x2_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.2D 0 <= lane2 <= 1	DUP Dd,Vn.D[lane2]	Dd -> result	A32/A64
poly64x2_t vcopyq_laneq_p64(poly64x2_t a, const int lane1, poly64x2_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.2D 0 <= lane2 <= 1	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A32/A64
float32x2_t vcopy_laneq_f32(float32x2_t a, const int lane1, float32x4_t b, const int lane2)	a -> Vd.2S 0 <= lane1 <= 1 b -> Vn.4S 0 <= lane2 <= 3	INS Vd.S[lane1],Vn.S[lane2]	Vd.2S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x4_t vcopyq_laneq_f32(float32x4_t a, const int lane1, float32x4_t b, const int lane2)	a -> Vd.4S 0 <= lane1 <= 3 b -> Vn.4S 0 <= lane2 <= 3	INS Vd.S[lane1],Vn.S[lane2]	Vd.4S -> result	A64
float64x1_t vcopy_laneq_f64(float64x1_t a, const int lane1, float64x2_t b, const int lane2)	a -> UNUSED lane1 == 0 b -> Vn.2D 0 <= lane2 <= 1	DUP Dd,Vn.D[lane2]	Dd -> result	A64
float64x2_t vcopyq_laneq_f64(float64x2_t a, const int lane1, float64x2_t b, const int lane2)	a -> Vd.2D 0 <= lane1 <= 1 b -> Vn.2D 0 <= lane2 <= 1	INS Vd.D[lane1],Vn.D[lane2]	Vd.2D -> result	A64
poly8x8_t vcopy_laneq_p8(poly8x8_t a, const int lane1, poly8x16_t b, const int lane2)	a -> Vd.8B 0 <= lane1 <= 7 b -> Vn.16B 0 <= lane2 <= 15	INS Vd.B[lane1],Vn.B[lane2]	Vd.8B -> result	A64
poly8x16_t vcopyq_laneq_p8(poly8x16_t a, const int lane1, poly8x16_t b, const int lane2)	a -> Vd.16B 0 <= lane1 <= 15 b -> Vn.16B 0 <= lane2 <= 15	INS Vd.B[lane1],Vn.B[lane2]	Vd.16B -> result	A64
poly16x4_t vcopy_laneq_p16(poly16x4_t a, const int lane1, poly16x8_t b, const int lane2)	a -> Vd.4H 0 <= lane1 <= 3 b -> Vn.8H 0 <= lane2 <= 7	INS Vd.H[lane1],Vn.H[lane2]	Vd.4H -> result	A64
poly16x8_t vcopyq_laneq_p16(poly16x8_t a, const int lane1, poly16x8_t b, const int lane2)	a -> Vd.8H 0 <= lane1 <= 7 b -> Vn.8H 0 <= lane2 <= 7	INS Vd.H[lane1],Vn.H[lane2]	Vd.8H -> result	A64
int8x8_t vrbtq_s8(int8x8_t a)	a -> Vn.8B	RBIT Vd.8B,Vn.8B	Vd.8B -> result	A64
int8x16_t vrbtq_s8(int8x16_t a)	a -> Vn.16B	RBIT Vd.16B,Vn.16B	Vd.16B -> result	A64
uint8x8_t vrbtq_u8(uint8x8_t a)	a -> Vn.8B	RBIT Vd.8B,Vn.8B	Vd.8B -> result	A64
uint8x16_t vrbtq_u8(uint8x16_t a)	a -> Vn.16B	RBIT Vd.16B,Vn.16B	Vd.16B -> result	A64
poly8x8_t vrbtq_p8(poly8x8_t a)	a -> Vn.8B	RBIT Vd.8B,Vn.8B	Vd.8B -> result	A64
poly8x16_t vrbtq_p8(poly8x16_t a)	a -> Vn.16B	RBIT Vd.16B,Vn.16B	Vd.16B -> result	A64
int8x8_t vcreate_s8(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.8B -> result	v7/A32/A64
int16x4_t vcreate_s16(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.4H -> result	v7/A32/A64
int32x2_t vcreate_s32(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.2S -> result	v7/A32/A64
int64x1_t vcreate_s64(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.1D -> result	v7/A32/A64
uint8x8_t vcreate_u8(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.8B -> result	v7/A32/A64
uint16x4_t vcreate_u16(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.4H -> result	v7/A32/A64
uint32x2_t vcreate_u32(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.2S -> result	v7/A32/A64
uint64x1_t vcreate_u64(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.1D -> result	v7/A32/A64
poly64x1_t vcreate_p64(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.1D -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vcreate_f16(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.4H -> result	v7/A32/A64
float32x2_t vcreate_f32(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.2S -> result	v7/A32/A64
poly8x8_t vcreate_p8(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.8B -> result	v7/A32/A64
poly16x4_t vcreate_p16(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.4H -> result	v7/A32/A64
float64x1_t vcreate_f64(uint64_t a)	a -> Xn	INS Vd.D[0],Xn	Vd.1D -> result	A64
int8x8_t vdup_n_s8(int8_t value)	value -> rn	DUP Vd.8B,rn	Vd.8B -> result	v7/A32/A64
int8x16_t vdupq_n_s8(int8_t value)	value -> rn	DUP Vd.16B,rn	Vd.16B -> result	v7/A32/A64
int16x4_t vdup_n_s16(int16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
int16x8_t vdupq_n_s16(int16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
int32x2_t vdup_n_s32(int32_t value)	value -> rn	DUP Vd.2S,rn	Vd.2S -> result	v7/A32/A64
int32x4_t vdupq_n_s32(int32_t value)	value -> rn	DUP Vd.4S,rn	Vd.4S -> result	v7/A32/A64
int64x1_t vdup_n_s64(int64_t value)	value -> rn	INS Dd.D[0],xn	Vd.1D -> result	v7/A32/A64
int64x2_t vdupq_n_s64(int64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	v7/A32/A64
uint8x8_t vdup_n_u8(uint8_t value)	value -> rn	DUP Vd.8B,rn	Vd.8B -> result	v7/A32/A64
uint8x16_t vdupq_n_u8(uint8_t value)	value -> rn	DUP Vd.16B,rn	Vd.16B -> result	v7/A32/A64
uint16x4_t vdup_n_u16(uint16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
uint16x8_t vdupq_n_u16(uint16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
uint32x2_t vdup_n_u32(uint32_t value)	value -> rn	DUP Vd.2S,rn	Vd.2S -> result	v7/A32/A64
uint32x4_t vdupq_n_u32(uint32_t value)	value -> rn	DUP Vd.4S,rn	Vd.4S -> result	v7/A32/A64
uint64x1_t vdup_n_u64(uint64_t value)	value -> rn	INS Dd.D[0],xn	Vd.1D -> result	v7/A32/A64
uint64x2_t vdupq_n_u64(uint64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	v7/A32/A64
poly64x1_t vdup_n_p64(poly64_t value)	value -> rn	INS Dd.D[0],xn	Vd.1D -> result	A32/A64
poly64x2_t vdupq_n_p64(poly64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	A32/A64
float32x2_t vdup_n_f32(float32_t value)	value -> rn	DUP Vd.2S,rn	Vd.2S -> result	v7/A32/A64
float32x4_t vdupq_n_f32(float32_t value)	value -> rn	DUP Vd.4S,rn	Vd.4S -> result	v7/A32/A64
poly8x8_t vdup_n_p8(poly8_t value)	value -> rn	DUP Vd.8B,rn	Vd.8B -> result	v7/A32/A64
poly8x16_t vdupq_n_p8(poly8_t value)	value -> rn	DUP Vd.16B,rn	Vd.16B -> result	v7/A32/A64
poly16x4_t vdup_n_p16(poly16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
poly16x8_t vdupq_n_p16(poly16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
float64x1_t vdup_n_f64(float64_t value)	value -> rn	INS Dd.D[0],xn	Vd.1D -> result	A64
float64x2_t vdupq_n_f64(float64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x8_t vmov_n_s8(int8_t value)	value -> rn	DUP Vd.8B,rn	Vd.8B -> result	v7/A32/A64
int8x16_t vmovq_n_s8(int8_t value)	value -> rn	DUP Vd.16B,rn	Vd.16B -> result	v7/A32/A64
int16x4_t vmov_n_s16(int16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
int16x8_t vmovq_n_s16(int16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
int32x2_t vmov_n_s32(int32_t value)	value -> rn	DUP Vd.2S,rn	Vd.2S -> result	v7/A32/A64
int32x4_t vmovq_n_s32(int32_t value)	value -> rn	DUP Vd.4S,rn	Vd.4S -> result	v7/A32/A64
int64x1_t vmov_n_s64(int64_t value)	value -> rn	DUP Vd.1D,rn	Vd.1D -> result	v7/A32/A64
int64x2_t vmovq_n_s64(int64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	v7/A32/A64
uint8x8_t vmov_n_u8(uint8_t value)	value -> rn	DUP Vd.8B,rn	Vd.8B -> result	v7/A32/A64
uint8x16_t vmovq_n_u8(uint8_t value)	value -> rn	DUP Vd.16B,rn	Vd.16B -> result	v7/A32/A64
uint16x4_t vmov_n_u16(uint16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
uint16x8_t vmovq_n_u16(uint16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
uint32x2_t vmov_n_u32(uint32_t value)	value -> rn	DUP Vd.2S,rn	Vd.2S -> result	v7/A32/A64
uint32x4_t vmovq_n_u32(uint32_t value)	value -> rn	DUP Vd.4S,rn	Vd.4S -> result	v7/A32/A64
uint64x1_t vmov_n_u64(uint64_t value)	value -> rn	DUP Vd.1D,rn	Vd.1D -> result	v7/A32/A64
uint64x2_t vmovq_n_u64(uint64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	v7/A32/A64
float32x2_t vmov_n_f32(float32_t value)	value -> rn	DUP Vd.2S,rn	Vd.2S -> result	v7/A32/A64
float32x4_t vmovq_n_f32(float32_t value)	value -> rn	DUP Vd.4S,rn	Vd.4S -> result	v7/A32/A64
poly8x8_t vmov_n_p8(poly8_t value)	value -> rn	DUP Vd.8B,rn	Vd.8B -> result	v7/A32/A64
poly8x16_t vmovq_n_p8(poly8_t value)	value -> rn	DUP Vd.16B,rn	Vd.16B -> result	v7/A32/A64
poly16x4_t vmov_n_p16(poly16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
poly16x8_t vmovq_n_p16(poly16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
float64x1_t vmov_n_f64(float64_t value)	value -> rn	DUP Vd.1D,rn	Vd.1D -> result	A64
float64x2_t vmovq_n_f64(float64_t value)	value -> rn	DUP Vd.2D,rn	Vd.2D -> result	A64
int8x8_t vdup_lane_s8(int8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Vd.8B,Vn.B[lane]	Vd.8B -> result	v7/A32/A64
int8x16_t vdupq_lane_s8(int8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Vd.16B,Vn.B[lane]	Vd.16B -> result	v7/A32/A64
int16x4_t vdup_lane_s16(int16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	v7/A32/A64
int16x8_t vdupq_lane_s16(int16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	v7/A32/A64
int32x2_t vdup_lane_s32(int32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Vd.2S,Vn.S[lane]	Vd.2S -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vdupq_lane_s32(int32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Vd.4S,Vn.S[lane]	Vd.4S -> result	v7/A32/A64
int64x1_t vdup_lane_s64(int64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	v7/A32/A64
int64x2_t vdupq_lane_s64(int64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	v7/A32/A64
uint8x8_t vdup_lane_u8(uint8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Vd.8B,Vn.B[lane]	Vd.8B -> result	v7/A32/A64
uint8x16_t vdupq_lane_u8(uint8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Vd.16B,Vn.B[lane]	Vd.16B -> result	v7/A32/A64
uint16x4_t vdup_lane_u16(uint16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	v7/A32/A64
uint16x8_t vdupq_lane_u16(uint16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	v7/A32/A64
uint32x2_t vdup_lane_u32(uint32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Vd.2S,Vn.S[lane]	Vd.2S -> result	v7/A32/A64
uint32x4_t vdupq_lane_u32(uint32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Vd.4S,Vn.S[lane]	Vd.4S -> result	v7/A32/A64
uint64x1_t vdup_lane_u64(uint64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	v7/A32/A64
uint64x2_t vdupq_lane_u64(uint64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	v7/A32/A64
poly64x1_t vdup_lane_p64(poly64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	A32/A64
poly64x2_t vdupq_lane_p64(poly64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	A32/A64
float32x2_t vdup_lane_f32(float32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Vd.2S,Vn.S[lane]	Vd.2S -> result	v7/A32/A64
float32x4_t vdupq_lane_f32(float32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Vd.4S,Vn.S[lane]	Vd.4S -> result	v7/A32/A64
poly8x8_t vdup_lane_p8(poly8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Vd.8B,Vn.B[lane]	Vd.8B -> result	v7/A32/A64
poly8x16_t vdupq_lane_p8(poly8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Vd.16B,Vn.B[lane]	Vd.16B -> result	v7/A32/A64
poly16x4_t vdup_lane_p16(poly16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	v7/A32/A64
poly16x8_t vdupq_lane_p16(poly16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	v7/A32/A64
float64x1_t vdup_lane_f64(float64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	A64
float64x2_t vdupq_lane_f64(float64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	A64
int8x8_t vdup_laneq_s8(int8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Vd.8B,Vn.B[lane]	Vd.8B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16_t vdupq_laneq_s8(int8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Vd.16B,Vn.B[lane]	Vd.16B -> result	A64
int16x4_t vdup_laneq_s16(int16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	A64
int16x8_t vdupq_laneq_s16(int16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	A64
int32x2_t vdup_laneq_s32(int32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Vd.2S,Vn.S[lane]	Vd.2S -> result	A64
int32x4_t vdupq_laneq_s32(int32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Vd.4S,Vn.S[lane]	Vd.4S -> result	A64
int64x1_t vdup_laneq_s64(int64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
int64x2_t vdupq_laneq_s64(int64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	A64
uint8x8_t vdup_laneq_u8(uint8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Vd.8B,Vn.B[lane]	Vd.8B -> result	A64
uint8x16_t vdupq_laneq_u8(uint8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Vd.16B,Vn.B[lane]	Vd.16B -> result	A64
uint16x4_t vdup_laneq_u16(uint16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	A64
uint16x8_t vdupq_laneq_u16(uint16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	A64
uint32x2_t vdup_laneq_u32(uint32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Vd.2S,Vn.S[lane]	Vd.2S -> result	A64
uint32x4_t vdupq_laneq_u32(uint32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Vd.4S,Vn.S[lane]	Vd.4S -> result	A64
uint64x1_t vdup_laneq_u64(uint64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
uint64x2_t vdupq_laneq_u64(uint64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	A64
poly64x1_t vdup_laneq_p64(poly64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
poly64x2_t vdupq_laneq_p64(poly64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	A64
float32x2_t vdup_laneq_f32(float32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Vd.2S,Vn.S[lane]	Vd.2S -> result	A64
float32x4_t vdupq_laneq_f32(float32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Vd.4S,Vn.S[lane]	Vd.4S -> result	A64
poly8x8_t vdup_laneq_p8(poly8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Vd.8B,Vn.B[lane]	Vd.8B -> result	A64
poly8x16_t vdupq_laneq_p8(poly8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Vd.16B,Vn.B[lane]	Vd.16B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly16x4_t vdup_laneq_p16(poly16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	A64
poly16x8_t vdupq_laneq_p16(poly16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	A64
float64x1_t vdup_laneq_f64(float64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
float64x2_t vdupq_laneq_f64(float64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Vd.2D,Vn.D[lane]	Vd.2D -> result	A64
int8x16_t vcombine_s8(int8x8_t low, int8x8_t high)	low -> Vn.8B high -> Vm.8B	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.16B -> result	v7/A32/A64
int16x8_t vcombine_s16(int16x4_t low, int16x4_t high)	low -> Vn.4H high -> Vm.4H	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.8H -> result	v7/A32/A64
int32x4_t vcombine_s32(int32x2_t low, int32x2_t high)	low -> Vn.2S high -> Vm.2S	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.4S -> result	v7/A32/A64
int64x2_t vcombine_s64(int64x1_t low, int64x1_t high)	low -> Vn.1D high -> Vm.1D	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.2D -> result	v7/A32/A64
uint8x16_t vcombine_u8(uint8x8_t low, uint8x8_t high)	low -> Vn.8B high -> Vm.8B	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.16B -> result	v7/A32/A64
uint16x8_t vcombine_u16(uint16x4_t low, uint16x4_t high)	low -> Vn.4H high -> Vm.4H	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.8H -> result	v7/A32/A64
uint32x4_t vcombine_u32(uint32x2_t low, uint32x2_t high)	low -> Vn.2S high -> Vm.2S	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.4S -> result	v7/A32/A64
uint64x2_t vcombine_u64(uint64x1_t low, uint64x1_t high)	low -> Vn.1D high -> Vm.1D	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.2D -> result	v7/A32/A64
poly64x2_t vcombine_p64(poly64x1_t low, poly64x1_t high)	low -> Vn.1D high -> Vm.1D	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.2D -> result	A32/A64
float16x8_t vcombine_f16(float16x4_t low, float16x4_t high)	low -> Vn.4H high -> Vm.4H	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.8H -> result	v7/A32/A64
float32x4_t vcombine_f32(float32x2_t low, float32x2_t high)	low -> Vn.2S high -> Vm.2S	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.4S -> result	v7/A32/A64
poly8x16_t vcombine_p8(poly8x8_t low, poly8x8_t high)	low -> Vn.8B high -> Vm.8B	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.16B -> result	v7/A32/A64
poly16x8_t vcombine_p16(poly16x4_t low, poly16x4_t high)	low -> Vn.4H high -> Vm.4H	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.8H -> result	v7/A32/A64
float64x2_t vcombine_f64(float64x1_t low, float64x1_t high)	low -> Vn.1D high -> Vm.1D	DUP Vd.1D,Vn.D[0] INS Vd.D[1],Vm.D[0]	Vd.2D -> result	A64
int8x8_t vget_high_s8(int8x16_t a)	a -> Vn.16B	DUP Vd.1D,Vn.D[1]	Vd.8B -> result	v7/A32/A64
int16x4_t vget_high_s16(int16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H -> result	v7/A32/A64
int32x2_t vget_high_s32(int32x4_t a)	a -> Vn.4S	DUP Vd.1D,Vn.D[1]	Vd.2S -> result	v7/A32/A64
int64x1_t vget_high_s64(int64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D -> result	v7/A32/A64
uint8x8_t vget_high_u8(uint8x16_t a)	a -> Vn.16B	DUP Vd.1D,Vn.D[1]	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4_t vget_high_u16(uint16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H -> result	v7/A32/A64
uint32x2_t vget_high_u32(uint32x4_t a)	a -> Vn.4S	DUP Vd.1D,Vn.D[1]	Vd.2S -> result	v7/A32/A64
uint64x1_t vget_high_u64(uint64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D -> result	v7/A32/A64
poly64x1_t vget_high_p64(poly64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D -> result	A32/A64
float16x4_t vget_high_f16(float16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H -> result	v7/A32/A64
float32x2_t vget_high_f32(float32x4_t a)	a -> Vn.4S	DUP Vd.1D,Vn.D[1]	Vd.2S -> result	v7/A32/A64
poly8x8_t vget_high_p8(poly8x16_t a)	a -> Vn.16B	DUP Vd.1D,Vn.D[1]	Vd.8B -> result	v7/A32/A64
poly16x4_t vget_high_p16(poly16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H -> result	v7/A32/A64
float64x1_t vget_high_f64(float64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D -> result	A64
int8x8_t vget_low_s8(int8x16_t a)	a -> Vn.16B	DUP Vd.1D,Vn.D[0]	Vd.8B -> result	v7/A32/A64
int16x4_t vget_low_s16(int16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[0]	Vd.4H -> result	v7/A32/A64
int32x2_t vget_low_s32(int32x4_t a)	a -> Vn.4S	DUP Vd.1D,Vn.D[0]	Vd.2S -> result	v7/A32/A64
int64x1_t vget_low_s64(int64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[0]	Vd.1D -> result	v7/A32/A64
uint8x8_t vget_low_u8(uint8x16_t a)	a -> Vn.16B	DUP Vd.1D,Vn.D[0]	Vd.8B -> result	v7/A32/A64
uint16x4_t vget_low_u16(uint16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[0]	Vd.4H -> result	v7/A32/A64
uint32x2_t vget_low_u32(uint32x4_t a)	a -> Vn.4S	DUP Vd.1D,Vn.D[0]	Vd.2S -> result	v7/A32/A64
uint64x1_t vget_low_u64(uint64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[0]	Vd.1D -> result	v7/A32/A64
poly64x1_t vget_low_p64(poly64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[0]	Vd.1D -> result	A32/A64
float16x4_t vget_low_f16(float16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[0]	Vd.4H -> result	v7/A32/A64
float32x2_t vget_low_f32(float32x4_t a)	a -> Vn.4S	DUP Vd.1D,Vn.D[0]	Vd.2S -> result	v7/A32/A64
poly8x8_t vget_low_p8(poly8x16_t a)	a -> Vn.16B	DUP Vd.1D,Vn.D[0]	Vd.8B -> result	v7/A32/A64
poly16x4_t vget_low_p16(poly16x8_t a)	a -> Vn.8H	DUP Vd.1D,Vn.D[0]	Vd.4H -> result	v7/A32/A64
float64x1_t vget_low_f64(float64x2_t a)	a -> Vn.2D	DUP Vd.1D,Vn.D[0]	Vd.1D -> result	A64
int8_t vdupb_lane_s8(int8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Bd,Vn.B[lane]	Bd -> result	A64
int16_t vduph_lane_s16(int16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Hd,Vn.H[lane]	Hd -> result	A64
int32_t vdups_lane_s32(int32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Sd,Vn.S[lane]	Sd -> result	A64
int64_t vdupd_lane_s64(int64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	A64
uint8_t vdupb_lane_u8(uint8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Bd,Vn.B[lane]	Bd -> result	A64
uint16_t vduph_lane_u16(uint16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Hd,Vn.H[lane]	Hd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32_t vdups_lane_u32(uint32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Sd,Vn.S[lane]	Sd -> result	A64
uint64_t vdupd_lane_u64(uint64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	A64
float32_t vdups_lane_f32(float32x2_t vec, const int lane)	vec -> Vn.2S 0 <= lane <= 1	DUP Sd,Vn.S[lane]	Sd -> result	A64
float64_t vdupd_lane_f64(float64x1_t vec, const int lane)	vec -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	A64
poly8_t vdupb_lane_p8(poly8x8_t vec, const int lane)	vec -> Vn.8B 0 <= lane <= 7	DUP Bd,Vn.B[lane]	Bd -> result	A64
poly16_t vduph_lane_p16(poly16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Hd,Vn.H[lane]	Hd -> result	A64
int8_t vdupb_laneq_s8(int8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Bd,Vn.B[lane]	Bd -> result	A64
int16_t vduph_laneq_s16(int16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Hd,Vn.H[lane]	Hd -> result	A64
int32_t vdups_laneq_s32(int32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Sd,Vn.S[lane]	Sd -> result	A64
int64_t vdupd_laneq_s64(int64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
uint8_t vdupb_laneq_u8(uint8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Bd,Vn.B[lane]	Bd -> result	A64
uint16_t vduph_laneq_u16(uint16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Hd,Vn.H[lane]	Hd -> result	A64
uint32_t vdups_laneq_u32(uint32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Sd,Vn.S[lane]	Sd -> result	A64
uint64_t vdupd_laneq_u64(uint64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
float32_t vdups_laneq_f32(float32x4_t vec, const int lane)	vec -> Vn.4S 0 <= lane <= 3	DUP Sd,Vn.S[lane]	Sd -> result	A64
float64_t vdupd_laneq_f64(float64x2_t vec, const int lane)	vec -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
poly8_t vdupb_laneq_p8(poly8x16_t vec, const int lane)	vec -> Vn.16B 0 <= lane <= 15	DUP Bd,Vn.B[lane]	Bd -> result	A64
poly16_t vduph_laneq_p16(poly16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Hd,Vn.H[lane]	Hd -> result	A64
int8x8_t vld1_s8(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B},[Xn]	Vt.8B -> result	v7/A32/A64
int8x16_t vld1q_s8(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B},[Xn]	Vt.16B -> result	v7/A32/A64
int16x4_t vld1_s16(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
int16x8_t vld1q_s16(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
int32x2_t vld1_s32(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S},[Xn]	Vt.2S -> result	v7/A32/A64
int32x4_t vld1q_s32(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S},[Xn]	Vt.4S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x1_t vld1_s64(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	v7/A32/A64
int64x2_t vld1q_s64(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D},[Xn]	Vt.2D -> result	v7/A32/A64
uint8x8_t vld1_u8(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B},[Xn]	Vt.8B -> result	v7/A32/A64
uint8x16_t vld1q_u8(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B},[Xn]	Vt.16B -> result	v7/A32/A64
uint16x4_t vld1_u16(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
uint16x8_t vld1q_u16(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
uint32x2_t vld1_u32(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S},[Xn]	Vt.2S -> result	v7/A32/A64
uint32x4_t vld1q_u32(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S},[Xn]	Vt.4S -> result	v7/A32/A64
uint64x1_t vld1_u64(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	v7/A32/A64
uint64x2_t vld1q_u64(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D},[Xn]	Vt.2D -> result	v7/A32/A64
poly64x1_t vld1_p64(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	A32/A64
poly64x2_t vld1q_p64(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D},[Xn]	Vt.2D -> result	A32/A64
float16x4_t vld1_f16(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
float16x8_t vld1q_f16(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
float32x2_t vld1_f32(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S},[Xn]	Vt.2S -> result	v7/A32/A64
float32x4_t vld1q_f32(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S},[Xn]	Vt.4S -> result	v7/A32/A64
poly8x8_t vld1_p8(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B},[Xn]	Vt.8B -> result	v7/A32/A64
poly8x16_t vld1q_p8(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B},[Xn]	Vt.16B -> result	v7/A32/A64
poly16x4_t vld1_p16(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
poly16x8_t vld1q_p16(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
float64x1_t vld1_f64(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	A64
float64x2_t vld1q_f64(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D},[Xn]	Vt.2D -> result	A64
int8x8_t vld1_lane_s8(int8_t const * ptr, int8x8_t src, const int lane)	ptr -> Xn src -> Vt.8B 0 <= lane <= 7	LD1 {Vt.b}[lane],[Xn]	Vt.8B -> result	v7/A32/A64
int8x16_t vld1q_lane_s8(int8_t const * ptr, int8x16_t src, const int lane)	ptr -> Xn src -> Vt.16B 0 <= lane <= 15	LD1 {Vt.b}[lane],[Xn]	Vt.16B -> result	v7/A32/A64
int16x4_t vld1_lane_s16(int16_t const * ptr, int16x4_t src, const int lane)	ptr -> Xn src -> Vt.4H 0 <= lane <= 3	LD1 {Vt.H}[lane],[Xn]	Vt.4H -> result	v7/A32/A64
int16x8_t vld1q_lane_s16(int16_t const * ptr, int16x8_t src, const int lane)	ptr -> Xn src -> Vt.8H 0 <= lane <= 7	LD1 {Vt.H}[lane],[Xn]	Vt.8H -> result	v7/A32/A64
int32x2_t vld1_lane_s32(int32_t const * ptr, int32x2_t src, const int lane)	ptr -> Xn src -> Vt.2S 0 <= lane <= 1	LD1 {Vt.S}[lane],[Xn]	Vt.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vld1q_lane_s32(int32_t const * ptr, int32x4_t src, const int lane)	ptr -> Xn src -> Vt.4S 0 <= lane <= 3	LD1 {Vt.S}[lane],[Xn]	Vt.4S -> result	v7/A32/A64
int64x1_t vld1_lane_s64(int64_t const * ptr, int64x1_t src, const int lane)	ptr -> Xn src -> Vt.1D lane == 0	LD1 {Vt.D}[lane],[Xn]	Vt.1D -> result	v7/A32/A64
int64x2_t vld1q_lane_s64(int64_t const * ptr, int64x2_t src, const int lane)	ptr -> Xn src -> Vt.2D 0 <= lane <= 1	LD1 {Vt.D}[lane],[Xn]	Vt.2D -> result	v7/A32/A64
uint8x8_t vld1_lane_u8(uint8_t const * ptr, uint8x8_t src, const int lane)	ptr -> Xn src -> Vt.8B 0 <= lane <= 7	LD1 {Vt.B}[lane],[Xn]	Vt.8B -> result	v7/A32/A64
uint8x16_t vld1q_lane_u8(uint8_t const * ptr, uint8x16_t src, const int lane)	ptr -> Xn src -> Vt.16B 0 <= lane <= 15	LD1 {Vt.B}[lane],[Xn]	Vt.16B -> result	v7/A32/A64
uint16x4_t vld1_lane_u16(uint16_t const * ptr, uint16x4_t src, const int lane)	ptr -> Xn src -> Vt.4H 0 <= lane <= 3	LD1 {Vt.H}[lane],[Xn]	Vt.4H -> result	v7/A32/A64
uint16x8_t vld1q_lane_u16(uint16_t const * ptr, uint16x8_t src, const int lane)	ptr -> Xn src -> Vt.8H 0 <= lane <= 7	LD1 {Vt.H}[lane],[Xn]	Vt.8H -> result	v7/A32/A64
uint32x2_t vld1_lane_u32(uint32_t const * ptr, uint32x2_t src, const int lane)	ptr -> Xn src -> Vt.2S 0 <= lane <= 1	LD1 {Vt.S}[lane],[Xn]	Vt.2S -> result	v7/A32/A64
uint32x4_t vld1q_lane_u32(uint32_t const * ptr, uint32x4_t src, const int lane)	ptr -> Xn src -> Vt.4S 0 <= lane <= 3	LD1 {Vt.S}[lane],[Xn]	Vt.4S -> result	v7/A32/A64
uint64x1_t vld1_lane_u64(uint64_t const * ptr, uint64x1_t src, const int lane)	ptr -> Xn src -> Vt.1D lane == 0	LD1 {Vt.D}[lane],[Xn]	Vt.1D -> result	v7/A32/A64
uint64x2_t vld1q_lane_u64(uint64_t const * ptr, uint64x2_t src, const int lane)	ptr -> Xn src -> Vt.2D 0 <= lane <= 1	LD1 {Vt.D}[lane],[Xn]	Vt.2D -> result	v7/A32/A64
poly64x1_t vld1_lane_p64(poly64_t const * ptr, poly64x1_t src, const int lane)	ptr -> Xn src -> Vt.1D lane == 0	LD1 {Vt.D}[lane],[Xn]	Vt.1D -> result	A32/A64
poly64x2_t vld1q_lane_p64(poly64_t const * ptr, poly64x2_t src, const int lane)	ptr -> Xn src -> Vt.2D 0 <= lane <= 1	LD1 {Vt.D}[lane],[Xn]	Vt.2D -> result	A32/A64
float16x4_t vld1_lane_f16(float16_t const * ptr, float16x4_t src, const int lane)	ptr -> Xn src -> Vt.4H 0 <= lane <= 3	LD1 {Vt.H}[lane],[Xn]	Vt.4H -> result	v7/A32/A64
float16x8_t vld1q_lane_f16(float16_t const * ptr, float16x8_t src, const int lane)	ptr -> Xn src -> Vt.8H 0 <= lane <= 7	LD1 {Vt.H}[lane],[Xn]	Vt.8H -> result	v7/A32/A64
float32x2_t vld1_lane_f32(float32_t const * ptr, float32x2_t src, const int lane)	ptr -> Xn src -> Vt.2S 0 <= lane <= 1	LD1 {Vt.S}[lane],[Xn]	Vt.2S -> result	v7/A32/A64
float32x4_t vld1q_lane_f32(float32_t const * ptr, float32x4_t src, const int lane)	ptr -> Xn src -> Vt.4S 0 <= lane <= 3	LD1 {Vt.S}[lane],[Xn]	Vt.4S -> result	v7/A32/A64
poly8x8_t vld1_lane_p8(poly8_t const * ptr, poly8x8_t src, const int lane)	ptr -> Xn src -> Vt.8B 0 <= lane <= 7	LD1 {Vt.B}[lane],[Xn]	Vt.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x16_t vld1q_lane_p8(poly8_t const * ptr, poly8x16_t src, const int lane)	ptr -> Xn src -> Vt.16B 0 <= lane <= 15	LD1 {Vt.B}[lane],[Xn]	Vt.16B -> result	v7/A32/A64
poly16x4_t vld1_lane_p16(poly16_t const * ptr, poly16x4_t src, const int lane)	ptr -> Xn src -> Vt.4H 0 <= lane <= 3	LD1 {Vt.H}[lane],[Xn]	Vt.4H -> result	v7/A32/A64
poly16x8_t vld1q_lane_p16(poly16_t const * ptr, poly16x8_t src, const int lane)	ptr -> Xn src -> Vt.8H 0 <= lane <= 7	LD1 {Vt.H}[lane],[Xn]	Vt.8H -> result	v7/A32/A64
float64x1_t vld1_lane_f64(float64_t const * ptr, float64x1_t src, const int lane)	ptr -> Xn src -> Vt.1D lane == 0	LD1 {Vt.D}[lane],[Xn]	Vt.1D -> result	A64
float64x2_t vld1q_lane_f64(float64_t const * ptr, float64x2_t src, const int lane)	ptr -> Xn src -> Vt.2D 0 <= lane <= 1	LD1 {Vt.D}[lane],[Xn]	Vt.2D -> result	A64
int8x8_t vld1_dup_s8(int8_t const * ptr)	ptr -> Xn	LD1R {Vt.8B},[Xn]	Vt.8B -> result	v7/A32/A64
int8x16_t vld1q_dup_s8(int8_t const * ptr)	ptr -> Xn	LD1R {Vt.16B},[Xn]	Vt.16B -> result	v7/A32/A64
int16x4_t vld1_dup_s16(int16_t const * ptr)	ptr -> Xn	LD1R {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
int16x8_t vld1q_dup_s16(int16_t const * ptr)	ptr -> Xn	LD1R {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
int32x2_t vld1_dup_s32(int32_t const * ptr)	ptr -> Xn	LD1R {Vt.2S},[Xn]	Vt.2S -> result	v7/A32/A64
int32x4_t vld1q_dup_s32(int32_t const * ptr)	ptr -> Xn	LD1R {Vt.4S},[Xn]	Vt.4S -> result	v7/A32/A64
int64x1_t vld1_dup_s64(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	v7/A32/A64
int64x2_t vld1q_dup_s64(int64_t const * ptr)	ptr -> Xn	LD1R {Vt.2D},[Xn]	Vt.2D -> result	v7/A32/A64
uint8x8_t vld1_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD1R {Vt.8B},[Xn]	Vt.8B -> result	v7/A32/A64
uint8x16_t vld1q_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD1R {Vt.16B},[Xn]	Vt.16B -> result	v7/A32/A64
uint16x4_t vld1_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD1R {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
uint16x8_t vld1q_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD1R {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
uint32x2_t vld1_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD1R {Vt.2S},[Xn]	Vt.2S -> result	v7/A32/A64
uint32x4_t vld1q_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD1R {Vt.4S},[Xn]	Vt.4S -> result	v7/A32/A64
uint64x1_t vld1_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	v7/A32/A64
uint64x2_t vld1q_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD1R {Vt.2D},[Xn]	Vt.2D -> result	v7/A32/A64
poly64x1_t vld1_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	A32/A64
poly64x2_t vld1q_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD1R {Vt.2D},[Xn]	Vt.2D -> result	A32/A64
float16x4_t vld1_dup_f16(float16_t const * ptr)	ptr -> Xn	LD1R {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
float16x8_t vld1q_dup_f16(float16_t const * ptr)	ptr -> Xn	LD1R {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
float32x2_t vld1_dup_f32(float32_t const * ptr)	ptr -> Xn	LD1R {Vt.2S},[Xn]	Vt.2S -> result	v7/A32/A64
float32x4_t vld1q_dup_f32(float32_t const * ptr)	ptr -> Xn	LD1R {Vt.4S},[Xn]	Vt.4S -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x8_t vld1_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD1R {Vt.8B},[Xn]	Vt.8B -> result	v7/A32/A64
poly8x16_t vld1q_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD1R {Vt.16B},[Xn]	Vt.16B -> result	v7/A32/A64
poly16x4_t vld1_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD1R {Vt.4H},[Xn]	Vt.4H -> result	v7/A32/A64
poly16x8_t vld1q_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD1R {Vt.8H},[Xn]	Vt.8H -> result	v7/A32/A64
float64x1_t vld1_dup_f64(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D},[Xn]	Vt.1D -> result	A64
float64x2_t vld1q_dup_f64(float64_t const * ptr)	ptr -> Xn	LD1R {Vt.2D},[Xn]	Vt.2D -> result	A64
void vst1_s8(int8_t * ptr, int8x8_t val)	ptr -> Xn val -> Vt.8B	ST1 {Vt.8B},[Xn]		v7/A32/A64
void vst1q_s8(int8_t * ptr, int8x16_t val)	ptr -> Xn val -> Vt.16B	ST1 {Vt.16B},[Xn]		v7/A32/A64
void vst1_s16(int16_t * ptr, int16x4_t val)	ptr -> Xn val -> Vt.4H	ST1 {Vt.4H},[Xn]		v7/A32/A64
void vst1q_s16(int16_t * ptr, int16x8_t val)	ptr -> Xn val -> Vt.8H	ST1 {Vt.8H},[Xn]		v7/A32/A64
void vst1_s32(int32_t * ptr, int32x2_t val)	ptr -> Xn val -> Vt.2S	ST1 {Vt.2S},[Xn]		v7/A32/A64
void vst1q_s32(int32_t * ptr, int32x4_t val)	ptr -> Xn val -> Vt.4S	ST1 {Vt.4S},[Xn]		v7/A32/A64
void vst1_s64(int64_t * ptr, int64x1_t val)	ptr -> Xn val -> Vt.1D	ST1 {Vt.1D},[Xn]		v7/A32/A64
void vst1q_s64(int64_t * ptr, int64x2_t val)	ptr -> Xn val -> Vt.2D	ST1 {Vt.2D},[Xn]		v7/A32/A64
void vst1_u8(uint8_t * ptr, uint8x8_t val)	ptr -> Xn val -> Vt.8B	ST1 {Vt.8B},[Xn]		v7/A32/A64
void vst1q_u8(uint8_t * ptr, uint8x16_t val)	ptr -> Xn val -> Vt.16B	ST1 {Vt.16B},[Xn]		v7/A32/A64
void vst1_u16(uint16_t * ptr, uint16x4_t val)	ptr -> Xn val -> Vt.4H	ST1 {Vt.4H},[Xn]		v7/A32/A64
void vst1q_u16(uint16_t * ptr, uint16x8_t val)	ptr -> Xn val -> Vt.8H	ST1 {Vt.8H},[Xn]		v7/A32/A64
void vst1_u32(uint32_t * ptr, uint32x2_t val)	ptr -> Xn val -> Vt.2S	ST1 {Vt.2S},[Xn]		v7/A32/A64
void vst1q_u32(uint32_t * ptr, uint32x4_t val)	ptr -> Xn val -> Vt.4S	ST1 {Vt.4S},[Xn]		v7/A32/A64
void vst1_u64(uint64_t * ptr, uint64x1_t val)	ptr -> Xn val -> Vt.1D	ST1 {Vt.1D},[Xn]		v7/A32/A64
void vst1q_u64(uint64_t * ptr, uint64x2_t val)	ptr -> Xn val -> Vt.2D	ST1 {Vt.2D},[Xn]		v7/A32/A64
void vst1_p64(poly64_t * ptr, poly64x1_t val)	ptr -> Xn val -> Vt.1D	ST1 {Vt.1D},[Xn]		A32/A64
void vst1q_p64(poly64_t * ptr, poly64x2_t val)	ptr -> Xn val -> Vt.2D	ST1 {Vt.2D},[Xn]		A32/A64
void vst1_f16(float16_t * ptr, float16x4_t val)	ptr -> Xn val -> Vt.4H	ST1 {Vt.4H},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst1q_f16(float16_t * ptr, float16x8_t val)	ptr -> Xn val -> Vt.8H	ST1 {Vt.8H},[Xn]		v7/A32/A64
void vst1_f32(float32_t * ptr, float32x2_t val)	ptr -> Xn val -> Vt.2S	ST1 {Vt.2S},[Xn]		v7/A32/A64
void vst1q_f32(float32_t * ptr, float32x4_t val)	ptr -> Xn val -> Vt.4S	ST1 {Vt.4S},[Xn]		v7/A32/A64
void vst1_p8(poly8_t * ptr, poly8x8_t val)	ptr -> Xn val -> Vt.8B	ST1 {Vt.8B},[Xn]		v7/A32/A64
void vst1q_p8(poly8_t * ptr, poly8x16_t val)	ptr -> Xn val -> Vt.16B	ST1 {Vt.16B},[Xn]		v7/A32/A64
void vst1_p16(poly16_t * ptr, poly16x4_t val)	ptr -> Xn val -> Vt.4H	ST1 {Vt.4H},[Xn]		v7/A32/A64
void vst1q_p16(poly16_t * ptr, poly16x8_t val)	ptr -> Xn val -> Vt.8H	ST1 {Vt.8H},[Xn]		v7/A32/A64
void vst1_f64(float64_t * ptr, float64x1_t val)	ptr -> Xn val -> Vt.1D	ST1 {Vt.1D},[Xn]		A64
void vst1q_f64(float64_t * ptr, float64x2_t val)	ptr -> Xn val -> Vt.2D	ST1 {Vt.2D},[Xn]		A64
void vst1_lane_s8(int8_t * ptr, int8x8_t val, const int lane)	ptr -> Xn val -> Vt.8B 0 <= lane <= 7	ST1 {Vt.b}[lane],[Xn]		v7/A32/A64
void vst1q_lane_s8(int8_t * ptr, int8x16_t val, const int lane)	ptr -> Xn val -> Vt.16B 0 <= lane <= 15	ST1 {Vt.b}[lane],[Xn]		v7/A32/A64
void vst1_lane_s16(int16_t * ptr, int16x4_t val, const int lane)	ptr -> Xn val -> Vt.4H 0 <= lane <= 3	ST1 {Vt.h}[lane],[Xn]		v7/A32/A64
void vst1q_lane_s16(int16_t * ptr, int16x8_t val, const int lane)	ptr -> Xn val -> Vt.8H 0 <= lane <= 7	ST1 {Vt.h}[lane],[Xn]		v7/A32/A64
void vst1_lane_s32(int32_t * ptr, int32x2_t val, const int lane)	ptr -> Xn val -> Vt.2S 0 <= lane <= 1	ST1 {Vt.s}[lane],[Xn]		v7/A32/A64
void vst1q_lane_s32(int32_t * ptr, int32x4_t val, const int lane)	ptr -> Xn val -> Vt.4S 0 <= lane <= 3	ST1 {Vt.s}[lane],[Xn]		v7/A32/A64
void vst1_lane_s64(int64_t * ptr, int64x1_t val, const int lane)	ptr -> Xn val -> Vt.1D lane == 0	ST1 {Vt.d}[lane],[Xn]		v7/A32/A64
void vst1q_lane_s64(int64_t * ptr, int64x2_t val, const int lane)	ptr -> Xn val -> Vt.2D 0 <= lane <= 1	ST1 {Vt.d}[lane],[Xn]		v7/A32/A64
void vst1_lane_u8(uint8_t * ptr, uint8x8_t val, const int lane)	ptr -> Xn val -> Vt.8B 0 <= lane <= 7	ST1 {Vt.b}[lane],[Xn]		v7/A32/A64
void vst1q_lane_u8(uint8_t * ptr, uint8x16_t val, const int lane)	ptr -> Xn val -> Vt.16B 0 <= lane <= 15	ST1 {Vt.b}[lane],[Xn]		v7/A32/A64
void vst1_lane_u16(uint16_t * ptr, uint16x4_t val, const int lane)	ptr -> Xn val -> Vt.4H 0 <= lane <= 3	ST1 {Vt.h}[lane],[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1q_lane_u16(uint16_t * ptr, uint16x8_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.8H</code> <code>0 &lt;= lane &lt;= 7</code>	ST1 {Vt.h}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_u32(uint32_t * ptr, uint32x2_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.2S</code> <code>0 &lt;= lane &lt;= 1</code>	ST1 {Vt.s}[lane],{Xn}		v7/A32/A64
<code>void vst1q_lane_u32(uint32_t * ptr, uint32x4_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.4S</code> <code>0 &lt;= lane &lt;= 3</code>	ST1 {Vt.s}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_u64(uint64_t * ptr, uint64x1_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.1D</code> <code>lane == 0</code>	ST1 {Vt.d}[lane],{Xn}		v7/A32/A64
<code>void vst1q_lane_u64(uint64_t * ptr, uint64x2_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.2D</code> <code>0 &lt;= lane &lt;= 1</code>	ST1 {Vt.d}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_p64(poly64_t * ptr, poly64x1_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.1D</code> <code>lane == 0</code>	ST1 {Vt.d}[lane],{Xn}		A32/A64
<code>void vst1q_lane_p64(poly64_t * ptr, poly64x2_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.2D</code> <code>0 &lt;= lane &lt;= 1</code>	ST1 {Vt.d}[lane],{Xn}		A32/A64
<code>void vst1_lane_f16(float16_t * ptr, float16x4_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.4H</code> <code>0 &lt;= lane &lt;= 3</code>	ST1 {Vt.h}[lane],{Xn}		v7/A32/A64
<code>void vst1q_lane_f16(float16_t * ptr, float16x8_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.8H</code> <code>0 &lt;= lane &lt;= 7</code>	ST1 {Vt.h}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_f32(float32_t * ptr, float32x2_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.2S</code> <code>0 &lt;= lane &lt;= 1</code>	ST1 {Vt.s}[lane],{Xn}		v7/A32/A64
<code>void vst1q_lane_f32(float32_t * ptr, float32x4_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.4S</code> <code>0 &lt;= lane &lt;= 3</code>	ST1 {Vt.s}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_p8(poly8_t * ptr, poly8x8_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.8B</code> <code>0 &lt;= lane &lt;= 7</code>	ST1 {Vt.b}[lane],{Xn}		v7/A32/A64
<code>void vst1q_lane_p8(poly8_t * ptr, poly8x16_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.16B</code> <code>0 &lt;= lane &lt;= 15</code>	ST1 {Vt.b}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_p16(poly16_t * ptr, poly16x4_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.4H</code> <code>0 &lt;= lane &lt;= 3</code>	ST1 {Vt.h}[lane],{Xn}		v7/A32/A64
<code>void vst1q_lane_p16(poly16_t * ptr, poly16x8_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.8H</code> <code>0 &lt;= lane &lt;= 7</code>	ST1 {Vt.h}[lane],{Xn}		v7/A32/A64
<code>void vst1_lane_f64(float64_t * ptr, float64x1_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.1D</code> <code>lane == 0</code>	ST1 {Vt.d}[lane],{Xn}		A64
<code>void vst1q_lane_f64(float64_t * ptr, float64x2_t val, const int lane)</code>	<code>ptr -&gt; Xn</code> <code>val -&gt; Vt.2D</code> <code>0 &lt;= lane &lt;= 1</code>	ST1 {Vt.d}[lane],{Xn}		A64
<code>int8x8x2_t vld2_s8(int8_t const * ptr)</code>	<code>ptr -&gt; Xn</code>	LD2 {Vt.8B - Vt2.8B},{Xn}	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16x2_t vld2q_s8(int8_t const * ptr)	ptr -> Xn	LD2 {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x2_t vld2_s16(int16_t const * ptr)	ptr -> Xn	LD2 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x2_t vld2q_s16(int16_t const * ptr)	ptr -> Xn	LD2 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x2_t vld2_s32(int32_t const * ptr)	ptr -> Xn	LD2 {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x2_t vld2q_s32(int32_t const * ptr)	ptr -> Xn	LD2 {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x2_t vld2_u8(uint8_t const * ptr)	ptr -> Xn	LD2 {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x2_t vld2q_u8(uint8_t const * ptr)	ptr -> Xn	LD2 {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x2_t vld2_u16(uint16_t const * ptr)	ptr -> Xn	LD2 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x2_t vld2q_u16(uint16_t const * ptr)	ptr -> Xn	LD2 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x2_t vld2_u32(uint32_t const * ptr)	ptr -> Xn	LD2 {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x2_t vld2q_u32(uint32_t const * ptr)	ptr -> Xn	LD2 {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x2_t vld2_f16(float16_t const * ptr)	ptr -> Xn	LD2 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x2_t vld2q_f16(float16_t const * ptr)	ptr -> Xn	LD2 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x2x2_t vld2_f32(float32_t const * ptr)	ptr -> Xn	LD2 {Vt.2S - Vt.2S},[Xn]	Vt.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x2_t vld2q_f32(float32_t const * ptr)	ptr -> Xn	LD2 {Vt.4S - Vt.4S},[Xn]	Vt.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x2_t vld2_p8(poly8_t const * ptr)	ptr -> Xn	LD2 {Vt.8B - Vt.8B},[Xn]	Vt.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x2_t vld2q_p8(poly8_t const * ptr)	ptr -> Xn	LD2 {Vt.16B - Vt.16B},[Xn]	Vt.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x2_t vld2_p16(poly16_t const * ptr)	ptr -> Xn	LD2 {Vt.4H - Vt.4H},[Xn]	Vt.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x2_t vld2q_p16(poly16_t const * ptr)	ptr -> Xn	LD2 {Vt.8H - Vt.8H},[Xn]	Vt.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x2_t vld2_s64(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt.1D},[Xn]	Vt.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x2_t vld2_u64(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt.1D},[Xn]	Vt.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x2_t vld2_p64(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt.1D},[Xn]	Vt.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x2_t vld2q_s64(int64_t const * ptr)	ptr -> Xn	LD2 {Vt.2D - Vt.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
uint64x2x2_t vld2q_u64(uint64_t const * ptr)	ptr -> Xn	LD2 {Vt.2D - Vt.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x2x2_t vld2q_p64(poly64_t const * ptr)	ptr -> Xn	LD2 {Vt.2D - Vt.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x2_t vld2_f64(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt.1D},[Xn]	Vt.1D -> result.val[1] Vt.1D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x2x2_t vld2q_f64(float64_t const * ptr)	ptr -> Xn	LD2 {Vt.2D - Vt.2.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x3_t vld3_s8(int8_t const * ptr)	ptr -> Xn	LD3 {Vt.8B - Vt.3.8B},[Xn]	Vt.3.8B -> result.val[2] Vt.2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x3_t vld3q_s8(int8_t const * ptr)	ptr -> Xn	LD3 {Vt.16B - Vt.3.16B},[Xn]	Vt.3.16B -> result.val[2] Vt.2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x3_t vld3_s16(int16_t const * ptr)	ptr -> Xn	LD3 {Vt.4H - Vt.3.4H},[Xn]	Vt.3.4H -> result.val[2] Vt.2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x3_t vld3q_s16(int16_t const * ptr)	ptr -> Xn	LD3 {Vt.8H - Vt.3.8H},[Xn]	Vt.3.8H -> result.val[2] Vt.2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x3_t vld3_s32(int32_t const * ptr)	ptr -> Xn	LD3 {Vt.2S - Vt.3.2S},[Xn]	Vt.3.2S -> result.val[2] Vt.2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x3_t vld3q_s32(int32_t const * ptr)	ptr -> Xn	LD3 {Vt.4S - Vt.3.4S},[Xn]	Vt.3.4S -> result.val[2] Vt.2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x3_t vld3_u8(uint8_t const * ptr)	ptr -> Xn	LD3 {Vt.8B - Vt.3.8B},[Xn]	Vt.3.8B -> result.val[2] Vt.2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x3_t vld3q_u8(uint8_t const * ptr)	ptr -> Xn	LD3 {Vt.16B - Vt.3.16B},[Xn]	Vt.3.16B -> result.val[2] Vt.2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4x3_t vld3_u16(uint16_t const * ptr)	ptr -> Xn	LD3 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x3_t vld3q_u16(uint16_t const * ptr)	ptr -> Xn	LD3 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x3_t vld3_u32(uint32_t const * ptr)	ptr -> Xn	LD3 {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x3_t vld3q_u32(uint32_t const * ptr)	ptr -> Xn	LD3 {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x3_t vld3_f16(float16_t const * ptr)	ptr -> Xn	LD3 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x3_t vld3q_f16(float16_t const * ptr)	ptr -> Xn	LD3 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x3_t vld3_f32(float32_t const * ptr)	ptr -> Xn	LD3 {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x3_t vld3q_f32(float32_t const * ptr)	ptr -> Xn	LD3 {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x3_t vld3_p8(poly8_t const * ptr)	ptr -> Xn	LD3 {Vt.8B - Vt3.8B},[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x16x3_t vld3q_p8(poly8_t const * ptr)	ptr -> Xn	LD3 {Vt.16B - Vt3.16B},[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x3_t vld3_p16(poly16_t const * ptr)	ptr -> Xn	LD3 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x3_t vld3q_p16(poly16_t const * ptr)	ptr -> Xn	LD3 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x3_t vld3_s64(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x3_t vld3_u64(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x3_t vld3_p64(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x3_t vld3q_s64(int64_t const * ptr)	ptr -> Xn	LD3 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
uint64x2x3_t vld3q_u64(uint64_t const * ptr)	ptr -> Xn	LD3 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x2x3_t vld3q_p64(poly64_t const * ptr)	ptr -> Xn	LD3 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x1x3_t vld3_f64(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x3_t vld3q_f64(float64_t const * ptr)	ptr -> Xn	LD3 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x4_t vld4_s8(int8_t const * ptr)	ptr -> Xn	LD4 {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x4_t vld4q_s8(int8_t const * ptr)	ptr -> Xn	LD4 {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x4_t vld4_s16(int16_t const * ptr)	ptr -> Xn	LD4 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x4_t vld4q_s16(int16_t const * ptr)	ptr -> Xn	LD4 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x4_t vld4_s32(int32_t const * ptr)	ptr -> Xn	LD4 {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x4_t vld4q_s32(int32_t const * ptr)	ptr -> Xn	LD4 {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8x4_t vld4_u8(uint8_t const * ptr)	ptr -> Xn	LD4 {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x4_t vld4q_u8(uint8_t const * ptr)	ptr -> Xn	LD4 {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x4_t vld4_u16(uint16_t const * ptr)	ptr -> Xn	LD4 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x4_t vld4q_u16(uint16_t const * ptr)	ptr -> Xn	LD4 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x4_t vld4_u32(uint32_t const * ptr)	ptr -> Xn	LD4 {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x4_t vld4q_u32(uint32_t const * ptr)	ptr -> Xn	LD4 {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x4_t vld4_f16(float16_t const * ptr)	ptr -> Xn	LD4 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8x4_t vld4q_f16(float16_t const * ptr)	ptr -> Xn	LD4 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x4_t vld4_f32(float32_t const * ptr)	ptr -> Xn	LD4 {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x4_t vld4q_f32(float32_t const * ptr)	ptr -> Xn	LD4 {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x4_t vld4_p8(poly8_t const * ptr)	ptr -> Xn	LD4 {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x4_t vld4q_p8(poly8_t const * ptr)	ptr -> Xn	LD4 {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x4_t vld4_p16(poly16_t const * ptr)	ptr -> Xn	LD4 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x4_t vld4q_p16(poly16_t const * ptr)	ptr -> Xn	LD4 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x1x4_t vld4_s64(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x4_t vld4_u64(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x4_t vld4_p64(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x4_t vld4q_s64(int64_t const * ptr)	ptr -> Xn	LD4 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
uint64x2x4_t vld4q_u64(uint64_t const * ptr)	ptr -> Xn	LD4 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x2x4_t vld4q_p64(poly64_t const * ptr)	ptr -> Xn	LD4 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x4_t vld4_f64(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float64x2x4_t vld4q_f64(float64_t const * ptr)	ptr -> Xn	LD4 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x2_t vld2_dup_s8(int8_t const * ptr)	ptr -> Xn	LD2R {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x2_t vld2q_dup_s8(int8_t const * ptr)	ptr -> Xn	LD2R {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x2_t vld2_dup_s16(int16_t const * ptr)	ptr -> Xn	LD2R {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x2_t vld2q_dup_s16(int16_t const * ptr)	ptr -> Xn	LD2R {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x2_t vld2_dup_s32(int32_t const * ptr)	ptr -> Xn	LD2R {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x2_t vld2q_dup_s32(int32_t const * ptr)	ptr -> Xn	LD2R {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x2_t vld2_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD2R {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x2_t vld2q_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD2R {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x2_t vld2_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD2R {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x2_t vld2q_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD2R {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x2_t vld2_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD2R {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4x2_t vld2q_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD2R {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x2_t vld2_dup_f16(float16_t const * ptr)	ptr -> Xn	LD2R {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x2_t vld2q_dup_f16(float16_t const * ptr)	ptr -> Xn	LD2R {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x2_t vld2_dup_f32(float32_t const * ptr)	ptr -> Xn	LD2R {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x2_t vld2q_dup_f32(float32_t const * ptr)	ptr -> Xn	LD2R {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x2_t vld2_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD2R {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x2_t vld2q_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD2R {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x2_t vld2_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD2R {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x2_t vld2q_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD2R {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x2_t vld2_dup_s64(int64_t const * ptr)	ptr -> Xn	LD2R {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x2_t vld2_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD2R {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x2_t vld2_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD2R {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x2_t vld2q_dup_s64(int64_t const * ptr)	ptr -> Xn	LD2R {Vt.2D - Vt2.2D},[Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2x2_t vld2q_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD2R {Vt.2D - Vt.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x2x2_t vld2q_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD2R {Vt.2D - Vt.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x2_t vld2_dup_f64(float64_t const * ptr)	ptr -> Xn	LD2R {Vt.1D - Vt.1D},[Xn]	Vt.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x2_t vld2q_dup_f64(float64_t const * ptr)	ptr -> Xn	LD2R {Vt.2D - Vt.2D},[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x3_t vld3_dup_s8(int8_t const * ptr)	ptr -> Xn	LD3R {Vt.8B - Vt.8B},[Xn]	Vt.8B -> result.val[2] Vt.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x3_t vld3q_dup_s8(int8_t const * ptr)	ptr -> Xn	LD3R {Vt.16B - Vt.16B},[Xn]	Vt.16B -> result.val[2] Vt.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x3_t vld3_dup_s16(int16_t const * ptr)	ptr -> Xn	LD3R {Vt.4H - Vt.4H},[Xn]	Vt.4H -> result.val[2] Vt.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x3_t vld3q_dup_s16(int16_t const * ptr)	ptr -> Xn	LD3R {Vt.8H - Vt.8H},[Xn]	Vt.8H -> result.val[2] Vt.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x3_t vld3_dup_s32(int32_t const * ptr)	ptr -> Xn	LD3R {Vt.2S - Vt.2S},[Xn]	Vt.2S -> result.val[2] Vt.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x3_t vld3q_dup_s32(int32_t const * ptr)	ptr -> Xn	LD3R {Vt.4S - Vt.4S},[Xn]	Vt.4S -> result.val[2] Vt.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8x3_t vld3_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD3R {Vt.8B - Vt3.8B},[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x3_t vld3q_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD3R {Vt.16B - Vt3.16B},[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x3_t vld3_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD3R {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x3_t vld3q_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD3R {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x3_t vld3_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD3R {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x3_t vld3q_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD3R {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x3_t vld3_dup_f16(float16_t const * ptr)	ptr -> Xn	LD3R {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x3_t vld3q_dup_f16(float16_t const * ptr)	ptr -> Xn	LD3R {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x3_t vld3_dup_f32(float32_t const * ptr)	ptr -> Xn	LD3R {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x4x3_t vld3q_dup_f32(float32_t const * ptr)	ptr -> Xn	LD3R {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x3_t vld3_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD3R {Vt.8B - Vt3.8B},[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x3_t vld3q_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD3R {Vt.16B - Vt3.16B},[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x3_t vld3_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD3R {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x3_t vld3q_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD3R {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x3_t vld3_dup_s64(int64_t const * ptr)	ptr -> Xn	LD3R {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x3_t vld3_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD3R {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x3_t vld3_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD3R {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x3_t vld3q_dup_s64(int64_t const * ptr)	ptr -> Xn	LD3R {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2x3_t vld3q_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD3R {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x2x3_t vld3q_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD3R {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x3_t vld3_dup_f64(float64_t const * ptr)	ptr -> Xn	LD3R {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x3_t vld3q_dup_f64(float64_t const * ptr)	ptr -> Xn	LD3R {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x4_t vld4_dup_s8(int8_t const * ptr)	ptr -> Xn	LD4R {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x4_t vld4q_dup_s8(int8_t const * ptr)	ptr -> Xn	LD4R {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x4_t vld4_dup_s16(int16_t const * ptr)	ptr -> Xn	LD4R {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x4_t vld4q_dup_s16(int16_t const * ptr)	ptr -> Xn	LD4R {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2x4_t_vld4_dup_s32(int32_t const * ptr)	ptr -> Xn	LD4R {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x4_t_vld4q_dup_s32(int32_t const * ptr)	ptr -> Xn	LD4R {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x4_t_vld4_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD4R {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x4_t_vld4q_dup_u8(uint8_t const * ptr)	ptr -> Xn	LD4R {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x4_t_vld4_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD4R {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x4_t_vld4q_dup_u16(uint16_t const * ptr)	ptr -> Xn	LD4R {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x4_t_vld4_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD4R {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4x4_t vld4q_dup_u32(uint32_t const * ptr)	ptr -> Xn	LD4R {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x4_t vld4q_dup_f16(float16_t const * ptr)	ptr -> Xn	LD4R {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x4_t vld4q_dup_f16(float16_t const * ptr)	ptr -> Xn	LD4R {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x4_t vld4q_dup_f32(float32_t const * ptr)	ptr -> Xn	LD4R {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x4_t vld4q_dup_f32(float32_t const * ptr)	ptr -> Xn	LD4R {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x4_t vld4q_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD4R {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x4_t vld4q_dup_p8(poly8_t const * ptr)	ptr -> Xn	LD4R {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly16x4x4_t vld4_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD4R {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x4_t vld4q_dup_p16(poly16_t const * ptr)	ptr -> Xn	LD4R {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x4_t vld4_dup_s64(int64_t const * ptr)	ptr -> Xn	LD4R {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x4_t vld4_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD4R {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x4_t vld4_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD4R {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x4_t vld4q_dup_s64(int64_t const * ptr)	ptr -> Xn	LD4R {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
uint64x2x4_t vld4q_dup_u64(uint64_t const * ptr)	ptr -> Xn	LD4R {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly64x2x4_t vld4q_dup_p64(poly64_t const * ptr)	ptr -> Xn	LD4R {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x4_t vld4_dup_f64(float64_t const * ptr)	ptr -> Xn	LD4R {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x4_t vld4q_dup_f64(float64_t const * ptr)	ptr -> Xn	LD4R {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
void vst2_s8(int8_t * ptr, int8x8x2_t val)	ptr -> Xn val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST2 {Vt.8B - Vt2.8B},[Xn]		v7/A32/A64
void vst2q_s8(int8_t * ptr, int8x16x2_t val)	ptr -> Xn val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST2 {Vt.16B - Vt2.16B},[Xn]		v7/A32/A64
void vst2_s16(int16_t * ptr, int16x4x2_t val)	ptr -> Xn val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST2 {Vt.4H - Vt2.4H},[Xn]		v7/A32/A64
void vst2q_s16(int16_t * ptr, int16x8x2_t val)	ptr -> Xn val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST2 {Vt.8H - Vt2.8H},[Xn]		v7/A32/A64
void vst2_s32(int32_t * ptr, int32x2x2_t val)	ptr -> Xn val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST2 {Vt.2S - Vt2.2S},[Xn]		v7/A32/A64
void vst2q_s32(int32_t * ptr, int32x4x2_t val)	ptr -> Xn val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST2 {Vt.4S - Vt2.4S},[Xn]		v7/A32/A64
void vst2_u8(uint8_t * ptr, uint8x8x2_t val)	ptr -> Xn val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST2 {Vt.8B - Vt2.8B},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst2q_u8(uint8_t * ptr, uint8x16x2_t val)	ptr -> Xn val.val[1] -> Vt.16B val.val[0] -> Vt.16B	ST2 {Vt.16B - Vt.16B}, [Xn]		v7/A32/A64
void vst2_u16(uint16_t * ptr, uint16x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST2 {Vt.4H - Vt.4H}, [Xn]		v7/A32/A64
void vst2q_u16(uint16_t * ptr, uint16x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST2 {Vt.8H - Vt.8H}, [Xn]		v7/A32/A64
void vst2_u32(uint32_t * ptr, uint32x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2S val.val[0] -> Vt.2S	ST2 {Vt.2S - Vt.2S}, [Xn]		v7/A32/A64
void vst2q_u32(uint32_t * ptr, uint32x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4S val.val[0] -> Vt.4S	ST2 {Vt.4S - Vt.4S}, [Xn]		v7/A32/A64
void vst2_f16(float16_t * ptr, float16x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST2 {Vt.4H - Vt.4H}, [Xn]		v7/A32/A64
void vst2q_f16(float16_t * ptr, float16x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST2 {Vt.8H - Vt.8H}, [Xn]		v7/A32/A64
void vst2_f32(float32_t * ptr, float32x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2S val.val[0] -> Vt.2S	ST2 {Vt.2S - Vt.2S}, [Xn]		v7/A32/A64
void vst2q_f32(float32_t * ptr, float32x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4S val.val[0] -> Vt.4S	ST2 {Vt.4S - Vt.4S}, [Xn]		v7/A32/A64
void vst2_p8(poly8_t * ptr, poly8x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8B val.val[0] -> Vt.8B	ST2 {Vt.8B - Vt.8B}, [Xn]		v7/A32/A64
void vst2q_p8(poly8_t * ptr, poly8x16x2_t val)	ptr -> Xn val.val[1] -> Vt.16B val.val[0] -> Vt.16B	ST2 {Vt.16B - Vt.16B}, [Xn]		v7/A32/A64
void vst2_p16(poly16_t * ptr, poly16x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST2 {Vt.4H - Vt.4H}, [Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst2q_p16(poly16_t * ptr, poly16x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST2 {Vt.8H - Vt.8H},[Xn]		v7/A32/A64
void vst2_s64(int64_t * ptr, int64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.1D},[Xn]		v7/A32/A64
void vst2_u64(uint64_t * ptr, uint64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.1D},[Xn]		v7/A32/A64
void vst2_p64(poly64_t * ptr, poly64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.1D},[Xn]		A32/A64
void vst2q_s64(int64_t * ptr, int64x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST2 {Vt.2D - Vt.2D},[Xn]		A64
void vst2q_u64(uint64_t * ptr, uint64x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST2 {Vt.2D - Vt.2D},[Xn]		A64
void vst2q_p64(poly64_t * ptr, poly64x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST2 {Vt.2D - Vt.2D},[Xn]		A64
void vst2_f64(float64_t * ptr, float64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.1D},[Xn]		A64
void vst2q_f64(float64_t * ptr, float64x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST2 {Vt.2D - Vt.2D},[Xn]		A64
void vst3_s8(int8_t * ptr, int8x8x3_t val)	ptr -> Xn val.val[2] -> Vt.8B val.val[1] -> Vt.8B val.val[0] -> Vt.8B	ST3 {Vt.8B - Vt.8B},[Xn]		v7/A32/A64
void vst3q_s8(int8_t * ptr, int8x16x3_t val)	ptr -> Xn val.val[2] -> Vt.16B val.val[1] -> Vt.16B val.val[0] -> Vt.16B	ST3 {Vt.16B - Vt.16B},[Xn]		v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst3_s16(int16_t * ptr, int16x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4H val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST3 {Vt.4H - Vt.4H},[Xn]		v7/A32/A64
<code>void vst3q_s16(int16_t * ptr, int16x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.8H val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST3 {Vt.8H - Vt.8H},[Xn]		v7/A32/A64
<code>void vst3_s32(int32_t * ptr, int32x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.2S val.val[1] -> Vt.2S val.val[0] -> Vt.2S	ST3 {Vt.2S - Vt.2S},[Xn]		v7/A32/A64
<code>void vst3q_s32(int32_t * ptr, int32x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4S val.val[1] -> Vt.4S val.val[0] -> Vt.4S	ST3 {Vt.4S - Vt.4S},[Xn]		v7/A32/A64
<code>void vst3_u8(uint8_t * ptr, uint8x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.8B val.val[1] -> Vt.8B val.val[0] -> Vt.8B	ST3 {Vt.8B - Vt.8B},[Xn]		v7/A32/A64
<code>void vst3q_u8(uint8_t * ptr, uint8x16x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.16B val.val[1] -> Vt.16B val.val[0] -> Vt.16B	ST3 {Vt.16B - Vt.16B},[Xn]		v7/A32/A64
<code>void vst3_u16(uint16_t * ptr, uint16x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4H val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST3 {Vt.4H - Vt.4H},[Xn]		v7/A32/A64
<code>void vst3q_u16(uint16_t * ptr, uint16x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.8H val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST3 {Vt.8H - Vt.8H},[Xn]		v7/A32/A64
<code>void vst3_u32(uint32_t * ptr, uint32x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.2S val.val[1] -> Vt.2S val.val[0] -> Vt.2S	ST3 {Vt.2S - Vt.2S},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst3q_u32(uint32_t * ptr, uint32x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4S val.val[1] -> Vt.4S val.val[0] -> Vt.4S	ST3 {Vt.4S - Vt.4S},[Xn]		v7/A32/A64
<code>void vst3_f16(float16_t * ptr, float16x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4H val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST3 {Vt.4H - Vt.4H},[Xn]		v7/A32/A64
<code>void vst3q_f16(float16_t * ptr, float16x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.8H val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST3 {Vt.8H - Vt.8H},[Xn]		v7/A32/A64
<code>void vst3_f32(float32_t * ptr, float32x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.2S val.val[1] -> Vt.2S val.val[0] -> Vt.2S	ST3 {Vt.2S - Vt.2S},[Xn]		v7/A32/A64
<code>void vst3q_f32(float32_t * ptr, float32x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4S val.val[1] -> Vt.4S val.val[0] -> Vt.4S	ST3 {Vt.4S - Vt.4S},[Xn]		v7/A32/A64
<code>void vst3_p8(poly8_t * ptr, poly8x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.8B val.val[1] -> Vt.8B val.val[0] -> Vt.8B	ST3 {Vt.8B - Vt.8B},[Xn]		v7/A32/A64
<code>void vst3q_p8(poly8_t * ptr, poly8x16x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.16B val.val[1] -> Vt.16B val.val[0] -> Vt.16B	ST3 {Vt.16B - Vt.16B},[Xn]		v7/A32/A64
<code>void vst3_p16(poly16_t * ptr, poly16x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.4H val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST3 {Vt.4H - Vt.4H},[Xn]		v7/A32/A64
<code>void vst3q_p16(poly16_t * ptr, poly16x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt.8H val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST3 {Vt.8H - Vt.8H},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst3_s64(int64_t * ptr, int64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.1D val.val[1] -&gt; Vt2.1D val.val[0] -&gt; Vt.1D</code>	ST1 {Vt.1D - Vt3.1D},[Xn]		v7/A32/A64
<code>void vst3_u64(uint64_t * ptr, uint64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.1D val.val[1] -&gt; Vt2.1D val.val[0] -&gt; Vt.1D</code>	ST1 {Vt.1D - Vt3.1D},[Xn]		v7/A32/A64
<code>void vst3_p64(poly64_t * ptr, poly64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.1D val.val[1] -&gt; Vt2.1D val.val[0] -&gt; Vt.1D</code>	ST1 {Vt.1D - Vt3.1D},[Xn]		A32/A64
<code>void vst3q_s64(int64_t * ptr, int64x2x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.2D val.val[1] -&gt; Vt2.2D val.val[0] -&gt; Vt.2D</code>	ST3 {Vt.2D - Vt3.2D},[Xn]		A64
<code>void vst3q_u64(uint64_t * ptr, uint64x2x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.2D val.val[1] -&gt; Vt2.2D val.val[0] -&gt; Vt.2D</code>	ST3 {Vt.2D - Vt3.2D},[Xn]		A64
<code>void vst3q_p64(poly64_t * ptr, poly64x2x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.2D val.val[1] -&gt; Vt2.2D val.val[0] -&gt; Vt.2D</code>	ST3 {Vt.2D - Vt3.2D},[Xn]		A64
<code>void vst3_f64(float64_t * ptr, float64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.1D val.val[1] -&gt; Vt2.1D val.val[0] -&gt; Vt.1D</code>	ST1 {Vt.1D - Vt3.1D},[Xn]		A64
<code>void vst3q_f64(float64_t * ptr, float64x2x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt3.2D val.val[1] -&gt; Vt2.2D val.val[0] -&gt; Vt.2D</code>	ST3 {Vt.2D - Vt3.2D},[Xn]		A64
<code>void vst4_s8(int8_t * ptr, int8x8x4_t val)</code>	<code>ptr -&gt; Xn val.val[3] -&gt; Vt4.8B val.val[2] -&gt; Vt3.8B val.val[1] -&gt; Vt2.8B val.val[0] -&gt; Vt.8B</code>	ST4 {Vt.8B - Vt4.8B},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst4q_s8(int8_t * ptr, int8x16x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST4 {Vt.16B - Vt4.16B},[Xn]		v7/A32/A64
<code>void vst4_s16(int16_t * ptr, int16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST4 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
<code>void vst4q_s16(int16_t * ptr, int16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST4 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
<code>void vst4_s32(int32_t * ptr, int32x2x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST4 {Vt.2S - Vt4.2S},[Xn]		v7/A32/A64
<code>void vst4q_s32(int32_t * ptr, int32x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST4 {Vt.4S - Vt4.4S},[Xn]		v7/A32/A64
<code>void vst4_u8(uint8_t * ptr, uint8x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST4 {Vt.8B - Vt4.8B},[Xn]		v7/A32/A64
<code>void vst4q_u8(uint8_t * ptr, uint8x16x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST4 {Vt.16B - Vt4.16B},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst4_u16(uint16_t * ptr, uint16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST4 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
<code>void vst4q_u16(uint16_t * ptr, uint16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST4 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
<code>void vst4_u32(uint32_t * ptr, uint32x2x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST4 {Vt.2S - Vt4.2S},[Xn]		v7/A32/A64
<code>void vst4q_u32(uint32_t * ptr, uint32x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST4 {Vt.4S - Vt4.4S},[Xn]		v7/A32/A64
<code>void vst4_f16(float16_t * ptr, float16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST4 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
<code>void vst4q_f16(float16_t * ptr, float16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST4 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
<code>void vst4_f32(float32_t * ptr, float32x2x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST4 {Vt.2S - Vt4.2S},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst4q_f32(float32_t * ptr, float32x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST4 {Vt.4S - Vt4.4S},[Xn]		v7/A32/A64
<code>void vst4_p8(poly8_t * ptr, poly8x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST4 {Vt.8B - Vt4.8B},[Xn]		v7/A32/A64
<code>void vst4q_p8(poly8_t * ptr, poly8x16x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST4 {Vt.16B - Vt4.16B},[Xn]		v7/A32/A64
<code>void vst4_p16(poly16_t * ptr, poly16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST4 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
<code>void vst4q_p16(poly16_t * ptr, poly16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST4 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
<code>void vst4_s64(int64_t * ptr, int64x1x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		v7/A32/A64
<code>void vst4_u64(uint64_t * ptr, uint64x1x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst4_p64(poly64_t * ptr, poly64x1x4_t val)	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		A32/A64
void vst4q_s64(int64_t * ptr, int64x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt4.2D},[Xn]		A64
void vst4q_u64(uint64_t * ptr, uint64x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST4 {Vt.2D - Vt4.2D},[Xn]		A64
void vst4q_p64(poly64_t * ptr, poly64x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST4 {Vt.2D - Vt4.2D},[Xn]		A64
void vst4_f64(float64_t * ptr, float64x1x4_t val)	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		A64
void vst4q_f64(float64_t * ptr, float64x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST4 {Vt.2D - Vt4.2D},[Xn]		A64
int16x4x2_t vld2_lane_s16(int16_t const * ptr, int16x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x2_t vld2q_lane_s16(int16_t const * ptr, int16x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2x2_t vld2_lane_s32(int32_t const * ptr, int32x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x2_t vld2q_lane_s32(int32_t const * ptr, int32x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint16x4x2_t vld2_lane_u16(uint16_t const * ptr, uint16x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x2_t vld2q_lane_u16(uint16_t const * ptr, uint16x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x2_t vld2_lane_u32(uint32_t const * ptr, uint32x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x2_t vld2q_lane_u32(uint32_t const * ptr, uint32x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x2_t vld2_lane_f16(float16_t const * ptr, float16x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x2_t vld2q_lane_f16(float16_t const * ptr, float16x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x2_t vld2_lane_f32(float32_t const * ptr, float32x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x2_t vld2q_lane_f32(float32_t const * ptr, float32x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly16x4x2_t vld2_lane_p16(poly16_t const * ptr, poly16x4x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly16x8x2_t vld2q_lane_p16(poly16_t const * ptr, poly16x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD2 {Vt.h - Vt2.h}[lane],[Xn]	Vt.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int8x8x2_t vld2_lane_s8(int8_t const * ptr, int8x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x8x2_t vld2_lane_u8(uint8_t const * ptr, uint8x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x8x2_t vld2_lane_p8(poly8_t const * ptr, poly8x8x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x2_t vld2q_lane_s8(int8_t const * ptr, int8x16x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt.16B -> result.val[1] Vt.16B -> result.val[0]	A64
uint8x16x2_t vld2q_lane_u8(uint8_t const * ptr, uint8x16x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt.16B -> result.val[1] Vt.16B -> result.val[0]	A64
poly8x16x2_t vld2q_lane_p8(poly8_t const * ptr, poly8x16x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt.16B -> result.val[1] Vt.16B -> result.val[0]	A64
int64x1x2_t vld2_lane_s64(int64_t const * ptr, int64x1x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.1D src.val[0] -> Vt.1D lane == 0	LD2 {Vt.d - Vt2.d}[lane],[Xn]	ptr -> Xn Vt.1D -> result.val[1] Vt.1D -> result.val[0]	A64
int64x2x2_t vld2q_lane_s64(int64_t const * ptr, int64x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD2 {Vt.d - Vt2.d}[lane],[Xn]	ptr -> Xn Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64
uint64x1x2_t vld2_lane_u64(uint64_t const * ptr, uint64x1x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.1D src.val[0] -> Vt.1D lane == 0	LD2 {Vt.d - Vt2.d}[lane],[Xn]	Vt.1D -> result.val[1] Vt.1D -> result.val[0]	A64
uint64x2x2_t vld2q_lane_u64(uint64_t const * ptr, uint64x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD2 {Vt.d - Vt2.d}[lane],[Xn]	Vt.2D -> result.val[1] Vt.2D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly64x1x2_t vld2_lane_p64(poly64_t const * ptr, poly64x1x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD2 {Vt.d - Vt2.d}[lane], [Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
poly64x2x2_t vld2q_lane_p64(poly64_t const * ptr, poly64x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD2 {Vt.d - Vt2.d}[lane], [Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x2_t vld2_lane_f64(float64_t const * ptr, float64x1x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD2 {Vt.d - Vt2.d}[lane], [Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x2_t vld2q_lane_f64(float64_t const * ptr, float64x2x2_t src, const int lane)	ptr -> Xn src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD2 {Vt.d - Vt2.d}[lane], [Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int16x4x3_t vld3_lane_s16(int16_t const * ptr, int16x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD3 {Vt.h - Vt3.h}[lane], [Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x3_t vld3q_lane_s16(int16_t const * ptr, int16x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD3 {Vt.h - Vt3.h}[lane], [Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x3_t vld3_lane_s32(int32_t const * ptr, int32x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2S src.val[1] -> Vt2.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD3 {Vt.s - Vt3.s}[lane], [Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x3_t vld3q_lane_s32(int32_t const * ptr, int32x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4S src.val[1] -> Vt2.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD3 {Vt.s - Vt3.s}[lane], [Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint16x4x3_t vld3_lane_u16(uint16_t const * ptr, uint16x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD3 {Vt.h - Vt3.h}[lane], [Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8x3_t vld3q_lane_u16(uint16_t const * ptr, uint16x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD3 {Vt.h - Vt3.h}[lane],[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x3_t vld3_lane_u32(uint32_t const * ptr, uint32x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2S src.val[1] -> Vt2.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD3 {Vt.s - Vt3.s}[lane],[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x3_t vld3q_lane_u32(uint32_t const * ptr, uint32x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4S src.val[1] -> Vt2.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD3 {Vt.s - Vt3.s}[lane],[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x3_t vld3_lane_f16(float16_t const * ptr, float16x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD3 {Vt.h - Vt3.h}[lane],[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x3_t vld3q_lane_f16(float16_t const * ptr, float16x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD3 {Vt.h - Vt3.h}[lane],[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x3_t vld3_lane_f32(float32_t const * ptr, float32x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2S src.val[1] -> Vt2.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD3 {Vt.s - Vt3.s}[lane],[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x3_t vld3q_lane_f32(float32_t const * ptr, float32x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4S src.val[1] -> Vt2.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD3 {Vt.s - Vt3.s}[lane],[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly16x4x3_t vld3_lane_p16(poly16_t const * ptr, poly16x4x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD3 {Vt.h - Vt3.h}[lane],[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly16x8x3_t vld3q_lane_p16(poly16_t const * ptr, poly16x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD3 {Vt.h - Vt3.h}[lane],[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int8x8x3_t vld3_lane_s8(int8_t const * ptr, int8x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8B src.val[1] -> Vt2.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD3 {Vt.b - Vt3.b}[lane],[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x8x3_t vld3_lane_u8(uint8_t const * ptr, uint8x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8B src.val[1] -> Vt2.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD3 {Vt.b - Vt3.b}[lane],[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x8x3_t vld3_lane_p8(poly8_t const * ptr, poly8x8x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.8B src.val[1] -> Vt2.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD3 {Vt.b - Vt3.b}[lane],[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x3_t vld3q_lane_s8(int8_t const * ptr, int8x16x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.16B src.val[1] -> Vt2.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD3 {Vt.b - Vt3.b}[lane],[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	A64
uint8x16x3_t vld3q_lane_u8(uint8_t const * ptr, uint8x16x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.16B src.val[1] -> Vt2.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD3 {Vt.b - Vt3.b}[lane],[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	A64
poly8x16x3_t vld3q_lane_p8(poly8_t const * ptr, poly8x16x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.16B src.val[1] -> Vt2.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD3 {Vt.b - Vt3.b}[lane],[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	A64
int64x1x3_t vld3_lane_s64(int64_t const * ptr, int64x1x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2x3_t vld3q_lane_s64(int64_t const * ptr, int64x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
uint64x1x3_t vld3_lane_u64(uint64_t const * ptr, uint64x1x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
uint64x2x3_t vld3q_lane_u64(uint64_t const * ptr, uint64x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x1x3_t vld3_lane_p64(poly64_t const * ptr, poly64x1x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
poly64x2x3_t vld3q_lane_p64(poly64_t const * ptr, poly64x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x3_t vld3_lane_f64(float64_t const * ptr, float64x1x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x3_t vld3q_lane_f64(float64_t const * ptr, float64x2x3_t src, const int lane)	ptr -> Xn src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD3 {Vt.d - Vt3.d}[lane],[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int16x4x4_t vld4_lane_s16(int16_t const * ptr, int16x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4H src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8x4_t vld4q_lane_s16(int16_t const * ptr, int16x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8H src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x4_t vld4_lane_s32(int32_t const * ptr, int32x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2S src.val[2] -> Vt3.2S src.val[1] -> Vt2.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD4 {Vt.s - Vt4.s}[lane],[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x4_t vld4q_lane_s32(int32_t const * ptr, int32x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4S src.val[2] -> Vt3.4S src.val[1] -> Vt2.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD4 {Vt.s - Vt4.s}[lane],[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint16x4x4_t vld4_lane_u16(uint16_t const * ptr, uint16x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4H src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x4_t vld4q_lane_u16(uint16_t const * ptr, uint16x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8H src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x4_t vld4_lane_u32(uint32_t const * ptr, uint32x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2S src.val[2] -> Vt3.2S src.val[1] -> Vt2.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD4 {Vt.s - Vt4.s}[lane],[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x4_t vld4q_lane_u32(uint32_t const * ptr, uint32x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4S src.val[2] -> Vt3.4S src.val[1] -> Vt2.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD4 {Vt.s - Vt4.s}[lane],[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4x4_t vld4_lane_f16(float16_t const * ptr, float16x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4H src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x4_t vld4q_lane_f16(float16_t const * ptr, float16x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8H src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x4_t vld4_lane_f32(float32_t const * ptr, float32x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2S src.val[2] -> Vt3.2S src.val[1] -> Vt2.2S src.val[0] -> Vt.2S 0 <= lane <= 1	LD4 {Vt.s - Vt4.s}[lane],[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x4_t vld4q_lane_f32(float32_t const * ptr, float32x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4S src.val[2] -> Vt3.4S src.val[1] -> Vt2.4S src.val[0] -> Vt.4S 0 <= lane <= 3	LD4 {Vt.s - Vt4.s}[lane],[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly16x4x4_t vld4_lane_p16(poly16_t const * ptr, poly16x4x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.4H src.val[2] -> Vt3.4H src.val[1] -> Vt2.4H src.val[0] -> Vt.4H 0 <= lane <= 3	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x4_t vld4q_lane_p16(poly16_t const * ptr, poly16x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8H src.val[2] -> Vt3.8H src.val[1] -> Vt2.8H src.val[0] -> Vt.8H 0 <= lane <= 7	LD4 {Vt.h - Vt4.h}[lane],[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int8x8x4_t vld4_lane_s8(int8_t const * ptr, int8x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8B src.val[2] -> Vt3.8B src.val[1] -> Vt2.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD4 {Vt.b - Vt4.b}[lane],[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8x4_t vld4_lane_u8(uint8_t const * ptr, uint8x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8B src.val[2] -> Vt3.8B src.val[1] -> Vt2.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD4 {Vt.b - Vt4.b}[lane],[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x8x4_t vld4_lane_p8(poly8_t const * ptr, poly8x8x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.8B src.val[2] -> Vt3.8B src.val[1] -> Vt2.8B src.val[0] -> Vt.8B 0 <= lane <= 7	LD4 {Vt.b - Vt4.b}[lane],[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x4_t vld4q_lane_s8(int8_t const * ptr, int8x16x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.16B src.val[2] -> Vt3.16B src.val[1] -> Vt2.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD4 {Vt.b - Vt4.b}[lane],[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	A64
uint8x16x4_t vld4q_lane_u8(uint8_t const * ptr, uint8x16x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.16B src.val[2] -> Vt3.16B src.val[1] -> Vt2.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD4 {Vt.b - Vt4.b}[lane],[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	A64
poly8x16x4_t vld4q_lane_p8(poly8_t const * ptr, poly8x16x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.16B src.val[2] -> Vt3.16B src.val[1] -> Vt2.16B src.val[0] -> Vt.16B 0 <= lane <= 15	LD4 {Vt.b - Vt4.b}[lane],[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	A64
int64x1x4_t vld4_lane_s64(int64_t const * ptr, int64x1x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.1D src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
int64x2x4_t vld4q_lane_s64(int64_t const * ptr, int64x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2D src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1x4_t vld4_lane_u64(uint64_t const * ptr, uint64x1x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.1D src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
uint64x2x4_t vld4q_lane_u64(uint64_t const * ptr, uint64x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2D src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
poly64x1x4_t vld4_lane_p64(poly64_t const * ptr, poly64x1x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.1D src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
poly64x2x4_t vld4q_lane_p64(poly64_t const * ptr, poly64x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2D src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
float64x1x4_t vld4_lane_f64(float64_t const * ptr, float64x1x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.1D src.val[2] -> Vt3.1D src.val[1] -> Vt2.1D src.val[0] -> Vt.1D lane == 0	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x4_t vld4q_lane_f64(float64_t const * ptr, float64x2x4_t src, const int lane)	ptr -> Xn src.val[3] -> Vt4.2D src.val[2] -> Vt3.2D src.val[1] -> Vt2.2D src.val[0] -> Vt.2D 0 <= lane <= 1	LD4 {Vt.d - Vt4.d}[lane],[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
void vst2_lane_s8(int8_t * ptr, int8x8x2_t val, const int lane)	ptr -> Xn val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST2 {Vt.b - Vt2.b}[lane],[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst2_lane_u8(uint8_t * ptr, uint8x8x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST2 {Vt.b - Vt2.b}[lane],[Xn]		v7/A32/A64
<code>void vst2_lane_p8(poly8_t * ptr, poly8x8x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST2 {Vt.b - Vt2.b}[lane],[Xn]		v7/A32/A64
<code>void vst3_lane_s8(int8_t * ptr, int8x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST3 {Vt.b - Vt3.b}[lane],[Xn]		v7/A32/A64
<code>void vst3_lane_u8(uint8_t * ptr, uint8x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST3 {Vt.b - Vt3.b}[lane],[Xn]		v7/A32/A64
<code>void vst3_lane_p8(poly8_t * ptr, poly8x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST3 {Vt.b - Vt3.b}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_s8(int8_t * ptr, int8x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST4 {Vt.b - Vt4.b}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_u8(uint8_t * ptr, uint8x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST4 {Vt.b - Vt4.b}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_p8(poly8_t * ptr, poly8x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B 0 <= lane <= 7	ST4 {Vt.b - Vt4.b}[lane],[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst2_lane_s16(int16_t * ptr, int16x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST2 {Vt.h - Vt2.h}[lane], [Xn]		v7/A32/A64
<code>void vst2q_lane_s16(int16_t * ptr, int16x8x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST2 {Vt.h - Vt2.h}[lane], [Xn]		v7/A32/A64
<code>void vst2_lane_s32(int32_t * ptr, int32x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST2 {Vt.s - Vt2.s}[lane], [Xn]		v7/A32/A64
<code>void vst2q_lane_s32(int32_t * ptr, int32x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST2 {Vt.s - Vt2.s}[lane], [Xn]		v7/A32/A64
<code>void vst2_lane_u16(uint16_t * ptr, uint16x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST2 {Vt.h - Vt2.h}[lane], [Xn]		v7/A32/A64
<code>void vst2q_lane_u16(uint16_t * ptr, uint16x8x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST2 {Vt.h - Vt2.h}[lane], [Xn]		v7/A32/A64
<code>void vst2_lane_u32(uint32_t * ptr, uint32x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST2 {Vt.s - Vt2.s}[lane], [Xn]		v7/A32/A64
<code>void vst2q_lane_u32(uint32_t * ptr, uint32x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST2 {Vt.s - Vt2.s}[lane], [Xn]		v7/A32/A64
<code>void vst2_lane_f16(float16_t * ptr, float16x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST2 {Vt.h - Vt2.h}[lane], [Xn]		v7/A32/A64
<code>void vst2q_lane_f16(float16_t * ptr, float16x8x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST2 {Vt.h - Vt2.h}[lane], [Xn]		v7/A32/A64
<code>void vst2_lane_f32(float32_t * ptr, float32x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST2 {Vt.s - Vt2.s}[lane], [Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst2q_lane_f32(float32_t * ptr, float32x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST2 {Vt.s - Vt2.s}[lane],[Xn]		v7/A32/A64
<code>void vst2_lane_p16(poly16_t * ptr, poly16x4x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST2 {Vt.h - Vt2.h}[lane],[Xn]		v7/A32/A64
<code>void vst2q_lane_p16(poly16_t * ptr, poly16x8x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST2 {Vt.h - Vt2.h}[lane],[Xn]		v7/A32/A64
<code>void vst2q_lane_s8(int8_t * ptr, int8x16x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST2 {Vt.b - Vt2.b}[lane],[Xn]		A64
<code>void vst2q_lane_u8(uint8_t * ptr, uint8x16x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST2 {Vt.b - Vt2.b}[lane],[Xn]		A64
<code>void vst2q_lane_p8(poly8_t * ptr, poly8x16x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST2 {Vt.b - Vt2.b}[lane],[Xn]		A64
<code>void vst2_lane_s64(int64_t * ptr, int64x1x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst2q_lane_s64(int64_t * ptr, int64x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst2_lane_u64(uint64_t * ptr, uint64x1x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst2q_lane_u64(uint64_t * ptr, uint64x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst2_lane_p64(poly64_t * ptr, poly64x1x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst2q_lane_p64(poly64_t * ptr, poly64x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst2_lane_f64(float64_t * ptr, float64x1x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst2q_lane_f64(float64_t * ptr, float64x2x2_t val, const int lane)</code>	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D 0 <= lane <= 2	ST2 {Vt.d - Vt2.d}[lane],[Xn]		A64
<code>void vst3_lane_s16(int16_t * ptr, int16x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST3 {Vt.h - Vt3.h}[lane],[Xn]		v7/A32/A64
<code>void vst3q_lane_s16(int16_t * ptr, int16x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST3 {Vt.h - Vt3.h}[lane],[Xn]		v7/A32/A64
<code>void vst3_lane_s32(int32_t * ptr, int32x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST3 {Vt.s - Vt3.s}[lane],[Xn]		v7/A32/A64
<code>void vst3q_lane_s32(int32_t * ptr, int32x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST3 {Vt.s - Vt3.s}[lane],[Xn]		v7/A32/A64
<code>void vst3_lane_u16(uint16_t * ptr, uint16x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST3 {Vt.h - Vt3.h}[lane],[Xn]		v7/A32/A64
<code>void vst3q_lane_u16(uint16_t * ptr, uint16x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST3 {Vt.h - Vt3.h}[lane],[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst3_lane_u32(uint32_t * ptr, uint32x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST3 {Vt.s - Vt3.s}[lane], [Xn]		v7/A32/A64
<code>void vst3q_lane_u32(uint32_t * ptr, uint32x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST3 {Vt.s - Vt3.s}[lane], [Xn]		v7/A32/A64
<code>void vst3_lane_f16(float16_t * ptr, float16x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST3 {Vt.h - Vt3.h}[lane], [Xn]		v7/A32/A64
<code>void vst3q_lane_f16(float16_t * ptr, float16x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST3 {Vt.h - Vt3.h}[lane], [Xn]		v7/A32/A64
<code>void vst3_lane_f32(float32_t * ptr, float32x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST3 {Vt.s - Vt3.s}[lane], [Xn]		v7/A32/A64
<code>void vst3q_lane_f32(float32_t * ptr, float32x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST3 {Vt.s - Vt3.s}[lane], [Xn]		v7/A32/A64
<code>void vst3_lane_p16(poly16_t * ptr, poly16x4x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST3 {Vt.h - Vt3.h}[lane], [Xn]		v7/A32/A64
<code>void vst3q_lane_p16(poly16_t * ptr, poly16x8x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST3 {Vt.h - Vt3.h}[lane], [Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst3q_lane_s8(int8_t * ptr, int8x16x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST3 {Vt.b - Vt3.b}[lane],[Xn]		v7/A32/A64
<code>void vst3q_lane_u8(uint8_t * ptr, uint8x16x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST3 {Vt.b - Vt3.b}[lane],[Xn]		v7/A32/A64
<code>void vst3q_lane_p8(poly8_t * ptr, poly8x16x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST3 {Vt.b - Vt3.b}[lane],[Xn]		v7/A32/A64
<code>void vst3_lane_s64(int64_t * ptr, int64x1x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst3q_lane_s64(int64_t * ptr, int64x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst3_lane_u64(uint64_t * ptr, uint64x1x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst3q_lane_u64(uint64_t * ptr, uint64x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst3_lane_p64(poly64_t * ptr, poly64x1x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst3q_lane_p64(poly64_t * ptr, poly64x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst3_lane_f64(float64_t * ptr, float64x1x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst3q_lane_f64(float64_t * ptr, float64x2x3_t val, const int lane)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST3 {Vt.d - Vt3.d}[lane],[Xn]		A64
<code>void vst4_lane_s16(int16_t * ptr, int16x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST4 {Vt.h - Vt4.h}[lane],[Xn]		v7/A32/A64
<code>void vst4q_lane_s16(int16_t * ptr, int16x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST4 {Vt.h - Vt4.h}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_s32(int32_t * ptr, int32x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST4 {Vt.s - Vt4.s}[lane],[Xn]		v7/A32/A64
<code>void vst4q_lane_s32(int32_t * ptr, int32x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST4 {Vt.s - Vt4.s}[lane],[Xn]		v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst4_lane_u16(uint16_t * ptr, uint16x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST4 {Vt.h - Vt4.h}[lane],[Xn]		v7/A32/A64
<code>void vst4q_lane_u16(uint16_t * ptr, uint16x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST4 {Vt.h - Vt4.h}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_u32(uint32_t * ptr, uint32x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST4 {Vt.s - Vt4.s}[lane],[Xn]		v7/A32/A64
<code>void vst4q_lane_u32(uint32_t * ptr, uint32x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST4 {Vt.s - Vt4.s}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_f16(float16_t * ptr, float16x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST4 {Vt.h - Vt4.h}[lane],[Xn]		v7/A32/A64
<code>void vst4q_lane_f16(float16_t * ptr, float16x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST4 {Vt.h - Vt4.h}[lane],[Xn]		v7/A32/A64
<code>void vst4_lane_f32(float32_t * ptr, float32x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S 0 <= lane <= 1	ST4 {Vt.s - Vt4.s}[lane],[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst4q_lane_f32(float32_t * ptr, float32x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S 0 <= lane <= 3	ST4 {Vt.s - Vt4.s}[lane], [Xn]		v7/A32/A64
<code>void vst4_lane_p16(poly16_t * ptr, poly16x4x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H 0 <= lane <= 3	ST4 {Vt.h - Vt4.h}[lane], [Xn]		v7/A32/A64
<code>void vst4q_lane_p16(poly16_t * ptr, poly16x8x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H 0 <= lane <= 7	ST4 {Vt.h - Vt4.h}[lane], [Xn]		v7/A32/A64
<code>void vst4q_lane_s8(int8_t * ptr, int8x16x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST4 {Vt.b - Vt4.b}[lane], [Xn]		A64
<code>void vst4q_lane_u8(uint8_t * ptr, uint8x16x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST4 {Vt.b - Vt4.b}[lane], [Xn]		A64
<code>void vst4q_lane_p8(poly8_t * ptr, poly8x16x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B 0 <= lane <= 15	ST4 {Vt.b - Vt4.b}[lane], [Xn]		A64
<code>void vst4_lane_s64(int64_t * ptr, int64x1x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST4 {Vt.d - Vt4.d}[lane], [Xn]		A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst4q_lane_s64(int64_t * ptr, int64x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64
<code>void vst4_lane_u64(uint64_t * ptr, uint64x1x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64
<code>void vst4q_lane_u64(uint64_t * ptr, uint64x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64
<code>void vst4_lane_p64(poly64_t * ptr, poly64x1x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64
<code>void vst4q_lane_p64(poly64_t * ptr, poly64x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64
<code>void vst4_lane_f64(float64_t * ptr, float64x1x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D lane == 0	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64
<code>void vst4q_lane_f64(float64_t * ptr, float64x2x4_t val, const int lane)</code>	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D 0 <= lane <= 1	ST4 {Vt.d - Vt4.d}[lane],[Xn]		A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1_s8_x2(int8_t * ptr, int8x8x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.8B val.val[0] -&gt; Vt.8B</code>	<code>ST1 {Vt.8B - Vt.8B},[Xn]</code>		v7/A32/A64
<code>void vst1q_s8_x2(int8_t * ptr, int8x16x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.16B val.val[0] -&gt; Vt.16B</code>	<code>ST1 {Vt.16B - Vt.16B},[Xn]</code>		v7/A32/A64
<code>void vst1_s16_x2(int16_t * ptr, int16x4x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.4H val.val[0] -&gt; Vt.4H</code>	<code>ST1 {Vt.4H - Vt.4H},[Xn]</code>		v7/A32/A64
<code>void vst1q_s16_x2(int16_t * ptr, int16x8x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.8H val.val[0] -&gt; Vt.8H</code>	<code>ST1 {Vt.8H - Vt.8H},[Xn]</code>		v7/A32/A64
<code>void vst1_s32_x2(int32_t * ptr, int32x2x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.2S val.val[0] -&gt; Vt.2S</code>	<code>ST1 {Vt.2S - Vt.2S},[Xn]</code>		v7/A32/A64
<code>void vst1q_s32_x2(int32_t * ptr, int32x4x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.4S val.val[0] -&gt; Vt.4S</code>	<code>ST1 {Vt.4S - Vt.4S},[Xn]</code>		v7/A32/A64
<code>void vst1_u8_x2(uint8_t * ptr, uint8x8x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.8B val.val[0] -&gt; Vt.8B</code>	<code>ST1 {Vt.8B - Vt.8B},[Xn]</code>		v7/A32/A64
<code>void vst1q_u8_x2(uint8_t * ptr, uint8x16x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.16B val.val[0] -&gt; Vt.16B</code>	<code>ST1 {Vt.16B - Vt.16B},[Xn]</code>		v7/A32/A64
<code>void vst1_u16_x2(uint16_t * ptr, uint16x4x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.4H val.val[0] -&gt; Vt.4H</code>	<code>ST1 {Vt.4H - Vt.4H},[Xn]</code>		v7/A32/A64
<code>void vst1q_u16_x2(uint16_t * ptr, uint16x8x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.8H val.val[0] -&gt; Vt.8H</code>	<code>ST1 {Vt.8H - Vt.8H},[Xn]</code>		v7/A32/A64
<code>void vst1_u32_x2(uint32_t * ptr, uint32x2x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.2S val.val[0] -&gt; Vt.2S</code>	<code>ST1 {Vt.2S - Vt.2S},[Xn]</code>		v7/A32/A64
<code>void vst1q_u32_x2(uint32_t * ptr, uint32x4x2_t val)</code>	<code>ptr -&gt; Xn val.val[1] -&gt; Vt.4S val.val[0] -&gt; Vt.4S</code>	<code>ST1 {Vt.4S - Vt.4S},[Xn]</code>		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst1_f16_x2(float16_t * ptr, float16x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt.2.4H},[Xn]		v7/A32/A64
void vst1q_f16_x2(float16_t * ptr, float16x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt.2.8H},[Xn]		v7/A32/A64
void vst1_f32_x2(float32_t * ptr, float32x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt.2.2S},[Xn]		v7/A32/A64
void vst1q_f32_x2(float32_t * ptr, float32x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4S val.val[0] -> Vt.4S	ST1 {Vt.4S - Vt.2.4S},[Xn]		v7/A32/A64
void vst1_p8_x2(poly8_t * ptr, poly8x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8B val.val[0] -> Vt.8B	ST1 {Vt.8B - Vt.2.8B},[Xn]		v7/A32/A64
void vst1q_p8_x2(poly8_t * ptr, poly8x16x2_t val)	ptr -> Xn val.val[1] -> Vt.16B val.val[0] -> Vt.16B	ST1 {Vt.16B - Vt.2.16B},[Xn]		v7/A32/A64
void vst1_p16_x2(poly16_t * ptr, poly16x4x2_t val)	ptr -> Xn val.val[1] -> Vt.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt.2.4H},[Xn]		v7/A32/A64
void vst1q_p16_x2(poly16_t * ptr, poly16x8x2_t val)	ptr -> Xn val.val[1] -> Vt.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt.2.8H},[Xn]		v7/A32/A64
void vst1_s64_x2(int64_t * ptr, int64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.2.1D},[Xn]		v7/A32/A64
void vst1_u64_x2(uint64_t * ptr, uint64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.2.1D},[Xn]		v7/A32/A64
void vst1_p64_x2(poly64_t * ptr, poly64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.2.1D},[Xn]		A32/A64
void vst1q_s64_x2(int64_t * ptr, int64x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt.2.2D},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst1q_u64_x2(uint64_t * ptr, uint64x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt.2D},[Xn]		v7/A32/A64
void vst1q_p64_x2(poly64_t * ptr, poly64x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt.2D},[Xn]		A32/A64
void vst1_f64_x2(float64_t * ptr, float64x1x2_t val)	ptr -> Xn val.val[1] -> Vt.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt.1D},[Xn]		A64
void vst1q_f64_x2(float64_t * ptr, float64x2x2_t val)	ptr -> Xn val.val[1] -> Vt.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt.2D},[Xn]		A64
void vst1_s8_x3(int8_t * ptr, int8x8x3_t val)	ptr -> Xn val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST1 {Vt.8B - Vt3.8B},[Xn]		v7/A32/A64
void vst1q_s8_x3(int8_t * ptr, int8x16x3_t val)	ptr -> Xn val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST1 {Vt.16B - Vt3.16B},[Xn]		v7/A32/A64
void vst1_s16_x3(int16_t * ptr, int16x4x3_t val)	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt3.4H},[Xn]		v7/A32/A64
void vst1q_s16_x3(int16_t * ptr, int16x8x3_t val)	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt3.8H},[Xn]		v7/A32/A64
void vst1_s32_x3(int32_t * ptr, int32x2x3_t val)	ptr -> Xn val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt3.2S},[Xn]		v7/A32/A64
void vst1q_s32_x3(int32_t * ptr, int32x4x3_t val)	ptr -> Xn val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST1 {Vt.4S - Vt3.4S},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1_u8_x3(uint8_t * ptr, uint8x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST1 {Vt.8B - Vt3.8B},[Xn]		v7/A32/A64
<code>void vst1q_u8_x3(uint8_t * ptr, uint8x16x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST1 {Vt.16B - Vt3.16B},[Xn]		v7/A32/A64
<code>void vst1_u16_x3(uint16_t * ptr, uint16x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt3.4H},[Xn]		v7/A32/A64
<code>void vst1q_u16_x3(uint16_t * ptr, uint16x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt3.8H},[Xn]		v7/A32/A64
<code>void vst1_u32_x3(uint32_t * ptr, uint32x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt3.2S},[Xn]		v7/A32/A64
<code>void vst1q_u32_x3(uint32_t * ptr, uint32x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST1 {Vt.4S - Vt3.4S},[Xn]		v7/A32/A64
<code>void vst1_f16_x3(float16_t * ptr, float16x4x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt3.4H},[Xn]		v7/A32/A64
<code>void vst1q_f16_x3(float16_t * ptr, float16x8x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt3.8H},[Xn]		v7/A32/A64
<code>void vst1_f32_x3(float32_t * ptr, float32x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt3.2S},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1q_f32_x3(float32_t * ptr, float32x4x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.4S val.val[1] -&gt; Vt.4S val.val[0] -&gt; Vt.4S</code>	<code>ST1 {Vt.4S - Vt.4S},[Xn]</code>		v7/A32/A64
<code>void vst1_p8_x3(poly8_t * ptr, poly8x8x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.8B val.val[1] -&gt; Vt.8B val.val[0] -&gt; Vt.8B</code>	<code>ST1 {Vt.8B - Vt.8B},[Xn]</code>		v7/A32/A64
<code>void vst1q_p8_x3(poly8_t * ptr, poly8x16x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.16B val.val[1] -&gt; Vt.16B val.val[0] -&gt; Vt.16B</code>	<code>ST1 {Vt.16B - Vt.16B},[Xn]</code>		v7/A32/A64
<code>void vst1_p16_x3(poly16_t * ptr, poly16x4x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.4H val.val[1] -&gt; Vt.4H val.val[0] -&gt; Vt.4H</code>	<code>ST1 {Vt.4H - Vt.4H},[Xn]</code>		v7/A32/A64
<code>void vst1q_p16_x3(poly16_t * ptr, poly16x8x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.8H val.val[1] -&gt; Vt.8H val.val[0] -&gt; Vt.8H</code>	<code>ST1 {Vt.8H - Vt.8H},[Xn]</code>		v7/A32/A64
<code>void vst1_s64_x3(int64_t * ptr, int64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.1D val.val[1] -&gt; Vt.1D val.val[0] -&gt; Vt.1D</code>	<code>ST1 {Vt.1D - Vt.1D},[Xn]</code>		v7/A32/A64
<code>void vst1_u64_x3(uint64_t * ptr, uint64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.1D val.val[1] -&gt; Vt.1D val.val[0] -&gt; Vt.1D</code>	<code>ST1 {Vt.1D - Vt.1D},[Xn]</code>		v7/A32/A64
<code>void vst1_p64_x3(poly64_t * ptr, poly64x1x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.1D val.val[1] -&gt; Vt.1D val.val[0] -&gt; Vt.1D</code>	<code>ST1 {Vt.1D - Vt.1D},[Xn]</code>		A32/A64
<code>void vst1q_s64_x3(int64_t * ptr, int64x2x3_t val)</code>	<code>ptr -&gt; Xn val.val[2] -&gt; Vt.2D val.val[1] -&gt; Vt.2D val.val[0] -&gt; Vt.2D</code>	<code>ST1 {Vt.2D - Vt.2D},[Xn]</code>		v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1q_u64_x3(uint64_t * ptr, uint64x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt3.2D}, [Xn]		v7/A32/A64
<code>void vst1q_p64_x3(poly64_t * ptr, poly64x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt3.2D}, [Xn]		v7/A32/A64
<code>void vst1_f64_x3(float64_t * ptr, float64x1x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt3.1D}, [Xn]		A64
<code>void vst1q_f64_x3(float64_t * ptr, float64x2x3_t val)</code>	ptr -> Xn val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt3.2D}, [Xn]		A64
<code>void vst1_s8_x4(int8_t * ptr, int8x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST1 {Vt.8B - Vt4.8B}, [Xn]		v7/A32/A64
<code>void vst1q_s8_x4(int8_t * ptr, int8x16x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST1 {Vt.16B - Vt4.16B}, [Xn]		v7/A32/A64
<code>void vst1_s16_x4(int16_t * ptr, int16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt4.4H}, [Xn]		v7/A32/A64
<code>void vst1q_s16_x4(int16_t * ptr, int16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt4.8H}, [Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1_s32_x4(int32_t * ptr, int32x4_t val)</code>	ptr -> Xn val.val[3] -> Vt.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt4.2S},[Xn]		v7/A32/A64
<code>void vst1q_s32_x4(int32_t * ptr, int32x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST1 {Vt.4S - Vt4.4S},[Xn]		v7/A32/A64
<code>void vst1_u8_x4(uint8_t * ptr, uint8x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST1 {Vt.8B - Vt4.8B},[Xn]		v7/A32/A64
<code>void vst1q_u8_x4(uint8_t * ptr, uint8x16x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST1 {Vt.16B - Vt4.16B},[Xn]		v7/A32/A64
<code>void vst1_u16_x4(uint16_t * ptr, uint16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
<code>void vst1q_u16_x4(uint16_t * ptr, uint16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
<code>void vst1_u32_x4(uint32_t * ptr, uint32x2x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt4.2S},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst1q_u32_x4(uint32_t * ptr, uint32x4x4_t val)	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST1 {Vt.4S - Vt4.4S},[Xn]		v7/A32/A64
void vst1_f16_x4(float16_t * ptr, float16x4x4_t val)	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
void vst1q_f16_x4(float16_t * ptr, float16x8x4_t val)	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
void vst1_f32_x4(float32_t * ptr, float32x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2S val.val[2] -> Vt3.2S val.val[1] -> Vt2.2S val.val[0] -> Vt.2S	ST1 {Vt.2S - Vt4.2S},[Xn]		v7/A32/A64
void vst1q_f32_x4(float32_t * ptr, float32x4x4_t val)	ptr -> Xn val.val[3] -> Vt4.4S val.val[2] -> Vt3.4S val.val[1] -> Vt2.4S val.val[0] -> Vt.4S	ST1 {Vt.4S - Vt4.4S},[Xn]		v7/A32/A64
void vst1_p8_x4(poly8_t * ptr, poly8x8x4_t val)	ptr -> Xn val.val[3] -> Vt4.8B val.val[2] -> Vt3.8B val.val[1] -> Vt2.8B val.val[0] -> Vt.8B	ST1 {Vt.8B - Vt4.8B},[Xn]		v7/A32/A64
void vst1q_p8_x4(poly8_t * ptr, poly8x16x4_t val)	ptr -> Xn val.val[3] -> Vt4.16B val.val[2] -> Vt3.16B val.val[1] -> Vt2.16B val.val[0] -> Vt.16B	ST1 {Vt.16B - Vt4.16B},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
<code>void vst1_p16_x4(poly16_t * ptr, poly16x4x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.4H val.val[2] -> Vt3.4H val.val[1] -> Vt2.4H val.val[0] -> Vt.4H	ST1 {Vt.4H - Vt4.4H},[Xn]		v7/A32/A64
<code>void vst1q_p16_x4(poly16_t * ptr, poly16x8x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.8H val.val[2] -> Vt3.8H val.val[1] -> Vt2.8H val.val[0] -> Vt.8H	ST1 {Vt.8H - Vt4.8H},[Xn]		v7/A32/A64
<code>void vst1_s64_x4(int64_t * ptr, int64x1x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		v7/A32/A64
<code>void vst1_u64_x4(uint64_t * ptr, uint64x1x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		v7/A32/A64
<code>void vst1_p64_x4(poly64_t * ptr, poly64x1x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		A32/A64
<code>void vst1q_s64_x4(int64_t * ptr, int64x2x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt4.2D},[Xn]		v7/A32/A64
<code>void vst1q_u64_x4(uint64_t * ptr, uint64x2x4_t val)</code>	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt4.2D},[Xn]		v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
void vst1q_p64_x4(poly64_t * ptr, poly64x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt4.2D},[Xn]		A32/A64
void vst1_f64_x4(float64_t * ptr, float64x1x4_t val)	ptr -> Xn val.val[3] -> Vt4.1D val.val[2] -> Vt3.1D val.val[1] -> Vt2.1D val.val[0] -> Vt.1D	ST1 {Vt.1D - Vt4.1D},[Xn]		A64
void vst1q_f64_x4(float64_t * ptr, float64x2x4_t val)	ptr -> Xn val.val[3] -> Vt4.2D val.val[2] -> Vt3.2D val.val[1] -> Vt2.2D val.val[0] -> Vt.2D	ST1 {Vt.2D - Vt4.2D},[Xn]		A64
int8x8x2_t vld1_s8_x2(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x2_t vld1q_s8_x2(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x2_t vld1_s16_x2(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x2_t vld1q_s16_x2(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x2_t vld1_s32_x2(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x2_t vld1q_s32_x2(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x2_t vld1_u8_x2(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x2_t vld1q_u8_x2(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4x2_t vld1_u16_x2(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x2_t vld1q_u16_x2(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x2_t vld1_u32_x2(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x2_t vld1q_u32_x2(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x2_t vld1_f16_x2(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x2_t vld1q_f16_x2(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x2_t vld1_f32_x2(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt2.2S},[Xn]	Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x2_t vld1q_f32_x2(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt2.4S},[Xn]	Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x2_t vld1_p8_x2(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt2.8B},[Xn]	Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x2_t vld1q_p8_x2(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt2.16B},[Xn]	Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x2_t vld1_p16_x2(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x2_t vld1q_p16_x2(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x2_t vld1_s64_x2(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1x2_t vld1_u64_x2(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x2_t vld1_p64_x2(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x2_t vld1q_s64_x2(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	v7/A32/A64
uint64x2x2_t vld1q_u64_x2(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	v7/A32/A64
poly64x2x2_t vld1q_p64_x2(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A32/A64
float64x1x2_t vld1_f64_x2(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x2_t vld1q_f64_x2(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x3_t vld1_s8_x3(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt3.8B},[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x3_t vld1q_s8_x3(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt3.16B},[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
int16x4x3_t vld1_s16_x3(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x3_t vld1q_s16_x3(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2x3_t vld1_s32_x3(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x3_t vld1q_s32_x3(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x3_t vld1_u8_x3(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt3.8B},[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x3_t vld1q_u8_x3(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt3.16B},[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x3_t vld1_u16_x3(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
uint16x8x3_t vld1q_u16_x3(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x3_t vld1_u32_x3(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x3_t vld1q_u32_x3(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x3_t vld1_f16_x3(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8x3_t vld1q_f16_x3(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x3_t vld1_f32_x3(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt3.2S},[Xn]	Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x3_t vld1q_f32_x3(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt3.4S},[Xn]	Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
poly8x8x3_t vld1_p8_x3(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt3.8B},[Xn]	Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x3_t vld1q_p8_x3(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt3.16B},[Xn]	Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x3_t vld1_p16_x3(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt3.4H},[Xn]	Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x3_t vld1q_p16_x3(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt3.8H},[Xn]	Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x3_t vld1_s64_x3(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x3_t vld1_u64_x3(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly64x1x3_t vld1_p64_x3(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64
int64x2x3_t vld1q_s64_x3(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	v7/A32/A64
uint64x2x3_t vld1q_u64_x3(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	v7/A32/A64
poly64x2x3_t vld1q_p64_x3(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A32/A64
float64x1x3_t vld1_f64_x3(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt3.1D},[Xn]	Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x3_t vld1q_f64_x3(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt3.2D},[Xn]	Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8x4_t vld1_s8_x4(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
int8x16x4_t vld1q_s8_x4(int8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4x4_t vld1_s16_x4(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
int16x8x4_t vld1q_s16_x4(int16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int32x2x4_t vld1_s32_x4(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
int32x4x4_t vld1q_s32_x4(int32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
uint8x8x4_t vld1_u8_x4(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
uint8x16x4_t vld1q_u8_x4(uint8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
uint16x4x4_t vld1_u16_x4(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8x4_t vld1q_u16_x4(uint16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
uint32x2x4_t vld1_u32_x4(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
uint32x4x4_t vld1q_u32_x4(uint32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64
float16x4x4_t vld1_f16_x4(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
float16x8x4_t vld1q_f16_x4(float16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
float32x2x4_t vld1_f32_x4(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.2S - Vt4.2S},[Xn]	Vt4.2S -> result.val[3] Vt3.2S -> result.val[2] Vt2.2S -> result.val[1] Vt.2S -> result.val[0]	v7/A32/A64
float32x4x4_t vld1q_f32_x4(float32_t const * ptr)	ptr -> Xn	LD1 {Vt.4S - Vt4.4S},[Xn]	Vt4.4S -> result.val[3] Vt3.4S -> result.val[2] Vt2.4S -> result.val[1] Vt.4S -> result.val[0]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x8x4_t vld1_p8_x4(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.8B - Vt4.8B},[Xn]	Vt4.8B -> result.val[3] Vt3.8B -> result.val[2] Vt2.8B -> result.val[1] Vt.8B -> result.val[0]	v7/A32/A64
poly8x16x4_t vld1q_p8_x4(poly8_t const * ptr)	ptr -> Xn	LD1 {Vt.16B - Vt4.16B},[Xn]	Vt4.16B -> result.val[3] Vt3.16B -> result.val[2] Vt2.16B -> result.val[1] Vt.16B -> result.val[0]	v7/A32/A64
poly16x4x4_t vld1_p16_x4(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.4H - Vt4.4H},[Xn]	Vt4.4H -> result.val[3] Vt3.4H -> result.val[2] Vt2.4H -> result.val[1] Vt.4H -> result.val[0]	v7/A32/A64
poly16x8x4_t vld1q_p16_x4(poly16_t const * ptr)	ptr -> Xn	LD1 {Vt.8H - Vt4.8H},[Xn]	Vt4.8H -> result.val[3] Vt3.8H -> result.val[2] Vt2.8H -> result.val[1] Vt.8H -> result.val[0]	v7/A32/A64
int64x1x4_t vld1_s64_x4(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
uint64x1x4_t vld1_u64_x4(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	v7/A32/A64
poly64x1x4_t vld1_p64_x4(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2x4_t vld1q_s64_x4(int64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	v7/A32/A64
uint64x2x4_t vld1q_u64_x4(uint64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	v7/A32/A64
poly64x2x4_t vld1q_p64_x4(poly64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A32/A64
float64x1x4_t vld1_f64_x4(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.1D - Vt4.1D},[Xn]	Vt4.1D -> result.val[3] Vt3.1D -> result.val[2] Vt2.1D -> result.val[1] Vt.1D -> result.val[0]	A64
float64x2x4_t vld1q_f64_x4(float64_t const * ptr)	ptr -> Xn	LD1 {Vt.2D - Vt4.2D},[Xn]	Vt4.2D -> result.val[3] Vt3.2D -> result.val[2] Vt2.2D -> result.val[1] Vt.2D -> result.val[0]	A64
int8x8_t vpadd_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ADDP Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x4_t vpadd_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	ADDP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int32x2_t vpadd_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	ADDP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint8x8_t vpadd_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ADDP Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x4_t vpadd_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	ADDP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint32x2_t vpadd_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	ADDP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x2_t vpadd_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FADDP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int8x16_t vpaddq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ADDP Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vpaddq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	ADDP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x4_t vpaddq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	ADDP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vpaddq_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	ADDP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x16_t vpaddq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ADDP Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x8_t vpaddq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	ADDP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x4_t vpaddq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	ADDP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vpaddq_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	ADDP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x4_t vpaddq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FADDP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vpaddq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FADDP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int16x4_t vpaddl_s8(int8x8_t a)	a -> Vn.8B	SADDLP Vd.4H,Vn.8B	Vd.4H -> result	v7/A32/A64
int16x8_t vpaddlq_s8(int8x16_t a)	a -> Vn.16B	SADDLP Vd.8H,Vn.16B	Vd.8H -> result	v7/A32/A64
int32x2_t vpaddl_s16(int16x4_t a)	a -> Vn.4H	SADDLP Vd.2S,Vn.4H	Vd.2S -> result	v7/A32/A64
int32x4_t vpaddlq_s16(int16x8_t a)	a -> Vn.8H	SADDLP Vd.4S,Vn.8H	Vd.4S -> result	v7/A32/A64
int64x1_t vpaddl_s32(int32x2_t a)	a -> Vn.2S	SADDLP Vd.1D,Vn.2S	Vd.1D -> result	v7/A32/A64
int64x2_t vpaddlq_s32(int32x4_t a)	a -> Vn.4S	SADDLP Vd.2D,Vn.4S	Vd.2D -> result	v7/A32/A64
uint16x4_t vpaddl_u8(uint8x8_t a)	a -> Vn.8B	UADDLP Vd.4H,Vn.8B	Vd.4H -> result	v7/A32/A64
uint16x8_t vpaddlq_u8(uint8x16_t a)	a -> Vn.16B	UADDLP Vd.8H,Vn.16B	Vd.8H -> result	v7/A32/A64
uint32x2_t vpaddl_u16(uint16x4_t a)	a -> Vn.4H	UADDLP Vd.2S,Vn.4H	Vd.2S -> result	v7/A32/A64
uint32x4_t vpaddlq_u16(uint16x8_t a)	a -> Vn.8H	UADDLP Vd.4S,Vn.8H	Vd.4S -> result	v7/A32/A64
uint64x1_t vpaddl_u32(uint32x2_t a)	a -> Vn.2S	UADDLP Vd.1D,Vn.2S	Vd.1D -> result	v7/A32/A64
uint64x2_t vpaddlq_u32(uint32x4_t a)	a -> Vn.4S	UADDLP Vd.2D,Vn.4S	Vd.2D -> result	v7/A32/A64
int16x4_t vpadal_s8(int16x4_t a, int8x8_t b)	a -> Vd.4H b -> Vn.8B	SADALP Vd.4H,Vn.8B	Vd.4H -> result	v7/A32/A64
int16x8_t vpadalq_s8(int16x8_t a, int8x16_t b)	a -> Vd.8H b -> Vn.16B	SADALP Vd.8H,Vn.16B	Vd.8H -> result	v7/A32/A64
int32x2_t vpadal_s16(int32x2_t a, int16x4_t b)	a -> Vd.2S b -> Vn.4H	SADALP Vd.2S,Vn.4H	Vd.2S -> result	v7/A32/A64
int32x4_t vpadalq_s16(int32x4_t a, int16x8_t b)	a -> Vd.4S b -> Vn.8H	SADALP Vd.4S,Vn.8H	Vd.4S -> result	v7/A32/A64
int64x1_t vpadal_s32(int64x1_t a, int32x2_t b)	a -> Vd.1D b -> Vn.2S	SADALP Vd.1D,Vn.2S	Vd.1D -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x2_t vpadalq_s32(int64x2_t a, int32x4_t b)	a -> Vd.2D b -> Vn.4S	SADALP Vd.2D,Vn.4S	Vd.2D -> result	v7/A32/A64
uint16x4_t vpadal_u8(uint16x4_t a, uint8x8_t b)	a -> Vd.4H b -> Vn.8B	UADALP Vd.4H,Vn.8B	Vd.4H -> result	v7/A32/A64
uint16x8_t vpadalq_u8(uint16x8_t a, uint8x16_t b)	a -> Vd.8H b -> Vn.16B	UADALP Vd.8H,Vn.16B	Vd.8H -> result	v7/A32/A64
uint32x2_t vpadal_u16(uint32x2_t a, uint16x4_t b)	a -> Vd.2S b -> Vn.4H	UADALP Vd.2S,Vn.4H	Vd.2S -> result	v7/A32/A64
uint32x4_t vpadalq_u16(uint32x4_t a, uint16x8_t b)	a -> Vd.4S b -> Vn.8H	UADALP Vd.4S,Vn.8H	Vd.4S -> result	v7/A32/A64
uint64x1_t vpadal_u32(uint64x1_t a, uint32x2_t b)	a -> Vd.1D b -> Vn.2S	UADALP Vd.1D,Vn.2S	Vd.1D -> result	v7/A32/A64
uint64x2_t vpadalq_u32(uint64x2_t a, uint32x4_t b)	a -> Vd.2D b -> Vn.4S	UADALP Vd.2D,Vn.4S	Vd.2D -> result	v7/A32/A64
int8x8_t vpmax_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SMAXP Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
int16x4_t vpmax_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SMAXP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int32x2_t vpmax_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SMAXP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint8x8_t vpmax_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UMAXP Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x4_t vpmax_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UMAXP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint32x2_t vpmax_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UMAXP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x2_t vpmax_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMAXP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int8x16_t vpmaxq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SMAXP Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x8_t vpmaxq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SMAXP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x4_t vpmaxq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SMAXP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint8x16_t vpmaxq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UMAXP Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x8_t vpmaxq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UMAXP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x4_t vpmaxq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UMAXP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float32x4_t vpmaxq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMAXP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vpmaxq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMAXP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int8x8_t vpmin_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	SMINP Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4_t vpmin_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	SMINP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
int32x2_t vpmin_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	SMINP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
uint8x8_t vpmin_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UMINP Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
uint16x4_t vpmin_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UMINP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	v7/A32/A64
uint32x2_t vpmin_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UMINP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
float32x2_t vpmin_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMINP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	v7/A32/A64
int8x16_t vpminq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	SMINP Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x8_t vpminq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	SMINP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x4_t vpminq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	SMINP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint8x16_t vpminq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UMINP Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x8_t vpminq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UMINP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x4_t vpminq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UMINP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float32x4_t vpminq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMINP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vpminq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMINP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vpmaxnm_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMAXNMP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vpmaxnmq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMAXNMP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vpmaxnmq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMAXNMP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vpminnm_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FMINNMP Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vpminnmq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FMINNMP Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vpminnmq_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FMINNMP Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
int64_t vpadd_s64(int64x2_t a)	a -> Vn.2D	ADDP Dd,Vn.2D	Dd -> result	A64
uint64_t vpadd_u64(uint64x2_t a)	a -> Vn.2D	ADDP Dd,Vn.2D	Dd -> result	A64
float32_t vpadds_f32(float32x2_t a)	a -> Vn.2S	FADDP Sd,Vn.2S	Sd -> result	A64
float64_t vpadd_f64(float64x2_t a)	a -> Vn.2D	FADDP Dd,Vn.2D	Dd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32_t vpmaks_f32(float32x2_t a)	a -> Vn.2S	FMAXP Sd,Vn.2S	Sd -> result	A64
float64_t vpmaxqd_f64(float64x2_t a)	a -> Vn.2D	FMAXP Dd,Vn.2D	Dd -> result	A64
float32_t vpmins_f32(float32x2_t a)	a -> Vn.2S	FMINP Sd,Vn.2S	Sd -> result	A64
float64_t vpminqd_f64(float64x2_t a)	a -> Vn.2D	FMINP Dd,Vn.2D	Dd -> result	A64
float32_t vpmxnms_f32(float32x2_t a)	a -> Vn.2S	FMAXNMP Sd,Vn.2S	Sd -> result	A64
float64_t vpmxnmqd_f64(float64x2_t a)	a -> Vn.2D	FMAXNMP Dd,Vn.2D	Dd -> result	A64
float32_t vpminnms_f32(float32x2_t a)	a -> Vn.2S	FMINNMP Sd,Vn.2S	Sd -> result	A64
float64_t vpminnmqd_f64(float64x2_t a)	a -> Vn.2D	FMINNMP Dd,Vn.2D	Dd -> result	A64
int8_t vaddv_s8(int8x8_t a)	a -> Vn.8B	ADDV Bd,Vn.8B	Bd -> result	A64
int8_t vaddvq_s8(int8x16_t a)	a -> Vn.16B	ADDV Bd,Vn.16B	Bd -> result	A64
int16_t vaddv_s16(int16x4_t a)	a -> Vn.4H	ADDV Hd,Vn.4H	Hd -> result	A64
int16_t vaddvq_s16(int16x8_t a)	a -> Vn.8H	ADDV Hd,Vn.8H	Hd -> result	A64
int32_t vaddv_s32(int32x2_t a)	a -> Vn.2S a -> Vm.2S	ADDP Vd.2S,Vn.2S,Vm.2S	Vd.S[0] -> result	A64
int32_t vaddvq_s32(int32x4_t a)	a -> Vn.4S	ADDV Sd,Vn.4S	Sd -> result	A64
int64_t vaddvq_s64(int64x2_t a)	a -> Vn.2D	ADDP Dd,Vn.2D	Dd -> result	A64
uint8_t vaddv_u8(uint8x8_t a)	a -> Vn.8B	ADDV Bd,Vn.8B	Bd -> result	A64
uint8_t vaddvq_u8(uint8x16_t a)	a -> Vn.16B	ADDV Bd,Vn.16B	Bd -> result	A64
uint16_t vaddv_u16(uint16x4_t a)	a -> Vn.4H	ADDV Hd,Vn.4H	Hd -> result	A64
uint16_t vaddvq_u16(uint16x8_t a)	a -> Vn.8H	ADDV Hd,Vn.8H	Hd -> result	A64
uint32_t vaddv_u32(uint32x2_t a)	a -> Vn.2S a -> Vm.2S	ADDP Vd.2S,Vn.2S,Vm.2S	Vd.S[0] -> result	A64
uint32_t vaddvq_u32(uint32x4_t a)	a -> Vn.4S	ADDV Sd,Vn.4S	Sd -> result	A64
uint64_t vaddvq_u64(uint64x2_t a)	a -> Vn.2D	ADDP Dd,Vn.2D	Dd -> result	A64
float32_t vaddv_f32(float32x2_t a)	a -> Vn.2S	FADDP Sd,Vn.2S	Sd -> result	A64
float32_t vaddvq_f32(float32x4_t a)	a -> Vn.4S a -> Vm.4S	FADDP Vt.4S,Vn.4S,Vm.4S FADDP Sd,Vt.2S	Sd -> result	A64
float64_t vaddvq_f64(float64x2_t a)	a -> Vn.2D	FADDP Dd,Vn.2D	Dd -> result	A64
int16_t vaddlv_s8(int8x8_t a)	a -> Vn.8B	SADDLV Hd,Vn.8B	Hd -> result	A64
int16_t vaddlvq_s8(int8x16_t a)	a -> Vn.16B	SADDLV Hd,Vn.16B	Hd -> result	A64
int32_t vaddlv_s16(int16x4_t a)	a -> Vn.4H	SADDLV Sd,Vn.4H	Sd -> result	A64
int32_t vaddlvq_s16(int16x8_t a)	a -> Vn.8H	SADDLV Sd,Vn.8H	Sd -> result	A64
int64_t vaddlv_s32(int32x2_t a)	a -> Vn.2S	SADDLP Vd.1D,Vn.2S	Dd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64_t vaddlvq_s32(int32x4_t a)	a -> Vn.4S	SADDLV Dd,Vn.4S	Dd -> result	A64
uint16_t vaddlv_u8(uint8x8_t a)	a -> Vn.8B	UADDLV Hd,Vn.8B	Hd -> result	A64
uint16_t vaddlvq_u8(uint8x16_t a)	a -> Vn.16B	UADDLV Hd,Vn.16B	Hd -> result	A64
uint32_t vaddlv_u16(uint16x4_t a)	a -> Vn.4H	UADDLV Sd,Vn.4H	Sd -> result	A64
uint32_t vaddlvq_u16(uint16x8_t a)	a -> Vn.8H	UADDLV Sd,Vn.8H	Sd -> result	A64
uint64_t vaddlv_u32(uint32x2_t a)	a -> Vn.2S	UADDLP Vd.1D,Vn.2S	Dd -> result	A64
uint64_t vaddlvq_u32(uint32x4_t a)	a -> Vn.4S	UADDLV Dd,Vn.4S	Dd -> result	A64
int8_t vmaxv_s8(int8x8_t a)	a -> Vn.8B	SMAVX Bd,Vn.8B	Bd -> result	A64
int8_t vmaxvq_s8(int8x16_t a)	a -> Vn.16B	SMAVX Bd,Vn.16B	Bd -> result	A64
int16_t vmaxv_s16(int16x4_t a)	a -> Vn.4H	SMAVX Hd,Vn.4H	Hd -> result	A64
int16_t vmaxvq_s16(int16x8_t a)	a -> Vn.8H	SMAVX Hd,Vn.8H	Hd -> result	A64
int32_t vmaxv_s32(int32x2_t a)	a -> Vn.2S a -> Vm.2S	SMAVX Vd.2S,Vn.2S,Vm.2S	Vd.S[0] -> result	A64
int32_t vmaxvq_s32(int32x4_t a)	a -> Vn.4S	SMAVX Sd,Vn.4S	Sd -> result	A64
uint8_t vmaxv_u8(uint8x8_t a)	a -> Vn.8B	UMAVX Bd,Vn.8B	Bd -> result	A64
uint8_t vmaxvq_u8(uint8x16_t a)	a -> Vn.16B	UMAVX Bd,Vn.16B	Bd -> result	A64
uint16_t vmaxv_u16(uint16x4_t a)	a -> Vn.4H	UMAVX Hd,Vn.4H	Hd -> result	A64
uint16_t vmaxvq_u16(uint16x8_t a)	a -> Vn.8H	UMAVX Hd,Vn.8H	Hd -> result	A64
uint32_t vmaxv_u32(uint32x2_t a)	a -> Vn.2S a -> Vm.2S	UMAVX Vd.2S,Vn.2S,Vm.2S	Vd.S[0] -> result	A64
uint32_t vmaxvq_u32(uint32x4_t a)	a -> Vn.4S	UMAVX Sd,Vn.4S	Sd -> result	A64
float32_t vmaxv_f32(float32x2_t a)	a -> Vn.2S	FMAVX Sd,Vn.2S	Sd -> result	A64
float32_t vmaxvq_f32(float32x4_t a)	a -> Vn.4S	FMAVX Sd,Vn.4S	Sd -> result	A64
float64_t vmaxvq_f64(float64x2_t a)	a -> Vn.2D	FMAVX Dd,Vn.2D	Dd -> result	A64
int8_t vminv_s8(int8x8_t a)	a -> Vn.8B	SMINV Bd,Vn.8B	Bd -> result	A64
int8_t vminvq_s8(int8x16_t a)	a -> Vn.16B	SMINV Bd,Vn.16B	Bd -> result	A64
int16_t vminv_s16(int16x4_t a)	a -> Vn.4H	SMINV Hd,Vn.4H	Hd -> result	A64
int16_t vminvq_s16(int16x8_t a)	a -> Vn.8H	SMINV Hd,Vn.8H	Hd -> result	A64
int32_t vminv_s32(int32x2_t a)	a -> Vn.2S a -> Vm.2S	SMINP Vd.2S,Vn.2S,Vm.2S	Vd.S[0] -> result	A64
int32_t vminvq_s32(int32x4_t a)	a -> Vn.4S	SMINV Sd,Vn.4S	Sd -> result	A64
uint8_t vminv_u8(uint8x8_t a)	a -> Vn.8B	UMINV Bd,Vn.8B	Bd -> result	A64
uint8_t vminvq_u8(uint8x16_t a)	a -> Vn.16B	UMINV Bd,Vn.16B	Bd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16_t vminv_u16(uint16x4_t a)	a -> Vn.4H	UMINV Hd,Vn.4H	Hd -> result	A64
uint16_t vminvq_u16(uint16x8_t a)	a -> Vn.8H	UMINV Hd,Vn.8H	Hd -> result	A64
uint32_t vminv_u32(uint32x2_t a)	a -> Vn.2S a -> Vm.2S	UMINP Vd.2S,Vn.2S,Vm.2S	Vd.S[0] -> result	A64
uint32_t vminvq_u32(uint32x4_t a)	a -> Vn.4S	UMINV Sd,Vn.4S	Sd -> result	A64
float32_t vminv_f32(float32x2_t a)	a -> Vn.2S	FMINP Sd,Vn.2S	Sd -> result	A64
float32_t vminvq_f32(float32x4_t a)	a -> Vn.4S	FMINV Sd,Vn.4S	Sd -> result	A64
float64_t vminvq_f64(float64x2_t a)	a -> Vn.2D	FMINP Dd,Vn.2D	Dd -> result	A64
float32_t vmaxnmv_f32(float32x2_t a)	a -> Vn.2S	FMAXNMP Sd,Vn.2S	Sd -> result	A64
float32_t vmaxnmvq_f32(float32x4_t a)	a -> Vn.4S	FMAXNMP Sd,Vn.4S	Sd -> result	A64
float64_t vmaxnmvq_f64(float64x2_t a)	a -> Vn.2D	FMAXNMP Dd,Vn.2D	Dd -> result	A64
float32_t vminnmv_f32(float32x2_t a)	a -> Vn.2S	FMINNMP Sd,Vn.2S	Sd -> result	A64
float32_t vminnmvq_f32(float32x4_t a)	a -> Vn.4S	FMINNMP Sd,Vn.4S	Sd -> result	A64
float64_t vminnmvq_f64(float64x2_t a)	a -> Vn.2D	FMINNMP Dd,Vn.2D	Dd -> result	A64
int8x8_t vext_s8(int8x8_t a, int8x8_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 7	EXT Vd.8B,Vn.8B,Vm.8B,#n	Vd.8B -> result	v7/A32/A64
int8x16_t vextq_s8(int8x16_t a, int8x16_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 15	EXT Vd.16B,Vn.16B,Vm.16B,#n	Vd.16B -> result	v7/A32/A64
int16x4_t vext_s16(int16x4_t a, int16x4_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 3	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B -> result	v7/A32/A64
int16x8_t vextq_s16(int16x8_t a, int16x8_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 7	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B -> result	v7/A32/A64
int32x2_t vext_s32(int32x2_t a, int32x2_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 1	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<2)	Vd.8B -> result	v7/A32/A64
int32x4_t vextq_s32(int32x4_t a, int32x4_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 3	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<2)	Vd.16B -> result	v7/A32/A64
int64x1_t vext_s64(int64x1_t a, int64x1_t b, const int n)	a -> Vn.8B b -> Vm.8B n == 0	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B -> result	v7/A32/A64
int64x2_t vextq_s64(int64x2_t a, int64x2_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 1	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B -> result	v7/A32/A64
uint8x8_t vext_u8(uint8x8_t a, uint8x8_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 7	EXT Vd.8B,Vn.8B,Vm.8B,#n	Vd.8B -> result	v7/A32/A64
uint8x16_t vextq_u8(uint8x16_t a, uint8x16_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 15	EXT Vd.16B,Vn.16B,Vm.16B,#n	Vd.16B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4_t vext_u16(uint16x4_t a, uint16x4_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 3	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B -> result	v7/A32/A64
uint16x8_t vextq_u16(uint16x8_t a, uint16x8_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 7	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B -> result	v7/A32/A64
uint32x2_t vext_u32(uint32x2_t a, uint32x2_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 1	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<2)	Vd.8B -> result	v7/A32/A64
uint32x4_t vextq_u32(uint32x4_t a, uint32x4_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 3	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<2)	Vd.16B -> result	v7/A32/A64
uint64x1_t vext_u64(uint64x1_t a, uint64x1_t b, const int n)	a -> Vn.8B b -> Vm.8B n == 0	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B -> result	v7/A32/A64
uint64x2_t vextq_u64(uint64x2_t a, uint64x2_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 1	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B -> result	v7/A32/A64
poly64x1_t vext_p64(poly64x1_t a, poly64x1_t b, const int n)	a -> Vn.8B b -> Vm.8B n == 0	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B -> result	A32/A64
poly64x2_t vextq_p64(poly64x2_t a, poly64x2_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 1	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B -> result	A32/A64
float32x2_t vext_f32(float32x2_t a, float32x2_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 1	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<2)	Vd.8B -> result	v7/A32/A64
float32x4_t vextq_f32(float32x4_t a, float32x4_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 3	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<2)	Vd.16B -> result	v7/A32/A64
float64x1_t vext_f64(float64x1_t a, float64x1_t b, const int n)	a -> Vn.8B b -> Vm.8B n == 0	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B -> result	A64
float64x2_t vextq_f64(float64x2_t a, float64x2_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 1	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B -> result	A64
poly8x8_t vext_p8(poly8x8_t a, poly8x8_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 7	EXT Vd.8B,Vn.8B,Vm.8B,#n	Vd.8B -> result	v7/A32/A64
poly8x16_t vextq_p8(poly8x16_t a, poly8x16_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 15	EXT Vd.16B,Vn.16B,Vm.16B,#n	Vd.16B -> result	v7/A32/A64
poly16x4_t vext_p16(poly16x4_t a, poly16x4_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 3	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B -> result	v7/A32/A64
poly16x8_t vextq_p16(poly16x8_t a, poly16x8_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 7	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B -> result	v7/A32/A64
int8x8_t vrev64_s8(int8x8_t vec)	vec -> Vn.8B	REV64 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vrev64q_s8(int8x16_t vec)	vec -> Vn.16B	REV64 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vrev64_s16(int16x4_t vec)	vec -> Vn.4H	REV64 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vrev64q_s16(int16x8_t vec)	vec -> Vn.8H	REV64 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2_t vrev64_s32(int32x2_t vec)	vec -> Vn.2S	REV64 Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
int32x4_t vrev64q_s32(int32x4_t vec)	vec -> Vn.4S	REV64 Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
uint8x8_t vrev64_u8(uint8x8_t vec)	vec -> Vn.8B	REV64 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vrev64q_u8(uint8x16_t vec)	vec -> Vn.16B	REV64 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vrev64_u16(uint16x4_t vec)	vec -> Vn.4H	REV64 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vrev64q_u16(uint16x8_t vec)	vec -> Vn.8H	REV64 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint32x2_t vrev64_u32(uint32x2_t vec)	vec -> Vn.2S	REV64 Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
uint32x4_t vrev64q_u32(uint32x4_t vec)	vec -> Vn.4S	REV64 Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
float32x2_t vrev64_f32(float32x2_t vec)	vec -> Vn.2S	REV64 Vd.2S,Vn.2S	Vd.2S -> result	v7/A32/A64
float32x4_t vrev64q_f32(float32x4_t vec)	vec -> Vn.4S	REV64 Vd.4S,Vn.4S	Vd.4S -> result	v7/A32/A64
poly8x8_t vrev64_p8(poly8x8_t vec)	vec -> Vn.8B	REV64 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vrev64q_p8(poly8x16_t vec)	vec -> Vn.16B	REV64 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
poly16x4_t vrev64_p16(poly16x4_t vec)	vec -> Vn.4H	REV64 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
poly16x8_t vrev64q_p16(poly16x8_t vec)	vec -> Vn.8H	REV64 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int8x8_t vrev32_s8(int8x8_t vec)	vec -> Vn.8B	REV32 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vrev32q_s8(int8x16_t vec)	vec -> Vn.16B	REV32 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int16x4_t vrev32_s16(int16x4_t vec)	vec -> Vn.4H	REV32 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
int16x8_t vrev32q_s16(int16x8_t vec)	vec -> Vn.8H	REV32 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
uint8x8_t vrev32_u8(uint8x8_t vec)	vec -> Vn.8B	REV32 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vrev32q_u8(uint8x16_t vec)	vec -> Vn.16B	REV32 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint16x4_t vrev32_u16(uint16x4_t vec)	vec -> Vn.4H	REV32 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
uint16x8_t vrev32q_u16(uint16x8_t vec)	vec -> Vn.8H	REV32 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
poly8x8_t vrev32_p8(poly8x8_t vec)	vec -> Vn.8B	REV32 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vrev32q_p8(poly8x16_t vec)	vec -> Vn.16B	REV32 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
poly16x4_t vrev32_p16(poly16x4_t vec)	vec -> Vn.4H	REV32 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
poly16x8_t vrev32q_p16(poly16x8_t vec)	vec -> Vn.8H	REV32 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
int8x8_t vrev16_s8(int8x8_t vec)	vec -> Vn.8B	REV16 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
int8x16_t vrev16q_s8(int8x16_t vec)	vec -> Vn.16B	REV16 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
uint8x8_t vrev16_u8(uint8x8_t vec)	vec -> Vn.8B	REV16 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64
uint8x16_t vrev16q_u8(uint8x16_t vec)	vec -> Vn.16B	REV16 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
poly8x8_t vrev16_p8(poly8x8_t vec)	vec -> Vn.8B	REV16 Vd.8B,Vn.8B	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x16_t vrev16q_p8(poly8x16_t vec)	vec -> Vn.16B	REV16 Vd.16B,Vn.16B	Vd.16B -> result	v7/A32/A64
int8x8_t vzip1_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
int8x16_t vzip1q_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x4_t vzip1_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int16x8_t vzip1q_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x2_t vzip1_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int32x4_t vzip1q_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vzip1q_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x8_t vzip1_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
uint8x16_t vzip1q_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x4_t vzip1_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
uint16x8_t vzip1q_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x2_t vzip1_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
uint32x4_t vzip1q_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vzip1q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly64x2_t vzip1q_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vzip1_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vzip1q_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vzip1q_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly8x8_t vzip1_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
poly8x16_t vzip1q_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
poly16x4_t vzip1_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
poly16x8_t vzip1q_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x8_t vzip2_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
int8x16_t vzip2q_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x4_t vzip2_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int16x8_t vzip2q_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x2_t vzip2_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int32x4_t vzip2q_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vzip2q_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x8_t vzip2_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
uint8x16_t vzip2q_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x4_t vzip2_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
uint16x8_t vzip2q_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x2_t vzip2_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
uint32x4_t vzip2q_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vzip2q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly64x2_t vzip2q_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vzip2_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vzip2q_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vzip2q_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly8x8_t vzip2_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
poly8x16_t vzip2q_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
poly16x4_t vzip2_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
poly16x8_t vzip2q_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int8x8_t vuzp1_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16_t vuzp1q_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x4_t vuzp1_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int16x8_t vuzp1q_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x2_t vuzp1_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int32x4_t vuzp1q_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vuzp1q_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x8_t vuzp1_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
uint8x16_t vuzp1q_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x4_t vuzp1_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
uint16x8_t vuzp1q_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x2_t vuzp1_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
uint32x4_t vuzp1q_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vuzp1q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly64x2_t vuzp1q_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vuzp1_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vuzp1q_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vuzp1q_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly8x8_t vuzp1_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
poly8x16_t vuzp1q_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
poly16x4_t vuzp1_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
poly16x8_t vuzp1q_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int8x8_t vuzp2_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
int8x16_t vuzp2q_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4_t vuzp2_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int16x8_t vuzp2q_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x2_t vuzp2_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int32x4_t vuzp2q_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vuzp2q_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x8_t vuzp2_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
uint8x16_t vuzp2q_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x4_t vuzp2_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
uint16x8_t vuzp2q_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x2_t vuzp2_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
uint32x4_t vuzp2q_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vuzp2q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly64x2_t vuzp2q_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vuzp2_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vuzp2q_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vuzp2q_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly8x8_t vuzp2_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
poly8x16_t vuzp2q_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
poly16x4_t vuzp2_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
poly16x8_t vuzp2q_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int8x8_t vtrn1_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
int8x16_t vtrn1q_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x4_t vtrn1_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vtrn1q_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x2_t vtrn1_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int32x4_t vtrn1q_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vtrn1q_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x8_t vtrn1_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
uint8x16_t vtrn1q_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x4_t vtrn1_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
uint16x8_t vtrn1q_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x2_t vtrn1_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
uint32x4_t vtrn1q_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vtrn1q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly64x2_t vtrn1q_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vtrn1_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN1 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vtrn1q_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vtrn1q_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly8x8_t vtrn1_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN1 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
poly8x16_t vtrn1q_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN1 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
poly16x4_t vtrn1_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
poly16x8_t vtrn1q_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int8x8_t vtrn2_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
int8x16_t vtrn2q_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
int16x4_t vtrn2_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int16x8_t vtrn2q_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x2_t vtrn2_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int32x4_t vtrn2q_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int64x2_t vtrn2q_s64(int64x2_t a, int64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x8_t vtrn2_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
uint8x16_t vtrn2q_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
uint16x4_t vtrn2_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
uint16x8_t vtrn2q_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
uint32x2_t vtrn2_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
uint32x4_t vtrn2q_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint64x2_t vtrn2q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly64x2_t vtrn2q_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
float32x2_t vtrn2_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN2 Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
float32x4_t vtrn2q_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float64x2_t vtrn2q_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	TRN2 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
poly8x8_t vtrn2_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN2 Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	A64
poly8x16_t vtrn2q_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN2 Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	A64
poly16x4_t vtrn2_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
poly16x8_t vtrn2q_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int8x8_t vtbl1_s8(int8x8_t a, int8x8_t b)	Vn -> Zeros(64):a b -> Vm	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbl1_u8(uint8x8_t a, uint8x8_t b)	Vn -> Zeros(64):a b -> Vm	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbl1_p8(poly8x8_t a, uint8x8_t b)	Vn -> Zeros(64):a b -> Vm	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbx1_s8(int8x8_t a, int8x8_t b, int8x8_t c)	a -> Vd Vn -> Zeros(64):b c -> Vm	MOVI Vtmp.8B,#8 CMHS Vtmp.8B,Vm.8B,Vtmp.8B TBL Vtmp1.8B,{Vn.16B},Vm.8B BIF Vd.8B,Vtmp1.8B,Vtmp.8B	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8_t vtbx1_u8(uint8x8_t a, uint8x8_t b, uint8x8_t c)	a -> Vd Vn -> Zeros(64):b c -> Vm	MOVI Vtmp.8B,#8 CMHS Vtmp.8B,Vm.8B,Vtmp.8B TBL Vtmp1.8B,{Vn.16B},Vm.8B BIF Vd.8B,Vtmp1.8B,Vtmp.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbx1_p8(poly8x8_t a, poly8x8_t b, uint8x8_t c)	a -> Vd Vn -> Zeros(64):b c -> Vm	MOVI Vtmp.8B,#8 CMHS Vtmp.8B,Vm.8B,Vtmp.8B TBL Vtmp1.8B,{Vn.16B},Vm.8B BIF Vd.8B,Vtmp1.8B,Vtmp.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbl2_s8(int8x8x2_t a, int8x8_t b)	Vn -> a.val[1]:a.val[0] b -> Vm	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbl2_u8(uint8x8x2_t a, uint8x8_t b)	Vn -> a.val[1]:a.val[0] b -> Vm	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbl2_p8(poly8x8x2_t a, uint8x8_t b)	Vn -> a.val[1]:a.val[0] b -> Vm	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbl3_s8(int8x8x3_t a, int8x8_t b)	Vn -> a.val[1]:a.val[0] Vn+1 -> Zeros(64):a.val[2] b -> Vm	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbl3_u8(uint8x8x3_t a, uint8x8_t b)	Vn -> a.val[1]:a.val[0] Vn+1 -> Zeros(64):a.val[2] b -> Vm	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbl3_p8(poly8x8x3_t a, uint8x8_t b)	Vn -> a.val[1]:a.val[0] Vn+1 -> Zeros(64):a.val[2] b -> Vm	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbl4_s8(int8x8x4_t a, int8x8_t b)	Vn -> a.val[1]:a.val[0] Vn+1 -> a.val[3]:a.val[2] b -> Vm	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbl4_u8(uint8x8x4_t a, uint8x8_t b)	Vn -> a.val[1]:a.val[0] Vn+1 -> a.val[3]:a.val[2] b -> Vm	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbl4_p8(poly8x8x4_t a, uint8x8_t b)	Vn -> a.val[1]:a.val[0] Vn+1 -> a.val[3]:a.val[2] b -> Vm	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbx2_s8(int8x8_t a, int8x8x2_t b, int8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] c -> Vm	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbx2_u8(uint8x8_t a, uint8x8x2_t b, uint8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] c -> Vm	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x8_t vtbx2_p8(poly8x8_t a, poly8x8x2_t b, uint8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] c -> Vm	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbx3_s8(int8x8_t a, int8x8x3_t b, int8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] Vn+1 -> Zeros(64):b.val[2] c -> Vm	MOVI Vtmp.8B,#24 CMHS Vtmp.8B,Vm.8B,Vtmp.8B TBL Vtmp1.8B,{Vn.16B,Vn+1.16B},Vm.8B BIF Vd.8B,Vtmp1.8B,Vtmp.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbx3_u8(uint8x8_t a, uint8x8x3_t b, uint8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] Vn+1 -> Zeros(64):b.val[2] c -> Vm	MOVI Vtmp.8B,#24 CMHS Vtmp.8B,Vm.8B,Vtmp.8B TBL Vtmp1.8B,{Vn.16B,Vn+1.16B},Vm.8B BIF Vd.8B,Vtmp1.8B,Vtmp.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbx3_p8(poly8x8_t a, poly8x8x3_t b, uint8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] Vn+1 -> Zeros(64):b.val[2] c -> Vm	MOVI Vtmp.8B,#24 CMHS Vtmp.8B,Vm.8B,Vtmp.8B TBL Vtmp1.8B,{Vn.16B,Vn+1.16B},Vm.8B BIF Vd.8B,Vtmp1.8B,Vtmp.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vtbx4_s8(int8x8_t a, int8x8x4_t b, int8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] Vn+1 -> b.val[3]:b.val[2] c -> Vm	TBX Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
uint8x8_t vtbx4_u8(uint8x8_t a, uint8x8x4_t b, uint8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] Vn+1 -> b.val[3]:b.val[2] c -> Vm	TBX Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x8_t vtbx4_p8(poly8x8_t a, poly8x8x4_t b, uint8x8_t c)	a -> Vd Vn -> b.val[1]:b.val[0] Vn+1 -> b.val[3]:b.val[2] c -> Vm	TBX Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B -> result	v7/A32/A64
int8x8_t vqtbl1_s8(int8x16_t t, uint8x8_t idx)	t -> Vn.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	A64
int8x16_t vqtbl1q_s8(int8x16_t t, uint8x16_t idx)	t -> Vn.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbl1_u8(uint8x16_t t, uint8x8_t idx)	t -> Vn.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbl1q_u8(uint8x16_t t, uint8x16_t idx)	t -> Vn.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbl1_p8(poly8x16_t t, uint8x8_t idx)	t -> Vn.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbl1q_p8(poly8x16_t t, uint8x16_t idx)	t -> Vn.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbx1_s8(int8x8_t a, int8x16_t t, uint8x8_t idx)	a -> Vd.8B t -> Vn.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16_t vqtbx1q_s8(int8x16_t a, int8x16_t t, uint8x16_t idx)	a -> Vd.16B t -> Vn.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbx1_u8(uint8x8_t a, uint8x16_t t, uint8x8_t idx)	a -> Vd.8B t -> Vn.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbx1q_u8(uint8x16_t a, uint8x16_t t, uint8x16_t idx)	a -> Vd.16B t -> Vn.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbx1_p8(poly8x8_t a, poly8x16_t t, uint8x8_t idx)	a -> Vd.8B t -> Vn.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbx1q_p8(poly8x16_t a, poly8x16_t t, uint8x16_t idx)	a -> Vd.16B t -> Vn.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbl2_s8(int8x16x2_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+1.16B},Vm.8B	Vd.8B -> result	A64
int8x16_t vqtbl2q_s8(int8x16x2_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+1.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbl2_u8(uint8x16x2_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+1.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbl2q_u8(uint8x16x2_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+1.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbl2_p8(poly8x16x2_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+1.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbl2q_p8(poly8x16x2_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+1.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbl3_s8(int8x16x3_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+2.16B},Vm.8B	Vd.8B -> result	A64
int8x16_t vqtbl3q_s8(int8x16x3_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+2.16B},Vm.16B	Vd.16B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8_t vqtbl3_u8(uint8x16x3_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+2.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbl3q_u8(uint8x16x3_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+2.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbl3_p8(poly8x16x3_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+2.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbl3q_p8(poly8x16x3_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+2.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbl4_s8(int8x16x4_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+3.16B},Vm.8B	Vd.8B -> result	A64
int8x16_t vqtbl4q_s8(int8x16x4_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+3.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbl4_u8(uint8x16x4_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+3.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbl4q_u8(uint8x16x4_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+3.16B},Vm.16B	Vd.16B -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x8_t vqtbl4_p8(poly8x16x4_t t, uint8x8_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.8B	TBL Vd.8B,{Vn.16B - Vn+3.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbl4q_p8(poly8x16x4_t t, uint8x16_t idx)	t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.16B	TBL Vd.16B,{Vn.16B - Vn+3.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbx2_s8(int8x8_t a, int8x16x2_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+1.16B},Vm.8B	Vd.8B -> result	A64
int8x16_t vqtbx2q_s8(int8x16_t a, int8x16x2_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+1.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbx2_u8(uint8x8_t a, uint8x16x2_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+1.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbx2q_u8(uint8x16_t a, uint8x16x2_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+1.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbx2_p8(poly8x8_t a, poly8x16x2_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+1.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbx2q_p8(poly8x16_t a, poly8x16x2_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+1.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbx3_s8(int8x8_t a, int8x16x3_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+2.16B},Vm.8B	Vd.8B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int8x16_t vqtbx3q_s8(int8x16_t a, int8x16x3_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+2.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbx3_u8(uint8x8_t a, uint8x16x3_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+2.16B},Vm.8B	Vd.8B -> result	A64
uint8x16_t vqtbx3q_u8(uint8x16_t a, uint8x16x3_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+2.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbx3_p8(poly8x8_t a, poly8x16x3_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+2.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbx3q_p8(poly8x16_t a, poly8x16x3_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+2.16B},Vm.16B	Vd.16B -> result	A64
int8x8_t vqtbx4_s8(int8x8_t a, int8x16x4_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+3.16B},Vm.8B	Vd.8B -> result	A64
int8x16_t vqtbx4q_s8(int8x16_t a, int8x16x4_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+3.16B},Vm.16B	Vd.16B -> result	A64
uint8x8_t vqtbx4_u8(uint8x8_t a, uint8x16x4_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+3.16B},Vm.8B	Vd.8B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x16_t vqtbx4q_u8(uint8x16_t a, uint8x16x4_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+3.16B},Vm.16B	Vd.16B -> result	A64
poly8x8_t vqtbx4_p8(poly8x8_t a, poly8x16x4_t t, uint8x8_t idx)	a -> Vd.8B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.8B	TBX Vd.8B,{Vn.16B - Vn+3.16B},Vm.8B	Vd.8B -> result	A64
poly8x16_t vqtbx4q_p8(poly8x16_t a, poly8x16x4_t t, uint8x16_t idx)	a -> Vd.16B t.val[0] -> Vn.16B t.val[1] -> Vn+1.16B t.val[2] -> Vn+2.16B t.val[3] -> Vn+3.16B idx -> Vm.16B	TBX Vd.16B,{Vn.16B - Vn+3.16B},Vm.16B	Vd.16B -> result	A64
uint8_t vget_lane_u8(uint8x8_t v, const int lane)	v -> Vn.8B 0 <= lane <= 7	UMOV Rd,Vn.B[lane]	Rd -> result	v7/A32/A64
uint16_t vget_lane_u16(uint16x4_t v, const int lane)	v -> Vn.4H 0 <= lane <= 3	UMOV Rd,Vn.H[lane]	Rd -> result	v7/A32/A64
uint32_t vget_lane_u32(uint32x2_t v, const int lane)	v -> Vn.2S 0 <= lane <= 1	UMOV Rd,Vn.S[lane]	Rd -> result	v7/A32/A64
uint64_t vget_lane_u64(uint64x1_t v, const int lane)	v -> Vn.1D lane == 0	UMOV Rd,Vn.D[lane]	Rd -> result	v7/A32/A64
poly64_t vget_lane_p64(poly64x1_t v, const int lane)	v -> Vn.1D lane == 0	UMOV Rd,Vn.D[lane]	Rd -> result	A32/A64
int8_t vget_lane_s8(int8x8_t v, const int lane)	v -> Vn.8B 0 <= lane <= 7	SMOV Rd,Vn.B[lane]	Rd -> result	v7/A32/A64
int16_t vget_lane_s16(int16x4_t v, const int lane)	v -> Vn.4H 0 <= lane <= 3	SMOV Rd,Vn.H[lane]	Rd -> result	v7/A32/A64
int32_t vget_lane_s32(int32x2_t v, const int lane)	v -> Vn.2S 0 <= lane <= 1	SMOV Rd,Vn.S[lane]	Rd -> result	v7/A32/A64
int64_t vget_lane_s64(int64x1_t v, const int lane)	v -> Vn.1D lane == 0	UMOV Rd,Vn.D[lane]	Rd -> result	v7/A32/A64
poly8_t vget_lane_p8(poly8x8_t v, const int lane)	v -> Vn.8B 0 <= lane <= 7	UMOV Rd,Vn.B[lane]	Rd -> result	v7/A32/A64
poly16_t vget_lane_p16(poly16x4_t v, const int lane)	v -> Vn.4H 0 <= lane <= 3	UMOV Rd,Vn.H[lane]	Rd -> result	v7/A32/A64
float32_t vget_lane_f32(float32x2_t v, const int lane)	v -> Vn.2S 0 <= lane <= 1	DUP Sd,Vn.S[lane]	Sd -> result	v7/A32/A64
float64_t vget_lane_f64(float64x1_t v, const int lane)	v -> Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8_t vgetq_lane_u8(uint8x16_t v, const int lane)	v -> Vn.16B 0 <= lane <= 15	UMOV Rd,Vn.B[lane]	Rd -> result	v7/A32/A64
uint16_t vgetq_lane_u16(uint16x8_t v, const int lane)	v -> Vn.8H 0 <= lane <= 7	UMOV Rd,Vn.H[lane]	Rd -> result	v7/A32/A64
uint32_t vgetq_lane_u32(uint32x4_t v, const int lane)	v -> Vn.4S 0 <= lane <= 3	UMOV Rd,Vn.S[lane]	Rd -> result	v7/A32/A64
uint64_t vgetq_lane_u64(uint64x2_t v, const int lane)	v -> Vn.2D 0 <= lane <= 1	UMOV Rd,Vn.D[lane]	Rd -> result	v7/A32/A64
poly64_t vgetq_lane_p64(poly64x2_t v, const int lane)	v -> Vn.2D 0 <= lane <= 1	UMOV Rd,Vn.D[lane]	Rd -> result	A32/A64
int8_t vgetq_lane_s8(int8x16_t v, const int lane)	v -> Vn.16B 0 <= lane <= 15	SMOV Rd,Vn.B[lane]	Rd -> result	v7/A32/A64
int16_t vgetq_lane_s16(int16x8_t v, const int lane)	v -> Vn.8H 0 <= lane <= 7	SMOV Rd,Vn.H[lane]	Rd -> result	v7/A32/A64
int32_t vgetq_lane_s32(int32x4_t v, const int lane)	v -> Vn.4S 0 <= lane <= 3	SMOV Rd,Vn.S[lane]	Rd -> result	v7/A32/A64
int64_t vgetq_lane_s64(int64x2_t v, const int lane)	v -> Vn.2D 0 <= lane <= 1	UMOV Rd,Vn.D[lane]	Rd -> result	v7/A32/A64
poly8_t vgetq_lane_p8(poly8x16_t v, const int lane)	v -> Vn.16B 0 <= lane <= 15	UMOV Rd,Vn.B[lane]	Rd -> result	v7/A32/A64
poly16_t vgetq_lane_p16(poly16x8_t v, const int lane)	v -> Vn.8H 0 <= lane <= 7	UMOV Rd,Vn.H[lane]	Rd -> result	v7/A32/A64
float16_t vgetq_lane_f16(float16x4_t v, const int lane)	v -> Vn.4H 0 <= lane <= 3	DUP Hd,Vn.H[lane]	Hd -> result	v7/A32/A64
float16_t vgetq_lane_f16(float16x8_t v, const int lane)	v -> Vn.8H 0 <= lane <= 7	DUP Hd,Vn.H[lane]	Hd -> result	v7/A32/A64
float32_t vgetq_lane_f32(float32x4_t v, const int lane)	v -> Vn.4S 0 <= lane <= 3	DUP Sd,Vn.S[lane]	Sd -> result	v7/A32/A64
float64_t vgetq_lane_f64(float64x2_t v, const int lane)	v -> Vn.2D 0 <= lane <= 1	DUP Dd,Vn.D[lane]	Dd -> result	A64
uint8x8_t vset_lane_u8(uint8_t a, uint8x8_t v, const int lane)	a -> Rn v -> Vd.8B 0 <= lane <= 7	INS Vd.B[lane],Rn	Vd.8B -> result	v7/A32/A64
uint16x4_t vset_lane_u16(uint16_t a, uint16x4_t v, const int lane)	a -> Rn v -> Vd.4H 0 <= lane <= 3	INS Vd.H[lane],Rn	Vd.4H -> result	v7/A32/A64
uint32x2_t vset_lane_u32(uint32_t a, uint32x2_t v, const int lane)	a -> Rn v -> Vd.2S 0 <= lane <= 1	INS Vd.S[lane],Rn	Vd.2S -> result	v7/A32/A64
uint64x1_t vset_lane_u64(uint64_t a, uint64x1_t v, const int lane)	a -> Rn v -> Vd.1D lane == 0	INS Vd.D[lane],Rn	Vd.1D -> result	v7/A32/A64
poly64x1_t vset_lane_p64(poly64_t a, poly64x1_t v, const int lane)	a -> Rn v -> Vd.1D lane == 0	INS Vd.D[lane],Rn	Vd.1D -> result	A32/A64
int8x8_t vset_lane_s8(int8_t a, int8x8_t v, const int lane)	a -> Rn v -> Vd.8B 0 <= lane <= 7	INS Vd.B[lane],Rn	Vd.8B -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4_t vset_lane_s16(int16_t a, int16x4_t v, const int lane)	a -> Rn v -> Vd.4H 0 <= lane <= 3	INS Vd.H[lane],Rn	Vd.4H -> result	v7/A32/A64
int32x2_t vset_lane_s32(int32_t a, int32x2_t v, const int lane)	a -> Rn v -> Vd.2S 0 <= lane <= 1	INS Vd.S[lane],Rn	Vd.2S -> result	v7/A32/A64
int64x1_t vset_lane_s64(int64_t a, int64x1_t v, const int lane)	a -> Rn v -> Vd.1D lane == 0	INS Vd.D[lane],Rn	Vd.1D -> result	v7/A32/A64
poly8x8_t vset_lane_p8(poly8_t a, poly8x8_t v, const int lane)	a -> Rn v -> Vd.8B 0 <= lane <= 7	INS Vd.B[lane],Rn	Vd.8B -> result	v7/A32/A64
poly16x4_t vset_lane_p16(poly16_t a, poly16x4_t v, const int lane)	a -> Rn v -> Vd.4H 0 <= lane <= 3	INS Vd.H[lane],Rn	Vd.4H -> result	v7/A32/A64
float16x4_t vset_lane_f16(float16_t a, float16x4_t v, const int lane)	a -> VnH v -> Vd.4H 0 <= lane <= 3	INS Vd.H[lane],Vn.H[0]	Vd.4H -> result	v7/A32/A64
float16x8_t vsetq_lane_f16(float16_t a, float16x8_t v, const int lane)	a -> VnH v -> Vd.8H 0 <= lane <= 7	INS Vd.H[lane],Vn.H[0]	Vd.8H -> result	v7/A32/A64
float32x2_t vset_lane_f32(float32_t a, float32x2_t v, const int lane)	a -> Rn v -> Vd.2S 0 <= lane <= 1	INS Vd.S[lane],Rn	Vd.2S -> result	v7/A32/A64
float64x1_t vset_lane_f64(float64_t a, float64x1_t v, const int lane)	a -> Rn v -> Vd.1D lane == 0	INS Vd.D[lane],Rn	Vd.1D -> result	A64
uint8x16_t vsetq_lane_u8(uint8_t a, uint8x16_t v, const int lane)	a -> Rn v -> Vd.16B 0 <= lane <= 15	INS Vd.B[lane],Rn	Vd.16B -> result	v7/A32/A64
uint16x8_t vsetq_lane_u16(uint16_t a, uint16x8_t v, const int lane)	a -> Rn v -> Vd.8H 0 <= lane <= 7	INS Vd.H[lane],Rn	Vd.8H -> result	v7/A32/A64
uint32x4_t vsetq_lane_u32(uint32_t a, uint32x4_t v, const int lane)	a -> Rn v -> Vd.4S 0 <= lane <= 3	INS Vd.S[lane],Rn	Vd.4S -> result	v7/A32/A64
uint64x2_t vsetq_lane_u64(uint64_t a, uint64x2_t v, const int lane)	a -> Rn v -> Vd.2D 0 <= lane <= 1	INS Vd.D[lane],Rn	Vd.2D -> result	v7/A32/A64
poly64x2_t vsetq_lane_p64(poly64_t a, poly64x2_t v, const int lane)	a -> Rn v -> Vd.2D 0 <= lane <= 1	INS Vd.D[lane],Rn	Vd.2D -> result	A32/A64
int8x16_t vsetq_lane_s8(int8_t a, int8x16_t v, const int lane)	a -> Rn v -> Vd.16B 0 <= lane <= 15	INS Vd.B[lane],Rn	Vd.16B -> result	v7/A32/A64
int16x8_t vsetq_lane_s16(int16_t a, int16x8_t v, const int lane)	a -> Rn v -> Vd.8H 0 <= lane <= 7	INS Vd.H[lane],Rn	Vd.8H -> result	v7/A32/A64
int32x4_t vsetq_lane_s32(int32_t a, int32x4_t v, const int lane)	a -> Rn v -> Vd.4S 0 <= lane <= 3	INS Vd.S[lane],Rn	Vd.4S -> result	v7/A32/A64
int64x2_t vsetq_lane_s64(int64_t a, int64x2_t v, const int lane)	a -> Rn v -> Vd.2D 0 <= lane <= 1	INS Vd.D[lane],Rn	Vd.2D -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x16_t vsetq_lane_p8(poly8_t a, poly8x16_t v, const int lane)	a -> Rn v -> Vd.16B 0 <= lane <= 15	INS Vd.B[lane],Rn	Vd.16B -> result	v7/A32/A64
poly16x8_t vsetq_lane_p16(poly16_t a, poly16x8_t v, const int lane)	a -> Rn v -> Vd.8H 0 <= lane <= 7	INS Vd.H[lane],Rn	Vd.8H -> result	v7/A32/A64
float32x4_t vsetq_lane_f32(float32_t a, float32x4_t v, const int lane)	a -> Rn v -> Vd.4S 0 <= lane <= 3	INS Vd.S[lane],Rn	Vd.4S -> result	v7/A32/A64
float64x2_t vsetq_lane_f64(float64_t a, float64x2_t v, const int lane)	a -> Rn v -> Vd.2D 0 <= lane <= 1	INS Vd.D[lane],Rn	Vd.2D -> result	A64
float32_t vrecpxs_f32(float32_t a)	a -> Sn	FRECPX Sd,Sn	Sd -> result	A64
float64_t vrecpxd_f64(float64_t a)	a -> Dn	FRECPX Dd,Dn	Dd -> result	A64
float32x2_t vfma_n_f32(float32x2_t a, float32x2_t b, float32_t n)	a -> Vd.2S b -> Vn.2S n -> Vm.S[0]	FMLA Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	v7/A32/A64
float32x4_t vfmaq_n_f32(float32x4_t a, float32x4_t b, float32_t n)	a -> Vd.4S b -> Vn.4S n -> Vm.S[0]	FMLA Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	v7/A32/A64
float32x2_t vfms_n_f32(float32x2_t a, float32x2_t b, float32_t n)	a -> Vd.2S b -> Vn.2S n -> Vm.S[0]	FMLS Vd.2S,Vn.2S,Vm.S[0]	Vd.2S -> result	A64
float32x4_t vfmsq_n_f32(float32x4_t a, float32x4_t b, float32_t n)	a -> Vd.4S b -> Vn.4S n -> Vm.S[0]	FMLS Vd.4S,Vn.4S,Vm.S[0]	Vd.4S -> result	A64
float64x1_t vfma_n_f64(float64x1_t a, float64x1_t b, float64_t n)	a -> Da b -> Dn n -> Dm	FMADD Dd,Dn,Dm,Da	Dd -> result	A64
float64x2_t vfmaq_n_f64(float64x2_t a, float64x2_t b, float64_t n)	a -> Vd.2D b -> Vn.2D n -> Vm.D[0]	FMLA Vd.2D,Vn.2D,Vm.D[0]	Vd.2D -> result	A64
float64x1_t vfms_n_f64(float64x1_t a, float64x1_t b, float64_t n)	a -> Da b -> Dn n -> Dm	FMSUB Dd,Dn,Dm,Da	Dd -> result	A64
float64x2_t vfmsq_n_f64(float64x2_t a, float64x2_t b, float64_t n)	a -> Vd.2D b -> Vn.2D n -> Vm.D[0]	FMLS Vd.2D,Vn.2D,Vm.D[0]	Vd.2D -> result	A64
int8x8x2_t vtrn_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN1 Vd1.8B,Vn.8B,Vm.8B TRN2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
int16x4x2_t vtrn_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
uint8x8x2_t vtrn_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN1 Vd1.8B,Vn.8B,Vm.8B TRN2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4x2_t vtrn_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
poly8x8x2_t vtrn_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	TRN1 Vd1.8B,Vn.8B,Vm.8B TRN2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
poly16x4x2_t vtrn_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
int32x2x2_t vtrn_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN1 Vd1.2S,Vn.2S,Vm.2S TRN2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
float32x2x2_t vtrn_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN1 Vd1.2S,Vn.2S,Vm.2S TRN2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
uint32x2x2_t vtrn_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	TRN1 Vd1.2S,Vn.2S,Vm.2S TRN2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
int8x16x2_t vtrnq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN1 Vd1.16B,Vn.16B,Vm.16B TRN2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
int16x8x2_t vtrnq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
int32x4x2_t vtrnq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN1 Vd1.4S,Vn.4S,Vm.4S TRN2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
float32x4x2_t vtrnq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN1 Vd1.4S,Vn.4S,Vm.4S TRN2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
uint8x16x2_t vtrnq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN1 Vd1.16B,Vn.16B,Vm.16B TRN2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
uint16x8x2_t vtrnq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
uint32x4x2_t vtrnq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	TRN1 Vd1.4S,Vn.4S,Vm.4S TRN2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly8x16x2_t vtrnq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	TRN1 Vd1.16B,Vn.16B,Vm.16B TRN2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
poly16x8x2_t vtrnq_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
int8x8x2_t vzip_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP1 Vd1.8B,Vn.8B,Vm.8B ZIP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
int16x4x2_t vzip_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
uint8x8x2_t vzip_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP1 Vd1.8B,Vn.8B,Vm.8B ZIP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
uint16x4x2_t vzip_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
poly8x8x2_t vzip_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	ZIP1 Vd1.8B,Vn.8B,Vm.8B ZIP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
poly16x4x2_t vzip_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
int32x2x2_t vzip_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP1 Vd1.2S,Vn.2S,Vm.2S ZIP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
float32x2x2_t vzip_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP1 Vd1.2S,Vn.2S,Vm.2S ZIP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
uint32x2x2_t vzip_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	ZIP1 Vd1.2S,Vn.2S,Vm.2S ZIP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
int8x16x2_t vzipq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP1 Vd1.16B,Vn.16B,Vm.16B ZIP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
int16x8x2_t vzipq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4x2_t vzipq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP1 Vd1.4S,Vn.4S,Vm.4S ZIP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
float32x4x2_t vzipq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP1 Vd1.4S,Vn.4S,Vm.4S ZIP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
uint8x16x2_t vzipq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP1 Vd1.16B,Vn.16B,Vm.16B ZIP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
uint16x8x2_t vzipq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
uint32x4x2_t vzipq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	ZIP1 Vd1.4S,Vn.4S,Vm.4S ZIP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
poly8x16x2_t vzipq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	ZIP1 Vd1.16B,Vn.16B,Vm.16B ZIP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
poly16x8x2_t vzipq_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
int8x8x2_t vuzp_s8(int8x8_t a, int8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP1 Vd1.8B,Vn.8B,Vm.8B UZP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
int16x4x2_t vuzp_s16(int16x4_t a, int16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
int32x2x2_t vuzp_s32(int32x2_t a, int32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP1 Vd1.2S,Vn.2S,Vm.2S UZP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
float32x2x2_t vuzp_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP1 Vd1.2S,Vn.2S,Vm.2S UZP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
uint8x8x2_t vuzp_u8(uint8x8_t a, uint8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP1 Vd1.8B,Vn.8B,Vm.8B UZP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
uint16x4x2_t vuzp_u16(uint16x4_t a, uint16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x2x2_t vuzp_u32(uint32x2_t a, uint32x2_t b)	a -> Vn.2S b -> Vm.2S	UZP1 Vd1.2S,Vn.2S,Vm.2S UZP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S -> result.val[0] Vd2.2S -> result.val[1]	v7/A32/A64
poly8x8x2_t vuzp_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	UZP1 Vd1.8B,Vn.8B,Vm.8B UZP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B -> result.val[0] Vd2.8B -> result.val[1]	v7/A32/A64
poly16x4x2_t vuzp_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
int8x16x2_t vuzpq_s8(int8x16_t a, int8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP1 Vd1.16B,Vn.16B,Vm.16B UZP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
int16x8x2_t vuzpq_s16(int16x8_t a, int16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
int32x4x2_t vuzpq_s32(int32x4_t a, int32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP1 Vd1.4S,Vn.4S,Vm.4S UZP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
float32x4x2_t vuzpq_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP1 Vd1.4S,Vn.4S,Vm.4S UZP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
uint8x16x2_t vuzpq_u8(uint8x16_t a, uint8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP1 Vd1.16B,Vn.16B,Vm.16B UZP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
uint16x8x2_t vuzpq_u16(uint16x8_t a, uint16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
uint32x4x2_t vuzpq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S b -> Vm.4S	UZP1 Vd1.4S,Vn.4S,Vm.4S UZP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S -> result.val[0] Vd2.4S -> result.val[1]	v7/A32/A64
poly8x16x2_t vuzpq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	UZP1 Vd1.16B,Vn.16B,Vm.16B UZP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B -> result.val[0] Vd2.16B -> result.val[1]	v7/A32/A64
poly16x8x2_t vuzpq_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
int16x4_t vreinterpret_s16_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8_t vreinterpret_u8_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_s8(int8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
int32x2_t vreinterpret_s32_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_s16(int16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
float32x2_t vreinterpret_f32_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x1_t vreinterpret_u64_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_s32(int32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	A32/A64
poly64x1_t vreinterpret_p64_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A64
float16x4_t vreinterpret_f16_f32(float32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vreinterpret_f16_u8(uint8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_u16(uint16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_u32(uint32x2_t a)	a -> Vd.2S	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint8x8_t vreinterpret_u8_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.2S -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_p8(poly8x8_t a)	a -> Vd.8B	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_p16(poly16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64x1_t vreinterpret_s64_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_u64(uint64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A64
uint64x1_t vreinterpret_u64_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A32/A64
float16x4_t vreinterpret_f16_s64(int64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	v7/A32/A64
int8x8_t vreinterpret_s8_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
int16x4_t vreinterpret_s16_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
int32x2_t vreinterpret_s32_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
float32x2_t vreinterpret_f32_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
uint8x8_t vreinterpret_u8_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
uint16x4_t vreinterpret_u16_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
uint32x2_t vreinterpret_u32_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.2S -> result	v7/A32/A64
poly8x8_t vreinterpret_p8_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.8B -> result	v7/A32/A64
poly16x4_t vreinterpret_p16_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.4H -> result	v7/A32/A64
uint64x1_t vreinterpret_u64_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
int64x1_t vreinterpret_s64_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	v7/A32/A64
float64x1_t vreinterpret_f64_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A64
poly64x1_t vreinterpret_p64_f16(float16x4_t a)	a -> Vd.4H	NOP	Vd.1D -> result	A32/A64
int16x8_t vreinterpretq_s16_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32x4_t vreinterpretq_s32_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_s8(int8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_s16(int16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vreinterpretq_u16_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_s32(int32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.1Q -> result	A32/A64
poly64x2_t vreinterpretq_p64_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A64
poly128_t vreinterpretq_p128_f64(float64x2_t a)	a -> Vd.1Q	NOP	Vd.2D -> result	A64
float16x8_t vreinterpretq_f16_f32(float32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vreinterpretq_u32_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_u8(uint8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_u16(uint16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2_t vreinterpretq_u64_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_u32(uint32x4_t a)	a -> Vd.4S	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.4S -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_p8(poly8x16_t a)	a -> Vd.16B	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
poly64x2_t vreinterpretq_p64_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.1Q -> result	A32/A64
float16x8_t vreinterpretq_f16_p16(poly16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_s64(int64x2_t a)	a -> Vd.1Q	NOP	Vd.2D -> result	A32/A64
poly64x2_t vreinterpretq_p64_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_u64(uint64x2_t a)	a -> Vd.1Q	NOP	Vd.2D -> result	A32/A64
float16x8_t vreinterpretq_f16_u64(uint64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8_t vreinterpretq_f16_s64(int64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	v7/A32/A64
int8x16_t vreinterpretq_s8_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
int16x8_t vreinterpretq_s16_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
int32x4_t vreinterpretq_s32_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
float32x4_t vreinterpretq_f32_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
uint8x16_t vreinterpretq_u8_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
uint16x8_t vreinterpretq_u16_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
uint32x4_t vreinterpretq_u32_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.4S -> result	v7/A32/A64
poly8x16_t vreinterpretq_p8_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.16B -> result	v7/A32/A64
poly16x8_t vreinterpretq_p16_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.8H -> result	v7/A32/A64
uint64x2_t vreinterpretq_u64_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
int64x2_t vreinterpretq_s64_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	v7/A32/A64
float64x2_t vreinterpretq_f64_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A64
poly64x2_t vreinterpretq_p64_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.2D -> result	A32/A64
poly128_t vreinterpretq_p128_f16(float16x8_t a)	a -> Vd.8H	NOP	Vd.1Q -> result	A32/A64
int8x8_t vreinterpret_s8_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	A64
int16x4_t vreinterpret_s16_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A64
int32x2_t vreinterpret_s32_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	A64
uint8x8_t vreinterpret_u8_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	A64
uint16x4_t vreinterpret_u16_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A64
uint32x2_t vreinterpret_u32_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	A64
poly8x8_t vreinterpret_p8_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	A64
poly16x4_t vreinterpret_p16_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A64
uint64x1_t vreinterpret_u64_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A64
int64x1_t vreinterpret_s64_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A64
float16x4_t vreinterpret_f16_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A64
float32x2_t vreinterpret_f32_f64(float64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	A64
int8x16_t vreinterpretq_s8_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	A64
int16x8_t vreinterpretq_s16_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A64
int32x4_t vreinterpretq_s32_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	A64
uint8x16_t vreinterpretq_u8_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x8_t vreinterpretq_u16_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A64
uint32x4_t vreinterpretq_u32_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	A64
poly8x16_t vreinterpretq_p8_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	A64
poly16x8_t vreinterpretq_p16_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A64
uint64x2_t vreinterpretq_u64_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A64
int64x2_t vreinterpretq_s64_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A64
float16x8_t vreinterpretq_f16_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A64
float32x4_t vreinterpretq_f32_f64(float64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	A64
int8x8_t vreinterpret_s8_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	A32/A64
int16x4_t vreinterpret_s16_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A32/A64
int32x2_t vreinterpret_s32_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	A32/A64
uint8x8_t vreinterpret_u8_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	A32/A64
uint16x4_t vreinterpret_u16_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A32/A64
uint32x2_t vreinterpret_u32_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.2S -> result	A32/A64
poly8x8_t vreinterpret_p8_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.8B -> result	A32/A64
poly16x4_t vreinterpret_p16_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A32/A64
int64x1_t vreinterpret_s64_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A32/A64
float64x1_t vreinterpret_f64_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.1D -> result	A64
float16x4_t vreinterpret_f16_p64(poly64x1_t a)	a -> Vd.1D	NOP	Vd.4H -> result	A32/A64
int8x16_t vreinterpretq_s8_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	A32/A64
int16x8_t vreinterpretq_s16_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A32/A64
int32x4_t vreinterpretq_s32_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	A32/A64
uint8x16_t vreinterpretq_u8_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	A32/A64
uint16x8_t vreinterpretq_u16_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A32/A64
uint32x4_t vreinterpretq_u32_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.4S -> result	A32/A64
poly8x16_t vreinterpretq_p8_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.16B -> result	A32/A64
poly16x8_t vreinterpretq_p16_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A32/A64
int64x2_t vreinterpretq_s64_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A32/A64
float64x2_t vreinterpretq_f64_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.2D -> result	A64
float16x8_t vreinterpretq_f16_p64(poly64x2_t a)	a -> Vd.2D	NOP	Vd.8H -> result	A32/A64
int8x16_t vreinterpretq_s8_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.16B -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x8_t vreinterpretq_s16_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.8H -> result	A32/A64
int32x4_t vreinterpretq_s32_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.4S -> result	A32/A64
uint8x16_t vreinterpretq_u8_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.16B -> result	A32/A64
uint16x8_t vreinterpretq_u16_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.8H -> result	A32/A64
uint32x4_t vreinterpretq_u32_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.4S -> result	A32/A64
poly8x16_t vreinterpretq_p8_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.16B -> result	A32/A64
poly16x8_t vreinterpretq_p16_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.8H -> result	A32/A64
uint64x2_t vreinterpretq_u64_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.2D -> result	A32/A64
int64x2_t vreinterpretq_s64_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.2D -> result	A32/A64
float64x2_t vreinterpretq_f64_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.2D -> result	A64
float16x8_t vreinterpretq_f16_p128(poly128_t a)	a -> Vd.1Q	NOP	Vd.8H -> result	A32/A64
poly128_t vldrq_p128(poly128_t const * ptr)	ptr -> Xn	LDR Qd,[Xn]	Qd -> result	A32/A64
void vstrq_p128(poly128_t * ptr, poly128_t val)	ptr -> Xn val -> Qt	STR Qt,[Xn]		A32/A64
uint8x16_t vaeseq_u8(uint8x16_t data, uint8x16_t key)	data -> Vd.16B key -> Vn.16B	AESE Vd.16B,Vn.16B	Vd.16B -> result	A32/A64
uint8x16_t vaesdq_u8(uint8x16_t data, uint8x16_t key)	data -> Vd.16B key -> Vn.16B	AESD Vd.16B,Vn.16B	Vd.16B -> result	A32/A64
uint8x16_t vaesmcq_u8(uint8x16_t data)	data -> Vn.16B	AESMC Vd.16B,Vn.16B	Vd.16B -> result	A32/A64
uint8x16_t vaesimcq_u8(uint8x16_t data)	data -> Vn.16B	AESIMC Vd.16B,Vn.16B	Vd.16B -> result	A32/A64
uint32x4_t vsha1cq_u32(uint32x4_t hash_abcd, uint32_t hash_e, uint32x4_t wk)	hash_abcd -> Qd hash_e -> Sn wk -> Vm.4S	SHA1C Qd,Sn,Vm.4S	Qd -> result	A32/A64
uint32x4_t vsha1pq_u32(uint32x4_t hash_abcd, uint32_t hash_e, uint32x4_t wk)	hash_abcd -> Qd hash_e -> Sn wk -> Vm.4S	SHA1P Qd,Sn,Vm.4S	Qd -> result	A32/A64
uint32x4_t vsha1mq_u32(uint32x4_t hash_abcd, uint32_t hash_e, uint32x4_t wk)	hash_abcd -> Qd hash_e -> Sn wk -> Vm.4S	SHA1M Qd,Sn,Vm.4S	Qd -> result	A32/A64
uint32_t vsha1h_u32(uint32_t hash_e)	hash_e -> Sn	SHA1H Sd,Sn	Sd -> result	A32/A64
uint32x4_t vsha1su0q_u32(uint32x4_t w0_3, uint32x4_t w4_7, uint32x4_t w8_11)	w0_3 -> Vd.4S w4_7 -> Vn.4S w8_11 -> Vm.4S	SHA1SU0 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A32/A64
uint32x4_t vsha1su1q_u32(uint32x4_t tw0_3, uint32x4_t w12_15)	tw0_3 -> Vd.4S w12_15 -> Vn.4S	SHA1SU1 Vd.4S,Vn.4S	Vd.4S -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vsha256hq_u32(uint32x4_t hash_abcd, uint32x4_t hash_efgh, uint32x4_t wk)	hash_abcd -> Qd hash_efgh -> Qn wk -> Vm.4S	SHA256H Qd,Qn,Vm.4S	Qd -> result	A32/A64
uint32x4_t vsha256h2q_u32(uint32x4_t hash_efgh, uint32x4_t hash_abcd, uint32x4_t wk)	hash_efgh -> Qd hash_abcd -> Qn wk -> Vm.4S	SHA256H2 Qd,Qn,Vm.4S	Qd -> result	A32/A64
uint32x4_t vsha256su0q_u32(uint32x4_t w0_3, uint32x4_t w4_7)	w0_3 -> Vd.4S w4_7 -> Vn.4S	SHA256SU0 Vd.4S,Vn.4S	Vd.4S -> result	A32/A64
uint32x4_t vsha256su1q_u32(uint32x4_t tw0_3, uint32x4_t w8_11, uint32x4_t w12_15)	tw0_3 -> Vd.4S w8_11 -> Vn.4S w12_15 -> Vm.4S	SHA256SU1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A32/A64
poly128_t vmull_p64(poly64_t a, poly64_t b)	a -> Vn.1D b -> Vm.1D	PMULL Vd.1Q,Vn.1D,Vm.1D	Vd.1Q -> result	A32/A64
poly128_t vmull_high_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.2D b -> Vm.2D	PMULL2 Vd.1Q,Vn.2D,Vm.2D	Vd.1Q -> result	A32/A64
poly8x8_t vadd_p8(poly8x8_t a, poly8x8_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
poly16x4_t vadd_p16(poly16x4_t a, poly16x4_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
poly64x1_t vadd_p64(poly64x1_t a, poly64x1_t b)	a -> Vn.8B b -> Vm.8B	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
poly8x16_t vaddq_p8(poly8x16_t a, poly8x16_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
poly16x8_t vaddq_p16(poly16x8_t a, poly16x8_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
poly64x2_t vaddq_p64(poly64x2_t a, poly64x2_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
poly128_t vaddq_p128(poly128_t a, poly128_t b)	a -> Vn.16B b -> Vm.16B	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
uint32_t __crc32b(uint32_t a, uint8_t b)	a -> Wn b -> Wm	CRC32B Wd,Wn,Wm	Wd -> result	A32/A64
uint32_t __crc32h(uint32_t a, uint16_t b)	a -> Wn b -> Wm	CRC32H Wd,Wn,Wm	Wd -> result	A32/A64
uint32_t __crc32w(uint32_t a, uint32_t b)	a -> Wn b -> Wm	CRC32W Wd,Wn,Wm	Wd -> result	A32/A64
uint32_t __crc32d(uint32_t a, uint64_t b)	a -> Wn b -> Xm	CRC32X Wd,Wn,Xm	Wd -> result	A32/A64
uint32_t __crc32cb(uint32_t a, uint8_t b)	a -> Wn b -> Wm	CRC32CB Wd,Wn,Wm	Wd -> result	A32/A64
uint32_t __crc32ch(uint32_t a, uint16_t b)	a -> Wn b -> Wm	CRC32CH Wd,Wn,Wm	Wd -> result	A32/A64
uint32_t __crc32cw(uint32_t a, uint32_t b)	a -> Wn b -> Wm	CRC32CW Wd,Wn,Wm	Wd -> result	A32/A64
uint32_t __crc32cd(uint32_t a, uint64_t b)	a -> Wn b -> Xm	CRC32CX Wd,Wn,Xm	Wd -> result	A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4_t vqrdmlah_s16(int16x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	SQRDMLAH Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int32x2_t vqrdmlah_s32(int32x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	SQRDMLAH Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int16x8_t vqrdmlahq_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	SQRDMLAH Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x4_t vqrdmlahq_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	SQRDMLAH Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int16x4_t vqrdmlsh_s16(int16x4_t a, int16x4_t b, int16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	SQRDMLSH Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
int32x2_t vqrdmlsh_s32(int32x2_t a, int32x2_t b, int32x2_t c)	a -> Vd.2S b -> Vn.2S c -> Vm.2S	SQRDMLSH Vd.2S,Vn.2S,Vm.2S	Vd.2S -> result	A64
int16x8_t vqrdmlshq_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	SQRDMLSH Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
int32x4_t vqrdmlshq_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vd.4S b -> Vn.4S c -> Vm.4S	SQRDMLSH Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
int16x4_t vqrdmlah_lane_s16(int16x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQRDMLAH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vqrdmlahq_lane_s16(int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQRDMLAH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int16x4_t vqrdmlah_laneq_s16(int16x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQRDMLAH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vqrdmlahq_laneq_s16(int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQRDMLAH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int32x2_t vqrdmlah_lane_s32(int32x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQRDMLAH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vqrdmlahq_lane_s32(int32x4_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQRDMLAH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
int32x2_t vqrdmlah_laneq_s32(int32x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQRDMLAH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vqrdmlahq_laneq_s32(int32x4_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQRDMLAH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int16x4_t vqrdmlsh_lane_s16(int16x4_t a, int16x4_t b, int16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	SQRDMLSH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vqrdmlshq_lane_s16(int16x8_t a, int16x8_t b, int16x4_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	SQRDMLSH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int16x4_t vqrdmlsh_laneeq_s16(int16x4_t a, int16x4_t b, int16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQRDMLSH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
int16x8_t vqrdmlshq_laneeq_s16(int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	SQRDMLSH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
int32x2_t vqrdmlsh_lane_s32(int32x2_t a, int32x2_t b, int32x2_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.2S 0 <= lane <= 1	SQRDMLSH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vqrdmlshq_lane_s32(int32x4_t a, int32x4_t b, int32x2_t v, const int lane)	a -> Vd.4S b -> Vn.4S v -> Vm.2S 0 <= lane <= 1	SQRDMLSH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
int32x2_t vqrdmlsh_laneeq_s32(int32x2_t a, int32x2_t b, int32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQRDMLSH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S -> result	A64
int32x4_t vqrdmlshq_laneeq_s32(int32x4_t a, int32x4_t b, int32x4_t v, const int lane)	a -> Vd.2S b -> Vn.2S v -> Vm.4S 0 <= lane <= 3	SQRDMLSH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S -> result	A64
int16_t vqrdmlahh_s16(int16_t a, int16_t b, int16_t c)	a -> Hd b -> Hn c -> Hm	SQRDMLSH Hd,Hn,Hm	Hd -> result	A64
int32_t vqrdmlahs_s32(int32_t a, int32_t b, int32_t c)	a -> Sd b -> Sn c -> Sm	SQRDMLSH Sd,Sn,Sm	Sd -> result	A64
int16_t vqrdmlshh_s16(int16_t a, int16_t b, int16_t c)	a -> Hd b -> Hn c -> Hm	SQRDMLSH Hd,Hn,Hm	Hd -> result	A64
int32_t vqrdmlshs_s32(int32_t a, int32_t b, int32_t c)	a -> Sd b -> Sn c -> Sm	SQRDMLSH Sd,Sn,Sm	Sd -> result	A64
int16_t vqrdmlahh_lane_s16(int16_t a, int16_t b, int16x4_t v, const int lane)	a -> Hd b -> Hn v -> Vm.4H 0 <= lane <= 3	SQRDMLAH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int16_t vqrdmlahh_laneeq_s16(int16_t a, int16_t b, int16x8_t v, const int lane)	a -> Hd b -> Hn v -> Vm.8H 0 <= lane <= 7	SQRDMLAH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int32_t vqrdmlahs_lane_s32(int32_t a, int32_t b, int32x4_t v, const int lane)	a -> Sd b -> Sn v -> Vm.2S 0 <= lane <= 1	SQRDMLAH Sd,Sn,Vm.S[lane]	Sd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int32_t vqrdmlahs_laneq_s32(int32_t a, int32_t b, int32x8_t v, const int lane)	a -> Sd b -> Sn v -> Vm.4S 0 <= lane <= 3	SQRDMLAH Sd,Sn,Vm.S[lane]	Sd -> result	A64
int16_t vqrdmlshh_lane_s16(int16_t a, int16_t b, int16x4_t v, const int lane)	a -> Hd b -> Hn v -> Vm.4H 0 <= lane <= 3	SQRDMLSH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int16_t vqrdmlshh_laneq_s16(int16_t a, int16_t b, int16x8_t v, const int lane)	a -> Hd b -> Hn v -> Vm.8H 0 <= lane <= 7	SQRDMLSH Hd,Hn,Vm.H[lane]	Hd -> result	A64
int32_t vqrdmlshs_lane_s32(int32_t a, int32_t b, int32x4_t v, const int lane)	a -> Sd b -> Sn v -> Vm.2S 0 <= lane <= 1	SQRDMLSH Sd,Sn,Vm.S[lane]	Sd -> result	A64
int32_t vqrdmlshs_laneq_s32(int32_t a, int32_t b, int32x8_t v, const int lane)	a -> Sd b -> Sn v -> Vm.4S 0 <= lane <= 3	SQRDMLSH Sd,Sn,Vm.S[lane]	Sd -> result	A64
float16_t vabsh_f16(float16_t a)	a -> Hn	FABS Hd,Hn	Hd -> result	A32/A64
uint16_t vceqzh_f16(float16_t a)	a -> Hn	FCMEQ Hd,Hn,#0	Hd -> result	A64
uint16_t vcgezh_f16(float16_t a)	a -> Hn	FCMGE Hd,Hn,#0	Hd -> result	A64
uint16_t vcgztz_f16(float16_t a)	a -> Hn	FCMGT Hd,Hn,#0	Hd -> result	A64
uint16_t vclezh_f16(float16_t a)	a -> Hn	FCMLE Hd,Hn,#0	Hd -> result	A64
uint16_t vcltzh_f16(float16_t a)	a -> Hn	FCMLT Hd,Hn,#0	Hd -> result	A64
float16_t vcvth_f16_s16(int16_t a)	a -> Hn	SCVTF Hd,Hn	Hd -> result	A64
float16_t vcvth_f16_s32(int32_t a)	a -> Hn	SCVTF Hd,Hn	Hd -> result	A32/A64
float16_t vcvth_f16_s64(int64_t a)	a -> Hn	SCVTF Hd,Hn	Hd -> result	A64
float16_t vcvth_f16_u16(uint16_t a)	a -> Hn	UCVTF Hd,Hn	Hd -> result	A64
float16_t vcvth_f16_u32(uint32_t a)	a -> Hn	UCVTF Hd,Hn	Hd -> result	A32/A64
float16_t vcvth_f16_u64(uint64_t a)	a -> Hn	UCVTF Hd,Hn	Hd -> result	A64
int16_t vcvth_s16_f16(float16_t a)	a -> Hn	FCVTZS Hd,Hn	Hd -> result	A64
int32_t vcvth_s32_f16(float16_t a)	a -> Hn	FCVTZS Hd,Hn	Hd -> result	A32/A64
int64_t vcvth_s64_f16(float16_t a)	a -> Hn	FCVTZS Hd,Hn	Hd -> result	A64
uint16_t vcvth_u16_f16(float16_t a)	a -> Hn	FCVTZU Hd,Hn	Hd -> result	A64
uint32_t vcvth_u32_f16(float16_t a)	a -> Hn	FCVTZU Hd,Hn	Hd -> result	A32/A64
uint64_t vcvth_u64_f16(float16_t a)	a -> Hn	FCVTZU Hd,Hn	Hd -> result	A64
int16_t vcvtah_s16_f16(float16_t a)	a -> Hn	FCVTAS Hd,Hn	Hd -> result	A64
int32_t vcvtah_s32_f16(float16_t a)	a -> Hn	FCVTAS Hd,Hn	Hd -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
int64_t vcvtah_s64_f16(float16_t a)	a -> Hn	FCVTAS Hd,Hn	Hd -> result	A64
uint16_t vcvtah_u16_f16(float16_t a)	a -> Hn	FCVTAU Hd,Hn	Hd -> result	A64
uint32_t vcvtah_u32_f16(float16_t a)	a -> Hn	FCVTAU Hd,Hn	Hd -> result	A32/A64
uint64_t vcvtah_u64_f16(float16_t a)	a -> Hn	FCVTAU Hd,Hn	Hd -> result	A64
int16_t vcvtmh_s16_f16(float16_t a)	a -> Hn	FCVTMS Hd,Hn	Hd -> result	A64
int32_t vcvtmh_s32_f16(float16_t a)	a -> Hn	FCVTMS Hd,Hn	Hd -> result	A32/A64
int64_t vcvtmh_s64_f16(float16_t a)	a -> Hn	FCVTMS Hd,Hn	Hd -> result	A64
uint16_t vcvtmh_u16_f16(float16_t a)	a -> Hn	FCVTMU Hd,Hn	Hd -> result	A64
uint32_t vcvtmh_u32_f16(float16_t a)	a -> Hn	FCVTMU Hd,Hn	Hd -> result	A32/A64
uint64_t vcvtmh_u64_f16(float16_t a)	a -> Hn	FCVTMU Hd,Hn	Hd -> result	A64
int16_t vcvtnh_s16_f16(float16_t a)	a -> Hn	FCVTNS Hd,Hn	Hd -> result	A64
int32_t vcvtnh_s32_f16(float16_t a)	a -> Hn	FCVTNS Hd,Hn	Hd -> result	A32/A64
int64_t vcvtnh_s64_f16(float16_t a)	a -> Hn	FCVTNS Hd,Hn	Hd -> result	A64
uint16_t vcvtnh_u16_f16(float16_t a)	a -> Hn	FCVTNU Hd,Hn	Hd -> result	A64
uint32_t vcvtnh_u32_f16(float16_t a)	a -> Hn	FCVTNU Hd,Hn	Hd -> result	A32/A64
uint64_t vcvtnh_u64_f16(float16_t a)	a -> Hn	FCVTNU Hd,Hn	Hd -> result	A64
int16_t vcvtph_s16_f16(float16_t a)	a -> Hn	FCVTPS Hd,Hn	Hd -> result	A64
int32_t vcvtph_s32_f16(float16_t a)	a -> Hn	FCVTPS Hd,Hn	Hd -> result	A32/A64
int64_t vcvtph_s64_f16(float16_t a)	a -> Hn	FCVTPS Hd,Hn	Hd -> result	A64
uint16_t vcvtph_u16_f16(float16_t a)	a -> Hn	FCVTPU Hd,Hn	Hd -> result	A64
uint32_t vcvtph_u32_f16(float16_t a)	a -> Hn	FCVTPU Hd,Hn	Hd -> result	A32/A64
uint64_t vcvtph_u64_f16(float16_t a)	a -> Hn	FCVTPU Hd,Hn	Hd -> result	A64
float16_t vnegh_f16(float16_t a)	a -> Hn	FNEG Hd,Hn	Hd -> result	A32/A64
float16_t vrecpeh_f16(float16_t a)	a -> Hn	FRECPE Hd,Hn	Hd -> result	A64
float16_t vrecpxh_f16(float16_t a)	a -> Hn	FRECPX Hd,Hn	Hd -> result	A64
float16_t vrndh_f16(float16_t a)	a -> Hn	FRINTZ Hd,Hn	Hd -> result	A32/A64
float16_t vrndah_f16(float16_t a)	a -> Hn	FRINTA Hd,Hn	Hd -> result	A32/A64
float16_t vrndih_f16(float16_t a)	a -> Hn	FRINTI Hd,Hn	Hd -> result	A32/A64
float16_t vrndmh_f16(float16_t a)	a -> Hn	FRINTM Hd,Hn	Hd -> result	A32/A64
float16_t vrndnh_f16(float16_t a)	a -> Hn	FRINTN Hd,Hn	Hd -> result	A32/A64
float16_t vrndph_f16(float16_t a)	a -> Hn	FRINTP Hd,Hn	Hd -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16_t vrndxh_f16(float16_t a)	a -> Hn	FRINTX Hd,Hn	Hd -> result	A32/A64
float16_t vrsqrteh_f16(float16_t a)	a -> Hn	FRSQRTX Hd,Hn	Hd -> result	A64
float16_t vsqrth_f16(float16_t a)	a -> Hn	FSQRT Hd,Hn	Hd -> result	A32/A64
float16_t vaddh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FADD Hd,Hn,Hm	Hd -> result	A32/A64
float16_t vabdh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FABD (scalar) Hd,Hn,Hm	Hd -> result	A64
uint16_t vcageh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FACGE Hd,Hn,Hm	Hd -> result	A64
uint16_t vcagth_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FACGT Hd,Hn,Hm	Hd -> result	A64
uint16_t vcaleh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FACGE Hd,Hn,Hm	Hd -> result	A64
uint16_t vcalth_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FACGT Hd,Hn,Hm	Hd -> result	A64
uint16_t vceqh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FCMEQ Hd,Hn,Hm	Hd -> result	A64
uint16_t vcgeh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FCMGE Hd,Hn,Hm	Hd -> result	A64
uint16_t vcgth_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FCMGT Hd,Hn,Hm	Hd -> result	A64
uint16_t vcleh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FCMGE Hd,Hn,Hm	Hd -> result	A64
uint16_t vclth_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FCMGT Hd,Hn,Hm	Hd -> result	A64
float16_t vcvth_n_f16_s16(int16_t a, const int n)	a -> Hn 1 <= n <= 16	SCVTF Hd,Hn,#n	Hd -> result	A64
float16_t vcvth_n_f16_s32(int32_t a, const int n)	a -> Hn 1 <= n <= 16	SCVTF Hd,Hn,#n	Hd -> result	A32/A64
float16_t vcvth_n_f16_s64(int64_t a, const int n)	a -> Hn 1 <= n <= 16	SCVTF Hd,Hn,#n	Hd -> result	A64
float16_t vcvth_n_f16_u16(uint16_t a, const int n)	a -> Hn 1 <= n <= 16	UCVTF Hd,Hn,#n	Hd -> result	A64
float16_t vcvth_n_f16_u32(uint32_t a, const int n)	a -> Hn 1 <= n <= 16	UCVTF Hd,Hn,#n	Hd -> result	A32/A64
float16_t vcvth_n_f16_u64(uint64_t a, const int n)	a -> Hn 1 <= n <= 16	UCVTF Hd,Hn,#n	Hd -> result	A64
int16_t vcvth_n_s16_f16(float16_t a, const int n)	a -> Hn 1 <= n <= 16	FCVTZS Hd,Hn,#n	Hd -> result	A64
int32_t vcvth_n_s32_f16(float16_t a, const int n)	a -> Hn 1 <= n <= 16	FCVTZS Hd,Hn,#n	Hd -> result	A32/A64
int64_t vcvth_n_s64_f16(float16_t a, const int n)	a -> Hn 1 <= n <= 16	FCVTZS Hd,Hn,#n	Hd -> result	A64
uint16_t vcvth_n_u16_f16(float16_t a, const int n)	a -> Hn 1 <= n <= 16	FCVTZU Hd,Hn,#n	Hd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32_t vcvth_n_u32_f16(float16_t a, const int n)	a -> Hn 1 <= n <= 16	FCVTZU Hd,Hn,#n	Hd -> result	A32/A64
uint64_t vcvth_n_u64_f16(float16_t a, const int n)	a -> Hn 1 <= n <= 16	FCVTZU Hd,Hn,#n	Hd -> result	A64
float16_t vdivh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FDIV Hd,Hn,Hm	Hd -> result	A32/A64
float16_t vmaxh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FMAX Hd,Hn,Hm	Hd -> result	A64
float16_t vmaxnmh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FMAXNM Hd,Hn,Hm	Hd -> result	A32/A64
float16_t vminh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FMIN Hd,Hn,Hm	Hd -> result	A64
float16_t vminnmh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FMINNM Hd,Hn,Hm	Hd -> result	A32/A64
float16_t vmulh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FMUL Hd,Hn,Hm	Hd -> result	A32/A64
float16_t vmulxh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FMULX Hd,Hn,Hm	Hd -> result	A64
float16_t vrecpsh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FRECPS Hd,Hn,Hm	Hd -> result	A64
float16_t vrsqrth_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FRSQRTS Hd,Hn,Hm	Hd -> result	A64
float16_t vsubh_f16(float16_t a, float16_t b)	a -> Hn b -> Hm	FSUB Hd,Hn,Hm	Hd -> result	A32/A64
float16_t vfmah_f16(float16_t a, float16_t b, float16_t c)	a -> Ha b -> Hn c -> Hm	FMADD Hd,Hn,Hm,Ha	Hd -> result	A32/A64
float16_t vfmsb_f16(float16_t a, float16_t b, float16_t c)	a -> Ha b -> Hn c -> Hm	FMSUB Hd,Hn,Hm,Ha	Hd -> result	A32/A64
float16x4_t vabs_f16(float16x4_t a)	a -> Vn.4H	FABS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vabsq_f16(float16x8_t a)	a -> Vn.8H	FABS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
uint16x4_t vceqz_f16(float16x4_t a)	a -> Vn.4H	FCMEQ Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
uint16x8_t vceqzq_f16(float16x8_t a)	a -> Vn.8H	FCMEQ Vd.8H,Vn.8H,#0	Vd.8H -> result	A32/A64
uint16x4_t vcgez_f16(float16x4_t a)	a -> Vn.4H	FCMGE Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
uint16x8_t vcgezq_f16(float16x8_t a)	a -> Vn.8H	FCMGE Vd.8H,Vn.8H,#0	Vd.8H -> result	A32/A64
uint16x4_t vcgtz_f16(float16x4_t a)	a -> Vn.4H	FCMGT Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
uint16x8_t vcgtzq_f16(float16x8_t a)	a -> Vn.8H	FCMGT Vd.8H,Vn.8H,#0	Vd.8H -> result	A32/A64
uint16x4_t vclez_f16(float16x4_t a)	a -> Vn.4H	FCMLE Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
uint16x8_t vclezq_f16(float16x8_t a)	a -> Vn.8H	FCMLE Vd.8H,Vn.8H,#0	Vd.8H -> result	A32/A64
uint16x4_t vcltz_f16(float16x4_t a)	a -> Vn.4H	FCMLT Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
uint16x8_t vcltzq_f16(float16x8_t a)	a -> Vn.8H	FCMLT Vd.8H,Vn.8H,#0	Vd.8H -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vcvt_f16_s16(int16x4_t a)	a -> Vn.4H	SCVTF Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
float16x8_t vcvtq_f16_s16(int16x8_t a)	a -> Vn.8H	SCVTF Vd.8H,Vn.8H,#0	Vd.8H -> result	A32/A64
float16x4_t vcvt_f16_u16(uint16x4_t a)	a -> Vn.4H	UCVTF Vd.4H,Vn.4H,#0	Vd.4H -> result	A32/A64
float16x8_t vcvtq_f16_u16(uint16x8_t a)	a -> Vn.8H	UCVTF Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
int16x4_t vcvt_s16_f16(float16x4_t a)	a -> Vn.4H	FCVTZS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
int16x8_t vcvtq_s16_f16(float16x8_t a)	a -> Vn.8H	FCVTZS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
uint16x4_t vcvt_u16_f16(float16x4_t a)	a -> Vn.4H	FCVTZS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
uint16x8_t vcvtq_u16_f16(float16x8_t a)	a -> Vn.8H	FCVTZS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
int16x4_t vcvt_s16_f16(float16x4_t a)	a -> Vn.4H	FCVTAS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
int16x8_t vcvtq_s16_f16(float16x8_t a)	a -> Vn.8H	FCVTAS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
uint16x4_t vcvt_u16_f16(float16x4_t a)	a -> Vn.4H	FCVTAU Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
uint16x8_t vcvtq_u16_f16(float16x8_t a)	a -> Vn.8H	FCVTAU Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
int16x4_t vcvtm_s16_f16(float16x4_t a)	a -> Vn.4H	FCVTMS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
int16x8_t vcvtmq_s16_f16(float16x8_t a)	a -> Vn.8H	FCVTMS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
uint16x4_t vcvtm_u16_f16(float16x4_t a)	a -> Vn.4H	FCVTMU Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
uint16x8_t vcvtmq_u16_f16(float16x8_t a)	a -> Vn.8H	FCVTMU Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
int16x4_t vcvt_n_s16_f16(float16x4_t a)	a -> Vn.4H	FCVTNS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
int16x8_t vcvt_nq_s16_f16(float16x8_t a)	a -> Vn.8H	FCVTNS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
uint16x4_t vcvt_n_u16_f16(float16x4_t a)	a -> Vn.4H	FCVTNU Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
uint16x8_t vcvt_nq_u16_f16(float16x8_t a)	a -> Vn.8H	FCVTNU Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
int16x4_t vcvt_p_s16_f16(float16x4_t a)	a -> Vn.4H	FCVTPS Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
int16x8_t vcvt_pq_s16_f16(float16x8_t a)	a -> Vn.8H	FCVTPS Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
uint16x4_t vcvt_p_u16_f16(float16x4_t a)	a -> Vn.4H	FCVTPU Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
uint16x8_t vcvt_pq_u16_f16(float16x8_t a)	a -> Vn.8H	FCVTPU Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vneg_f16(float16x4_t a)	a -> Vn.4H	FNEG Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vnegq_f16(float16x8_t a)	a -> Vn.8H	FNEG Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrecpe_f16(float16x4_t a)	a -> Vn.4H	FRECPE Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrecpeq_f16(float16x8_t a)	a -> Vn.8H	FRECPE Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrnd_f16(float16x4_t a)	a -> Vn.4H	FRINTZ Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrndq_f16(float16x8_t a)	a -> Vn.8H	FRINTZ Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrnda_f16(float16x4_t a)	a -> Vn.4H	FRINTA Vd.4H,Vn.4H	Vd.4H -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8_t vrndaq_f16(float16x8_t a)	a -> Vn.8H	FRINTA Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrndi_f16(float16x4_t a)	a -> Vn.4H	FRINTI Vd.4H,Vn.4H	Vd.4H -> result	A64
float16x8_t vrndiq_f16(float16x8_t a)	a -> Vn.8H	FRINTI Vd.8H,Vn.8H	Vd.8H -> result	A64
float16x4_t vrndm_f16(float16x4_t a)	a -> Vn.4H	FRINTM Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrndmq_f16(float16x8_t a)	a -> Vn.8H	FRINTM Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrndn_f16(float16x4_t a)	a -> Vn.4H	FRINTN Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrndnq_f16(float16x8_t a)	a -> Vn.8H	FRINTN Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrndp_f16(float16x4_t a)	a -> Vn.4H	FRINTP Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrndpq_f16(float16x8_t a)	a -> Vn.8H	FRINTP Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrndx_f16(float16x4_t a)	a -> Vn.4H	FRINTX Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrndxq_f16(float16x8_t a)	a -> Vn.8H	FRINTX Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vrsqrte_f16(float16x4_t a)	a -> Vn.4H	FRSQRT Vd.4H,Vn.4H	Vd.4H -> result	A32/A64
float16x8_t vrsqrteq_f16(float16x8_t a)	a -> Vn.8H	FRSQRT Vd.8H,Vn.8H	Vd.8H -> result	A32/A64
float16x4_t vsqrt_f16(float16x4_t a)	a -> Vn.4H	FSQRT Vd.4H,Vn.4H	Vd.4H -> result	A64
float16x8_t vsqrtq_f16(float16x8_t a)	a -> Vn.8H	FSQRT Vd.8H,Vn.8H	Vd.8H -> result	A64
float16x4_t vadd_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FADD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vaddq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FADD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vabd_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FABD Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vabdq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FABD Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcage_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FACGE Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcageq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FACGE Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcagt_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FACGT Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcagtg_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FACGT Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcale_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FACGE Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcaleq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FACGE Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcalt_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FACGT Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcaltq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FACGT Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint16x4_t vceq_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCMEQ Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vceqq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCMEQ Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcge_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCMGE Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcgeq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCMGE Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcgt_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCMGT Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcgtq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCMGT Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vcle_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCMGE Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcleq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCMGE Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
uint16x4_t vclt_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCMGT Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
uint16x8_t vcltq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCMGT Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vcvtn_f16_s16(int16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	SCVTF Vd.4H,Vn.4H,#n	Vd.4H -> result	A32/A64
float16x8_t vcvtnq_f16_s16(int16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	SCVTF Vd.8H,Vn.8H,#n	Vd.8H -> result	A32/A64
float16x4_t vcvtn_f16_u16(uint16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	UCVTF Vd.4H,Vn.4H,#n	Vd.4H -> result	A32/A64
float16x8_t vcvtnq_f16_u16(uint16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	UCVTF Vd.8H,Vn.8H,#n	Vd.8H -> result	A32/A64
int16x4_t vcvtn_s16_f16(float16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	FCVTZS Vd.4H,Vn.4H,#n	Vd.4H -> result	A32/A64
int16x8_t vcvtnq_s16_f16(float16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	FCVTZS Vd.8H,Vn.8H,#n	Vd.8H -> result	A32/A64
uint16x4_t vcvtn_u16_f16(float16x4_t a, const int n)	a -> Vn.4H 1 <= n <= 16	FCVTZU Vd.4H,Vn.4H,#n	Vd.4H -> result	A32/A64
uint16x8_t vcvtnq_u16_f16(float16x8_t a, const int n)	a -> Vn.8H 1 <= n <= 16	FCVTZU Vd.8H,Vn.8H,#n	Vd.8H -> result	A32/A64
float16x4_t vdiv_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FDIV Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vdivq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FDIV Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vmax_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMAX Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vmaxq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMAX Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vmaxnm_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMAXNM Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8_t vmaxnmq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMAXNM Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vmin_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMIN Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vminq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMIN Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vminnm_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMINNM Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vminnmq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMINNM Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vmul_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMUL Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vmulq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMUL Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vmulx_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMULX Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vmulxq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMULX Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vpadd_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FADDP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vpaddq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FADDP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vpmax_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMAXP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vpmaxq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMAXP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vpmaxnm_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMAXNMP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vpmaxnmq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMAXNMP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vpmin_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMINP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vpminq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMINP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vpminnm_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FMINNMP Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vpminnmq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FMINNMP Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vrecps_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FRECPS Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vrecpsq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FRECPS Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vrsqrts_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FRSQRTS Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vrsqrtsq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FRSQRTS Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vsub_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vsubq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vfma_f16(float16x4_t a, float16x4_t b, float16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	FMLA Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vfmaq_f16(float16x8_t a, float16x8_t b, float16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	FMLA Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vfms_f16(float16x4_t a, float16x4_t b, float16x4_t c)	a -> Vd.4H b -> Vn.4H c -> Vm.4H	FMLS Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A32/A64
float16x8_t vfmsq_f16(float16x8_t a, float16x8_t b, float16x8_t c)	a -> Vd.8H b -> Vn.8H c -> Vm.8H	FMLS Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A32/A64
float16x4_t vfma_lane_f16(float16x4_t a, float16x4_t b, float16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	FMLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
float16x8_t vfmaq_lane_f16(float16x8_t a, float16x8_t b, float16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	FMLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
float16x4_t vfma_laneq_f16(float16x4_t a, float16x4_t b, float16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	FMLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
float16x8_t vfmaq_laneq_f16(float16x8_t a, float16x8_t b, float16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	FMLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
float16x4_t vfma_n_f16(float16x4_t a, float16x4_t b, float16_t n)	a -> Vd.4H b -> Vn.4H n -> Vm.H[0]	FMLA Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	A64
float16x8_t vfmaq_n_f16(float16x8_t a, float16x8_t b, float16_t n)	a -> Vd.8H b -> Vn.8H n -> Vm.H[0]	FMLA Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	A64
float16_t vfma_lane_f16(float16_t a, float16_t b, float16x4_t v, const int lane)	a -> Hd b -> Hn v -> Vm.4H 0 <= lane <= 3	FMLA Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16_t vfma_laneq_f16(float16_t a, float16_t b, float16x8_t v, const int lane)	a -> Hd b -> Hn v -> Vm.8H 0 <= lane <= 7	FMLA Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16x4_t vfms_lane_f16(float16x4_t a, float16x4_t b, float16x4_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.4H 0 <= lane <= 3	FMLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
float16x8_t vfmsq_lane_f16(float16x8_t a, float16x8_t b, float16x4_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.4H 0 <= lane <= 3	FMLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vfms_laneq_f16(float16x4_t a, float16x4_t b, float16x8_t v, const int lane)	a -> Vd.4H b -> Vn.4H v -> Vm.8H 0 <= lane <= 7	FMLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
float16x8_t vfmsq_laneq_f16(float16x8_t a, float16x8_t b, float16x8_t v, const int lane)	a -> Vd.8H b -> Vn.8H v -> Vm.8H 0 <= lane <= 7	FMLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
float16x4_t vfms_n_f16(float16x4_t a, float16x4_t b, float16_t n)	a -> Vd.4H b -> Vn.4H n -> Vm.H[0]	FMLS Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	A64
float16x8_t vfmsq_n_f16(float16x8_t a, float16x8_t b, float16_t n)	a -> Vd.8H b -> Vn.8H n -> Vm.H[0]	FMLS Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	A64
float16_t vfms_h_lane_f16(float16_t a, float16_t b, float16x4_t v, const int lane)	a -> Hd b -> Hn v -> Vm.4H 0 <= lane <= 3	FMLS Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16_t vfms_h_laneq_f16(float16_t a, float16_t b, float16x8_t v, const int lane)	a -> Hd b -> Hn v -> Vm.8H 0 <= lane <= 7	FMLS Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16x4_t vmul_lane_f16(float16x4_t a, float16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	FMUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A32/A64
float16x8_t vmulq_lane_f16(float16x8_t a, float16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	FMUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A32/A64
float16x4_t vmul_laneq_f16(float16x4_t a, float16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	FMUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
float16x8_t vmulq_laneq_f16(float16x8_t a, float16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	FMUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
float16x4_t vmul_n_f16(float16x4_t a, float16_t n)	a -> Vn.4H n -> Vm.H[0]	FMUL Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	A32/A64
float16x8_t vmulq_n_f16(float16x8_t a, float16_t n)	a -> Vn.8H n -> Vm.H[0]	FMUL Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	A32/A64
float16_t vmul_h_lane_f16(float16_t a, float16x4_t v, const int lane)	a -> Hn v -> Vm.4H 0 <= lane <= 3	FMUL Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16_t vmul_h_laneq_f16(float16_t a, float16x8_t v, const int lane)	a -> Hn v -> Vm.8H 0 <= lane <= 7	FMUL Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16x4_t vmulx_lane_f16(float16x4_t a, float16x4_t v, const int lane)	a -> Vn.4H v -> Vm.4H 0 <= lane <= 3	FMULX Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64
float16x8_t vmulxq_lane_f16(float16x8_t a, float16x4_t v, const int lane)	a -> Vn.8H v -> Vm.4H 0 <= lane <= 3	FMULX Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
float16x4_t vmulx_laneq_f16(float16x4_t a, float16x8_t v, const int lane)	a -> Vn.4H v -> Vm.8H 0 <= lane <= 7	FMULX Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8_t vmulxq_laneq_f16(float16x8_t a, float16x8_t v, const int lane)	a -> Vn.8H v -> Vm.8H 0 <= lane <= 7	FMULX Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H -> result	A64
float16x4_t vmulx_n_f16(float16x4_t a, float16_t n)	a -> Vn.4H n -> Vm.H[0]	FMULX Vd.4H,Vn.4H,Vm.H[0]	Vd.4H -> result	A64
float16x8_t vmulxq_n_f16(float16x8_t a, float16_t n)	a -> Vn.8H n -> Vm.H[0]	FMULX Vd.8H,Vn.8H,Vm.H[0]	Vd.8H -> result	A64
float16_t vmulxh_lane_f16(float16_t a, float16x4_t v, const int lane)	a -> Hn v -> Vm.4H 0 <= lane <= 3	FMULX Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16_t vmulxh_laneq_f16(float16_t a, float16x8_t v, const int lane)	a -> Hn v -> Vm.8H 0 <= lane <= 7	FMULX Hd,Hn,Vm.H[lane]	Hd -> result	A64
float16_t vmaxv_f16(float16x4_t a)	a -> Vn.4H	FMAXP Hd,Vn.4H	Hd -> result	A64
float16_t vmaxvq_f16(float16x8_t a)	a -> Vn.8H	FMAXP Hd,Vn.8H	Hd -> result	A64
float16_t vminv_f16(float16x4_t a)	a -> Vn.4H	FMINP Hd,Vn.4H	Hd -> result	A64
float16_t vminvq_f16(float16x8_t a)	a -> Vn.8H	FMINP Hd,Vn.8H	Hd -> result	A64
float16_t vmaxnmv_f16(float16x4_t a)	a -> Vn.4H	FMAXNMP Hd,Vn.4H	Hd -> result	A64
float16_t vmaxnmvq_f16(float16x8_t a)	a -> Vn.8H	FMAXNMP Hd,Vn.8H	Hd -> result	A64
float16_t vminnmv_f16(float16x4_t a)	a -> Vn.4H	FMINNMP Hd,Vn.4H	Hd -> result	A64
float16_t vminnmvq_f16(float16x8_t a)	a -> Vn.8H	FMINNMP Hd,Vn.8H	Hd -> result	A64
float16x4_t vbsl_f16(uint16x4_t a, float16x4_t b, float16x4_t c)	a -> Vd.8B b -> Vn.8B c -> Vm.8B	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B -> result	v7/A32/A64
float16x8_t vbslq_f16(uint16x8_t a, float16x8_t b, float16x8_t c)	a -> Vd.16B b -> Vn.16B c -> Vm.16B	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B -> result	v7/A32/A64
float16x4x2_t vzip_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
float16x8x2_t vzipq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
float16x4x2_t vuzp_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64
float16x8x2_t vuzpq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
float16x4x2_t vtrn_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H -> result.val[0] Vd2.4H -> result.val[1]	v7/A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8x2_t vtrnq_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H -> result.val[0] Vd2.8H -> result.val[1]	v7/A32/A64
float16x4_t vmov_n_f16(float16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
float16x8_t vmovq_n_f16(float16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
float16x4_t vdup_n_f16(float16_t value)	value -> rn	DUP Vd.4H,rn	Vd.4H -> result	v7/A32/A64
float16x8_t vdupq_n_f16(float16_t value)	value -> rn	DUP Vd.8H,rn	Vd.8H -> result	v7/A32/A64
float16x4_t vdup_lane_f16(float16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	v7/A32/A64
float16x8_t vdupq_lane_f16(float16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	v7/A32/A64
float16x4_t vext_f16(float16x4_t a, float16x4_t b, const int n)	a -> Vn.8B b -> Vm.8B 0 <= n <= 3	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B -> result	v7/A32/A64
float16x8_t vextq_f16(float16x8_t a, float16x8_t b, const int n)	a -> Vn.16B b -> Vm.16B 0 <= n <= 7	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B -> result	v7/A32/A64
float16x4_t vrev64_f16(float16x4_t vec)	vec -> Vn.4H	REV64 Vd.4H,Vn.4H	Vd.4H -> result	v7/A32/A64
float16x8_t vrev64q_f16(float16x8_t vec)	vec -> Vn.8H	REV64 Vd.8H,Vn.8H	Vd.8H -> result	v7/A32/A64
float16x4_t vzip1_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vzip1q_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vzip2_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vzip2q_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vuzp1_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vuzp1q_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vuzp2_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vuzp2q_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vtrn1_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN1 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vtrn1q_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN1 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64
float16x4_t vtrn2_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	TRN2 Vd.4H,Vn.4H,Vm.4H	Vd.4H -> result	A64
float16x8_t vtrn2q_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	TRN2 Vd.8H,Vn.8H,Vm.8H	Vd.8H -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vdup_laneq_f16(float16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.4H,Vn.H[lane]	Vd.4H -> result	A64
float16x8_t vdupq_laneq_f16(float16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Vd.8H,Vn.H[lane]	Vd.8H -> result	A64
float16_t vduph_lane_f16(float16x4_t vec, const int lane)	vec -> Vn.4H 0 <= lane <= 3	DUP Hd,Vn.H[lane]	Hd -> result	A64
float16_t vduph_laneq_f16(float16x8_t vec, const int lane)	vec -> Vn.8H 0 <= lane <= 7	DUP Hd,Vn.H[lane]	Hd -> result	A64
uint32x2_t vdot_u32(uint32x2_t r, uint8x8_t a, uint8x8_t b)	r -> Vd.2S a -> Vn.8B b -> Vm.8B	UDOT Vd.2S,Vn.8B,Vm.8B	Vd.2S -> result	A32/A64
int32x2_t vdot_s32(int32x2_t r, int8x8_t a, int8x8_t b)	r -> Vd.2S a -> Vn.8B b -> Vm.8B	SDOT Vd.2S,Vn.8B,Vm.8B	Vd.2S -> result	A32/A64
uint32x4_t vdotq_u32(uint32x4_t r, uint8x16_t a, uint8x16_t b)	r -> Vd.4S a -> Vn.16B b -> Vm.16B	UDOT Vd.4S,Vn.16B,Vm.16B	Vd.4S -> result	A32/A64
int32x4_t vdotq_s32(int32x4_t r, int8x16_t a, int8x16_t b)	r -> Vd.4S a -> Vn.16B b -> Vm.16B	SDOT Vd.4S,Vn.16B,Vm.16B	Vd.4S -> result	A32/A64
uint32x2_t vdot_lane_u32(uint32x2_t r, uint8x8_t a, uint8x8_t b, const int lane)	r -> Vd.2S a -> Vn.8B b -> Vm.4B 0 <= lane <= 1	UDOT Vd.2S,Vn.8B,Vm.4B[lane]	Vd.2S -> result	A32/A64
int32x2_t vdot_lane_s32(int32x2_t r, int8x8_t a, int8x8_t b, const int lane)	r -> Vd.2S a -> Vn.8B b -> Vm.4B 0 <= lane <= 1	SDOT Vd.2S,Vn.8B,Vm.4B[lane]	Vd.2S -> result	A32/A64
uint32x4_t vdotq_laneq_u32(uint32x4_t r, uint8x16_t a, uint8x16_t b, const int lane)	r -> Vd.4S a -> Vn.16B b -> Vm.4B 0 <= lane <= 3	UDOT Vd.4S,Vn.16B,Vm.4B[lane]	Vd.4S -> result	A64
int32x4_t vdotq_laneq_s32(int32x4_t r, int8x16_t a, int8x16_t b, const int lane)	r -> Vd.4S a -> Vn.16B b -> Vm.4B 0 <= lane <= 3	SDOT Vd.4S,Vn.16B,Vm.4B[lane]	Vd.4S -> result	A64
uint32x2_t vdot_laneq_u32(uint32x2_t r, uint8x8_t a, uint8x16_t b, const int lane)	r -> Vd.2S a -> Vn.8B b -> Vm.4B 0 <= lane <= 3	UDOT Vd.2S,Vn.8B,Vm.4B[lane]	Vd.2S -> result	A64
int32x2_t vdot_laneq_s32(int32x2_t r, int8x8_t a, int8x16_t b, const int lane)	r -> Vd.2S a -> Vn.8B b -> Vm.4B 0 <= lane <= 3	SDOT Vd.2S,Vn.8B,Vm.4B[lane]	Vd.2S -> result	A64
uint32x4_t vdotq_lane_u32(uint32x4_t r, uint8x16_t a, uint8x8_t b, const int lane)	r -> Vd.4S a -> Vn.16B b -> Vm.4B 0 <= lane <= 1	UDOT Vd.4S,Vn.16B,Vm.4B[lane]	Vd.4S -> result	A32/A64
int32x4_t vdotq_lane_s32(int32x4_t r, int8x16_t a, int8x8_t b, const int lane)	r -> Vd.4S a -> Vn.16B b -> Vm.4B 0 <= lane <= 1	SDOT Vd.4S,Vn.16B,Vm.4B[lane]	Vd.4S -> result	A32/A64
uint64x2_t vsha512hq_u64(uint64x2_t hash_ed, uint64x2_t hash_gf, uint64x2_t kwh_kwh2)	hash_ed -> Qd hash_gf -> Qn	SHA512H Qd,Qn,Vm.2D	Qd -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint64x2_t vsha512h2q_u64(uint64x2_t sum_ab, uint64x2_t hash_c, uint64x2_t hash_ab)	sum_ab -> Qd hash_c -> Qn	SHA512H2 Qd,Qn,Vm.2D	Qd -> result	A64
uint64x2_t vsha512su0q_u64(uint64x2_t w0_1, uint64x2_t w2_)	w0_1 -> Vd.2D w2_ -> Vn.2D	SHA512SU0 Vd.2D,Vn.2D	Vd.2D -> result	A64
uint64x2_t vsha512su1q_u64(uint64x2_t s01_s02, uint64x2_t w14_15, uint64x2_t w9_10)	s01_s02 -> Vd.2D w14_15 -> Vn.2D	SHA512SU1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint8x16_t veor3q_u8(uint8x16_t a, uint8x16_t b, uint8x16_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint16x8_t veor3q_u16(uint16x8_t a, uint16x8_t b, uint16x8_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint32x4_t veor3q_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint64x2_t veor3q_u64(uint64x2_t a, uint64x2_t b, uint64x2_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int8x16_t veor3q_s8(int8x16_t a, int8x16_t b, int8x16_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int16x8_t veor3q_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int32x4_t veor3q_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int64x2_t veor3q_s64(int64x2_t a, int64x2_t b, int64x2_t c)	a -> Vn.16B	EOR3 Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint64x2_t vrax1q_u64(uint64x2_t a, uint64x2_t b)	a -> Vn.2D	RAX1 Vd.2D,Vn.2D,Vm.2D	Vd.2D -> result	A64
uint64x2_t vxarq_u64(uint64x2_t a, uint64x2_t b, const int imm6)	a -> Vn.2D 0 <= imm6 <= 63	XAR Vd.2D,Vn.2D,Vm.2D,imm6	Vd.2D -> result	A64
uint8x16_t vbcaxq_u8(uint8x16_t a, uint8x16_t b, uint8x16_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint16x8_t vbcaxq_u16(uint16x8_t a, uint16x8_t b, uint16x8_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint32x4_t vbcaxq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
uint64x2_t vbcaxq_u64(uint64x2_t a, uint64x2_t b, uint64x2_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int8x16_t vbcaxq_s8(int8x16_t a, int8x16_t b, int8x16_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int16x8_t vbcaxq_s16(int16x8_t a, int16x8_t b, int16x8_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int32x4_t vbcaxq_s32(int32x4_t a, int32x4_t b, int32x4_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64
int64x2_t vbcaxq_s64(int64x2_t a, int64x2_t b, int64x2_t c)	a -> Vn.16B	BCAX Vd.16B,Vn.16B,Vm.16B,Va.16B	Vd.16B -> result	A64



Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
uint32x4_t vsm3ss1q_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vn.4S	SM3SS1 Vd.4S,Vn.4S,Vm.4S,Va.4S	Vd.4S -> result	A64
uint32x4_t vsm3tt1aq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c, const int imm2)	a -> Vd.4S 0 <= imm2 <= 3	SM3TT1A Vd.4S,Vn.4S,Vm.4S[imm2]	Vd.4S -> result	A64
uint32x4_t vsm3tt1bq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c, const int imm2)	a -> Vd.4S 0 <= imm2 <= 3	SM3TT1B Vd.4S,Vn.4S,Vm.4S[imm2]	Vd.4S -> result	A64
uint32x4_t vsm3tt2aq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c, const int imm2)	a -> Vd.4S 0 <= imm2 <= 3	SM3TT2A Vd.4S,Vn.4S,Vm.4S[imm2]	Vd.4S -> result	A64
uint32x4_t vsm3tt2bq_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c, const int imm2)	a -> Vd.4S 0 <= imm2 <= 3	SM3TT2B Vd.4S,Vn.4S,Vm.4S[imm2]	Vd.4S -> result	A64
uint32x4_t vsm3partw1q_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.4S	SM3PARTW1 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint32x4_t vsm3partw2q_u32(uint32x4_t a, uint32x4_t b, uint32x4_t c)	a -> Vd.4S	SM3PARTW2 Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
uint32x4_t vsm4eq_u32(uint32x4_t a, uint32x4_t b)	a -> Vd.4S	SM4E Vd.4S,Vn.4S	Vd.4S -> result	A64
uint32x4_t vsm4eqkeyq_u32(uint32x4_t a, uint32x4_t b)	a -> Vn.4S	SM4EKEY Vd.4S,Vn.4S,Vm.4S	Vd.4S -> result	A64
float32x2_t vfmlal_low_f32(float32x2_t r, float16x4_t a, float16x4_t b)	r -> Vd.2S	FMLAL Vd.2S,Vn.2H,Vm.2H	Vd.2S -> result	A32/A64
float32x2_t vfmlsl_low_f32(float32x2_t r, float16x4_t a, float16x4_t b)	r -> Vd.2S	FMLSL Vd.2S,Vn.2H,Vm.2H	Vd.2S -> result	A32/A64
float32x4_t vfmlalq_low_f32(float32x4_t r, float16x8_t a, float16x8_t b)	r -> Vd.4S	FMLAL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	A32/A64
float32x4_t vfmlslq_low_f32(float32x4_t r, float16x8_t a, float16x8_t b)	r -> Vd.4S	FMLSL Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	A32/A64
float32x2_t vfmlal_high_f32(float32x2_t r, float16x4_t a, float16x4_t b)	r -> Vd.2S	FMLAL2 Vd.2S,Vn.2H,Vm.2H	Vd.2S -> result	A32/A64
float32x2_t vfmlsl_high_f32(float32x2_t r, float16x4_t a, float16x4_t b)	r -> Vd.2S	FMLSL2 Vd.2S,Vn.2H,Vm.2H	Vd.2S -> result	A32/A64
float32x4_t vfmlalq_high_f32(float32x4_t r, float16x8_t a, float16x8_t b)	r -> Vd.4S	FMLAL2 Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	A32/A64
float32x4_t vfmlslq_high_f32(float32x4_t r, float16x8_t a, float16x8_t b)	r -> Vd.4S	FMLSL2 Vd.4S,Vn.4H,Vm.4H	Vd.4S -> result	A32/A64
float32x2_t vfmlal_lane_low_f32(float32x2_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 3	FMLAL Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x2_t vfmlal_laneq_low_f32(float32x2_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.2S 0 <= lane <= 7	FMLAL Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x4_t vfmlal_lane_low_f32(float32x4_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 3	FMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x4_t vfmlal_laneq_low_f32(float32x4_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.4S 0 <= lane <= 7	FMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x2_t vfmlsl_lane_low_f32(float32x2_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 3	FMLSL Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float32x2_t vfmlsl_laneq_low_f32(float32x2_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.2S 0 <= lane <= 7	FMLSL Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x4_t vfmlslq_lane_low_f32(float32x4_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.4S 0 <= lane <= 3	FMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x4_t vfmlslq_laneq_low_f32(float32x4_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.4S 0 <= lane <= 7	FMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x2_t vfmlal_lane_high_f32(float32x2_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 3	FMLAL2 Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x2_t vfmlsl_lane_high_f32(float32x2_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 3	FMLSL2 Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x4_t vfmlalq_lane_high_f32(float32x4_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 3	FMLAL2 Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x4_t vfmlslq_lane_high_f32(float32x4_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 3	FMLSL2 Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x2_t vfmlal_laneq_high_f32(float32x2_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.2S 0 <= lane <= 7	FMLAL2 Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x2_t vfmlsl_laneq_high_f32(float32x2_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.2S 0 <= lane <= 7	FMLSL2 Vd.2S,Vn.2H,Vm.H[lane]	Vd.2S -> result	A32/A64
float32x4_t vfmlalq_laneq_high_f32(float32x4_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.4S 0 <= lane <= 7	FMLAL2 Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float32x4_t vfmlslq_laneq_high_f32(float32x4_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.4S 0 <= lane <= 7	FMLSL2 Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S -> result	A32/A64
float16x4_t vcadd_rot90_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCADD Vd.4H,Vn.4H,Vm.4H,#90	Vd.4H -> result	A32/A64
float32x2_t vcadd_rot90_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCADD Vd.2S,Vn.2S,Vm.2S,#90	Vd.2S -> result	A32/A64
float16x8_t vcaddq_rot90_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCADD Vd.8H,Vn.8H,Vm.8H,#90	Vd.8H -> result	A32/A64
float32x4_t vcaddq_rot90_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCADD Vd.4S,Vn.4S,Vm.4S,#90	Vd.4S -> result	A32/A64
float64x2_t vcaddq_rot90_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCADD Vd.2D,Vn.2D,Vm.2D,#90	Vd.2D -> result	A64
float16x4_t vcadd_rot270_f16(float16x4_t a, float16x4_t b)	a -> Vn.4H b -> Vm.4H	FCADD Vd.4H,Vn.4H,Vm.4H,#270	Vd.4H -> result	A32/A64
float32x2_t vcadd_rot270_f32(float32x2_t a, float32x2_t b)	a -> Vn.2S b -> Vm.2S	FCADD Vd.2S,Vn.2S,Vm.2S,#270	Vd.2S -> result	A32/A64
float16x8_t vcaddq_rot270_f16(float16x8_t a, float16x8_t b)	a -> Vn.8H b -> Vm.8H	FCADD Vd.8H,Vn.8H,Vm.8H,#270	Vd.8H -> result	A32/A64
float32x4_t vcaddq_rot270_f32(float32x4_t a, float32x4_t b)	a -> Vn.4S b -> Vm.4S	FCADD Vd.4S,Vn.4S,Vm.4S,#270	Vd.4S -> result	A32/A64
float64x2_t vcaddq_rot270_f64(float64x2_t a, float64x2_t b)	a -> Vn.2D b -> Vm.2D	FCADD Vd.2D,Vn.2D,Vm.2D,#270	Vd.2D -> result	A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vcmla_f16(float16x4_t r, float16x4_t a, float16x4_t b)	r -> Vd.4H	FCMLA Vd.4H,Vn.4H,Vm.4H,#0	Vd.4H -> result	A32/A64
float32x2_t vcmla_f32(float32x2_t r, float32x2_t a, float32x2_t b)	r -> Vd.2S	FCMLA Vd.2S,Vn.2S,Vm.2S,#0	Vd.2S -> result	A32/A64
float16x4_t vcmla_lane_f16(float16x4_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#0	Vd.4H -> result	A32/A64
float32x2_t vcmla_lane_f32(float32x2_t r, float32x2_t a, float32x2_t b, const int lane)	r -> Vd.2S lane == 0	FCMLA Vd.2S,Vn.2S,Vm.2S,#0	Vd.2S -> result	A32/A64
float16x4_t vcmla_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#0	Vd.4H -> result	A32/A64
float16x4_t vcmla_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 2 <= lane <= 3	DUP Dm,Vm.D[1] FCMLA Vd.4H,Vn.4H,Vm.H[lane % 2],#0	Vd.4H -> result	A32/A64
float32x2_t vcmla_laneq_f32(float32x2_t r, float32x2_t a, float32x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 1	DUP Dm,Vm.D[1] FCMLA Vd.2S,Vn.2S,Vm.2S,#0	Vd.2S -> result	A32/A64
float16x8_t vcmlaq_f16(float16x8_t r, float16x8_t a, float16x8_t b)	r -> Vd.8H	FCMLA Vd.8H,Vn.8H,Vm.8H,#0	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_f32(float32x4_t r, float32x4_t a, float32x4_t b)	r -> Vd.4S	FCMLA Vd.4S,Vn.4S,Vm.4S,#0	Vd.4S -> result	A32/A64
float64x2_t vcmlaq_f64(float64x2_t r, float64x2_t a, float64x2_t b)	r -> Vd.2D	FCMLA Vd.2D,Vn.2D,Vm.2D,#0	Vd.2D -> result	A64
float16x8_t vcmlaq_lane_f16(float16x8_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.8H 0 <= lane <= 1	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#0	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_lane_f32(float32x4_t r, float32x4_t a, float32x2_t b, const int lane)	r -> Vd.4S lane == 0	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#0	Vd.4S -> result	A32/A64
float16x8_t vcmlaq_laneq_f16(float16x8_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.8H 0 <= lane <= 3	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#0	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_laneq_f32(float32x4_t r, float32x4_t a, float32x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 1	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#0	Vd.4S -> result	A32/A64
float16x4_t vcmla_rot90_f16(float16x4_t r, float16x4_t a, float16x4_t b)	r -> Vd.4H	FCMLA Vd.4H,Vn.4H,Vm.4H,#90	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot90_f32(float32x2_t r, float32x2_t a, float32x2_t b)	r -> Vd.2S	FCMLA Vd.2S,Vn.2S,Vm.2S,#90	Vd.2S -> result	A32/A64
float16x4_t vcmla_rot90_lane_f16(float16x4_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#90	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot90_lane_f32(float32x2_t r, float32x2_t a, float32x2_t b, const int lane)	r -> Vd.2S lane == 0	FCMLA Vd.2S,Vn.2S,Vm.2S,#90	Vd.2S -> result	A32/A64
float16x4_t vcmla_rot90_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#90	Vd.4H -> result	A32/A64
float16x4_t vcmla_rot90_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 2 <= lane <= 3	DUP Dm,Vm.D[1] FCMLA Vd.4H,Vn.4H,Vm.H[lane % 2],#90	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot90_laneq_f32(float32x2_t r, float32x2_t a, float32x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 1	DUP Dm,Vm.D[1] FCMLA Vd.2S,Vn.2S,Vm.2S,#90	Vd.2S -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x8_t vcmlaq_rot90_f16(float16x8_t r, float16x8_t a, float16x8_t b)	r -> Vd.8H	FCMLA Vd.8H,Vn.8H,Vm.8H,#90	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot90_f32(float32x4_t r, float32x4_t a, float32x4_t b)	r -> Vd.4S	FCMLA Vd.4S,Vn.4S,Vm.4S,#90	Vd.4S -> result	A32/A64
float64x2_t vcmlaq_rot90_f64(float64x2_t r, float64x2_t a, float64x2_t b)	r -> Vd.2D	FCMLA Vd.2D,Vn.2D,Vm.2D,#90	Vd.2D -> result	A64
float16x8_t vcmlaq_rot90_lane_f16(float16x8_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.8H 0 <= lane <= 1	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#90	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot90_lane_f32(float32x4_t r, float32x4_t a, float32x2_t b, const int lane)	r -> Vd.4S lane == 0	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#90	Vd.4S -> result	A32/A64
float16x8_t vcmlaq_rot90_laneq_f16(float16x8_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.8H 0 <= lane <= 3	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#90	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot90_laneq_f32(float32x4_t r, float32x4_t a, float32x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 1	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#90	Vd.4S -> result	A32/A64
float16x4_t vcmla_rot180_f16(float16x4_t r, float16x4_t a, float16x4_t b)	r -> Vd.4H	FCMLA Vd.4H,Vn.4H,Vm.4H,#180	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot180_f32(float32x2_t r, float32x2_t a, float32x2_t b)	r -> Vd.2S	FCMLA Vd.2S,Vn.2S,Vm.2S,#180	Vd.2S -> result	A32/A64
float16x4_t vcmla_rot180_lane_f16(float16x4_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#180	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot180_lane_f32(float32x2_t r, float32x2_t a, float32x2_t b, const int lane)	r -> Vd.2S lane == 0	FCMLA Vd.2S,Vn.2S,Vm.2S,#180	Vd.2S -> result	A32/A64
float16x4_t vcmla_rot180_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#180	Vd.4H -> result	A32/A64
float16x4_t vcmla_rot180_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 2 <= lane <= 3	DUP Dm,Vm.D[1] FCMLA Vd.4H,Vn.4H,Vm.H[lane % 2],#180	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot180_laneq_f32(float32x2_t r, float32x2_t a, float32x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 1	DUP Dm,Vm.D[1] FCMLA Vd.2S,Vn.2S,Vm.2S,#180	Vd.2S -> result	A32/A64
float16x8_t vcmlaq_rot180_f16(float16x8_t r, float16x8_t a, float16x8_t b)	r -> Vd.8H	FCMLA Vd.8H,Vn.8H,Vm.8H,#180	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot180_f32(float32x4_t r, float32x4_t a, float32x4_t b)	r -> Vd.4S	FCMLA Vd.4S,Vn.4S,Vm.4S,#180	Vd.4S -> result	A32/A64
float64x2_t vcmlaq_rot180_f64(float64x2_t r, float64x2_t a, float64x2_t b)	r -> Vd.2D	FCMLA Vd.2D,Vn.2D,Vm.2D,#180	Vd.2D -> result	A64
float16x8_t vcmlaq_rot180_lane_f16(float16x8_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.8H 0 <= lane <= 1	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#180	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot180_lane_f32(float32x4_t r, float32x4_t a, float32x2_t b, const int lane)	r -> Vd.4S lane == 0	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#180	Vd.4S -> result	A32/A64
float16x8_t vcmlaq_rot180_laneq_f16(float16x8_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.8H 0 <= lane <= 3	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#180	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot180_laneq_f32(float32x4_t r, float32x4_t a, float32x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 1	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#180	Vd.4S -> result	A32/A64

Intrinsic	Argument Preparation	Instruction	Result	Supported Architectures
float16x4_t vcmla_rot270_f16(float16x4_t r, float16x4_t a, float16x4_t b)	r -> Vd.4H	FCMLA Vd.4H,Vn.4H,Vm.4H,#270	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot270_f32(float32x2_t r, float32x2_t a, float32x2_t b)	r -> Vd.2S	FCMLA Vd.2S,Vn.2S,Vm.2S,#270	Vd.2S -> result	A32/A64
float16x4_t vcmla_rot270_lane_f16(float16x4_t r, float16x4_t a, float16x4_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#270	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot270_lane_f32(float32x2_t r, float32x2_t a, float32x2_t b, const int lane)	r -> Vd.2S lane == 0	FCMLA Vd.2S,Vn.2S,Vm.2S,#270	Vd.2S -> result	A32/A64
float16x4_t vcmla_rot270_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 0 <= lane <= 1	FCMLA Vd.4H,Vn.4H,Vm.H[lane],#270	Vd.4H -> result	A32/A64
float16x4_t vcmla_rot270_laneq_f16(float16x4_t r, float16x4_t a, float16x8_t b, const int lane)	r -> Vd.4H 2 <= lane <= 3	DUP Dm,Vm.D[1] FCMLA Vd.4H,Vn.4H,Vm.H[lane % 2],#270	Vd.4H -> result	A32/A64
float32x2_t vcmla_rot270_laneq_f32(float32x2_t r, float32x2_t a, float32x4_t b, const int lane)	r -> Vd.2S 0 <= lane <= 1	DUP Dm,Vm.D[1] FCMLA Vd.2S,Vn.2S,Vm.2S,#270	Vd.2S -> result	A32/A64
float16x8_t vcmlaq_rot270_f16(float16x8_t r, float16x8_t a, float16x8_t b)	r -> Vd.8H	FCMLA Vd.8H,Vn.8H,Vm.8H,#270	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot270_f32(float32x4_t r, float32x4_t a, float32x4_t b)	r -> Vd.4S	FCMLA Vd.4S,Vn.4S,Vm.4S,#270	Vd.4S -> result	A32/A64
float64x2_t vcmlaq_rot270_f64(float64x2_t r, float64x2_t a, float64x2_t b)	r -> Vd.2D	FCMLA Vd.2D,Vn.2D,Vm.2D,#270	Vd.2D -> result	A64
float16x8_t vcmlaq_rot270_lane_f16(float16x8_t r, float16x8_t a, float16x4_t b, const int lane)	r -> Vd.8H 0 <= lane <= 1	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#270	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot270_lane_f32(float32x4_t r, float32x4_t a, float32x2_t b, const int lane)	r -> Vd.4S lane == 0	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#270	Vd.4S -> result	A32/A64
float16x8_t vcmlaq_rot270_laneq_f16(float16x8_t r, float16x8_t a, float16x8_t b, const int lane)	r -> Vd.8H 0 <= lane <= 3	FCMLA Vd.8H,Vn.8H,Vm.H[lane],#270	Vd.8H -> result	A32/A64
float32x4_t vcmlaq_rot270_laneq_f32(float32x4_t r, float32x4_t a, float32x4_t b, const int lane)	r -> Vd.4S 0 <= lane <= 1	FCMLA Vd.4S,Vn.4S,Vm.S[lane],#270	Vd.4S -> result	A32/A64
float32x2_t vrnd32z_f32(float32x2_t a)	a -> Vn	FRINT32Z Vd.2S,Vn.2S	Vd -> result	A64
float32x4_t vrnd32zq_f32(float32x4_t a)	a -> Vn	FRINT32Z Vd.4S,Vn.4S	Vd -> result	A64
float64x1_t vrnd32z_f64(float64x1_t a)	a -> Dn	FRINT32Z Dd,Dn	Dd -> result	A64
float64x2_t vrnd32zq_f64(float64x2_t a)	a -> Vn	FRINT32Z Vd.2D,Vn.2D	Vd -> result	A64
float32x2_t vrnd64z_f32(float32x2_t a)	a -> Vn	FRINT64Z Vd.2S,Vn.2S	Vd -> result	A64
float32x4_t vrnd64zq_f32(float32x4_t a)	a -> Vn	FRINT64Z Vd.4S,Vn.4S	Vd -> result	A64
float64x1_t vrnd64z_f64(float64x1_t a)	a -> Dn	FRINT64Z Dd,Dn	Dd -> result	A64
float64x2_t vrnd64zq_f64(float64x2_t a)	a -> Vn	FRINT64Z Vd.2D,Vn.2D	Vd -> result	A64
float32x2_t vrnd32x_f32(float32x2_t a)	a -> Vn	FRINT32X Vd.2S,Vn.2S	Vd -> result	A64
float32x4_t vrnd32xq_f32(float32x4_t a)	a -> Vn	FRINT32X Vd.4S,Vn.4S	Vd -> result	A64
float64x1_t vrnd32x_f64(float64x1_t a)	a -> Dn	FRINT32X Dd,Dn	Dd -> result	A64
float64x2_t vrnd32xq_f64(float64x2_t a)	a -> Vn	FRINT32X Vd.2D,Vn.2D	Vd -> result	A64
float32x2_t vrnd64x_f32(float32x2_t a)	a -> Vn	FRINT64X Vd.2S,Vn.2S	Vd -> result	A64
float32x4_t vrnd64xq_f32(float32x4_t a)	a -> Vn	FRINT64X Vd.4S,Vn.4S	Vd -> result	A64
float64x1_t vrnd64x_f64(float64x1_t a)	a -> Dn	FRINT64X Dd,Dn	Dd -> result	A64
float64x2_t vrnd64xq_f64(float64x2_t a)	a -> Vn	FRINT64X Vd.2D,Vn.2D	Vd -> result	A64