



ARM[®] NEON[™] Intrinsics Reference

Document number: IHI 0073A
Date of Issue: 09/05/2014

Abstract

This draft document is a reference for the Advanced SIMD Architecture Extension (NEON) Intrinsics for ARMv7 and ARMv8 architectures.

Keywords

ACLE, NEON

How to find the latest release of this specification or report a defect in it

This document is at draft status, please check the *ARM Information Center* (<http://infocenter.arm.com/>) for a later release. This document may be found under “Developer Guides and Articles”, “Software Development”.

If you have comments on content then send an e-mail to arm.acle@arm.com specifying the number (IHI0073A) and the page number to which your comments apply.

Confidentiality status

This document is Non-Confidential.

Proprietary notice

This document is protected by copyright and other related rights and the practice or implementation of the information contained in this document may be protected by one or more patents or pending patent applications. No part of this document may be reproduced in any form by any means without the express prior written permission of ARM. **No license, express or implied, by estoppel or otherwise to any intellectual property rights is granted by this document unless specifically stated.**

Your access to the information in this document is conditional upon your acceptance that you will not use or permit others to use the information for the purposes of determining whether implementations infringe any third party patents.

THIS DOCUMENT IS PROVIDED “AS IS”. ARM PROVIDES NO REPRESENTATIONS AND NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE DOCUMENT. For the avoidance of doubt, ARM makes no representation with respect to, and has undertaken no analysis to identify or understand the scope and content of, third party patents, copyrights, trade secrets, or other rights.

This document may include technical inaccuracies or typographical errors.

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL ARM BE LIABLE FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF ANY USE OF THIS DOCUMENT, EVEN IF ARM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This document consists solely of commercial items. You shall be responsible for ensuring that any use, duplication or disclosure of this document complies fully with any relevant export laws and regulations to assure that this document or any portion thereof is not exported, directly or indirectly, in violation of such export laws. Use of the word “partner” in reference to ARM’s customers is not intended to create or refer to any partnership relationship with any other company. ARM may make changes to this document at any time and without notice.

If any of the provisions contained in these terms conflict with any of the provisions of any click through or signed written agreement covering this document with ARM, then the click through or signed written agreement prevails over and supersedes the conflicting provisions of these terms. This document may be translated into other languages for convenience, and you agree that if there is any conflict between the English version of this document and any translation, the terms of the English version of the Agreement shall prevail.

Words and logos marked with ® or ™ are registered trademarks or trademarks of ARM Limited or its affiliates in the EU and/or elsewhere. All rights reserved. Other brands and names mentioned in this document may be the trademarks of their respective owners. Please follow ARM’s trademark usage guidelines at <http://www.arm.com/about/trademark-usage-guidelines.php>.

Copyright © 2014. ARM Limited or its affiliates. All rights reserved.

ARM Limited. Company 02557590 registered in England.
110 Fulbourn Road, Cambridge, England CB1 9NJ.
LES-PRE-20349

Contents

1	ABOUT THIS DOCUMENT	4
1.1	Change control	4
1.1.1	Current status and anticipated changes	4
1.1.2	Change history	4
1.2	References	4
1.3	Terms and abbreviations	4
2	SCOPE	5
3	LIST OF INTRINSICS	6

1 ABOUT THIS DOCUMENT

1.1 Change control

1.1.1 Current status and anticipated changes

This document is the first release of the ARM NEON Intrinsics reference.

1.1.2 Change history

Issue	Date	By	Change
A	09/05/2014	TB	First release

1.2 References

This document refers to the following documents.

Ref	Doc No	Author(s)	Title
ARMARMv8	ARM DDI0487A.B	ARM	ARMv8-A Reference Manual (Issue A.b)
ACLE2	IHI 0053C	ARM	ARM C Language extensions, Release 2.0.

1.3 Terms and abbreviations

This document uses the following terms and abbreviations.

Term	Meaning
ARMv7, ARMv8	Legacy intrinsics common to ARMv7(A&R profiles) & ARMv8, all instruction sets
ARMv8	Intrinsics introduced in in ARMv8, all instruction sets
ARMv8(AArch64)	Intrinsics introduced in ARMv8, AArch64 state only

2 SCOPE

This document serves as a look-up reference for all ARMv7 and ARMv8 NEON Intrinsics. The formal specification for NEON Intrinsics is available in [ACLE2]. The table in section 3 has the following format:

Intrinsic Prototype	Instruction operand to argument mapping	ARMv8 AArch64 Instruction(s) the intrinsic maps to	Result location with respect to instruction.	List of architectures the intrinsic is supported in.
---------------------	---	--	--	--

The AArch64 instruction mapping is shown here as an example implementation. Their meaning and semantics are specified in [ACLE2]. For accurate specification of the vector and scalar data types used in this document, refer [ACLE2] – this document does not specify them.

This document does not describe the assembly operation of instructions – see [ARMARMv8].

3 LIST OF INTRINSICS

Intrinsic	Argument Preparation	A64 Instruction	Result	Supported Architectures
int8x8_t vadd_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ADD Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vaddq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ADD Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vadd_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ADD Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vaddq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ADD Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vadd_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ADD Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vaddq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ADD Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vadd_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	ADD Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vaddq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ADD Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
uint8x8_t vadd_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ADD Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vaddq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ADD Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vadd_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ADD Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8

uint16x8_t vaddq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ADD Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vadd_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ADD Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vaddq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ADD Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vadd_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	ADD Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vaddq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ADD Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
float32x2_t vadd_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FADD Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vaddq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FADD Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float64x1_t vadd_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FADD Dd,Dn,Dm	Dd	ARMv8(AArch64)
float64x2_t vaddq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FADD Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
int64_t vadd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	ADD Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vadd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	ADD Dd,Dn,Dm	Dd	ARMv8(AArch64)
int16x8_t vaddl_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SADDL Vd.8H,Vn.8B,Vm.8B	Vd.8H	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
int64x1_t vqadd_s64 (int64x1_t a, int64x1_t b)	a → Dn b → Dm	SQADD Dd,Dn,Dm	Dd	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint32x4_t vqaddq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UQADD Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vqadd_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQADD Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vqaddq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UQADD Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
int8_t vqaddb_s8 (int8_t a, int8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	SQADD Bd,Bn,Bm	Bd	ARMv8(AArch64)
int16_t vqaddh_s16 (int16_t a, int16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	SQADD Hd,Hn,Hm	Hd	ARMv8(AArch64)
int32_t vqadds_s32 (int32_t a, int32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	SQADD Sd,Sn,Sm	Sd	ARMv8(AArch64)
int64_t vqaddd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SQADD Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint8_t vqaddb_u8 (uint8_t a, uint8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	UQADD Bd,Bn,Bm	Bd	ARMv8(AArch64)
uint16_t vqaddh_u16 (uint16_t a, uint16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	UQADD Hd,Hn,Hm	Hd	ARMv8(AArch64)
uint32_t vqadds_u32 (uint32_t a, uint32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	UQADD Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vqaddd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQADD Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vuqadd_s8 (int8x8_t a, uint8x8_t b)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$	SUQADD Vd.8B,Vn.8B	Vd.8B	ARMv8(AArch64)

int8x16_t vuqaddq_s8 (int8x16_t a, uint8x16_t b)	a → Vd.16B b → Vn.16B	SUQADD Vd.16B,Vn.16B	Vd.16B	ARMv8(AArch64)
int16x4_t vuqadd_s16 (int16x4_t a, uint16x4_t b)	a → Vd.4H b → Vn.4H	SUQADD Vd.4H,Vn.4H	Vd.4H	ARMv8(AArch64)
int16x8_t vuqaddq_s16 (int16x8_t a, uint16x8_t b)	a → Vd.8H b → Vn.8H	SUQADD Vd.8H,Vn.8H	Vd.8H	ARMv8(AArch64)
int32x2_t vuqadd_s32 (int32x2_t a, uint32x2_t b)	a → Vd.2S b → Vn.2S	SUQADD Vd.2S,Vn.2S	Vd.2S	ARMv8(AArch64)
int32x4_t vuqaddq_s32 (int32x4_t a, uint32x4_t b)	a → Vd.4S b → Vn.4S	SUQADD Vd.4S,Vn.4S	Vd.4S	ARMv8(AArch64)
int64x1_t vuqadd_s64 (int64x1_t a, uint64x1_t b)	a → Dd b → Dn	SUQADD Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vuqaddq_s64 (int64x2_t a, uint64x2_t b)	a → Vd.2D b → Vn.2D	SUQADD Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int8_t vuqaddb_s8 (int8_t a, uint8_t b)	a → Bd b → Bn	SUQADD Bd,Bn	Bd	ARMv8(AArch64)
int16_t vuqaddh_s16 (int16_t a, uint16_t b)	a → Hd b → Hn	SUQADD Hd,Hn	Hd	ARMv8(AArch64)
int32_t vuqadds_s32 (int32_t a, uint32_t b)	a → Sd b → Sn	SUQADD Sd,Sn	Sd	ARMv8(AArch64)
int64_t vuqaddd_s64 (int64_t a, uint64_t b)	a → Dd b → Dn	SUQADD Dd,Dn	Dd	ARMv8(AArch64)
uint8x8_t vsqadd_u8 (uint8x8_t a, int8x8_t b)	a → Vd.8B b → Vn.8B	USQADD Vd.8B,Vn.8B	Vd.8B	ARMv8(AArch64)

uint8x16_t vsqaddq_u8 (uint8x16_t a, int8x16_t b)	a → Vd.16B b → Vn.16B	USQADD Vd.16B,Vn.16B	Vd.16B	ARMv8(AArch64)
uint16x4_t vsqadd_u16 (uint16x4_t a, int16x4_t b)	a → Vd.4H b → Vn.4H	USQADD Vd.4H,Vn.4H	Vd.4H	ARMv8(AArch64)
uint16x8_t vsqaddq_u16 (uint16x8_t a, int16x8_t b)	a → Vd.8H b → Vn.8H	USQADD Vd.8H,Vn.8H	Vd.8H	ARMv8(AArch64)
uint32x2_t vsqadd_u32 (uint32x2_t a, int32x2_t b)	a → Vd.2S b → Vn.2S	USQADD Vd.2S,Vn.2S	Vd.2S	ARMv8(AArch64)
uint32x4_t vsqaddq_u32 (uint32x4_t a, int32x4_t b)	a → Vd.4S b → Vn.4S	USQADD Vd.4S,Vn.4S	Vd.4S	ARMv8(AArch64)
uint64x1_t vsqadd_u64 (uint64x1_t a, int64x1_t b)	a → Dd b → Dn	USQADD Dd,Dn	Dd	ARMv8(AArch64)
uint64x2_t vsqaddq_u64 (uint64x2_t a, int64x2_t b)	a → Vd.2D b → Vn.2D	USQADD Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint8_t vsqaddb_u8 (uint8_t a, int8_t b)	a → Bd b → Bn	USQADD Bd,Bn	Bd	ARMv8(AArch64)
uint16_t vsqaddh_u16 (uint16_t a, int16_t b)	a → Hd b → Hn	USQADD Hd,Hn	Hd	ARMv8(AArch64)
uint32_t vsqadds_u32 (uint32_t a, int32_t b)	a → Sd b → Sn	USQADD Sd,Sn	Sd	ARMv8(AArch64)
uint64_t vsqaddd_u64 (uint64_t a, int64_t b)	a → Dd b → Dn	USQADD Dd,Dn	Dd	ARMv8(AArch64)
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

uint32x4_t vraddhn_high_u64 (uint32x2_t r, uint64x2_t a, uint64x2_t b)	$r \rightarrow \text{Vd.2S}$ $a \rightarrow \text{Vn.2D}$ $b \rightarrow \text{Vm.2D}$	RADDHN2 Vd.4S,Vn.2D,Vm.2D	Vd.4S	ARMv8(AArch64)
int8x8_t vmul_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	MUL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vmulq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	MUL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vmul_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	MUL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vmulq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	MUL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vmul_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.2S}$	MUL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vmulq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow \text{Vn.4S}$ $b \rightarrow \text{Vm.4S}$	MUL Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vmul_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	MUL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vmulq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	MUL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vmul_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	MUL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vmulq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	MUL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vmul_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.2S}$	MUL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
float64x1_t vmul_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FMUL Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
float32x4_t vmulxq_f32 (float32x4_t a, float32x4_t b)	a → Vn.4S b → Vm.4S	FMULX Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x1_t vmulx_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FMULX Dd,Dn,Dm	Dd	ARMv8(AArch64)
float64x2_t vmulxq_f64 (float64x2_t a, float64x2_t b)	a → Vn.2D b → Vm.2D	FMULX Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32_t vmulxs_f32 (float32_t a, float32_t b)	a → Sn b → Sm	FMULX Sd,Sn,Sm	Sd	ARMv8(AArch64)

float64_t vmulxd_f64 (float64_t a, float64_t b)	a → Dn b → Dm	FMULX Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
float32x4_t vmulxq_lane_f32 (float32x4_t a, float32x2_t v, const int lane)	a → Vn.4S v → Vm.2S 0 ≤ lane ≤ 1	FMULX Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
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	ARMv8(AArch64)
float64x2_t vmulxq_lane_f64 (float64x2_t a, float64x1_t v, const int lane)	a → Vn.2D v → Vm.1D lane == 0	FMULX Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
float32x4_t vmulxq_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	ARMv8(AArch64)
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	ARMv8(AArch64)

float64x2_t vmulxq_laneq_f64 (float64x2_t a, float64x2_t v, const int lane)	$a \rightarrow Vn.2D$ $v \rightarrow Vm.2D$ $0 \leq lane \leq 1$	FMULX Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D	ARMv8(AArch64)
float32_t vmulxs_laneq_f32 (float32_t a, float32x4_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	FMULX Sd,Sn,Vm.S[lane]	Sd	ARMv8(AArch64)
float64_t vmulxd_laneq_f64 (float64_t a, float64x2_t v, const int lane)	$a \rightarrow Dn$ $v \rightarrow Vm.2D$ $0 \leq lane \leq 1$	FMULX Dd,Dn,Vm.D[lane]	Dd	ARMv8(AArch64)
float32x2_t vdiv_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FDIV Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vdivq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FDIV Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x1_t vdiv_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FDIV Dd,Dn,Dm	Dd	ARMv8(AArch64)
float64x2_t vdivq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FDIV Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
int8x8_t vmla_s8 (int8x8_t a, int8x8_t b, int8x8_t c)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $c \rightarrow Vm.8B$	MLA Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vmlaq_s8 (int8x16_t a, int8x16_t b, int8x16_t c)	$a \rightarrow Vd.16B$ $b \rightarrow Vn.16B$ $c \rightarrow Vm.16B$	MLA Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vmla_s16 (int16x4_t a, int16x4_t b, int16x4_t c)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $c \rightarrow Vm.4H$	MLA Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vmlaq_s16 (int16x8_t a, int16x8_t b, int16x8_t c)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.8H$ $c \rightarrow Vm.8H$	MLA Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint8x8_t vmls_u8 (uint8x8_t a, uint8x8_t b, uint8x8_t c)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $c \rightarrow \text{Vm.8B}$	MLS Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vmlsq_u8 (uint8x16_t a, uint8x16_t b, uint8x16_t c)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $c \rightarrow \text{Vm.16B}$	MLS Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vmls_u16 (uint16x4_t a, uint16x4_t b, uint16x4_t c)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $c \rightarrow \text{Vm.4H}$	MLS Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vmlsq_u16 (uint16x8_t a, uint16x8_t b, uint16x8_t c)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $c \rightarrow \text{Vm.8H}$	MLS Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vmls_u32 (uint32x2_t a, uint32x2_t b, uint32x2_t c)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $c \rightarrow \text{Vm.2S}$	MLS Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vmlsq_u32 (uint32x4_t a, uint32x4_t b, uint32x4_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $c \rightarrow \text{Vm.4S}$	MLS Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float32x2_t vmls_f32 (float32x2_t a, float32x2_t b, float32x2_t c)	$a \rightarrow \text{N/A}$ $b \rightarrow \text{N/A}$ $c \rightarrow \text{N/A}$	RESULT[I] = a[i] - (b[i] * c[i]) for i = 0 to 1	N/A	ARMv7, ARMv8
float32x4_t vmlsq_f32 (float32x4_t a, float32x4_t b, float32x4_t c)	$a \rightarrow \text{N/A}$ $b \rightarrow \text{N/A}$ $c \rightarrow \text{N/A}$	RESULT[I] = a[i] - (b[i] * c[i]) for i = 0 to 3	N/A	ARMv7, ARMv8
float64x1_t vmls_f64 (float64x1_t a, float64x1_t b, float64x1_t c)	$a \rightarrow \text{N/A}$ $b \rightarrow \text{N/A}$ $c \rightarrow \text{N/A}$	RESULT[I] = a[i] - (b[i] * c[i]) for i = 0	N/A	ARMv8(AArch64)
float64x2_t vmlsq_f64 (float64x2_t a, float64x2_t b, float64x2_t c)	$a \rightarrow \text{N/A}$ $b \rightarrow \text{N/A}$ $c \rightarrow \text{N/A}$	RESULT[I] = a[i] - (b[i] * c[i]) for i = 0 to 1	N/A	ARMv8(AArch64)

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
int16x8_t vmlsl_high_s8 (int16x8_t a, int8x16_t b, int8x16_t c)	a → Vd.8H b → Vn.16B c → Vm.16B	SMLS�2 Vd.8H,Vn.16B,Vm.16B	Vd.8H	ARMv8(AArch64)
int32x4_t vmlsl_high_s16 (int32x4_t a, int16x8_t b, int16x8_t c)	a → Vd.4S b → Vn.8H c → Vm.8H	SMLS�2 Vd.4S,Vn.8H,Vm.8H	Vd.4S	ARMv8(AArch64)
int64x2_t vmlsl_high_s32 (int64x2_t a, int32x4_t b, int32x4_t c)	a → Vd.2D b → Vn.4S c → Vm.4S	SMLS�2 Vd.2D,Vn.4S,Vm.4S	Vd.2D	ARMv8(AArch64)
uint16x8_t vmlsl_high_u8 (uint16x8_t a, uint8x16_t b, uint8x16_t c)	a → Vd.8H b → Vn.16B c → Vm.16B	UMLS�2 Vd.8H,Vn.16B,Vm.16B	Vd.8H	ARMv8(AArch64)

uint32x4_t vmlsl_high_u16 (uint32x4_t a, uint16x8_t b, uint16x8_t c)	a → Vd.4S b → Vn.8H c → Vm.8H	UMLSL2 Vd.4S,Vn.8H,Vm.8H	Vd.4S	ARMv8(AArch64)
uint64x2_t vmlsl_high_u32 (uint64x2_t a, uint32x4_t b, uint32x4_t c)	a → Vd.2D b → Vn.4S c → Vm.4S	UMLSL2 Vd.2D,Vn.4S,Vm.4S	Vd.2D	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
float64x1_t vfma_f64 (float64x1_t a, float64x1_t b, float64x1_t c)	a → Da b → Dn c → Dm	FMADD Dd,Dn,Dm,Da	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
int16x8_t vqdmulhq_s16 (int16x8_t a, int16x8_t b)	a → Vn.8H b → Vm.8H	SQDMULH Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
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	ARMv7, ARMv8
int32x4_t vqdmulhq_s32 (int32x4_t a, int32x4_t b)	a → Vn.4S b → Vm.4S	SQDMULH Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8

int16_t vqdmulhh_s16 (int16_t a, int16_t b)	a → Hn b → Hm	SQDMULH Hd,Hn,Hm	Hd	ARMv8(AArch64)
int32_t vqdmulhs_s32 (int32_t a, int32_t b)	a → Sn b → Sm	SQDMULH Sd,Sn,Sm	Sd	ARMv8(AArch64)
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	ARMv7, ARMv8
int16x8_t vqrdmulhq_s16 (int16x8_t a, int16x8_t b)	a → Vn.8H b → Vm.8H	SQRDMULH Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
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	ARMv7, ARMv8
int32x4_t vqrdmulhq_s32 (int32x4_t a, int32x4_t b)	a → Vn.4S b → Vm.4S	SQRDMULH Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int16_t vqrdmulhh_s16 (int16_t a, int16_t b)	a → Hn b → Hm	SQRDMULH Hd,Hn,Hm	Hd	ARMv8(AArch64)
int32_t vqrdmulhs_s32 (int32_t a, int32_t b)	a → Sn b → Sm	SQRDMULH Sd,Sn,Sm	Sd	ARMv8(AArch64)
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	ARMv7, ARMv8
int64x2_t vqdmulal_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	ARMv7, ARMv8
int32_t vqdmulalh_s16 (int32_t a, int16_t b, int16_t c)	a → Sd b → Hn c → Hm	SQDMLAL Sd,Hn,Hm	Sd	ARMv8(AArch64)

int64_t vqdmmlals_s32 (int64_t a, int32_t b, int32_t c)	a → Dd b → Sn c → Sm	SQDMLAL Dd,Sn,Sm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
int32_t vqdmmlslh_s16 (int32_t a, int16_t b, int16_t c)	a → Sd b → Hn c → Hm	SQDMLSL Sd,Hn,Hm	Sd	ARMv8(AArch64)
int64_t vqdmmlsls_s32 (int64_t a, int32_t b, int32_t c)	a → Dd b → Sn c → Sm	SQDMLSL Dd,Sn,Sm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv7, ARMv8
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	ARMv7, ARMv8
int32_t vqdmullh_s16 (int16_t a, int16_t b)	a → Hn b → Hm	SQDMULL Sd,Hn,Hm	Sd	ARMv8(AArch64)
int64_t vqdmulls_s32 (int32_t a, int32_t b)	a → Sn b → Sm	SQDMULL Dd,Sn,Sm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

int64x1_t vsub_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SUB Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vsubq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SUB Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
uint8x8_t vsub_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SUB Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vsubq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SUB Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vsub_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SUB Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vsubq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SUB Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vsub_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	SUB Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vsubq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SUB Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vsub_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SUB Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vsubq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SUB Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
float32x2_t vsub_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vsubq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8

float64x1_t vsub_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FSUB Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
int64_t vsubd_s64 (int64_t a, int64_t b)	a → Dn b → Dm	SUB Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vsubd_u64 (uint64_t a, uint64_t b)	a → Dn b → Dm	SUB Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint16x4_t vhsb_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UHSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vhsbq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UHSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vhsb_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UHSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vhsbq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UHSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int8x8_t vqsb_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SQSUB Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vqsbq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SQSUB Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vqsb_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SQSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vqsbq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SQSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vqsb_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	SQSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vqsbq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SQSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vqsb_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SQSUB Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vqsbq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SQSUB Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8

uint8x8_t vqsub_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UQSUB Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vqsubq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UQSUB Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vqsub_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UQSUB Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vqsubq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UQSUB Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vqsub_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UQSUB Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vqsubq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UQSUB Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vqsub_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQSUB Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vqsubq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UQSUB Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
int8_t vqsubb_s8 (int8_t a, int8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	SQSUB Bd,Bn,Bm	Bd	ARMv8(AArch64)
int16_t vqsubh_s16 (int16_t a, int16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	SQSUB Hd,Hn,Hm	Hd	ARMv8(AArch64)
int32_t vqsubs_s32 (int32_t a, int32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	SQSUB Sd,Sn,Sm	Sd	ARMv8(AArch64)
int64_t vqsubd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SQSUB Dd,Dn,Dm	Dd	ARMv8(AArch64)

uint8_t vqsubb_u8 (uint8_t a, uint8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	UQSUB Bd,Bn,Bm	Bd	ARMv8(AArch64)
uint16_t vqsubh_u16 (uint16_t a, uint16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	UQSUB Hd,Hn,Hm	Hd	ARMv8(AArch64)
uint32_t vqsubs_u32 (uint32_t a, uint32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	UQSUB Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vqsubd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQSUB Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vsubhn_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SUBHN Vd.8B,Vn.8H,Vm.8H	Vd.8B	ARMv7, ARMv8
int16x4_t vsubhn_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SUBHN Vd.4H,Vn.4S,Vm.4S	Vd.4H	ARMv7, ARMv8
int32x2_t vsubhn_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SUBHN Vd.2S,Vn.2D,Vm.2D	Vd.2S	ARMv7, ARMv8
uint8x8_t vsubhn_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SUBHN Vd.8B,Vn.8H,Vm.8H	Vd.8B	ARMv7, ARMv8
uint16x4_t vsubhn_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SUBHN Vd.4H,Vn.4S,Vm.4S	Vd.4H	ARMv7, ARMv8
uint32x2_t vsubhn_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SUBHN Vd.2S,Vn.2D,Vm.2D	Vd.2S	ARMv7, ARMv8
int8x16_t vsubhn_high_s16 (int8x8_t r, int16x8_t a, int16x8_t b)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SUBHN2 Vd.16B,Vn.8H,Vm.8H	Vd.16B	ARMv8(AArch64)
int16x8_t vsubhn_high_s32 (int16x4_t r, int32x4_t a, int32x4_t b)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SUBHN2 Vd.8H,Vn.4S,Vm.4S	Vd.8H	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)

int16x8_t vrsubhn_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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint8x8_t vceq_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMEQ Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vceqq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMEQ Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vceq_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMEQ Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vceqq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMEQ Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vceq_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	CMEQ Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vceqq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	CMEQ Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint32x2_t vceq_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FCMEQ Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vceqq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FCMEQ Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vceq_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMEQ Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vceqq_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMEQ Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint64x1_t vceq_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMEQ Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vceqq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

uint64x1_t vceq_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMEQ Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vceqq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vceq_p64 (poly64x1_t a, poly64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMEQ Dd,Dn,Dm	Dd	ARMv8
uint64x2_t vceqq_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8
uint64x1_t vceq_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMEQ Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vceqq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FCMEQ Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint64_t vceqd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMEQ Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vceqd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMEQ Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint32_t vceqs_f32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FCMEQ Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vceqd_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMEQ Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint8x8_t vceqz_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CMEQ Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vceqzq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CMEQ Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint16x4_t vceqz_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CMEQ Vd.4H,Vn.4H,#0	Vd.4H	ARMv8(AArch64)

uint16x8_t vceqz_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CMEQ Vd.8H,Vn.8H,#0	Vd.8H	ARMv8(AArch64)
uint32x2_t vceqz_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CMEQ Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vceqz_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CMEQ Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint8x8_t vceqz_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	CMEQ Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vceqz_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	CMEQ Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint16x4_t vceqz_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	CMEQ Vd.4H,Vn.4H,#0	Vd.4H	ARMv8(AArch64)
uint16x8_t vceqz_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	CMEQ Vd.8H,Vn.8H,#0	Vd.8H	ARMv8(AArch64)
uint32x2_t vceqz_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	CMEQ Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vceqz_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	CMEQ Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint32x2_t vceqz_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCMEQ Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vceqz_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCMEQ Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint8x8_t vceqz_p8 (poly8x8_t a)	$a \rightarrow Vn.8B$	CMEQ Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vceqz_p8 (poly8x16_t a)	$a \rightarrow Vn.16B$	CMEQ Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint64x1_t vceqz_s64 (int64x1_t a)	$a \rightarrow Dn$	CMEQ Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vceqz_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	CMEQ Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)

uint64x1_t vceqz_u64 (uint64x1_t a)	$a \rightarrow Dn$	CMEQ Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vceqzq_u64 (uint64x2_t a)	$a \rightarrow Vn.2D$	CMEQ Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint64x1_t vceqz_p64 (poly64x1_t a)	$a \rightarrow Dn$	CMEQ Dd,Dn,#0	Dd	ARMv8
uint64x2_t vceqzq_p64 (poly64x2_t a)	$a \rightarrow Vn.2D$	CMEQ Vd.2D,Vn.2D,#0	Vd.2D	ARMv8
uint64x1_t vceqz_f64 (float64x1_t a)	$a \rightarrow Dn$	FCMEQ Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vceqzq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCMEQ Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint64_t vceqzd_s64 (int64_t a)	$a \rightarrow Dn$	CMEQ Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64_t vceqzd_u64 (uint64_t a)	$a \rightarrow Dn$	CMEQ Dd,Dn,#0	Dd	ARMv8(AArch64)
uint32_t vceqzs_f32 (float32_t a)	$a \rightarrow Sn$	FCMEQ Sd,Sn,#0	Sd	ARMv8(AArch64)
uint64_t vceqzd_f64 (float64_t a)	$a \rightarrow Dn$	FCMEQ Dd,Dn,#0	Dd	ARMv8(AArch64)
uint8x8_t vcge_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMGE Vd.8B,Vm.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vcgeq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMGE Vd.16B,Vm.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vcge_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMGE Vd.4H,Vm.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vcgeq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMGE Vd.8H,Vm.8H,Vn.8H	Vd.8H	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
uint64x1_t vcge_s64 (int64x1_t a, int64x1_t b)	a → Dn b → Dm	CMGE Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)

uint64x1_t vcge_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHS Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcgeq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMHS Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcge_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGE Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcgeq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FCMGE Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64_t vcged_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMGE Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vcged_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHS Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint32_t vcges_f32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FCMGE Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vcged_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGE Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint8x8_t vcgez_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CMGE Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vcgezq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CMGE Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint16x4_t vcgez_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CMGE Vd.4H,Vn.4H,#0	Vd.4H	ARMv8(AArch64)
uint16x8_t vcgezq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CMGE Vd.8H,Vn.8H,#0	Vd.8H	ARMv8(AArch64)
uint32x2_t vcgez_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CMGE Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)

uint32x4_t vcgezq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CMGE Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vcgez_s64 (int64x1_t a)	$a \rightarrow Dn$	CMGE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vcgezq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	CMGE Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint32x2_t vcgez_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCMGE Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vcgezq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCMGE Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vcgez_f64 (float64x1_t a)	$a \rightarrow Dn$	FCMGE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vcgezq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCMGE Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint64_t vcgezd_s64 (int64_t a)	$a \rightarrow Dn$	CMGE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint32_t vcgezs_f32 (float32_t a)	$a \rightarrow Sn$	FCMGE Sd,Sn,#0	Sd	ARMv8(AArch64)
uint64_t vcgezd_f64 (float64_t a)	$a \rightarrow Dn$	FCMGE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint8x8_t vcle_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMGE Vd.8B,Vm.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vcleq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMGE Vd.16B,Vm.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vcle_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMGE Vd.4H,Vm.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vcleq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMGE Vd.8H,Vm.8H,Vn.8H	Vd.8H	ARMv7, ARMv8

uint32x2_t vcle_s32 (int32x2_t a, int32x2_t b)	a → Vn.2S b → Vm.2S	CMGE Vd.2S,Vm.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcleq_s32 (int32x4_t a, int32x4_t b)	a → Vn.4S b → Vm.4S	CMGE Vd.4S,Vm.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
uint64x1_t vcle_s64 (int64x1_t a, int64x1_t b)	a → Dn b → Dm	CMGE Dd,Dm,Dn	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)

uint64x1_t vcld_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHS Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcldq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMHS Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcld_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGE Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcldq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FCMGE Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64_t vcld_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMGE Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64_t vcld_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHS Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint32_t vcld_s32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FCMGE Sd,Sm,Sn	Sd	ARMv8(AArch64)
uint64_t vcld_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGE Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint8x8_t vcldz_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CMLE Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vcldzq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CMLE Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint16x4_t vcldz_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CMLE Vd.4H,Vn.4H,#0	Vd.4H	ARMv8(AArch64)
uint16x8_t vcldzq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CMLE Vd.8H,Vn.8H,#0	Vd.8H	ARMv8(AArch64)
uint32x2_t vcldz_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CMLE Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)

uint32x4_t vclezq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CMLE Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vclez_s64 (int64x1_t a)	$a \rightarrow Dn$	CMLE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vclezq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	CMLE Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint32x2_t vclez_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	CMLE Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vclezq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCMLE Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vclez_f64 (float64x1_t a)	$a \rightarrow Dn$	FCMLE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vclezq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCMLE Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint64_t vclezd_s64 (int64_t a)	$a \rightarrow Dn$	CMLE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint32_t vclezs_f32 (float32_t a)	$a \rightarrow Sn$	FCMLE Sd,Sn,#0	Sd	ARMv8(AArch64)
uint64_t vclezd_f64 (float64_t a)	$a \rightarrow Dn$	FCMLE Dd,Dn,#0	Dd	ARMv8(AArch64)
uint8x8_t vcgt_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMGT Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vcgtq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMGT Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vcgt_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMGT Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vcgtq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMGT Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8

uint32x2_t vcgt_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	CMGT Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcgtq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	CMGT Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vcgt_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMHI Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vcgtq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMHI Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vcgt_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMHI Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vcgtq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMHI Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vcgt_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	CMHI Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcgtq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	CMHI Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint32x2_t vcgt_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FCMGT Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcgtq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FCMGT Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vcgt_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMGT Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcgtq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMGT Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

uint64x1_t vcgtq_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHI Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcgtq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMHI Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcgtq_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGT Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcgtq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FCMGT Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint64_t vcgtd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMGT Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vcgtd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHI Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint32_t vcgts_f32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FCMGT Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vcgtd_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGT Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint8x8_t vcgtz_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CMGT Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vcgtzq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CMGT Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint16x4_t vcgtz_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CMGT Vd.4H,Vn.4H,#0	Vd.4H	ARMv8(AArch64)
uint16x8_t vcgtzq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CMGT Vd.8H,Vn.8H,#0	Vd.8H	ARMv8(AArch64)
uint32x2_t vcgtz_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CMGT Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)

uint32x4_t vcgtzq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CMGT Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vcgtz_s64 (int64x1_t a)	$a \rightarrow Dn$	CMGT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vcgtzq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	CMGT Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint32x2_t vcgtz_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCMGT Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vcgtzq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCMGT Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vcgtz_f64 (float64x1_t a)	$a \rightarrow Dn$	FCMGT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vcgtzq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCMGT Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint64_t vcgtzd_s64 (int64_t a)	$a \rightarrow Dn$	CMGT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint32_t vcgtzs_f32 (float32_t a)	$a \rightarrow Sn$	FCMGT Sd,Sn,#0	Sd	ARMv8(AArch64)
uint64_t vcgtzd_f64 (float64_t a)	$a \rightarrow Dn$	FCMGT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint8x8_t vclt_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMGT Vd.8B,Vm.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vcltq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMGT Vd.16B,Vm.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vclt_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMGT Vd.4H,Vm.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vcltq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMGT Vd.8H,Vm.8H,Vn.8H	Vd.8H	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
uint64x1_t vclt_s64 (int64x1_t a, int64x1_t b)	a → Dn b → Dm	CMGT Dd,Dm,Dn	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)

uint64x1_t vclt_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHI Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcltq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMHI Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vclt_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGT Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcltq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FCMGT Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64_t vcltd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMGT Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64_t vcltd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMHI Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint32_t vclts_f32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FCMGT Sd,Sm,Sn	Sd	ARMv8(AArch64)
uint64_t vcltd_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FCMGT Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint8x8_t vcltz_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CMLT Vd.8B,Vn.8B,#0	Vd.8B	ARMv8(AArch64)
uint8x16_t vcltzq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CMLT Vd.16B,Vn.16B,#0	Vd.16B	ARMv8(AArch64)
uint16x4_t vcltz_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CMLT Vd.4H,Vn.4H,#0	Vd.4H	ARMv8(AArch64)
uint16x8_t vcltzq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CMLT Vd.8H,Vn.8H,#0	Vd.8H	ARMv8(AArch64)
uint32x2_t vcltz_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CMLT Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)

uint32x4_t vcltzq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CMLT Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vcltz_s64 (int64x1_t a)	$a \rightarrow Dn$	CMLT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vcltzq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	CMLT Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint32x2_t vcltz_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCMLT Vd.2S,Vn.2S,#0	Vd.2S	ARMv8(AArch64)
uint32x4_t vcltzq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCMLT Vd.4S,Vn.4S,#0	Vd.4S	ARMv8(AArch64)
uint64x1_t vcltz_f64 (float64x1_t a)	$a \rightarrow Dn$	FCMLT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint64x2_t vcltzq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCMLT Vd.2D,Vn.2D,#0	Vd.2D	ARMv8(AArch64)
uint64_t vcltzd_s64 (int64_t a)	$a \rightarrow Dn$	CMLT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint32_t vcltzs_f32 (float32_t a)	$a \rightarrow Sn$	FCMLT Sd,Sn,#0	Sd	ARMv8(AArch64)
uint64_t vcltzd_f64 (float64_t a)	$a \rightarrow Dn$	FCMLT Dd,Dn,#0	Dd	ARMv8(AArch64)
uint32x2_t vcage_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FACGE Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcageq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FACGE Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vcage_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FACGE Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcageq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FACGE Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

uint32_t vcages_f32 (float32_t a, float32_t b)	$a \rightarrow S_n$ $b \rightarrow S_m$	FACGE Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vcaged_f64 (float64_t a, float64_t b)	$a \rightarrow D_n$ $b \rightarrow D_m$	FACGE Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint32x2_t vcale_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FACGE Vd.2S,Vm.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcaleq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FACGE Vd.4S,Vm.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vcale_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow D_n$ $b \rightarrow D_m$	FACGE Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcaleq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FACGE Vd.2D,Vm.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint32_t vcales_f32 (float32_t a, float32_t b)	$a \rightarrow S_n$ $b \rightarrow S_m$	FACGE Sd,Sm,Sn	Sd	ARMv8(AArch64)
uint64_t vcaled_f64 (float64_t a, float64_t b)	$a \rightarrow D_n$ $b \rightarrow D_m$	FACGE Dd,Dm,Dn	Dd	ARMv8(AArch64)
uint32x2_t vcagt_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FACGT Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcagtg_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FACGT Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vcagt_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow D_n$ $b \rightarrow D_m$	FACGT Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vcagtg_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FACGT Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

uint32_t vcagts_f32 (float32_t a, float32_t b)	a → Sn b → Sm	FACGT Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vcagtd_f64 (float64_t a, float64_t b)	a → Dn b → Dm	FACGT Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
uint64x1_t vcalt_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FACGT Dd,Dm,Dn	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
uint32_t vcalts_f32 (float32_t a, float32_t b)	a → Sn b → Sm	FACGT Sd,Sm,Sn	Sd	ARMv8(AArch64)
uint64_t vcaltd_f64 (float64_t a, float64_t b)	a → Dn b → Dm	FACGT Dd,Dm,Dn	Dd	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint32x2_t vtst_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	CMTST Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vtstq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	CMTST Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vtst_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMTST Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vtstq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMTST Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vtst_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMTST Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vtstq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMTST Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vtst_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	CMTST Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vtstq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	CMTST Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vtst_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	CMTST Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vtstq_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	CMTST Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vtst_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	CMTST Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vtstq_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	CMTST Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8

uint64x1_t vtst_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMTST Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vtstq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMTST Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vtst_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMTST Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64x2_t vtstq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMTST Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vtst_p64 (poly64x1_t a, poly64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMTST Dd,Dn,Dm	Dd	ARMv8
uint64x2_t vtstq_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	CMTST Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8
uint64_t vtstd_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMTST Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vtstd_u64 (uint64_t a, uint64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	CMTST Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vabd_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SABD Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vabdq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SABD Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vabd_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SABD Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vabdq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SABD Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
float64x1_t vabd_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FABD Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)

float32_t vabds_f32 (float32_t a, float32_t b)	a → Sn b → Sm	FABD Sd,Sn,Sm	Sd	ARMv8(AArch64)
float64_t vabdd_f64 (float64_t a, float64_t b)	a → Dn b → Dm	FABD Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint8x8_t vmax_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UMAX Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vmaxq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UMAX Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vmax_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UMAX Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vmaxq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UMAX Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vmax_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UMAX Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vmaxq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UMAX Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float32x2_t vmax_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FMAX Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vmaxq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FMAX Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float64x1_t vmax_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FMAX Dd,Dn,Dm	Dd	ARMv8(AArch64)
float64x2_t vmaxq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FMAX Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
int8x8_t vmin_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SMIN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vminq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SMIN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8

int16x4_t vmin_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SMIN Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vminq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SMIN Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vmin_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	SMIN Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vminq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SMIN Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vmin_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UMIN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vminq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UMIN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vmin_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UMIN Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vminq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UMIN Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vmin_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UMIN Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vminq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UMIN Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float32x2_t vmin_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FMIN Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vminq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FMIN Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8

float64x1_t vmin_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FMIN Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8
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	ARMv8
float64x1_t vmaxnm_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FMAXNM Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8
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	ARMv8
float64x1_t vminnm_f64 (float64x1_t a, float64x1_t b)	a → Dn b → Dm	FMINNM Dd,Dn,Dm	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8

int16x4_t vshl_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vshlq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vshl_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	SSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vshlq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vshl_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vshlq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
uint8x8_t vshl_u8 (uint8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	USHL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vshlq_u8 (uint8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	USHL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vshl_u16 (uint16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	USHL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vshlq_u16 (uint16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	USHL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vshl_u32 (uint32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	USHL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vshlq_u32 (uint32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	USHL Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8

uint64x1_t vshl_u64 (uint64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	USHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vshlq_u64 (uint64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	USHL Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
int64_t vshld_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vshld_u64 (uint64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	USHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vqshl_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SQSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vqshlq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SQSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vqshl_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SQSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vqshlq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SQSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vqshl_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	SQSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vqshlq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SQSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vqshl_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SQSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vqshlq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SQSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
uint64x1_t vqshl_u64 (uint64x1_t a, int64x1_t b)	a → Dn b → Dm	UQSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
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	ARMv7, ARMv8
int8_t vqshlb_s8 (int8_t a, int8_t b)	a → Bn b → Bm	SQSHL Bd,Bn,Bm	Bd	ARMv8(AArch64)
int16_t vqshlh_s16 (int16_t a, int16_t b)	a → Hn b → Hm	SQSHL Hd,Hn,Hm	Hd	ARMv8(AArch64)
int32_t vqshls_s32 (int32_t a, int32_t b)	a → Sn b → Sm	SQSHL Sd,Sn,Sm	Sd	ARMv8(AArch64)
int64_t vqshld_s64 (int64_t a, int64_t b)	a → Dn b → Dm	SQSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)

uint8_t vqshlb_u8 (uint8_t a, int8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	UQSHL Bd,Bn,Bm	Bd	ARMv8(AArch64)
uint16_t vqshlh_u16 (uint16_t a, int16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	UQSHL Hd,Hn,Hm	Hd	ARMv8(AArch64)
uint32_t vqshls_u32 (uint32_t a, int32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	UQSHL Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vqshld_u64 (uint64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vrshl_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SRSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vrshlq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SRSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vrshl_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	SRSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vrshlq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	SRSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vrshl_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	SRSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vrshlq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	SRSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vrshl_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SRSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vrshlq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	SRSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8

uint8x8_t vrshl_u8 (uint8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	URSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vrshlq_u8 (uint8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	URSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vrshl_u16 (uint16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	URSHL Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vrshlq_u16 (uint16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	URSHL Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vrshl_u32 (uint32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	URSHL Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vrshlq_u32 (uint32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	URSHL Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
uint64x1_t vrshl_u64 (uint64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	URSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vrshlq_u64 (uint64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	URSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
int64_t vrshld_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SRSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint64_t vrshld_u64 (uint64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	URSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vqrshl_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	SQRSHL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vqrshlq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	SQRSHL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
int64x1_t vqrshl_s64 (int64x1_t a, int64x1_t b)	a → Dn b → Dm	SQRSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint64x1_t vqrshl_u64 (uint64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQRSHL Dd,Dn,Dm	Dd	ARMv7, ARMv8
uint64x2_t vqrshlq_u64 (uint64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UQRSHL Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv7, ARMv8
int8_t vqrshlb_s8 (int8_t a, int8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	SQRSHL Bd,Bn,Bm	Bd	ARMv8(AArch64)
int16_t vqrshlh_s16 (int16_t a, int16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	SQRSHL Hd,Hn,Hm	Hd	ARMv8(AArch64)
int32_t vqrshls_s32 (int32_t a, int32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	SQRSHL Sd,Sn,Sm	Sd	ARMv8(AArch64)
int64_t vqrshld_s64 (int64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	SQRSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
uint8_t vqrshlb_u8 (uint8_t a, int8_t b)	$a \rightarrow Bn$ $b \rightarrow Bm$	UQRSHL Bd,Bn,Bm	Bd	ARMv8(AArch64)
uint16_t vqrshlh_u16 (uint16_t a, int16_t b)	$a \rightarrow Hn$ $b \rightarrow Hm$	UQRSHL Hd,Hn,Hm	Hd	ARMv8(AArch64)
uint32_t vqrshls_u32 (uint32_t a, int32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	UQRSHL Sd,Sn,Sm	Sd	ARMv8(AArch64)
uint64_t vqrshld_u64 (uint64_t a, int64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	UQRSHL Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vshr_n_s8 (int8x8_t a, const int n)	$a \rightarrow Vn.8B$ $1 \leq n \leq 8$	SSHR Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vshrq_n_s8 (int8x16_t a, const int n)	$a \rightarrow Vn.16B$ $1 \leq n \leq 8$	SSHR Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8

int16x4_t vshr_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $1 \leq n \leq 16$	SSHR Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vshrq_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 16$	SSHR Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vshr_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	SSHR Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vshrq_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	SSHR Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vshr_n_s64 (int64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	SSHR Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vshrq_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	SSHR Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vshr_n_u8 (uint8x8_t a, const int n)	$a \rightarrow Vn.8B$ $1 \leq n \leq 8$	USHR Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vshrq_n_u8 (uint8x16_t a, const int n)	$a \rightarrow Vn.16B$ $1 \leq n \leq 8$	USHR Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vshr_n_u16 (uint16x4_t a, const int n)	$a \rightarrow Vn.4H$ $1 \leq n \leq 16$	USHR Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vshrq_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 16$	USHR Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vshr_n_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	USHR Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vshrq_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	USHR Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8

uint64x1_t vshr_n_u64 (uint64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	USHR Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vshrq_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	USHR Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
int64_t vshrd_n_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	SSHR Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64_t vshrd_n_u64 (uint64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	USHR Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vshl_n_s8 (int8x8_t a, const int n)	$a \rightarrow Vn.8B$ $0 \leq n \leq 7$	SHL Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vshlq_n_s8 (int8x16_t a, const int n)	$a \rightarrow Vn.16B$ $0 \leq n \leq 7$	SHL Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
int16x4_t vshl_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	SHL Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vshlq_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	SHL Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vshl_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	SHL Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vshlq_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	SHL Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vshl_n_s64 (int64x1_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SHL Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vshlq_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $0 \leq n \leq 63$	SHL Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8

uint8x8_t vshl_n_u8 (uint8x8_t a, const int n)	$a \rightarrow Vn.8B$ $0 \leq n \leq 7$	SHL Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vshlq_n_u8 (uint8x16_t a, const int n)	$a \rightarrow Vn.16B$ $0 \leq n \leq 7$	SHL Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vshl_n_u16 (uint16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	SHL Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vshlq_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	SHL Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vshl_n_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	SHL Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vshlq_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	SHL Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint64x1_t vshl_n_u64 (uint64x1_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SHL Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vshlq_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $0 \leq n \leq 63$	SHL Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
int64_t vshld_n_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SHL Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64_t vshld_n_u64 (uint64_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SHL Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vrshr_n_s8 (int8x8_t a, const int n)	$a \rightarrow Vn.8B$ $1 \leq n \leq 8$	SRSR Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vrshrq_n_s8 (int8x16_t a, const int n)	$a \rightarrow Vn.16B$ $1 \leq n \leq 8$	SRSR Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8

int16x4_t vrshr_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $1 \leq n \leq 16$	SRSHR Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vrshrq_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 16$	SRSHR Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vrshr_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	SRSHR Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vrshrq_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	SRSHR Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vrshr_n_s64 (int64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	SRSHR Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vrshrq_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	SRSHR Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vrshr_n_u8 (uint8x8_t a, const int n)	$a \rightarrow Vn.8B$ $1 \leq n \leq 8$	URSHR Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vrshrq_n_u8 (uint8x16_t a, const int n)	$a \rightarrow Vn.16B$ $1 \leq n \leq 8$	URSHR Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vrshr_n_u16 (uint16x4_t a, const int n)	$a \rightarrow Vn.4H$ $1 \leq n \leq 16$	URSHR Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vrshrq_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 16$	URSHR Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vrshr_n_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	URSHR Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vrshrq_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	URSHR Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8

uint64x1_t vrshr_n_u64 (uint64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	URSHR Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vrshrq_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	URSHR Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
int64_t vrshrd_n_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	SRSR Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64_t vrshrd_n_u64 (uint64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	URSHR Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vsra_n_s8 (int8x8_t a, int8x8_t b, const int n)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $1 \leq n \leq 8$	SSRA Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vsraq_n_s8 (int8x16_t a, int8x16_t b, const int n)	$a \rightarrow Vd.16B$ $b \rightarrow Vn.16B$ $1 \leq n \leq 8$	SSRA Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
int16x4_t vsra_n_s16 (int16x4_t a, int16x4_t b, const int n)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $1 \leq n \leq 16$	SSRA Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vsraq_n_s16 (int16x8_t a, int16x8_t b, const int n)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.8H$ $1 \leq n \leq 16$	SSRA Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vsra_n_s32 (int32x2_t a, int32x2_t b, const int n)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $1 \leq n \leq 32$	SSRA Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vsraq_n_s32 (int32x4_t a, int32x4_t b, const int n)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $1 \leq n \leq 32$	SSRA Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vsra_n_s64 (int64x1_t a, int64x1_t b, const int n)	$a \rightarrow Dd$ $b \rightarrow Dn$ $1 \leq n \leq 64$	SSRA Dd,Dn,#n	Dd	ARMv7, ARMv8

int64x2_t vsraq_n_s64 (int64x2_t a, int64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $1 \leq n \leq 64$	SSRA Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vsra_n_u8 (uint8x8_t a, uint8x8_t b, const int n)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $1 \leq n \leq 8$	USRA Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vsraq_n_u8 (uint8x16_t a, uint8x16_t b, const int n)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $1 \leq n \leq 8$	USRA Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vsra_n_u16 (uint16x4_t a, uint16x4_t b, const int n)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $1 \leq n \leq 16$	USRA Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vsraq_n_u16 (uint16x8_t a, uint16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $1 \leq n \leq 16$	USRA Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vsra_n_u32 (uint32x2_t a, uint32x2_t b, const int n)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $1 \leq n \leq 32$	USRA Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vsraq_n_u32 (uint32x4_t a, uint32x4_t b, const int n)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $1 \leq n \leq 32$	USRA Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint64x1_t vsra_n_u64 (uint64x1_t a, uint64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	USRA Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vsraq_n_u64 (uint64x2_t a, uint64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $1 \leq n \leq 64$	USRA Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
int64_t vsrad_n_s64 (int64_t a, int64_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	SSRA Dd,Dn,#n	Dd	ARMv8(AArch64)

uint64_t vsrad_n_u64 (uint64_t a, uint64_t b, const int n)	$a \rightarrow Dd$ $b \rightarrow Dn$ $1 \leq n \leq 64$	USRA Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vrsra_n_s8 (int8x8_t a, int8x8_t b, const int n)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $1 \leq n \leq 8$	SRSRA Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vrsraq_n_s8 (int8x16_t a, int8x16_t b, const int n)	$a \rightarrow Vd.16B$ $b \rightarrow Vn.16B$ $1 \leq n \leq 8$	SRSRA Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
int16x4_t vrsra_n_s16 (int16x4_t a, int16x4_t b, const int n)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $1 \leq n \leq 16$	SRSRA Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vrsraq_n_s16 (int16x8_t a, int16x8_t b, const int n)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.8H$ $1 \leq n \leq 16$	SRSRA Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vrsra_n_s32 (int32x2_t a, int32x2_t b, const int n)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $1 \leq n \leq 32$	SRSRA Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vrsraq_n_s32 (int32x4_t a, int32x4_t b, const int n)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $1 \leq n \leq 32$	SRSRA Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vrsra_n_s64 (int64x1_t a, int64x1_t b, const int n)	$a \rightarrow Dd$ $b \rightarrow Dn$ $1 \leq n \leq 64$	SRSRA Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vrsraq_n_s64 (int64x2_t a, int64x2_t b, const int n)	$a \rightarrow Vd.2D$ $b \rightarrow Vn.2D$ $1 \leq n \leq 64$	SRSRA Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vrsra_n_u8 (uint8x8_t a, uint8x8_t b, const int n)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $1 \leq n \leq 8$	URSRA Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8

uint8x16_t vrsraq_n_u8 (uint8x16_t a, uint8x16_t b, const int n)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $1 \leq n \leq 8$	URSRA Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vrsra_n_u16 (uint16x4_t a, uint16x4_t b, const int n)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $1 \leq n \leq 16$	URSRA Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vrsraq_n_u16 (uint16x8_t a, uint16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $1 \leq n \leq 16$	URSRA Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vrsra_n_u32 (uint32x2_t a, uint32x2_t b, const int n)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $1 \leq n \leq 32$	URSRA Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vrsraq_n_u32 (uint32x4_t a, uint32x4_t b, const int n)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $1 \leq n \leq 32$	URSRA Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint64x1_t vrsra_n_u64 (uint64x1_t a, uint64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	URSRA Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vrsraq_n_u64 (uint64x2_t a, uint64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $1 \leq n \leq 64$	URSRA Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
int64_t vrsrad_n_s64 (int64_t a, int64_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	SRSRA Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64_t vrsrad_n_u64 (uint64_t a, uint64_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	URSRA Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vqshl_n_s8 (int8x8_t a, const int n)	$a \rightarrow \text{Vn.8B}$ $0 \leq n \leq 7$	SQSHL Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vqshlq_n_s8 (int8x16_t a, const int n)	$a \rightarrow \text{Vn.16B}$ $0 \leq n \leq 7$	SQSHL Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8

int16x4_t vqshl_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	SQSHL Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vqshlq_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	SQSHL Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vqshl_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	SQSHL Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vqshlq_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	SQSHL Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vqshl_n_s64 (int64x1_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SQSHL Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vqshlq_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $0 \leq n \leq 63$	SQSHL Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vqshl_n_u8 (uint8x8_t a, const int n)	$a \rightarrow Vn.8B$ $0 \leq n \leq 7$	UQSHL Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vqshlq_n_u8 (uint8x16_t a, const int n)	$a \rightarrow Vn.16B$ $0 \leq n \leq 7$	UQSHL Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vqshl_n_u16 (uint16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	UQSHL Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vqshlq_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	UQSHL Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vqshl_n_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	UQSHL Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vqshlq_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	UQSHL Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8

uint64x1_t vqshl_n_u64 (uint64x1_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	UQSHL Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vqshlq_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $0 \leq n \leq 63$	UQSHL Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
int8_t vqshlb_n_s8 (int8_t a, const int n)	$a \rightarrow Bn$ $0 \leq n \leq 7$	SQSHL Bd,Bn,#n	Bd	ARMv8(AArch64)
int16_t vqshlh_n_s16 (int16_t a, const int n)	$a \rightarrow Hn$ $0 \leq n \leq 15$	SQSHL Hd,Hn,#n	Hd	ARMv8(AArch64)
int32_t vqshls_n_s32 (int32_t a, const int n)	$a \rightarrow Sn$ $0 \leq n \leq 31$	SQSHL Sd,Sn,#n	Sd	ARMv8(AArch64)
int64_t vqshld_n_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SQSHL Dd,Dn,#n	Dd	ARMv8(AArch64)
uint8_t vqshlb_n_u8 (uint8_t a, const int n)	$a \rightarrow Bn$ $0 \leq n \leq 7$	UQSHL Bd,Bn,#n	Bd	ARMv8(AArch64)
uint16_t vqshlh_n_u16 (uint16_t a, const int n)	$a \rightarrow Hn$ $0 \leq n \leq 15$	UQSHL Hd,Hn,#n	Hd	ARMv8(AArch64)
uint32_t vqshls_n_u32 (uint32_t a, const int n)	$a \rightarrow Sn$ $0 \leq n \leq 31$	UQSHL Sd,Sn,#n	Sd	ARMv8(AArch64)
uint64_t vqshld_n_u64 (uint64_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	UQSHL Dd,Dn,#n	Dd	ARMv8(AArch64)
uint8x8_t vqshlu_n_s8 (int8x8_t a, const int n)	$a \rightarrow Vn.8B$ $0 \leq n \leq 7$	SQSHLU Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vqshluq_n_s8 (int8x16_t a, const int n)	$a \rightarrow Vn.16B$ $0 \leq n \leq 7$	SQSHLU Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8

uint16x4_t vqshlu_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	SQSHLU Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vqshluq_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	SQSHLU Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vqshlu_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	SQSHLU Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vqshluq_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	SQSHLU Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint64x1_t vqshlu_n_s64 (int64x1_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SQSHLU Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vqshluq_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $0 \leq n \leq 63$	SQSHLU Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8_t vqshlub_n_s8 (int8_t a, const int n)	$a \rightarrow Bn$ $0 \leq n \leq 7$	SQSHLU Bd,Bn,#n	Bd	ARMv8(AArch64)
uint16_t vqshluh_n_s16 (int16_t a, const int n)	$a \rightarrow Hn$ $0 \leq n \leq 15$	SQSHLU Hd,Hn,#n	Hd	ARMv8(AArch64)
uint32_t vqshlus_n_s32 (int32_t a, const int n)	$a \rightarrow Sn$ $0 \leq n \leq 31$	SQSHLU Sd,Sn,#n	Sd	ARMv8(AArch64)
uint64_t vqshlud_n_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $0 \leq n \leq 63$	SQSHLU Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vshrn_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
int16x4_t vshrn_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8

int32x2_t vshrn_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
uint8x8_t vshrn_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
uint16x4_t vshrn_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
uint32x2_t vshrn_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
int8x16_t vshrn_high_n_s16 (int8x8_t r, int16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
int16x8_t vshrn_high_n_s32 (int16x4_t r, int32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
int32x4_t vshrn_high_n_s64 (int32x2_t r, int64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
uint8x16_t vshrn_high_n_u16 (uint8x8_t r, uint16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
uint16x8_t vshrn_high_n_u32 (uint16x4_t r, uint32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vshrn_high_n_u64 (uint32x2_t r, uint64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
uint8x8_t vqshrun_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQSHRUN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8

uint16x4_t vqshrun_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQSHRUN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
uint32x2_t vqshrun_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQSHRUN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
uint8_t vqshrunh_n_s16 (int16_t a, const int n)	$a \rightarrow Hn$ $1 \leq n \leq 8$	SQSHRUN Bd,Hn,#n	Bd	ARMv8(AArch64)
uint16_t vqshruns_n_s32 (int32_t a, const int n)	$a \rightarrow Sn$ $1 \leq n \leq 16$	SQSHRUN Hd,Sn,#n	Hd	ARMv8(AArch64)
uint32_t vqshrund_n_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 32$	SQSHRUN Sd,Dn,#n	Sd	ARMv8(AArch64)
uint8x16_t vqshrun_high_n_s16 (uint8x8_t r, int16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQSHRUN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
uint16x8_t vqshrun_high_n_s32 (uint16x4_t r, int32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQSHRUN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vqshrun_high_n_s64 (uint32x2_t r, int64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQSHRUN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
uint8x8_t vqrshrun_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQRSHRUN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
uint16x4_t vqrshrun_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQRSHRUN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
uint32x2_t vqrshrun_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQRSHRUN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
uint8_t vqrshrunh_n_s16 (int16_t a, const int n)	$a \rightarrow Hn$ $1 \leq n \leq 8$	SQRSHRUN Bd,Hn,#n	Bd	ARMv8(AArch64)

uint16_t vqrshrund_n_s32 (int32_t a, const int n)	$a \rightarrow S_n$ $1 \leq n \leq 16$	SQRSHRUN Hd,Sn,#n	Hd	ARMv8(AArch64)
uint32_t vqrshrund_n_s64 (int64_t a, const int n)	$a \rightarrow D_n$ $1 \leq n \leq 32$	SQRSHRUN Sd,Dn,#n	Sd	ARMv8(AArch64)
uint8x16_t vqrshrun_high_n_s16 (uint8x8_t r, int16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQRSHRUN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
uint16x8_t vqrshrun_high_n_s32 (uint16x4_t r, int32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQRSHRUN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vqrshrun_high_n_s64 (uint32x2_t r, int64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQRSHRUN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
int8x8_t vqshrn_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQSHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
int16x4_t vqshrn_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQSHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
int32x2_t vqshrn_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQSHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
uint8x8_t vqshrn_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	UQSHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
uint16x4_t vqshrn_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	UQSHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
uint32x2_t vqshrn_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	UQSHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
int8_t vqshrn_h_n_s16 (int16_t a, const int n)	$a \rightarrow H_n$ $1 \leq n \leq 8$	SQSHRN Bd,Hn,#n	Bd	ARMv8(AArch64)

int16_t vqshrns_n_s32 (int32_t a, const int n)	$a \rightarrow S_n$ $1 \leq n \leq 16$	SQSHRN Hd,Sn,#n	Hd	ARMv8(AArch64)
int32_t vqshrnd_n_s64 (int64_t a, const int n)	$a \rightarrow D_n$ $1 \leq n \leq 32$	SQSHRN Sd,Dn,#n	Sd	ARMv8(AArch64)
uint8_t vqshrnh_n_u16 (uint16_t a, const int n)	$a \rightarrow H_n$ $1 \leq n \leq 8$	UQSHRN Bd,Hn,#n	Bd	ARMv8(AArch64)
uint16_t vqshrns_n_u32 (uint32_t a, const int n)	$a \rightarrow S_n$ $1 \leq n \leq 16$	UQSHRN Hd,Sn,#n	Hd	ARMv8(AArch64)
uint32_t vqshrnd_n_u64 (uint64_t a, const int n)	$a \rightarrow D_n$ $1 \leq n \leq 32$	UQSHRN Sd,Dn,#n	Sd	ARMv8(AArch64)
int8x16_t vqshrn_high_n_s16 (int8x8_t r, int16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQSHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
int16x8_t vqshrn_high_n_s32 (int16x4_t r, int32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQSHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
int32x4_t vqshrn_high_n_s64 (int32x2_t r, int64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQSHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
uint8x16_t vqshrn_high_n_u16 (uint8x8_t r, uint16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	UQSHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
uint16x8_t vqshrn_high_n_u32 (uint16x4_t r, uint32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	UQSHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vqshrn_high_n_u64 (uint32x2_t r, uint64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	UQSHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)

int8x8_t vrshrn_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	RSHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
int16x4_t vrshrn_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	RSHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
int32x2_t vrshrn_n_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	RSHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
uint8x8_t vrshrn_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $1 \leq n \leq 8$	RSHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
uint16x4_t vrshrn_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 16$	RSHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
uint32x2_t vrshrn_n_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 32$	RSHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
int8x16_t vrshrn_high_n_s16 (int8x8_t r, int16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	RSHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
int16x8_t vrshrn_high_n_s32 (int16x4_t r, int32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	RSHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
int32x4_t vrshrn_high_n_s64 (int32x2_t r, int64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	RSHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
uint8x16_t vrshrn_high_n_u16 (uint8x8_t r, uint16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	RSHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
uint16x8_t vrshrn_high_n_u32 (uint16x4_t r, uint32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	RSHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)

uint32x4_t vrshrn_high_n_u64 (uint32x2_t r, uint64x2_t a, const int n)	$r \rightarrow 32(\text{Vd})$ $a \rightarrow \text{Vn.2D}$ $1 \leq n \leq 32$	RSHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
int8x8_t vqrrshrn_n_s16 (int16x8_t a, const int n)	$a \rightarrow \text{Vn.8H}$ $1 \leq n \leq 8$	SQRSHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
int16x4_t vqrrshrn_n_s32 (int32x4_t a, const int n)	$a \rightarrow \text{Vn.4S}$ $1 \leq n \leq 16$	SQRSHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
int32x2_t vqrrshrn_n_s64 (int64x2_t a, const int n)	$a \rightarrow \text{Vn.2D}$ $1 \leq n \leq 32$	SQRSHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
uint8x8_t vqrrshrn_n_u16 (uint16x8_t a, const int n)	$a \rightarrow \text{Vn.8H}$ $1 \leq n \leq 8$	UQRSHRN Vd.8B,Vn.8H,#n	Vd.8B	ARMv7, ARMv8
uint16x4_t vqrrshrn_n_u32 (uint32x4_t a, const int n)	$a \rightarrow \text{Vn.4S}$ $1 \leq n \leq 16$	UQRSHRN Vd.4H,Vn.4S,#n	Vd.4H	ARMv7, ARMv8
uint32x2_t vqrrshrn_n_u64 (uint64x2_t a, const int n)	$a \rightarrow \text{Vn.2D}$ $1 \leq n \leq 32$	UQRSHRN Vd.2S,Vn.2D,#n	Vd.2S	ARMv7, ARMv8
int8_t vqrrshrn_n_s16 (int16_t a, const int n)	$a \rightarrow \text{Hn}$ $1 \leq n \leq 8$	SQRSHRN Bd,Hn,#n	Bd	ARMv8(AArch64)
int16_t vqrrshrn_n_s32 (int32_t a, const int n)	$a \rightarrow \text{Sn}$ $1 \leq n \leq 16$	SQRSHRN Hd,Sn,#n	Hd	ARMv8(AArch64)
int32_t vqrrshrn_n_s64 (int64_t a, const int n)	$a \rightarrow \text{Dn}$ $1 \leq n \leq 32$	SQRSHRN Sd,Dn,#n	Sd	ARMv8(AArch64)
uint8_t vqrrshrn_n_u16 (uint16_t a, const int n)	$a \rightarrow \text{Hn}$ $1 \leq n \leq 8$	UQRSHRN Bd,Hn,#n	Bd	ARMv8(AArch64)
uint16_t vqrrshrn_n_u32 (uint32_t a, const int n)	$a \rightarrow \text{Sn}$ $1 \leq n \leq 16$	UQRSHRN Hd,Sn,#n	Hd	ARMv8(AArch64)

uint32_t vqrshrnd_n_u64 (uint64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 32$	UQRSHRN Sd,Dn,#n	Sd	ARMv8(AArch64)
int8x16_t vqrshrn_high_n_s16 (int8x8_t r, int16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	SQRSHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
int16x8_t vqrshrn_high_n_s32 (int16x4_t r, int32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	SQRSHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
int32x4_t vqrshrn_high_n_s64 (int32x2_t r, int64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	SQRSHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
uint8x16_t vqrshrn_high_n_u16 (uint8x8_t r, uint16x8_t a, const int n)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$ $1 \leq n \leq 8$	UQRSHRN2 Vd.16B,Vn.8H,#n	Vd.16B	ARMv8(AArch64)
uint16x8_t vqrshrn_high_n_u32 (uint16x4_t r, uint32x4_t a, const int n)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$ $1 \leq n \leq 16$	UQRSHRN2 Vd.8H,Vn.4S,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vqrshrn_high_n_u64 (uint32x2_t r, uint64x2_t a, const int n)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$ $1 \leq n \leq 32$	UQRSHRN2 Vd.4S,Vn.2D,#n	Vd.4S	ARMv8(AArch64)
int16x8_t vshll_n_s8 (int8x8_t a, const int n)	$a \rightarrow Vn.8B$ $0 \leq n \leq 7$	SSHLL Vd.8H,Vn.8B,#n	Vd.8H	ARMv7, ARMv8
int32x4_t vshll_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	SSHLL Vd.4S,Vn.4H,#n	Vd.4S	ARMv7, ARMv8
int64x2_t vshll_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	SSHLL Vd.2D,Vn.2S,#n	Vd.2D	ARMv7, ARMv8
uint16x8_t vshll_n_u8 (uint8x8_t a, const int n)	$a \rightarrow Vn.8B$ $0 \leq n \leq 7$	USHLL Vd.8H,Vn.8B,#n	Vd.8H	ARMv7, ARMv8

uint32x4_t vshll_n_u16 (uint16x4_t a, const int n)	$a \rightarrow Vn.4H$ $0 \leq n \leq 15$	USHLL Vd.4S,Vn.4H,#n	Vd.4S	ARMv7, ARMv8
uint64x2_t vshll_n_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $0 \leq n \leq 31$	USHLL Vd.2D,Vn.2S,#n	Vd.2D	ARMv7, ARMv8
int16x8_t vshll_high_n_s8 (int8x16_t a, const int n)	$a \rightarrow Vn.16B$ $0 \leq n \leq 7$	SSHLL2 Vd.8H,Vn.16B,#n	Vd.8H	ARMv8(AArch64)
int32x4_t vshll_high_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	SSHLL2 Vd.4S,Vn.8H,#n	Vd.4S	ARMv8(AArch64)
int64x2_t vshll_high_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	SSHLL2 Vd.2D,Vn.4S,#n	Vd.2D	ARMv8(AArch64)
uint16x8_t vshll_high_n_u8 (uint8x16_t a, const int n)	$a \rightarrow Vn.16B$ $0 \leq n \leq 7$	USHLL2 Vd.8H,Vn.16B,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vshll_high_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $0 \leq n \leq 15$	USHLL2 Vd.4S,Vn.8H,#n	Vd.4S	ARMv8(AArch64)
uint64x2_t vshll_high_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $0 \leq n \leq 31$	USHLL2 Vd.2D,Vn.4S,#n	Vd.2D	ARMv8(AArch64)
int16x8_t vshll_n_s8 (int8x8_t a, const int n)	$a \rightarrow Vn.8B$ $n == 8$	SHLL Vd.8H,Vn.8B,#n	Vd.8H	ARMv7, ARMv8
int32x4_t vshll_n_s16 (int16x4_t a, const int n)	$a \rightarrow Vn.4H$ $n == 16$	SHLL Vd.4S,Vn.4H,#n	Vd.4S	ARMv7, ARMv8
int64x2_t vshll_n_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $n == 32$	SHLL Vd.2D,Vn.2S,#n	Vd.2D	ARMv7, ARMv8
uint16x8_t vshll_n_u8 (uint8x8_t a, const int n)	$a \rightarrow Vn.8B$ $n == 8$	SHLL Vd.8H,Vn.8B,#n	Vd.8H	ARMv7, ARMv8

uint32x4_t vshll_n_u16 (uint16x4_t a, const int n)	$a \rightarrow Vn.4H$ $n == 16$	SHLL Vd.4S,Vn.4H,#n	Vd.4S	ARMv7, ARMv8
uint64x2_t vshll_n_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $n == 32$	SHLL Vd.2D,Vn.2S,#n	Vd.2D	ARMv7, ARMv8
int16x8_t vshll_high_n_s8 (int8x16_t a, const int n)	$a \rightarrow Vn.16B$ $n == 8$	SHLL2 Vd.8H,Vn.16B,#n	Vd.8H	ARMv8(AArch64)
int32x4_t vshll_high_n_s16 (int16x8_t a, const int n)	$a \rightarrow Vn.8H$ $n == 16$	SHLL2 Vd.4S,Vn.8H,#n	Vd.4S	ARMv8(AArch64)
int64x2_t vshll_high_n_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $n == 32$	SHLL2 Vd.2D,Vn.4S,#n	Vd.2D	ARMv8(AArch64)
uint16x8_t vshll_high_n_u8 (uint8x16_t a, const int n)	$a \rightarrow Vn.16B$ $n == 8$	SHLL2 Vd.8H,Vn.16B,#n	Vd.8H	ARMv8(AArch64)
uint32x4_t vshll_high_n_u16 (uint16x8_t a, const int n)	$a \rightarrow Vn.8H$ $n == 16$	SHLL2 Vd.4S,Vn.8H,#n	Vd.4S	ARMv8(AArch64)
uint64x2_t vshll_high_n_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $n == 32$	SHLL2 Vd.2D,Vn.4S,#n	Vd.2D	ARMv8(AArch64)
int8x8_t vsri_n_s8 (int8x8_t a, int8x8_t b, const int n)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $1 \leq n \leq 8$	SRI Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vsriq_n_s8 (int8x16_t a, int8x16_t b, const int n)	$a \rightarrow Vd.16B$ $b \rightarrow Vn.16B$ $1 \leq n \leq 8$	SRI Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
int16x4_t vsri_n_s16 (int16x4_t a, int16x4_t b, const int n)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $1 \leq n \leq 16$	SRI Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8

int16x8_t vsriq_n_s16 (int16x8_t a, int16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $1 \leq n \leq 16$	SRI Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vsri_n_s32 (int32x2_t a, int32x2_t b, const int n)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $1 \leq n \leq 32$	SRI Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vsriq_n_s32 (int32x4_t a, int32x4_t b, const int n)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $1 \leq n \leq 32$	SRI Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vsri_n_s64 (int64x1_t a, int64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	SRI Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vsriq_n_s64 (int64x2_t a, int64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $1 \leq n \leq 64$	SRI Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vsri_n_u8 (uint8x8_t a, uint8x8_t b, const int n)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $1 \leq n \leq 8$	SRI Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vsriq_n_u8 (uint8x16_t a, uint8x16_t b, const int n)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $1 \leq n \leq 8$	SRI Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vsri_n_u16 (uint16x4_t a, uint16x4_t b, const int n)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $1 \leq n \leq 16$	SRI Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vsriq_n_u16 (uint16x8_t a, uint16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $1 \leq n \leq 16$	SRI Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vsri_n_u32 (uint32x2_t a, uint32x2_t b, const int n)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $1 \leq n \leq 32$	SRI Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8

uint32x4_t vsriq_n_u32 (uint32x4_t a, uint32x4_t b, const int n)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $1 \leq n \leq 32$	SRI Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint64x1_t vsri_n_u64 (uint64x1_t a, uint64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	SRI Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vsriq_n_u64 (uint64x2_t a, uint64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $1 \leq n \leq 64$	SRI Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
poly64x1_t vsri_n_p64 (poly64x1_t a, poly64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	SRI Dd,Dn,#n	Dd	ARMv8
poly64x2_t vsriq_n_p64 (poly64x2_t a, poly64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $1 \leq n \leq 64$	SRI Vd.2D,Vn.2D,#n	Vd.2D	ARMv8
poly8x8_t vsri_n_p8 (poly8x8_t a, poly8x8_t b, const int n)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $1 \leq n \leq 8$	SRI Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
poly8x16_t vsriq_n_p8 (poly8x16_t a, poly8x16_t b, const int n)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $1 \leq n \leq 8$	SRI Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
poly16x4_t vsri_n_p16 (poly16x4_t a, poly16x4_t b, const int n)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $1 \leq n \leq 16$	SRI Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
poly16x8_t vsriq_n_p16 (poly16x8_t a, poly16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $1 \leq n \leq 16$	SRI Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int64_t vsrid_n_s64 (int64_t a, int64_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $1 \leq n \leq 64$	SRI Dd,Dn,#n	Dd	ARMv8(AArch64)

uint64_t vsrid_n_u64 (uint64_t a, uint64_t b, const int n)	$a \rightarrow Dd$ $b \rightarrow Dn$ $1 \leq n \leq 64$	SRI Dd,Dn,#n	Dd	ARMv8(AArch64)
int8x8_t vsli_n_s8 (int8x8_t a, int8x8_t b, const int n)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $0 \leq n \leq 7$	SLI Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vsliq_n_s8 (int8x16_t a, int8x16_t b, const int n)	$a \rightarrow Vd.16B$ $b \rightarrow Vn.16B$ $0 \leq n \leq 7$	SLI Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
int16x4_t vsli_n_s16 (int16x4_t a, int16x4_t b, const int n)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $0 \leq n \leq 15$	SLI Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
int16x8_t vsliq_n_s16 (int16x8_t a, int16x8_t b, const int n)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.8H$ $0 \leq n \leq 15$	SLI Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int32x2_t vsli_n_s32 (int32x2_t a, int32x2_t b, const int n)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $0 \leq n \leq 31$	SLI Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vsliq_n_s32 (int32x4_t a, int32x4_t b, const int n)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $0 \leq n \leq 31$	SLI Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int64x1_t vsli_n_s64 (int64x1_t a, int64x1_t b, const int n)	$a \rightarrow Dd$ $b \rightarrow Dn$ $0 \leq n \leq 63$	SLI Dd,Dn,#n	Dd	ARMv7, ARMv8
int64x2_t vsliq_n_s64 (int64x2_t a, int64x2_t b, const int n)	$a \rightarrow Vd.2D$ $b \rightarrow Vn.2D$ $0 \leq n \leq 63$	SLI Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
uint8x8_t vsli_n_u8 (uint8x8_t a, uint8x8_t b, const int n)	$a \rightarrow Vd.8B$ $b \rightarrow Vn.8B$ $0 \leq n \leq 7$	SLI Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8

uint8x16_t vsliq_n_u8 (uint8x16_t a, uint8x16_t b, const int n)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $0 \leq n \leq 7$	SLI Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vsli_n_u16 (uint16x4_t a, uint16x4_t b, const int n)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $0 \leq n \leq 15$	SLI Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
uint16x8_t vsliq_n_u16 (uint16x8_t a, uint16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $0 \leq n \leq 15$	SLI Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
uint32x2_t vsli_n_u32 (uint32x2_t a, uint32x2_t b, const int n)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $0 \leq n \leq 31$	SLI Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vsliq_n_u32 (uint32x4_t a, uint32x4_t b, const int n)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $0 \leq n \leq 31$	SLI Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint64x1_t vsli_n_u64 (uint64x1_t a, uint64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $0 \leq n \leq 63$	SLI Dd,Dn,#n	Dd	ARMv7, ARMv8
uint64x2_t vsliq_n_u64 (uint64x2_t a, uint64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $0 \leq n \leq 63$	SLI Vd.2D,Vn.2D,#n	Vd.2D	ARMv7, ARMv8
poly64x1_t vsli_n_p64 (poly64x1_t a, poly64x1_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $0 \leq n \leq 63$	SLI Dd,Dn,#n	Dd	ARMv8
poly64x2_t vsliq_n_p64 (poly64x2_t a, poly64x2_t b, const int n)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2D}$ $0 \leq n \leq 63$	SLI Vd.2D,Vn.2D,#n	Vd.2D	ARMv8
poly8x8_t vsli_n_p8 (poly8x8_t a, poly8x8_t b, const int n)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $0 \leq n \leq 7$	SLI Vd.8B,Vn.8B,#n	Vd.8B	ARMv7, ARMv8

poly8x16_t vsliq_n_p8 (poly8x16_t a, poly8x16_t b, const int n)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $0 \leq n \leq 7$	SLI Vd.16B,Vn.16B,#n	Vd.16B	ARMv7, ARMv8
poly16x4_t vsli_n_p16 (poly16x4_t a, poly16x4_t b, const int n)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $0 \leq n \leq 15$	SLI Vd.4H,Vn.4H,#n	Vd.4H	ARMv7, ARMv8
poly16x8_t vsliq_n_p16 (poly16x8_t a, poly16x8_t b, const int n)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $0 \leq n \leq 15$	SLI Vd.8H,Vn.8H,#n	Vd.8H	ARMv7, ARMv8
int64_t vslid_n_s64 (int64_t a, int64_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $0 \leq n \leq 63$	SLI Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64_t vslid_n_u64 (uint64_t a, uint64_t b, const int n)	$a \rightarrow \text{Dd}$ $b \rightarrow \text{Dn}$ $0 \leq n \leq 63$	SLI Dd,Dn,#n	Dd	ARMv8(AArch64)
int32x2_t vcvts32_f32 (float32x2_t a)	$a \rightarrow \text{Vn.2S}$	FCVTZS Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vcvts32_f32 (float32x4_t a)	$a \rightarrow \text{Vn.4S}$	FCVTZS Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
uint32x2_t vcvts32_f32 (float32x2_t a)	$a \rightarrow \text{Vn.2S}$	FCVTZU Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vcvts32_f32 (float32x4_t a)	$a \rightarrow \text{Vn.4S}$	FCVTZU Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int32x2_t vcvtns32_f32 (float32x2_t a)	$a \rightarrow \text{Vn.2S}$	FCVTNS Vd.2S,Vn.2S	Vd.2S	ARMv8
int32x4_t vcvtns32_f32 (float32x4_t a)	$a \rightarrow \text{Vn.4S}$	FCVTNS Vd.4S,Vn.4S	Vd.4S	ARMv8
uint32x2_t vcvtnu32_f32 (float32x2_t a)	$a \rightarrow \text{Vn.2S}$	FCVTNU Vd.2S,Vn.2S	Vd.2S	ARMv8
uint32x4_t vcvtnu32_f32 (float32x4_t a)	$a \rightarrow \text{Vn.4S}$	FCVTNU Vd.4S,Vn.4S	Vd.4S	ARMv8

int32x2_t vcvtm_s32_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTMS Vd.2S,Vn.2S	Vd.2S	ARMv8
int32x4_t vcvtmq_s32_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTMS Vd.4S,Vn.4S	Vd.4S	ARMv8
uint32x2_t vcvtm_u32_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTMU Vd.2S,Vn.2S	Vd.2S	ARMv8
uint32x4_t vcvtmq_u32_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTMU Vd.4S,Vn.4S	Vd.4S	ARMv8
int32x2_t vcvt_p_s32_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTPS Vd.2S,Vn.2S	Vd.2S	ARMv8
int32x4_t vcvt_pq_s32_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTPS Vd.4S,Vn.4S	Vd.4S	ARMv8
uint32x2_t vcvt_p_u32_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTPU Vd.2S,Vn.2S	Vd.2S	ARMv8
uint32x4_t vcvt_pq_u32_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTPU Vd.4S,Vn.4S	Vd.4S	ARMv8
int32x2_t vcvt_a_s32_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTAS Vd.2S,Vn.2S	Vd.2S	ARMv8
int32x4_t vcvt_aq_s32_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTAS Vd.4S,Vn.4S	Vd.4S	ARMv8
uint32x2_t vcvt_a_u32_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTAU Vd.2S,Vn.2S	Vd.2S	ARMv8
uint32x4_t vcvt_aq_u32_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTAU Vd.4S,Vn.4S	Vd.4S	ARMv8
int32_t vcvt_s_s32_f32 (float32_t a)	$a \rightarrow Sn$	FCVTZS Sd,Sn	Sd	ARMv8(AArch64)
uint32_t vcvt_s_u32_f32 (float32_t a)	$a \rightarrow Sn$	FCVTZU Sd,Sn	Sd	ARMv8(AArch64)
int32_t vcvt_ns_s32_f32 (float32_t a)	$a \rightarrow Sn$	FCVTNS Sd,Sn	Sd	ARMv8(AArch64)

uint32_t vcvtms_u32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTNU Sd,Sn	Sd	ARMv8(AArch64)
int32_t vcvtms_s32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTMS Sd,Sn	Sd	ARMv8(AArch64)
uint32_t vcvtms_u32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTMU Sd,Sn	Sd	ARMv8(AArch64)
int32_t vcvtps_s32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTPS Sd,Sn	Sd	ARMv8(AArch64)
uint32_t vcvtps_u32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTPU Sd,Sn	Sd	ARMv8(AArch64)
int32_t vcvtas_s32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTAS Sd,Sn	Sd	ARMv8(AArch64)
uint32_t vcvtas_u32_f32 (float32_t a)	$a \rightarrow \text{Sn}$	FCVTAU Sd,Sn	Sd	ARMv8(AArch64)
int64x1_t vcvt_s64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTZS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vcvtq_s64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTZS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcvt_u64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTZU Dd,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcvtq_u64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTZU Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int64x1_t vcvt_n_s64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTNS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vcvt_nq_s64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTNS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcvt_n_u64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTNU Dd,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcvt_nq_u64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTNU Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)

int64x1_t vcvtm_s64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTMS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vcvtmq_s64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTMS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcvtm_u64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTMU Dd,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcvtmq_u64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTMU Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int64x1_t vcvtp_s64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTPS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vcvtpq_s64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTPS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcvtp_u64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTPU Dd,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcvtpq_u64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTPU Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int64x1_t vcvta_s64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTAS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vcvtaq_s64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTAS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint64x1_t vcvta_u64_f64 (float64x1_t a)	$a \rightarrow \text{Dn}$	FCVTAU Dd,Dn	Dd	ARMv8(AArch64)
uint64x2_t vcvtaq_u64_f64 (float64x2_t a)	$a \rightarrow \text{Vn.2D}$	FCVTAU Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int64_t vcvtd_s64_f64 (float64_t a)	$a \rightarrow \text{Dn}$	FCVTZS Dd,Dn	Dd	ARMv8(AArch64)
uint64_t vcvtd_u64_f64 (float64_t a)	$a \rightarrow \text{Dn}$	FCVTZU Dd,Dn	Dd	ARMv8(AArch64)
int64_t vcvtn_d_s64_f64 (float64_t a)	$a \rightarrow \text{Dn}$	FCVTNS Dd,Dn	Dd	ARMv8(AArch64)

uint64_t vcvtnd_u64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTNU Dd,Dn	Dd	ARMv8(AArch64)
int64_t vcvtmd_s64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTMS Dd,Dn	Dd	ARMv8(AArch64)
uint64_t vcvtmd_u64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTMU Dd,Dn	Dd	ARMv8(AArch64)
int64_t vcvtpd_s64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTPS Dd,Dn	Dd	ARMv8(AArch64)
uint64_t vcvtpd_u64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTPU Dd,Dn	Dd	ARMv8(AArch64)
int64_t vcvtad_s64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTAS Dd,Dn	Dd	ARMv8(AArch64)
uint64_t vcvtad_u64_f64 (float64_t a)	$a \rightarrow Dn$	FCVTAU Dd,Dn	Dd	ARMv8(AArch64)
int32x2_t vcvt_n_s32_f32 (float32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	FCVTZS Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
int32x4_t vcvtq_n_s32_f32 (float32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	FCVTZS Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
uint32x2_t vcvt_n_u32_f32 (float32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	FCVTZU Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
uint32x4_t vcvtq_n_u32_f32 (float32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	FCVTZU Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
int32_t vcvts_n_s32_f32 (float32_t a, const int n)	$a \rightarrow Sn$ $1 \leq n \leq 32$	FCVTZS Sd,Sn,#n	Sd	ARMv8(AArch64)
uint32_t vcvts_n_u32_f32 (float32_t a, const int n)	$a \rightarrow Sn$ $1 \leq n \leq 32$	FCVTZU Sd,Sn,#n	Sd	ARMv8(AArch64)
int64x1_t vcvt_n_s64_f64 (float64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	FCVTZS Dd,Dn,#n	Dd	ARMv8(AArch64)

int64x2_t vcvttq_n_s64_f64 (float64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	FCVTZS Vd.2D,Vn.2D,#n	Vd.2D	ARMv8(AArch64)
uint64x1_t vcvtt_n_u64_f64 (float64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	FCVTZU Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64x2_t vcvttq_n_u64_f64 (float64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	FCVTZU Vd.2D,Vn.2D,#n	Vd.2D	ARMv8(AArch64)
int64_t vcvttd_n_s64_f64 (float64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	FCVTZS Dd,Dn,#n	Dd	ARMv8(AArch64)
uint64_t vcvttd_n_u64_f64 (float64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	FCVTZU Dd,Dn,#n	Dd	ARMv8(AArch64)
float32x2_t vcvt_f32_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	SCVTF Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vcvttq_f32_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SCVTF Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
float32x2_t vcvt_f32_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	UCVTF Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vcvttq_f32_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	UCVTF Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
float32_t vcvt_s_f32_s32 (int32_t a)	$a \rightarrow Sn$	SCVTF Sd,Sn	Sd	ARMv8(AArch64)
float32_t vcvt_s_f32_u32 (uint32_t a)	$a \rightarrow Sn$	UCVTF Sd,Sn	Sd	ARMv8(AArch64)
float64x1_t vcvt_f64_s64 (int64x1_t a)	$a \rightarrow Dn$	SCVTF Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vcvttq_f64_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	SCVTF Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float64x1_t vcvt_f64_u64 (uint64x1_t a)	$a \rightarrow Dn$	UCVTF Dd,Dn	Dd	ARMv8(AArch64)

float64x2_t vcvttq_f64_u64 (uint64x2_t a)	$a \rightarrow Vn.2D$	UCVTF Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float64_t vcvtd_f64_s64 (int64_t a)	$a \rightarrow Dn$	SCVTF Dd,Dn	Dd	ARMv8(AArch64)
float64_t vcvtd_f64_u64 (uint64_t a)	$a \rightarrow Dn$	UCVTF Dd,Dn	Dd	ARMv8(AArch64)
float32x2_t vcvtn_f32_s32 (int32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	SCVTF Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
float32x4_t vcvtn_f32_s32 (int32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	SCVTF Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
float32x2_t vcvtn_f32_u32 (uint32x2_t a, const int n)	$a \rightarrow Vn.2S$ $1 \leq n \leq 32$	UCVTF Vd.2S,Vn.2S,#n	Vd.2S	ARMv7, ARMv8
float32x4_t vcvtn_f32_u32 (uint32x4_t a, const int n)	$a \rightarrow Vn.4S$ $1 \leq n \leq 32$	UCVTF Vd.4S,Vn.4S,#n	Vd.4S	ARMv7, ARMv8
float32_t vcvts_n_f32_s32 (int32_t a, const int n)	$a \rightarrow Sn$ $1 \leq n \leq 32$	SCVTF Sd,Sn,#n	Sd	ARMv8(AArch64)
float32_t vcvts_n_f32_u32 (uint32_t a, const int n)	$a \rightarrow Sn$ $1 \leq n \leq 32$	UCVTF Sd,Sn,#n	Sd	ARMv8(AArch64)
float64x1_t vcvtn_f64_s64 (int64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	SCVTF Dd,Dn,#n	Dd	ARMv8(AArch64)
float64x2_t vcvtn_f64_s64 (int64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	SCVTF Vd.2D,Vn.2D,#n	Vd.2D	ARMv8(AArch64)
float64x1_t vcvtn_f64_u64 (uint64x1_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	UCVTF Dd,Dn,#n	Dd	ARMv8(AArch64)
float64x2_t vcvtn_f64_u64 (uint64x2_t a, const int n)	$a \rightarrow Vn.2D$ $1 \leq n \leq 64$	UCVTF Vd.2D,Vn.2D,#n	Vd.2D	ARMv8(AArch64)

float64_t vcvt_d_n_f64_s64 (int64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	SCVTF Dd,Dn,#n	Dd	ARMv8(AArch64)
float64_t vcvt_d_n_f64_u64 (uint64_t a, const int n)	$a \rightarrow Dn$ $1 \leq n \leq 64$	UCVTF Dd,Dn,#n	Dd	ARMv8(AArch64)
float16x4_t vcvt_f16_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTN Vd.4H,Vn.4S	Vd.4H	ARMv7, ARMv8
float16x8_t vcvt_high_f16_f32 (float16x4_t r, float32x4_t a)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$	FCVTN2 Vd.8H,Vn.4S	Vd.8H	ARMv8(AArch64)
float32x2_t vcvt_f32_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCVTN Vd.2S,Vn.2D	Vd.2S	ARMv8(AArch64)
float32x4_t vcvt_high_f32_f64 (float32x2_t r, float64x2_t a)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$	FCVTN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
float32x4_t vcvt_f32_f16 (float16x4_t a)	$a \rightarrow Vn.4H$	FCVTL Vd.4S,Vn.4H	Vd.4S	ARMv7, ARMv8
float32x4_t vcvt_high_f32_f16 (float16x8_t a)	$a \rightarrow Vn.8H$	FCVTL2 Vd.4S,Vn.8H	Vd.4S	ARMv8(AArch64)
float64x2_t vcvt_f64_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FCVTL Vd.2D,Vn.2S	Vd.2D	ARMv8(AArch64)
float64x2_t vcvt_high_f64_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FCVTL2 Vd.2D,Vn.4S	Vd.2D	ARMv8(AArch64)
float32x2_t vcvtx_f32_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FCVTXN Vd.2S,Vn.2D	Vd.2S	ARMv8(AArch64)
float32_t vcvtxd_f32_f64 (float64_t a)	$a \rightarrow Dn$	FCVTXN Sd,Dn	Sd	ARMv8(AArch64)
float32x4_t vcvtx_high_f32_f64 (float32x2_t r, float64x2_t a)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$	FCVTXN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
float32x2_t vrnd_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTZ Vd.2S,Vn.2S	Vd.2S	ARMv8

float32x4_t vrndq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTZ Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrnd_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTZ Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrndq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTZ Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vrndn_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTN Vd.2S,Vn.2S	Vd.2S	ARMv8
float32x4_t vrndnq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTN Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrndn_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTN Dd,Dn	Dd	ARMv8
float64x2_t vrndnq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTN Vd.2D,Vn.2D	Vd.2D	ARMv8
float32_t vrndns_f32 (float32_t a)	$a \rightarrow Sn$	FRINTN Sd,Sn	Sd	ARMv8
float32x2_t vrndm_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTM Vd.2S,Vn.2S	Vd.2S	ARMv8
float32x4_t vrndmq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTM Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrndm_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTM Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrndmq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTM Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vrndp_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTP Vd.2S,Vn.2S	Vd.2S	ARMv8
float32x4_t vrndpq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTP Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrndp_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTP Dd,Dn	Dd	ARMv8(AArch64)

float64x2_t vrndpq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTP Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vrnda_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTA Vd.2S,Vn.2S	Vd.2S	ARMv8
float32x4_t vrndaq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTA Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrnda_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTA Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrndaq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTA Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vrndi_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTI Vd.2S,Vn.2S	Vd.2S	ARMv8
float32x4_t vrndiq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTI Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrndi_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTI Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrndiq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTI Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vrndx_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRINTX Vd.2S,Vn.2S	Vd.2S	ARMv8
float32x4_t vrndxq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRINTX Vd.4S,Vn.4S	Vd.4S	ARMv8
float64x1_t vrndx_f64 (float64x1_t a)	$a \rightarrow Dn$	FRINTX Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrndxq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRINTX Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int8x8_t vmovn_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	XTN Vd.8B,Vn.8H	Vd.8B	ARMv7, ARMv8
int16x4_t vmovn_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	XTN Vd.4H,Vn.4S	Vd.4H	ARMv7, ARMv8

int32x2_t vmovn_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	XTN Vd.2S,Vn.2D	Vd.2S	ARMv7, ARMv8
uint8x8_t vmovn_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	XTN Vd.8B,Vn.8H	Vd.8B	ARMv7, ARMv8
uint16x4_t vmovn_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	XTN Vd.4H,Vn.4S	Vd.4H	ARMv7, ARMv8
uint32x2_t vmovn_u64 (uint64x2_t a)	$a \rightarrow Vn.2D$	XTN Vd.2S,Vn.2D	Vd.2S	ARMv7, ARMv8
int8x16_t vmovn_high_s16 (int8x8_t r, int16x8_t a)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$	XTN2 Vd.16B,Vn.8H	Vd.16B	ARMv8(AArch64)
int16x8_t vmovn_high_s32 (int16x4_t r, int32x4_t a)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$	XTN2 Vd.8H,Vn.4S	Vd.8H	ARMv8(AArch64)
int32x4_t vmovn_high_s64 (int32x2_t r, int64x2_t a)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$	XTN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
uint8x16_t vmovn_high_u16 (uint8x8_t r, uint16x8_t a)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$	XTN2 Vd.16B,Vn.8H	Vd.16B	ARMv8(AArch64)
uint16x8_t vmovn_high_u32 (uint16x4_t r, uint32x4_t a)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$	XTN2 Vd.8H,Vn.4S	Vd.8H	ARMv8(AArch64)
uint32x4_t vmovn_high_u64 (uint32x2_t r, uint64x2_t a)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$	XTN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
int16x8_t vmovl_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	SSHLL Vd.8H,Vn.8B,#0	Vd.8H	ARMv7, ARMv8
int32x4_t vmovl_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	SSHLL Vd.4S,Vn.4H,#0	Vd.4S	ARMv7, ARMv8
int64x2_t vmovl_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	SSHLL Vd.2D,Vn.2S,#0	Vd.2D	ARMv7, ARMv8
uint16x8_t vmovl_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	USHLL Vd.8H,Vn.8B,#0	Vd.8H	ARMv7, ARMv8

uint32x4_t vmovl_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	USHLL Vd.4S,Vn.4H,#0	Vd.4S	ARMv7, ARMv8
uint64x2_t vmovl_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	USHLL Vd.2D,Vn.2S,#0	Vd.2D	ARMv7, ARMv8
int16x8_t vmovl_high_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	SSHLL2 Vd.8H,Vn.16B,#0	Vd.8H	ARMv8(AArch64)
int32x4_t vmovl_high_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SSHLL2 Vd.4S,Vn.8H,#0	Vd.4S	ARMv8(AArch64)
int64x2_t vmovl_high_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SSHLL2 Vd.2D,Vn.4S,#0	Vd.2D	ARMv8(AArch64)
uint16x8_t vmovl_high_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	USHLL2 Vd.8H,Vn.16B,#0	Vd.8H	ARMv8(AArch64)
uint32x4_t vmovl_high_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	USHLL2 Vd.4S,Vn.8H,#0	Vd.4S	ARMv8(AArch64)
uint64x2_t vmovl_high_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	USHLL2 Vd.2D,Vn.4S,#0	Vd.2D	ARMv8(AArch64)
int8x8_t vqmovn_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SQXTN Vd.8B,Vn.8H	Vd.8B	ARMv7, ARMv8
int16x4_t vqmovn_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SQXTN Vd.4H,Vn.4S	Vd.4H	ARMv7, ARMv8
int32x2_t vqmovn_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	SQXTN Vd.2S,Vn.2D	Vd.2S	ARMv7, ARMv8
uint8x8_t vqmovn_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	UQXTN Vd.8B,Vn.8H	Vd.8B	ARMv7, ARMv8
uint16x4_t vqmovn_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	UQXTN Vd.4H,Vn.4S	Vd.4H	ARMv7, ARMv8
uint32x2_t vqmovn_u64 (uint64x2_t a)	$a \rightarrow Vn.2D$	UQXTN Vd.2S,Vn.2D	Vd.2S	ARMv7, ARMv8
int8_t vqmovnh_s16 (int16_t a)	$a \rightarrow Hn$	SQXTN Bd,Hn	Bd	ARMv8(AArch64)

int16_t vqmovns_s32 (int32_t a)	a → Sn	SQXTN Hd,Sn	Hd	ARMv8(AArch64)
int32_t vqmovnd_s64 (int64_t a)	a → Dn	SQXTN Sd,Dn	Sd	ARMv8(AArch64)
uint8_t vqmovnh_u16 (uint16_t a)	a → Hn	UQXTN Bd,Hn	Bd	ARMv8(AArch64)
uint16_t vqmovns_u32 (uint32_t a)	a → Sn	UQXTN Hd,Sn	Hd	ARMv8(AArch64)
uint32_t vqmovnd_u64 (uint64_t a)	a → Dn	UQXTN Sd,Dn	Sd	ARMv8(AArch64)
int8x16_t vqmovn_high_s16 (int8x8_t r, int16x8_t a)	r → Vd.8B a → Vn.8H	SQXTN2 Vd.16B,Vn.8H	Vd.16B	ARMv8(AArch64)
int16x8_t vqmovn_high_s32 (int16x4_t r, int32x4_t a)	r → Vd.4H a → Vn.4S	SQXTN2 Vd.8H,Vn.4S	Vd.8H	ARMv8(AArch64)
int32x4_t vqmovn_high_s64 (int32x2_t r, int64x2_t a)	r → Vd.2S a → Vn.2D	SQXTN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
uint8x16_t vqmovn_high_u16 (uint8x8_t r, uint16x8_t a)	r → Vd.8B a → Vn.8H	UQXTN2 Vd.16B,Vn.8H	Vd.16B	ARMv8(AArch64)
uint16x8_t vqmovn_high_u32 (uint16x4_t r, uint32x4_t a)	r → Vd.4H a → Vn.4S	UQXTN2 Vd.8H,Vn.4S	Vd.8H	ARMv8(AArch64)
uint32x4_t vqmovn_high_u64 (uint32x2_t r, uint64x2_t a)	r → Vd.2S a → Vn.2D	UQXTN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
uint8x8_t vqmovun_s16 (int16x8_t a)	a → Vn.8H	SQXTUN Vd.8B,Vn.8H	Vd.8B	ARMv7, ARMv8
uint16x4_t vqmovun_s32 (int32x4_t a)	a → Vn.4S	SQXTUN Vd.4H,Vn.4S	Vd.4H	ARMv7, ARMv8
uint32x2_t vqmovun_s64 (int64x2_t a)	a → Vn.2D	SQXTUN Vd.2S,Vn.2D	Vd.2S	ARMv7, ARMv8

uint8_t vqmovunh_s16 (int16_t a)	$a \rightarrow Hn$	SQXTUN Bd,Hn	Bd	ARMv8(AArch64)
uint16_t vqmovuns_s32 (int32_t a)	$a \rightarrow Sn$	SQXTUN Hd,Sn	Hd	ARMv8(AArch64)
uint32_t vqmovund_s64 (int64_t a)	$a \rightarrow Dn$	SQXTUN Sd,Dn	Sd	ARMv8(AArch64)
uint8x16_t vqmovun_high_s16 (uint8x8_t r, int16x8_t a)	$r \rightarrow Vd.8B$ $a \rightarrow Vn.8H$	SQXTUN2 Vd.16B,Vn.8H	Vd.16B	ARMv8(AArch64)
uint16x8_t vqmovun_high_s32 (uint16x4_t r, int32x4_t a)	$r \rightarrow Vd.4H$ $a \rightarrow Vn.4S$	SQXTUN2 Vd.8H,Vn.4S	Vd.8H	ARMv8(AArch64)
uint32x4_t vqmovun_high_s64 (uint32x2_t r, int64x2_t a)	$r \rightarrow Vd.2S$ $a \rightarrow Vn.2D$	SQXTUN2 Vd.4S,Vn.2D	Vd.4S	ARMv8(AArch64)
int16x4_t vmla_lane_s16 (int16x4_t a, int16x4_t b, int16x4_t v, const int lane)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv7, ARMv8
int16x8_t vmlaq_lane_s16 (int16x8_t a, int16x8_t b, int16x4_t v, const int lane)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.8H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv7, ARMv8
int32x2_t vmla_lane_s32 (int32x2_t a, int32x2_t b, int32x2_t v, const int lane)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv7, ARMv8
int32x4_t vmlaq_lane_s32 (int32x4_t a, int32x4_t b, int32x2_t v, const int lane)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
uint16x4_t vmla_lane_u16 (uint16x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv7, ARMv8

uint16x8_t vmlaq_lane_u16 (uint16x8_t a, uint16x8_t b, uint16x4_t v, const int lane)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv7, ARMv8
uint32x2_t vmla_lane_u32 (uint32x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv7, ARMv8
uint32x4_t vmlaq_lane_u32 (uint32x4_t a, uint32x4_t b, uint32x2_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
float32x2_t vmla_lane_f32 (float32x2_t a, float32x2_t b, float32x2_t v, const int lane)	$0 \leq \text{lane} \leq 1$	RESULT[l] = a[l] + (b[l] * v[lane]) for i = 0 to 1	N/A	ARMv7, ARMv8
float32x4_t vmlaq_lane_f32 (float32x4_t a, float32x4_t b, float32x2_t v, const int lane)	$0 \leq \text{lane} \leq 1$	RESULT[l] = a[l] + (b[l] * v[lane]) for i = 0 to 3	N/A	ARMv7, ARMv8
int16x4_t vmla_laneeq_s16 (int16x4_t a, int16x4_t b, int16x8_t v, const int lane)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)
int16x8_t vmlaq_laneeq_s16 (int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
int32x2_t vmla_laneeq_s32 (int32x2_t a, int32x2_t b, int32x4_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
int32x4_t vmlaq_laneeq_s32 (int32x4_t a, int32x4_t b, int32x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)

uint16x4_t vmla_laneq_u16 (uint16x4_t a, uint16x4_t b, uint16x8_t v, const int lane)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLA Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)
uint16x8_t vmlaq_laneq_u16 (uint16x8_t a, uint16x8_t b, uint16x8_t v, const int lane)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLA Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
uint32x2_t vmla_laneq_u32 (uint32x2_t a, uint32x2_t b, uint32x4_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLA Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
uint32x4_t vmlaq_laneq_u32 (uint32x4_t a, uint32x4_t b, uint32x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLA Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
float32x2_t vmla_laneq_f32 (float32x2_t a, float32x2_t b, float32x4_t v, const int lane)	$0 \leq \text{lane} \leq 3$	RESULT[I] = a[i] + (b[i] * v[lane]) for i = 0 to 1	N/A	ARMv8(AArch64)
float32x4_t vmlaq_laneq_f32 (float32x4_t a, float32x4_t b, float32x4_t v, const int lane)	$0 \leq \text{lane} \leq 3$	RESULT[I] = a[i] + (b[i] * v[lane]) for i = 0 to 3	N/A	ARMv8(AArch64)
int32x4_t vmlal_lane_s16 (int32x4_t a, int16x4_t b, int16x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	SMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
int64x2_t vmlal_lane_s32 (int64x2_t a, int32x2_t b, int32x2_t v, const int lane)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	SMLAL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8
uint32x4_t vmlal_lane_u16 (uint32x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	UMLAL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8

int32x2_t vmls_lane_s32 (int32x2_t a, int32x2_t b, int32x2_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv7, ARMv8
int32x4_t vmlsq_lane_s32 (int32x4_t a, int32x4_t b, int32x2_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
uint16x4_t vmls_lane_u16 (uint16x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv7, ARMv8
uint16x8_t vmlsq_lane_u16 (uint16x8_t a, uint16x8_t b, uint16x4_t v, const int lane)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv7, ARMv8
uint32x2_t vmls_lane_u32 (uint32x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv7, ARMv8
uint32x4_t vmlsq_lane_u32 (uint32x4_t a, uint32x4_t b, uint32x2_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
float32x2_t vmls_lane_f32 (float32x2_t a, float32x2_t b, float32x2_t v, const int lane)	$0 \leq \text{lane} \leq 1$	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 1	N/A	ARMv7, ARMv8
float32x4_t vmlsq_lane_f32 (float32x4_t a, float32x4_t b, float32x2_t v, const int lane)	$0 \leq \text{lane} \leq 1$	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 3	N/A	ARMv7, ARMv8
int16x4_t vmls_laneeq_s16 (int16x4_t a, int16x4_t b, int16x8_t v, const int lane)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)

int16x8_t vmlsq_laneq_s16 (int16x8_t a, int16x8_t b, int16x8_t v, const int lane)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
int32x2_t vmlsq_laneq_s32 (int32x2_t a, int32x2_t b, int32x4_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
int32x4_t vmlsq_laneq_s32 (int32x4_t a, int32x4_t b, int32x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
uint16x4_t vmlsq_laneq_u16 (uint16x4_t a, uint16x4_t b, uint16x8_t v, const int lane)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLS Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)
uint16x8_t vmlsq_laneq_u16 (uint16x8_t a, uint16x8_t b, uint16x8_t v, const int lane)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	MLS Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
uint32x2_t vmlsq_laneq_u32 (uint32x2_t a, uint32x2_t b, uint32x4_t v, const int lane)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLS Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
uint32x4_t vmlsq_laneq_u32 (uint32x4_t a, uint32x4_t b, uint32x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	MLS Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
float32x2_t vmlsq_laneq_f32 (float32x2_t a, float32x2_t b, float32x4_t v, const int lane)	$0 \leq \text{lane} \leq 3$	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 1	N/A	ARMv8(AArch64)
float32x4_t vmlsq_laneq_f32 (float32x4_t a, float32x4_t b, float32x4_t v, const int lane)	$0 \leq \text{lane} \leq 3$	RESULT[I] = a[i] - (b[i] * v[lane]) for i = 0 to 3	N/A	ARMv8(AArch64)

int32x4_t vmlsl_lane_s16 (int32x4_t a, int16x4_t b, int16x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	SMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
int64x2_t vmlsl_lane_s32 (int64x2_t a, int32x2_t b, int32x2_t v, const int lane)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	SMLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8
uint32x4_t vmlsl_lane_u16 (uint32x4_t a, uint16x4_t b, uint16x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	UMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
uint64x2_t vmlsl_lane_u32 (uint64x2_t a, uint32x2_t b, uint32x2_t v, const int lane)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	UMLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8
int32x4_t vmlsl_high_lane_s16 (int32x4_t a, int16x8_t b, int16x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	SMLSL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vmlsl_high_lane_s32 (int64x2_t a, int32x4_t b, int32x2_t v, const int lane)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	SMLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmlsl_high_lane_u16 (uint32x4_t a, uint16x8_t b, uint16x4_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.8H}$ $v \rightarrow \text{Vm.4H}$ $0 \leq \text{lane} \leq 3$	UMLSL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmlsl_high_lane_u32 (uint64x2_t a, uint32x4_t b, uint32x2_t v, const int lane)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.2S}$ $0 \leq \text{lane} \leq 1$	UMLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32x4_t vmlsl_laneeq_s16 (int32x4_t a, int16x4_t b, int16x8_t v, const int lane)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $v \rightarrow \text{Vm.8H}$ $0 \leq \text{lane} \leq 7$	SMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)

int64x2_t vmlsl_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	SMLSLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmlsl_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	UMLSLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmlsl_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	UMLSLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32x4_t vmlsl_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	SMLSLSL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vmlsl_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	SMLSLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmlsl_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	UMLSLSL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmlsl_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	UMLSLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32x4_t vqdmmlsl_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	SQDMLSLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
int64x2_t vqdmmlsl_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	SQDMLSLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8

int32_t vqdmmlsh_lane_s16 (int32_t a, int16_t b, int16x4_t v, const int lane)	a → Sd b → Hn v → Vm.4H 0 ≤ lane ≤ 3	SQDMLSL Sd,Hn,Vm.H[lane]	Sd	ARMv8(AArch64)
int64_t vqdmmlsls_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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
int32x4_t vqdmmlsl_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	SQDMLSL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vqdmmlsl_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	SQDMLSL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32_t vqdmmlsh_laneeq_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	ARMv8(AArch64)
int64_t vqdmmlsls_laneeq_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	ARMv8(AArch64)
int32x4_t vqdmmlsl_high_laneeq_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	ARMv8(AArch64)

int64x2_t vqdmmlsl_high_laneq_s32 (int64x2_t a, int32x4_t b, int32x4_t v, const int lane)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$ $v \rightarrow \text{Vm.4S}$ $0 \leq \text{lane} \leq 3$	SQDMLSL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int16x4_t vmul_n_s16 (int16x4_t a, int16_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.H}[0]$	MUL Vd.4H,Vn.4H,Vm.H[0]	Vd.4H	ARMv7, ARMv8
int16x8_t vmulq_n_s16 (int16x8_t a, int16_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.H}[0]$	MUL Vd.8H,Vn.8H,Vm.H[0]	Vd.8H	ARMv7, ARMv8
int32x2_t vmul_n_s32 (int32x2_t a, int32_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.S}[0]$	MUL Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
int32x4_t vmulq_n_s32 (int32x4_t a, int32_t b)	$a \rightarrow \text{Vn.4S}$ $b \rightarrow \text{Vm.S}[0]$	MUL Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
uint16x4_t vmul_n_u16 (uint16x4_t a, uint16_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.H}[0]$	MUL Vd.4H,Vn.4H,Vm.H[0]	Vd.4H	ARMv7, ARMv8
uint16x8_t vmulq_n_u16 (uint16x8_t a, uint16_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.H}[0]$	MUL Vd.8H,Vn.8H,Vm.H[0]	Vd.8H	ARMv7, ARMv8
uint32x2_t vmul_n_u32 (uint32x2_t a, uint32_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.S}[0]$	MUL Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
uint32x4_t vmulq_n_u32 (uint32x4_t a, uint32_t b)	$a \rightarrow \text{Vn.4S}$ $b \rightarrow \text{Vm.S}[0]$	MUL Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
float32x2_t vmul_n_f32 (float32x2_t a, float32_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.S}[0]$	FMUL Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
float32x4_t vmulq_n_f32 (float32x4_t a, float32_t b)	$a \rightarrow \text{Vn.4S}$ $b \rightarrow \text{Vm.S}[0]$	FMUL Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
float64x1_t vmul_n_f64 (float64x1_t a, float64_t b)	$a \rightarrow \text{Dn}$ $b \rightarrow \text{Vm.D}[0]$	FMUL Dd,Dn,Vm.D[0]	Dd	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

float32x4_t vmulq_lane_f32 (float32x4_t a, float32x2_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	FMUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
float64x1_t vmul_lane_f64 (float64x1_t a, float64x1_t v, const int lane)	$a \rightarrow Dn$ $v \rightarrow Vm.1D$ lane == 0	FMUL Dd,Dn,Vm.D[lane]	Dd	ARMv8(AArch64)
float64x2_t vmulq_lane_f64 (float64x2_t a, float64x1_t v, const int lane)	$a \rightarrow Vn.2D$ $v \rightarrow Vm.1D$ lane == 0	FMUL Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D	ARMv8(AArch64)
float32_t vmuls_lane_f32 (float32_t a, float32x2_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	FMUL Sd,Sn,Vm.S[lane]	Sd	ARMv8(AArch64)
float64_t vmuld_lane_f64 (float64_t a, float64x1_t v, const int lane)	$a \rightarrow Dn$ $v \rightarrow Vm.1D$ lane == 0	FMUL Dd,Dn,Vm.S[lane]	Dd	ARMv8(AArch64)
int16x4_t vmul_laneq_s16 (int16x4_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	MUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)
int16x8_t vmulq_laneq_s16 (int16x8_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	MUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
int32x2_t vmul_laneq_s32 (int32x2_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	MUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
int32x4_t vmulq_laneq_s32 (int32x4_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	MUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
uint16x4_t vmul_laneq_u16 (uint16x4_t a, uint16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	MUL Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)

uint16x8_t vmulq_laneq_u16 (uint16x8_t a, uint16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	MUL Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
uint32x2_t vmul_laneq_u32 (uint32x2_t a, uint32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	MUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
uint32x4_t vmulq_laneq_u32 (uint32x4_t a, uint32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	MUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
float32x2_t vmul_laneq_f32 (float32x2_t a, float32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	FMUL Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
float32x4_t vmulq_laneq_f32 (float32x4_t a, float32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	FMUL Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
float64x1_t vmul_laneq_f64 (float64x1_t a, float64x2_t v, const int lane)	$a \rightarrow Dn$ $v \rightarrow Vm.2D$ $0 \leq lane \leq 1$	FMUL Dd,Dn,Vm.D[lane]	Dd	ARMv8(AArch64)
float64x2_t vmulq_laneq_f64 (float64x2_t a, float64x2_t v, const int lane)	$a \rightarrow Vn.2D$ $v \rightarrow Vm.2D$ $0 \leq lane \leq 1$	FMUL Vd.2D,Vn.2D,Vm.D[lane]	Vd.2D	ARMv8(AArch64)
float32_t vmuls_laneq_f32 (float32_t a, float32x4_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	FMUL Sd,Sn,Vm.S[lane]	Sd	ARMv8(AArch64)
float64_t vmuld_laneq_f64 (float64_t a, float64x2_t v, const int lane)	$a \rightarrow Dn$ $v \rightarrow Vm.2D$ $0 \leq lane \leq 1$	FMUL Dd,Dn,Vm.D[lane]	Dd	ARMv8(AArch64)
int32x4_t vmull_n_s16 (int16x4_t a, int16_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.H[0]$	SMULL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
int64x2_t vmull_n_s32 (int32x2_t a, int32_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.S[0]$	SMULL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8

uint32x4_t vmull_n_u16 (uint16x4_t a, uint16_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.H[0]$	UMULL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
uint64x2_t vmull_n_u32 (uint32x2_t a, uint32_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.S[0]$	UMULL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8
int32x4_t vmull_high_n_s16 (int16x8_t a, int16_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.H[0]$	SMULL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S	ARMv8(AArch64)
int64x2_t vmull_high_n_s32 (int32x4_t a, int32_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.S[0]$	SMULL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmull_high_n_u16 (uint16x8_t a, uint16_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.H[0]$	UMULL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmull_high_n_u32 (uint32x4_t a, uint32_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.S[0]$	UMULL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D	ARMv8(AArch64)
int32x4_t vmull_lane_s16 (int16x4_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
int64x2_t vmull_lane_s32 (int32x2_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8
uint32x4_t vmull_lane_u16 (uint16x4_t a, uint16x4_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	UMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
uint64x2_t vmull_lane_u32 (uint32x2_t a, uint32x2_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	UMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8
int32x4_t vmull_high_lane_s16 (int16x8_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)

int64x2_t vmull_high_lane_s32 (int32x4_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmull_high_lane_u16 (uint16x8_t a, uint16x4_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	UMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmull_high_lane_u32 (uint32x4_t a, uint32x2_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	UMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32x4_t vmull_laneq_s16 (int16x4_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vmull_laneq_s32 (int32x2_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmull_laneq_u16 (uint16x4_t a, uint16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	UMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmull_laneq_u32 (uint32x2_t a, uint32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	UMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32x4_t vmull_high_laneq_s16 (int16x8_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vmull_high_laneq_s32 (int32x4_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmull_high_laneq_u16 (uint16x8_t a, uint16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	UMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)

uint64x2_t vmull_high_laneq_u32 (uint32x4_t a, uint32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	UMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32x4_t vqdmull_n_s16 (int16x4_t a, int16_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.H[0]$	SQDMULL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
int64x2_t vqdmull_n_s32 (int32x2_t a, int32_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.S[0]$	SQDMULL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8
int32x4_t vqdmull_high_n_s16 (int16x8_t a, int16_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.H[0]$	SQDMULL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S	ARMv8(AArch64)
int64x2_t vqdmull_high_n_s32 (int32x4_t a, int32_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.S[0]$	SQDMULL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D	ARMv8(AArch64)
int32x4_t vqdmull_lane_s16 (int16x4_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQDMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv7, ARMv8
int64x2_t vqdmull_lane_s32 (int32x2_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQDMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv7, ARMv8
int32_t vqdmullh_lane_s16 (int16_t a, int16x4_t v, const int lane)	$a \rightarrow Hn$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQDMULL Sd,Hn,Vm.H[lane]	Sd	ARMv8(AArch64)
int64_t vqdmulls_lane_s32 (int32_t a, int32x2_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQDMULL Dd,Sn,Vm.S[lane]	Dd	ARMv8(AArch64)
int32x4_t vqdmull_high_lane_s16 (int16x8_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQDMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vqdmull_high_lane_s32 (int32x4_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQDMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)

int32x4_t vqdmull_laneq_s16 (int16x4_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQDMULL Vd.4S,Vn.4H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vqdmull_laneq_s32 (int32x2_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQDMULL Vd.2D,Vn.2S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int32_t vqdmullh_laneq_s16 (int16_t a, int16x8_t v, const int lane)	$a \rightarrow Hn$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQDMULL Sd,Hn,Vm.H[lane]	Sd	ARMv8(AArch64)
int64_t vqdmulls_laneq_s32 (int32_t a, int32x4_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQDMULL Dd,Sn,Vm.S[lane]	Dd	ARMv8(AArch64)
int32x4_t vqdmull_high_laneq_s16 (int16x8_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQDMULL2 Vd.4S,Vn.8H,Vm.H[lane]	Vd.4S	ARMv8(AArch64)
int64x2_t vqdmull_high_laneq_s32 (int32x4_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQDMULL2 Vd.2D,Vn.4S,Vm.S[lane]	Vd.2D	ARMv8(AArch64)
int16x4_t vqdmulh_n_s16 (int16x4_t a, int16_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.H[0]$	SQDMULH Vd.4H,Vn.4H,Vm.H[0]	Vd.4H	ARMv7, ARMv8
int16x8_t vqdmulhq_n_s16 (int16x8_t a, int16_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.H[0]$	SQDMULH Vd.8H,Vn.8H,Vm.H[0]	Vd.8H	ARMv7, ARMv8
int32x2_t vqdmulh_n_s32 (int32x2_t a, int32_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.S[0]$	SQDMULH Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
int32x4_t vqdmulhq_n_s32 (int32x4_t a, int32_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.S[0]$	SQDMULH Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
int16x4_t vqdmulh_lane_s16 (int16x4_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv7, ARMv8

int16x8_t vqdmulhq_lane_s16 (int16x8_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv7, ARMv8
int32x2_t vqdmulhq_lane_s32 (int32x2_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv7, ARMv8
int32x4_t vqdmulhq_lane_s32 (int32x4_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
int16_t vqdmulhh_lane_s16 (int16_t a, int16x4_t v, const int lane)	$a \rightarrow Hn$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQDMULH Hd,Hn,Vm.H[lane]	Hd	ARMv8(AArch64)
int32_t vqdmulhs_lane_s32 (int32_t a, int32x2_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQDMULH Sd,Sn,Vm.H[lane]	Sd	ARMv8(AArch64)
int16x4_t vqdmulh_laneq_s16 (int16x4_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)
int16x8_t vqdmulhq_laneq_s16 (int16x8_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
int32x2_t vqdmulh_laneq_s32 (int32x2_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
int32x4_t vqdmulhq_laneq_s32 (int32x4_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
int16_t vqdmulhh_laneq_s16 (int16_t a, int16x8_t v, const int lane)	$a \rightarrow Hn$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQDMULH Hd,Hn,Vm.H[lane]	Hd	ARMv8(AArch64)

int32_t vqdmulhs_laneq_s32 (int32_t a, int32x4_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQDMULH Sd,Sn,Vm.H[lane]	Sd	ARMv8(AArch64)
int16x4_t vqrdmulh_n_s16 (int16x4_t a, int16_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.H[0]$	SQRDMULH Vd.4H,Vn.4H,Vm.H[0]	Vd.4H	ARMv7, ARMv8
int16x8_t vqrdmulhq_n_s16 (int16x8_t a, int16_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.H[0]$	SQRDMULH Vd.8H,Vn.8H,Vm.H[0]	Vd.8H	ARMv7, ARMv8
int32x2_t vqrdmulh_n_s32 (int32x2_t a, int32_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.S[0]$	SQRDMULH Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
int32x4_t vqrdmulhq_n_s32 (int32x4_t a, int32_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.S[0]$	SQRDMULH Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
int16x4_t vqrdmulh_lane_s16 (int16x4_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQRDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv7, ARMv8
int16x8_t vqrdmulhq_lane_s16 (int16x8_t a, int16x4_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQRDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv7, ARMv8
int32x2_t vqrdmulh_lane_s32 (int32x2_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQRDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv7, ARMv8
int32x4_t vqrdmulhq_lane_s32 (int32x4_t a, int32x2_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQRDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv7, ARMv8
int16_t vqrdmulhh_lane_s16 (int16_t a, int16x4_t v, const int lane)	$a \rightarrow Hn$ $v \rightarrow Vm.4H$ $0 \leq lane \leq 3$	SQRDMULH Hd,Hn,Vm.H[lane]	Hd	ARMv8(AArch64)
int32_t vqrdmulhs_lane_s32 (int32_t a, int32x2_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.2S$ $0 \leq lane \leq 1$	SQRDMULH Sd,Sn,Vm.S[lane]	Sd	ARMv8(AArch64)

int16x4_t vqrdmulh_laneq_s16 (int16x4_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.4H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQRDMULH Vd.4H,Vn.4H,Vm.H[lane]	Vd.4H	ARMv8(AArch64)
int16x8_t vqrdmulhq_laneq_s16 (int16x8_t a, int16x8_t v, const int lane)	$a \rightarrow Vn.8H$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQRDMULH Vd.8H,Vn.8H,Vm.H[lane]	Vd.8H	ARMv8(AArch64)
int32x2_t vqrdmulh_laneq_s32 (int32x2_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.2S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQRDMULH Vd.2S,Vn.2S,Vm.S[lane]	Vd.2S	ARMv8(AArch64)
int32x4_t vqrdmulhq_laneq_s32 (int32x4_t a, int32x4_t v, const int lane)	$a \rightarrow Vn.4S$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQRDMULH Vd.4S,Vn.4S,Vm.S[lane]	Vd.4S	ARMv8(AArch64)
int16_t vqrdmulhh_laneq_s16 (int16_t a, int16x8_t v, const int lane)	$a \rightarrow Hn$ $v \rightarrow Vm.8H$ $0 \leq lane \leq 7$	SQRDMULH Hd,Hn,Vm.H[lane]	Hd	ARMv8(AArch64)
int32_t vqrdmulhs_laneq_s32 (int32_t a, int32x4_t v, const int lane)	$a \rightarrow Sn$ $v \rightarrow Vm.4S$ $0 \leq lane \leq 3$	SQRDMULH Sd,Sn,Vm.S[lane]	Sd	ARMv8(AArch64)
int16x4_t vmla_n_s16 (int16x4_t a, int16x4_t b, int16_t c)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.4H$ $c \rightarrow Vm.H[0]$	MLA Vd.4H,Vn.4H,Vm.H[0]	Vd.4H	ARMv7, ARMv8
int16x8_t vmlaq_n_s16 (int16x8_t a, int16x8_t b, int16_t c)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.8H$ $c \rightarrow Vm.H[0]$	MLA Vd.8H,Vn.8H,Vm.H[0]	Vd.8H	ARMv7, ARMv8
int32x2_t vmla_n_s32 (int32x2_t a, int32x2_t b, int32_t c)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $c \rightarrow Vm.S[0]$	MLA Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
int32x4_t vmlaq_n_s32 (int32x4_t a, int32x4_t b, int32_t c)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $c \rightarrow Vm.S[0]$	MLA Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8

uint16x4_t vmla_n_u16 (uint16x4_t a, uint16x4_t b, uint16_t c)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.4H}$ $c \rightarrow \text{Vm.H}[0]$	MLA Vd.4H,Vn.4H,Vm.H[0]	Vd.4H	ARMv7, ARMv8
uint16x8_t vmlaq_n_u16 (uint16x8_t a, uint16x8_t b, uint16_t c)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.8H}$ $c \rightarrow \text{Vm.H}[0]$	MLA Vd.8H,Vn.8H,Vm.H[0]	Vd.8H	ARMv7, ARMv8
uint32x2_t vmla_n_u32 (uint32x2_t a, uint32x2_t b, uint32_t c)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.2S}$ $c \rightarrow \text{Vm.S}[0]$	MLA Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
uint32x4_t vmlaq_n_u32 (uint32x4_t a, uint32x4_t b, uint32_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4S}$ $c \rightarrow \text{Vm.S}[0]$	MLA Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
float32x2_t vmla_n_f32 (float32x2_t a, float32x2_t b, float32_t c)	$a \rightarrow \text{N/A}$ $b \rightarrow \text{N/A}$ $c \rightarrow \text{N/A}$	RESULT[i] = a[i] + (b[i] * c) for i = 0 to 1	N/A	ARMv7, ARMv8
float32x4_t vmlaq_n_f32 (float32x4_t a, float32x4_t b, float32_t c)	$a \rightarrow \text{N/A}$ $b \rightarrow \text{N/A}$ $c \rightarrow \text{N/A}$	RESULT[i] = a[i] + (b[i] * c) for i = 0 to 3	N/A	ARMv7, ARMv8
int32x4_t vmlal_n_s16 (int32x4_t a, int16x4_t b, int16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $c \rightarrow \text{Vm.H}[0]$	SMLAL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
int64x2_t vmlal_n_s32 (int64x2_t a, int32x2_t b, int32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $c \rightarrow \text{Vm.S}[0]$	SMLAL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8
uint32x4_t vmlal_n_u16 (uint32x4_t a, uint16x4_t b, uint16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $c \rightarrow \text{Vm.H}[0]$	UMLAL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
uint64x2_t vmlal_n_u32 (uint64x2_t a, uint32x2_t b, uint32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $c \rightarrow \text{Vm.S}[0]$	UMLAL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
int32x4_t vmlsl_n_s16 (int32x4_t a, int16x4_t b, int16_t c)	a → Vd.4S b → Vn.4H c → Vm.H[0]	SMLSL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
int64x2_t vmlsl_n_s32 (int64x2_t a, int32x2_t b, int32_t c)	a → Vd.2D b → Vn.2S c → Vm.S[0]	SMLSL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8

uint32x4_t vmlsl_n_u16 (uint32x4_t a, uint16x4_t b, uint16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $c \rightarrow \text{Vm.H}[0]$	UMLSL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
uint64x2_t vmlsl_n_u32 (uint64x2_t a, uint32x2_t b, uint32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $c \rightarrow \text{Vm.S}[0]$	UMLSL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8
int32x4_t vmlsl_high_n_s16 (int32x4_t a, int16x8_t b, int16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.8H}$ $c \rightarrow \text{Vm.H}[0]$	SMLSL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S	ARMv8(AArch64)
int64x2_t vmlsl_high_n_s32 (int64x2_t a, int32x4_t b, int32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$ $c \rightarrow \text{Vm.S}[0]$	SMLSL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D	ARMv8(AArch64)
uint32x4_t vmlsl_high_n_u16 (uint32x4_t a, uint16x8_t b, uint16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.8H}$ $c \rightarrow \text{Vm.H}[0]$	UMLSL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S	ARMv8(AArch64)
uint64x2_t vmlsl_high_n_u32 (uint64x2_t a, uint32x4_t b, uint32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$ $c \rightarrow \text{Vm.S}[0]$	UMLSL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D	ARMv8(AArch64)
int32x4_t vqdmisl_n_s16 (int32x4_t a, int16x4_t b, int16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.4H}$ $c \rightarrow \text{Vm.H}[0]$	SQDMLSL Vd.4S,Vn.4H,Vm.H[0]	Vd.4S	ARMv7, ARMv8
int64x2_t vqdmisl_n_s32 (int64x2_t a, int32x2_t b, int32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.2S}$ $c \rightarrow \text{Vm.S}[0]$	SQDMLSL Vd.2D,Vn.2S,Vm.S[0]	Vd.2D	ARMv7, ARMv8
int32x4_t vqdmisl_high_n_s16 (int32x4_t a, int16x8_t b, int16_t c)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.8H}$ $c \rightarrow \text{Vm.H}[0]$	SQDMLSL2 Vd.4S,Vn.8H,Vm.H[0]	Vd.4S	ARMv8(AArch64)
int64x2_t vqdmisl_high_n_s32 (int64x2_t a, int32x4_t b, int32_t c)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$ $c \rightarrow \text{Vm.S}[0]$	SQDMLSL2 Vd.2D,Vn.4S,Vm.S[0]	Vd.2D	ARMv8(AArch64)
int8x8_t vabs_s8 (int8x8_t a)	$a \rightarrow \text{Vn.8B}$	ABS Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8

int8x16_t vabsq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	ABS Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vabs_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	ABS Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vabsq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	ABS Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vabs_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	ABS Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vabsq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	ABS Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
float32x2_t vabs_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FABS Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vabsq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FABS Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vabs_s64 (int64x1_t a)	$a \rightarrow Dn$	ABS Dd,Dn	Dd	ARMv8(AArch64)
int64_t vabsd_s64 (int64_t a)	$a \rightarrow Dn$	ABS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vabsq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	ABS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float64x1_t vabs_f64 (float64x1_t a)	$a \rightarrow Dn$	FABS Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vabsq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FABS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int8x8_t vqabs_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	SQABS Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vqabsq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	SQABS Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vqabs_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	SQABS Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8

int16x8_t vqabsq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SQABS Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vqabs_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	SQABS Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vqabsq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SQABS Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vqabs_s64 (int64x1_t a)	$a \rightarrow Dn$	SQABS Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vqabsq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	SQABS Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int8_t vqabsb_s8 (int8_t a)	$a \rightarrow Bn$	SQABS Bd,Bn	Bd	ARMv8(AArch64)
int16_t vqabsh_s16 (int16_t a)	$a \rightarrow Hn$	SQABS Hd,Hn	Hd	ARMv8(AArch64)
int32_t vqabss_s32 (int32_t a)	$a \rightarrow Sn$	SQABS Sd,Sn	Sd	ARMv8(AArch64)
int64_t vqabsd_s64 (int64_t a)	$a \rightarrow Dn$	SQABS Dd,Dn	Dd	ARMv8(AArch64)
int8x8_t vneg_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	NEG Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vnegq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	NEG Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vneg_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	NEG Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vnegq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	NEG Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vneg_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	NEG Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vnegq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	NEG Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8

float32x2_t vneg_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FNEG Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vnegq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FNEG Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vneg_s64 (int64x1_t a)	$a \rightarrow Dn$	NEG Dd,Dn	Dd	ARMv8(AArch64)
int64_t vnegd_s64 (int64_t a)	$a \rightarrow Dn$	NEG Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vnegq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	NEG Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float64x1_t vneg_f64 (float64x1_t a)	$a \rightarrow Dn$	FNEG Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vnegq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FNEG Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
int8x8_t vqneg_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	SQNEG Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vqnegq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	SQNEG Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vqneg_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	SQNEG Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vqnegq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SQNEG Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vqneg_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	SQNEG Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vqnegq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SQNEG Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int64x1_t vqneg_s64 (int64x1_t a)	$a \rightarrow Dn$	SQNEG Dd,Dn	Dd	ARMv8(AArch64)
int64x2_t vqnegq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	SQNEG Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)

int8_t vqnegb_s8 (int8_t a)	$a \rightarrow Bn$	SQNEG Bd,Bn	Bd	ARMv8(AArch64)
int16_t vqnegh_s16 (int16_t a)	$a \rightarrow Hn$	SQNEG Hd,Hn	Hd	ARMv8(AArch64)
int32_t vqnegs_s32 (int32_t a)	$a \rightarrow Sn$	SQNEG Sd,Sn	Sd	ARMv8(AArch64)
int64_t vqnegd_s64 (int64_t a)	$a \rightarrow Dn$	SQNEG Dd,Dn	Dd	ARMv8(AArch64)
int8x8_t vcls_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CLS Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vclsq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CLS Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vcls_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CLS Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vclsq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CLS Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vcls_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CLS Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vclsq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CLS Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int8x8_t vclz_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CLZ Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vclzq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CLZ Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vclz_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	CLZ Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vclzq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	CLZ Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vclz_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	CLZ Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8

int32x4_t vclzq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	CLZ Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vclz_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	CLZ Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vclzq_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	CLZ Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vclz_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	CLZ Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vclzq_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	CLZ Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vclz_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	CLZ Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vclzq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	CLZ Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
int8x8_t vcnt_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	CNT Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vcntq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	CNT Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vcnt_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	CNT Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vcntq_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	CNT Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
poly8x8_t vcnt_p8 (poly8x8_t a)	$a \rightarrow Vn.8B$	CNT Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
poly8x16_t vcntq_p8 (poly8x16_t a)	$a \rightarrow Vn.16B$	CNT Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t vrecpe_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	URECPE Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vrecpeq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	URECPE Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8

float32x2_t vrecpe_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRECPE Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vrecpeq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRECPE Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
float64x1_t vrecpe_f64 (float64x1_t a)	$a \rightarrow Dn$	FRECPE Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrecpeq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRECPE Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32_t vrecpes_f32 (float32_t a)	$a \rightarrow Sn$	FRECPE Sd,Sn	Sd	ARMv8(AArch64)
float64_t vrecped_f64 (float64_t a)	$a \rightarrow Dn$	FRECPE Dd,Dn	Dd	ARMv8(AArch64)
float32x2_t vrecps_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FRECPS Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vrecpsq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FRECPS Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float64x1_t vrecps_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FRECPS Dd,Dn,Dm	Dd	ARMv8(AArch64)
float64x2_t vrecpsq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FRECPS Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32_t vrecps_f32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FRECPS Sd,Sn,Sm	Sd	ARMv8(AArch64)
float64_t vrecpsd_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FRECPS Dd,Dn,Dm	Dd	ARMv8(AArch64)
float32x2_t vsqrt_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FSQRT Vd.2S,Vn.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vsqrtq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FSQRT Vd.4S,Vn.4S	Vd.4S	ARMv8(AArch64)

float64x1_t vsqrt_f64 (float64x1_t a)	$a \rightarrow Dn$	FSQRT Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vsqrtq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FSQRT Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
uint32x2_t vrsqrte_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	URSQRTE Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vrsqrteq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	URSQRTE Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
float32x2_t vrsqrte_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FRSQRTE Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vrsqrteq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FRSQRTE Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
float64x1_t vrsqrte_f64 (float64x1_t a)	$a \rightarrow Dn$	FRSQRTE Dd,Dn	Dd	ARMv8(AArch64)
float64x2_t vrsqrteq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FRSQRTE Vd.2D,Vn.2D	Vd.2D	ARMv8(AArch64)
float32_t vrsqrtes_f32 (float32_t a)	$a \rightarrow Sn$	FRSQRTE Sd,Sn	Sd	ARMv8(AArch64)
float64_t vrsqrteq_f64 (float64_t a)	$a \rightarrow Dn$	FRSQRTE Dd,Dn	Dd	ARMv8(AArch64)
float32x2_t vrsqrts_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	FRSQRTS Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vrsqrtsq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FRSQRTS Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv7, ARMv8
float64x1_t vrsqrts_f64 (float64x1_t a, float64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FRSQRTS Dd,Dn,Dm	Dd	ARMv8(AArch64)
float64x2_t vrsqrtsq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FRSQRTS Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

float32_t vrsqrtss_f32 (float32_t a, float32_t b)	$a \rightarrow Sn$ $b \rightarrow Sm$	FRSQRTS Sd,Sn,Sm	Sd	ARMv8(AArch64)
float64_t vrsqrtsd_f64 (float64_t a, float64_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	FRSQRTS Dd,Dn,Dm	Dd	ARMv8(AArch64)
int8x8_t vmvn_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vmvnx_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vmvn_s16 (int16x4_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int16x8_t vmvnx_s16 (int16x8_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int32x2_t vmvn_s32 (int32x2_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int32x4_t vmvnx_s32 (int32x4_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vmvn_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vmvnx_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vmvn_u16 (uint16x4_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint16x8_t vmvnx_u16 (uint16x8_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t vmvn_u32 (uint32x2_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint32x4_t vmvnx_u32 (uint32x4_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
poly8x8_t vmvn_p8 (poly8x8_t a)	$a \rightarrow Vn.8B$	MVN Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8

poly8x16_t vmvnq_p8 (poly8x16_t a)	$a \rightarrow Vn.16B$	MVN Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int8x8_t vand_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vandq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vand_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int16x8_t vandq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int32x2_t vand_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int32x4_t vandq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int64x1_t vand_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Dn$ $b \rightarrow Dm$	AND Dd,Dn,Dm	Dd	ARMv7, ARMv8
int64x2_t vandq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vand_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vandq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vand_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

uint16x8_t vandq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t vand_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint32x4_t vandq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint64x1_t vand_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	AND Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint64x2_t vandq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	AND Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int8x8_t vorr_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vorrq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vorr_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int16x8_t vorrq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int32x2_t vorr_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int32x4_t vorrq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int64x1_t vorr_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

int64x2_t vorrq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vorr_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vorrq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vorr_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint16x8_t vorrq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t vorr_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint32x4_t vorrq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint64x1_t vorr_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint64x2_t vorrq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int8x8_t veor_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t veorq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t veor_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

int16x8_t veorq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int32x2_t veor_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int32x4_t veorq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int64x1_t veor_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int64x2_t veorq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t veor_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t veorq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t veor_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint16x8_t veorq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t veor_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint32x4_t veorq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint64x1_t veor_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	EOR Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

uint64x2_t veorq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	EOR Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int8x8_t vbic_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vbicq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vbic_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int16x8_t vbicq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int32x2_t vbic_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int32x4_t vbicq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int64x1_t vbic_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int64x2_t vbicq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vbic_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vbicq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vbic_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

uint16x8_t vbicq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t vbic_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint32x4_t vbicq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint64x1_t vbic_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	BIC Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint64x2_t vbicq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	BIC Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int8x8_t vorn_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vornq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vorn_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int16x8_t vornq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int32x2_t vorn_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int32x4_t vornq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int64x1_t vorn_s64 (int64x1_t a, int64x1_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

int64x2_t vornq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vorn_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vornq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vorn_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint16x8_t vornq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint32x2_t vorn_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint32x4_t vornq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
uint64x1_t vorn_u64 (uint64x1_t a, uint64x1_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	ORN Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint64x2_t vornq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	ORN Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int8x8_t vbsl_s8 (uint8x8_t a, int8x8_t b, int8x8_t c)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $c \rightarrow \text{Vm.8B}$	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vbslq_s8 (uint8x16_t a, int8x16_t b, int8x16_t c)	$a \rightarrow \text{Vd.16B}$ $b \rightarrow \text{Vn.16B}$ $c \rightarrow \text{Vm.16B}$	BSL Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vbsl_s16 (uint16x4_t a, int16x4_t b, int16x4_t c)	$a \rightarrow \text{Vd.8B}$ $b \rightarrow \text{Vn.8B}$ $c \rightarrow \text{Vm.8B}$	BSL Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8
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	ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
int32x2_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)

int64x1_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
uint8x8_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
uint16x4_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
uint32x2_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
uint64x1_t vcopy_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	ARMv8(AArch64)

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	ARMv8(AArch64)
poly64x1_t vcopy_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	ARMv8
poly64x2_t vcopyq_lane_p64 (poly64x2_t a, const int lane1, poly64x1_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	ARMv8
float32x2_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
float64x1_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
poly8x8_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)

poly16x4_t vcopy_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	ARMv8(AArch64)
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	ARMv8(AArch64)
int8x8_t vcopy_laneeq_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	ARMv8(AArch64)
int8x16_t vcopyq_laneeq_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	ARMv8(AArch64)
int16x4_t vcopy_laneeq_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	ARMv8(AArch64)
int16x8_t vcopyq_laneeq_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	ARMv8(AArch64)
int32x2_t vcopy_laneeq_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	ARMv8(AArch64)
int32x4_t vcopyq_laneeq_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	ARMv8(AArch64)
int64x1_t vcopy_laneeq_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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8
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	ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

poly16x8_t vcopyq_laneq_p16 (poly16x8_t a, const int lane1, poly16x8_t b, const int lane2)	$a \rightarrow \text{Vd.8H}$ $0 \leq \text{lane1} \leq 7$ $b \rightarrow \text{Vn.8H}$ $0 \leq \text{lane2} \leq 7$	INS Vd.H[lane1], Vn.H[lane2]	Vd.8H	ARMv8(AArch64)
int8x8_t vrbic_s8 (int8x8_t a)	$a \rightarrow \text{Vn.8B}$	RBIT Vd.8B, Vn.8B	Vd.8B	ARMv8(AArch64)
int8x16_t vrbicq_s8 (int8x16_t a)	$a \rightarrow \text{Vn.16B}$	RBIT Vd.16B, Vn.16B	Vd.16B	ARMv8(AArch64)
uint8x8_t vrbic_u8 (uint8x8_t a)	$a \rightarrow \text{Vn.8B}$	RBIT Vd.8B, Vn.8B	Vd.8B	ARMv8(AArch64)
uint8x16_t vrbicq_u8 (uint8x16_t a)	$a \rightarrow \text{Vn.16B}$	RBIT Vd.16B, Vn.16B	Vd.16B	ARMv8(AArch64)
poly8x8_t vrbic_p8 (poly8x8_t a)	$a \rightarrow \text{Vn.8B}$	RBIT Vd.8B, Vn.8B	Vd.8B	ARMv8(AArch64)
poly8x16_t vrbicq_p8 (poly8x16_t a)	$a \rightarrow \text{Vn.16B}$	RBIT Vd.16B, Vn.16B	Vd.16B	ARMv8(AArch64)
int8x8_t vcreate_s8 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.8B	ARMv7, ARMv8
int16x4_t vcreate_s16 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.4H	ARMv7, ARMv8
int32x2_t vcreate_s32 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.2S	ARMv7, ARMv8
int64x1_t vcreate_s64 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.1D	ARMv7, ARMv8
uint8x8_t vcreate_u8 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.8B	ARMv7, ARMv8
uint16x4_t vcreate_u16 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.4H	ARMv7, ARMv8
uint32x2_t vcreate_u32 (uint64_t a)	$a \rightarrow \text{Xn}$	INS Vd.D[0], Xn	Vd.2S	ARMv7, ARMv8

uint64x1_t vcreate_u64 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.1D	ARMv7, ARMv8
poly64x1_t vcreate_p64 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.1D	ARMv8
float16x4_t vcreate_f16 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.4H	ARMv7, ARMv8
float32x2_t vcreate_f32 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.2S	ARMv7, ARMv8
poly8x8_t vcreate_p8 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.8B	ARMv7, ARMv8
poly16x4_t vcreate_p16 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.4H	ARMv7, ARMv8
float64x1_t vcreate_f64 (uint64_t a)	$a \rightarrow X_n$	INS Vd.D[0],Xn	Vd.1D	ARMv8(AArch64)
int8x8_t vdup_n_s8 (int8_t value)	value \rightarrow rn	DUP Vd.8B,rn	Vd.8B	ARMv7, ARMv8
int8x16_t vdupq_n_s8 (int8_t value)	value \rightarrow rn	DUP Vd.16B,rn	Vd.16B	ARMv7, ARMv8
int16x4_t vdup_n_s16 (int16_t value)	value \rightarrow rn	DUP Vd.4H,rn	Vd.4H	ARMv7, ARMv8
int16x8_t vdupq_n_s16 (int16_t value)	value \rightarrow rn	DUP Vd.8H,rn	Vd.8H	ARMv7, ARMv8
int32x2_t vdup_n_s32 (int32_t value)	value \rightarrow rn	DUP Vd.2S,rn	Vd.2S	ARMv7, ARMv8
int32x4_t vdupq_n_s32 (int32_t value)	value \rightarrow rn	DUP Vd.4S,rn	Vd.4S	ARMv7, ARMv8
int64x1_t vdup_n_s64 (int64_t value)	value \rightarrow rn	INS Dd.D[0],xn	Vd.1D	ARMv7, ARMv8
int64x2_t vdupq_n_s64 (int64_t value)	value \rightarrow rn	DUP Vd.2D,rn	Vd.2D	ARMv7, ARMv8

uint8x8_t vdup_n_u8 (uint8_t value)	value → rn	DUP Vd.8B,rn	Vd.8B	ARMv7, ARMv8
uint8x16_t vdupq_n_u8 (uint8_t value)	value → rn	DUP Vd.16B,rn	Vd.16B	ARMv7, ARMv8
uint16x4_t vdup_n_u16 (uint16_t value)	value → rn	DUP Vd.4H,rn	Vd.4H	ARMv7, ARMv8
uint16x8_t vdupq_n_u16 (uint16_t value)	value → rn	DUP Vd.8H,rn	Vd.8H	ARMv7, ARMv8
uint32x2_t vdup_n_u32 (uint32_t value)	value → rn	DUP Vd.2S,rn	Vd.2S	ARMv7, ARMv8
uint32x4_t vdupq_n_u32 (uint32_t value)	value → rn	DUP Vd.4S,rn	Vd.4S	ARMv7, ARMv8
uint64x1_t vdup_n_u64 (uint64_t value)	value → rn	INS Dd.D[0],xn	Vd.1D	ARMv7, ARMv8
uint64x2_t vdupq_n_u64 (uint64_t value)	value → rn	DUP Vd.2D,rn	Vd.2D	ARMv7, ARMv8
poly64x1_t vdup_n_p64 (poly64_t value)	value → rn	INS Dd.D[0],xn	Vd.1D	ARMv8
poly64x2_t vdupq_n_p64 (poly64_t value)	value → rn	DUP Vd.2D,rn	Vd.2D	ARMv8
float32x2_t vdup_n_f32 (float32_t value)	value → rn	DUP Vd.2S,rn	Vd.2S	ARMv7, ARMv8
float32x4_t vdupq_n_f32 (float32_t value)	value → rn	DUP Vd.4S,rn	Vd.4S	ARMv7, ARMv8
poly8x8_t vdup_n_p8 (poly8_t value)	value → rn	DUP Vd.8B,rn	Vd.8B	ARMv7, ARMv8
poly8x16_t vdupq_n_p8 (poly8_t value)	value → rn	DUP Vd.16B,rn	Vd.16B	ARMv7, ARMv8
poly16x4_t vdup_n_p16 (poly16_t value)	value → rn	DUP Vd.4H,rn	Vd.4H	ARMv7, ARMv8

poly16x8_t vdupq_n_p16 (poly16_t value)	value → rn	DUP Vd.8H,rn	Vd.8H	ARMv7, ARMv8
float64x1_t vdup_n_f64 (float64_t value)	value → rn	INS Dd.D[0],xn	Vd.1D	ARMv8(AArch64)
float64x2_t vdupq_n_f64 (float64_t value)	value → rn	DUP Vd.2D,rn	Vd.2D	ARMv8(AArch64)
int8x8_t vmov_n_s8 (int8_t value)	value → rn	DUP Vd.8B,rn	Vd.8B	ARMv7, ARMv8
int8x16_t vmovq_n_s8 (int8_t value)	value → rn	DUP Vd.16B,rn	Vd.16B	ARMv7, ARMv8
int16x4_t vmov_n_s16 (int16_t value)	value → rn	DUP Vd.4H,rn	Vd.4H	ARMv7, ARMv8
int16x8_t vmovq_n_s16 (int16_t value)	value → rn	DUP Vd.8H,rn	Vd.8H	ARMv7, ARMv8
int32x2_t vmov_n_s32 (int32_t value)	value → rn	DUP Vd.2S,rn	Vd.2S	ARMv7, ARMv8
int32x4_t vmovq_n_s32 (int32_t value)	value → rn	DUP Vd.4S,rn	Vd.4S	ARMv7, ARMv8
int64x1_t vmov_n_s64 (int64_t value)	value → rn	DUP Vd.1D,rn	Vd.1D	ARMv7, ARMv8
int64x2_t vmovq_n_s64 (int64_t value)	value → rn	DUP Vd.2D,rn	Vd.2D	ARMv7, ARMv8
uint8x8_t vmov_n_u8 (uint8_t value)	value → rn	DUP Vd.8B,rn	Vd.8B	ARMv7, ARMv8
uint8x16_t vmovq_n_u8 (uint8_t value)	value → rn	DUP Vd.16B,rn	Vd.16B	ARMv7, ARMv8
uint16x4_t vmov_n_u16 (uint16_t value)	value → rn	DUP Vd.4H,rn	Vd.4H	ARMv7, ARMv8
uint16x8_t vmovq_n_u16 (uint16_t value)	value → rn	DUP Vd.8H,rn	Vd.8H	ARMv7, ARMv8

uint32x2_t vmov_n_u32 (uint32_t value)	value → rn	DUP Vd.2S,rn	Vd.2S	ARMv7, ARMv8
uint32x4_t vmovq_n_u32 (uint32_t value)	value → rn	DUP Vd.4S,rn	Vd.4S	ARMv7, ARMv8
uint64x1_t vmov_n_u64 (uint64_t value)	value → rn	DUP Vd.1D,rn	Vd.1D	ARMv7, ARMv8
uint64x2_t vmovq_n_u64 (uint64_t value)	value → rn	DUP Vd.2D,rn	Vd.2D	ARMv7, ARMv8
float32x2_t vmov_n_f32 (float32_t value)	value → rn	DUP Vd.2S,rn	Vd.2S	ARMv7, ARMv8
float32x4_t vmovq_n_f32 (float32_t value)	value → rn	DUP Vd.4S,rn	Vd.4S	ARMv7, ARMv8
poly8x8_t vmov_n_p8 (poly8_t value)	value → rn	DUP Vd.8B,rn	Vd.8B	ARMv7, ARMv8
poly8x16_t vmovq_n_p8 (poly8_t value)	value → rn	DUP Vd.16B,rn	Vd.16B	ARMv7, ARMv8
poly16x4_t vmov_n_p16 (poly16_t value)	value → rn	DUP Vd.4H,rn	Vd.4H	ARMv7, ARMv8
poly16x8_t vmovq_n_p16 (poly16_t value)	value → rn	DUP Vd.8H,rn	Vd.8H	ARMv7, ARMv8
float64x1_t vmov_n_f64 (float64_t value)	value → rn	DUP Vd.1D,rn	Vd.1D	ARMv8(AArch64)
float64x2_t vmovq_n_f64 (float64_t value)	value → rn	DUP Vd.2D,rn	Vd.2D	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
int64x1_t vdup_lane_s64 (int64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv7, ARMv8
int64x2_t vdupq_lane_s64 (int64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

uint64x1_t vdup_lane_u64 (uint64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv7, ARMv8
uint64x2_t vdupq_lane_u64 (uint64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D	ARMv7, ARMv8
poly64x1_t vdup_lane_p64 (poly64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv8
poly64x2_t vdupq_lane_p64 (poly64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D	ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
float64x1_t vdup_lane_f64 (float64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
float64x2_t vdupq_lane_f64 (float64x1_t vec, const int lane)	vec → Vn.1D lane == 0	DUP Vd.2D,Vn.D[lane]	Vd.2D	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
int64x1_t vdup_laneq_s64 (int64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
uint64x1_t vdup_laneq_u64 (uint64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
poly64x1_t vdup_laneq_p64 (poly64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8
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	ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

float64x1_t vdup_laneq_f64 (float64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
int8x8_t vget_high_s8 (int8x16_t a)	a → Vn.16B	DUP Vd.1D,Vn.D[1]	Vd.8B	ARMv7, ARMv8
int16x4_t vget_high_s16 (int16x8_t a)	a → Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H	ARMv7, ARMv8
int32x2_t vget_high_s32 (int32x4_t a)	a → Vn.4S	DUP Vd.1D,Vn.D[1]	Vd.2S	ARMv7, ARMv8
int64x1_t vget_high_s64 (int64x2_t a)	a → Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D	ARMv7, ARMv8
uint8x8_t vget_high_u8 (uint8x16_t a)	a → Vn.16B	DUP Vd.1D,Vn.D[1]	Vd.8B	ARMv7, ARMv8
uint16x4_t vget_high_u16 (uint16x8_t a)	a → Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H	ARMv7, ARMv8
uint32x2_t vget_high_u32 (uint32x4_t a)	a → Vn.4S	DUP Vd.1D,Vn.D[1]	Vd.2S	ARMv7, ARMv8
uint64x1_t vget_high_u64 (uint64x2_t a)	a → Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D	ARMv7, ARMv8
poly64x1_t vget_high_p64 (poly64x2_t a)	a → Vn.2D	DUP Vd.1D,Vn.D[1]	Vd.1D	ARMv8
float16x4_t vget_high_f16 (float16x8_t a)	a → Vn.8H	DUP Vd.1D,Vn.D[1]	Vd.4H	ARMv8(AArch64)

float32x2_t vget_high_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	DUP Vd.1D,Vn.D[1]	Vd.2S	ARMv7, ARMv8
poly8x8_t vget_high_p8 (poly8x16_t a)	$a \rightarrow Vn.16B$	DUP Vd.1D,Vn.D[1]	Vd.8B	ARMv7, ARMv8
poly16x4_t vget_high_p16 (poly16x8_t a)	$a \rightarrow Vn.8H$	DUP Vd.1D,Vn.D[1]	Vd.4H	ARMv7, ARMv8
float64x1_t vget_high_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	DUP Vd.1D,Vn.D[1]	Vd.1D	ARMv8(AArch64)
int8x8_t vget_low_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	DUP Vd.1D,Vn.D[0]	Vd.8B	ARMv7, ARMv8
int16x4_t vget_low_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	DUP Vd.1D,Vn.D[0]	Vd.4H	ARMv7, ARMv8
int32x2_t vget_low_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	DUP Vd.1D,Vn.D[0]	Vd.2S	ARMv7, ARMv8
int64x1_t vget_low_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	DUP Vd.1D,Vn.D[0]	Vd.1D	ARMv7, ARMv8
uint8x8_t vget_low_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	DUP Vd.1D,Vn.D[0]	Vd.8B	ARMv7, ARMv8
uint16x4_t vget_low_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	DUP Vd.1D,Vn.D[0]	Vd.4H	ARMv7, ARMv8
uint32x2_t vget_low_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	DUP Vd.1D,Vn.D[0]	Vd.2S	ARMv7, ARMv8
uint64x1_t vget_low_u64 (uint64x2_t a)	$a \rightarrow Vn.2D$	DUP Vd.1D,Vn.D[0]	Vd.1D	ARMv7, ARMv8
poly64x1_t vget_low_p64 (poly64x2_t a)	$a \rightarrow Vn.2D$	DUP Vd.1D,Vn.D[0]	Vd.1D	ARMv8
float16x4_t vget_low_f16 (float16x8_t a)	$a \rightarrow Vn.8H$	DUP Vd.1D,Vn.D[0]	Vd.4H	ARMv8(AArch64)
float32x2_t vget_low_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	DUP Vd.1D,Vn.D[0]	Vd.2S	ARMv7, ARMv8

poly8x8_t vget_low_p8 (poly8x16_t a)	$a \rightarrow Vn.16B$	DUP Vd.1D,Vn.D[0]	Vd.8B	ARMv7, ARMv8
poly16x4_t vget_low_p16 (poly16x8_t a)	$a \rightarrow Vn.8H$	DUP Vd.1D,Vn.D[0]	Vd.4H	ARMv7, ARMv8
float64x1_t vget_low_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	DUP Vd.1D,Vn.D[0]	Vd.1D	ARMv8(AArch64)
int8_t vdupb_lane_s8 (int8x8_t vec, const int lane)	$vec \rightarrow Vn.8B$ $0 \leq lane \leq 7$	DUP Bd,Vn.B[lane]	Bd	ARMv8(AArch64)
int16_t vduph_lane_s16 (int16x4_t vec, const int lane)	$vec \rightarrow Vn.4H$ $0 \leq lane \leq 3$	DUP Hd,Vn.H[lane]	Hd	ARMv8(AArch64)
int32_t vdups_lane_s32 (int32x2_t vec, const int lane)	$vec \rightarrow Vn.2S$ $0 \leq lane \leq 1$	DUP Sd,Vn.S[lane]	Sd	ARMv8(AArch64)
int64_t vdupd_lane_s64 (int64x1_t vec, const int lane)	$vec \rightarrow Vn.1D$ lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
uint8_t vdupb_lane_u8 (uint8x8_t vec, const int lane)	$vec \rightarrow Vn.8B$ $0 \leq lane \leq 7$	DUP Bd,Vn.B[lane]	Bd	ARMv8(AArch64)
uint16_t vduph_lane_u16 (uint16x4_t vec, const int lane)	$vec \rightarrow Vn.4H$ $0 \leq lane \leq 3$	DUP Hd,Vn.H[lane]	Hd	ARMv8(AArch64)
uint32_t vdups_lane_u32 (uint32x2_t vec, const int lane)	$vec \rightarrow Vn.2S$ $0 \leq lane \leq 1$	DUP Sd,Vn.S[lane]	Sd	ARMv8(AArch64)
uint64_t vdupd_lane_u64 (uint64x1_t vec, const int lane)	$vec \rightarrow Vn.1D$ lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
float32_t vdups_lane_f32 (float32x2_t vec, const int lane)	$vec \rightarrow Vn.2S$ $0 \leq lane \leq 1$	DUP Sd,Vn.S[lane]	Sd	ARMv8(AArch64)
float64_t vdupd_lane_f64 (float64x1_t vec, const int lane)	$vec \rightarrow Vn.1D$ lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)

poly8_t vdupb_lane_p8 (poly8x8_t vec, const int lane)	vec → Vn.8B 0 ≤ lane ≤ 7	DUP Bd,Vn.B[lane]	Bd	ARMv8(AArch64)
poly16_t vduph_lane_p16 (poly16x4_t vec, const int lane)	vec → Vn.4H 0 ≤ lane ≤ 3	DUP Hd,Vn.H[lane]	Hd	ARMv8(AArch64)
int8_t vdupb_laneq_s8 (int8x16_t vec, const int lane)	vec → Vn.16B 0 ≤ lane ≤ 15	DUP Bd,Vn.B[lane]	Bd	ARMv8(AArch64)
int16_t vduph_laneq_s16 (int16x8_t vec, const int lane)	vec → Vn.8H 0 ≤ lane ≤ 7	DUP Hd,Vn.H[lane]	Hd	ARMv8(AArch64)
int32_t vdups_laneq_s32 (int32x4_t vec, const int lane)	vec → Vn.4S 0 ≤ lane ≤ 3	DUP Sd,Vn.S[lane]	Sd	ARMv8(AArch64)
int64_t vdupd_laneq_s64 (int64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
uint8_t vdupb_laneq_u8 (uint8x16_t vec, const int lane)	vec → Vn.16B 0 ≤ lane ≤ 15	DUP Bd,Vn.B[lane]	Bd	ARMv8(AArch64)
uint16_t vduph_laneq_u16 (uint16x8_t vec, const int lane)	vec → Vn.8H 0 ≤ lane ≤ 7	DUP Hd,Vn.H[lane]	Hd	ARMv8(AArch64)
uint32_t vdups_laneq_u32 (uint32x4_t vec, const int lane)	vec → Vn.4S 0 ≤ lane ≤ 3	DUP Sd,Vn.S[lane]	Sd	ARMv8(AArch64)
uint64_t vdupd_laneq_u64 (uint64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
float32_t vdups_laneq_f32 (float32x4_t vec, const int lane)	vec → Vn.4S 0 ≤ lane ≤ 3	DUP Sd,Vn.S[lane]	Sd	ARMv8(AArch64)
float64_t vdupd_laneq_f64 (float64x2_t vec, const int lane)	vec → Vn.2D 0 ≤ lane ≤ 1	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)

poly8_t vdupb_laneq_p8 (poly8x16_t vec, const int lane)	vec → Vn.16B 0 ≤ lane ≤ 15	DUP Bd,Vn.B[lane]	Bd	ARMv8(AArch64)
poly16_t vduph_laneq_p16 (poly16x8_t vec, const int lane)	vec → Vn.8H 0 ≤ lane ≤ 7	DUP Hd,Vn.H[lane]	Hd	ARMv8(AArch64)
int8x8_t vld1_s8 (int8_t const * ptr)	ptr → Xn	LD1 {Vt.8B},[Xn]	Vt.8B	ARMv7, ARMv8
int8x16_t vld1q_s8 (int8_t const * ptr)	ptr → Xn	LD1 {Vt.16B},[Xn]	Vt.16B	ARMv7, ARMv8
int16x4_t vld1_s16 (int16_t const * ptr)	ptr → Xn	LD1 {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
int16x8_t vld1q_s16 (int16_t const * ptr)	ptr → Xn	LD1 {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
int32x2_t vld1_s32 (int32_t const * ptr)	ptr → Xn	LD1 {Vt.2S},[Xn]	Vt.2S	ARMv7, ARMv8
int32x4_t vld1q_s32 (int32_t const * ptr)	ptr → Xn	LD1 {Vt.4S},[Xn]	Vt.4S	ARMv7, ARMv8
int64x1_t vld1_s64 (int64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv7, ARMv8
int64x2_t vld1q_s64 (int64_t const * ptr)	ptr → Xn	LD1 {Vt.2D},[Xn]	Vt.2D	ARMv7, ARMv8
uint8x8_t vld1_u8 (uint8_t const * ptr)	ptr → Xn	LD1 {Vt.8B},[Xn]	Vt.8B	ARMv7, ARMv8
uint8x16_t vld1q_u8 (uint8_t const * ptr)	ptr → Xn	LD1 {Vt.16B},[Xn]	Vt.16B	ARMv7, ARMv8
uint16x4_t vld1_u16 (uint16_t const * ptr)	ptr → Xn	LD1 {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
uint16x8_t vld1q_u16 (uint16_t const * ptr)	ptr → Xn	LD1 {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
uint32x2_t vld1_u32 (uint32_t const * ptr)	ptr → Xn	LD1 {Vt.2S},[Xn]	Vt.2S	ARMv7, ARMv8

uint32x4_t vld1q_u32 (uint32_t const * ptr)	ptr → Xn	LD1 {Vt.4S},[Xn]	Vt.4S	ARMv7, ARMv8
uint64x1_t vld1_u64 (uint64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv7, ARMv8
uint64x2_t vld1q_u64 (uint64_t const * ptr)	ptr → Xn	LD1 {Vt.2D},[Xn]	Vt.2D	ARMv7, ARMv8
poly64x1_t vld1_p64 (poly64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv8
poly64x2_t vld1q_p64 (poly64_t const * ptr)	ptr → Xn	LD1 {Vt.2D},[Xn]	Vt.2D	ARMv8
float16x4_t vld1_f16 (float16_t const * ptr)	ptr → Xn	LD1 {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
float16x8_t vld1q_f16 (float16_t const * ptr)	ptr → Xn	LD1 {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
float32x2_t vld1_f32 (float32_t const * ptr)	ptr → Xn	LD1 {Vt.2S},[Xn]	Vt.2S	ARMv7, ARMv8
float32x4_t vld1q_f32 (float32_t const * ptr)	ptr → Xn	LD1 {Vt.4S},[Xn]	Vt.4S	ARMv7, ARMv8
poly8x8_t vld1_p8 (poly8_t const * ptr)	ptr → Xn	LD1 {Vt.8B},[Xn]	Vt.8B	ARMv7, ARMv8
poly8x16_t vld1q_p8 (poly8_t const * ptr)	ptr → Xn	LD1 {Vt.16B},[Xn]	Vt.16B	ARMv7, ARMv8
poly16x4_t vld1_p16 (poly16_t const * ptr)	ptr → Xn	LD1 {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
poly16x8_t vld1q_p16 (poly16_t const * ptr)	ptr → Xn	LD1 {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
float64x1_t vld1_f64 (float64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv8(AArch64)
float64x2_t vld1q_f64 (float64_t const * ptr)	ptr → Xn	LD1 {Vt.2D},[Xn]	Vt.2D	ARMv8(AArch64)

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8
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	ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
int8x8_t vld1_dup_s8 (int8_t const * ptr)	ptr → Xn	LD1R {Vt.8B},[Xn]	Vt.8B	ARMv7, ARMv8
int8x16_t vld1q_dup_s8 (int8_t const * ptr)	ptr → Xn	LD1R {Vt.16B},[Xn]	Vt.16B	ARMv7, ARMv8
int16x4_t vld1_dup_s16 (int16_t const * ptr)	ptr → Xn	LD1R {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8

int16x8_t vld1q_dup_s16 (int16_t const * ptr)	ptr → Xn	LD1R {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
int32x2_t vld1_dup_s32 (int32_t const * ptr)	ptr → Xn	LD1R {Vt.2S},[Xn]	Vt.2S	ARMv7, ARMv8
int32x4_t vld1q_dup_s32 (int32_t const * ptr)	ptr → Xn	LD1R {Vt.4S},[Xn]	Vt.4S	ARMv7, ARMv8
int64x1_t vld1_dup_s64 (int64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv7, ARMv8
int64x2_t vld1q_dup_s64 (int64_t const * ptr)	ptr → Xn	LD1R {Vt.2D},[Xn]	Vt.2D	ARMv7, ARMv8
uint8x8_t vld1_dup_u8 (uint8_t const * ptr)	ptr → Xn	LD1R {Vt.8B},[Xn]	Vt.8B	ARMv7, ARMv8
uint8x16_t vld1q_dup_u8 (uint8_t const * ptr)	ptr → Xn	LD1R {Vt.16B},[Xn]	Vt.16B	ARMv7, ARMv8
uint16x4_t vld1_dup_u16 (uint16_t const * ptr)	ptr → Xn	LD1R {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
uint16x8_t vld1q_dup_u16 (uint16_t const * ptr)	ptr → Xn	LD1R {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
uint32x2_t vld1_dup_u32 (uint32_t const * ptr)	ptr → Xn	LD1R {Vt.2S},[Xn]	Vt.2S	ARMv7, ARMv8
uint32x4_t vld1q_dup_u32 (uint32_t const * ptr)	ptr → Xn	LD1R {Vt.4S},[Xn]	Vt.4S	ARMv7, ARMv8
uint64x1_t vld1_dup_u64 (uint64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv7, ARMv8
uint64x2_t vld1q_dup_u64 (uint64_t const * ptr)	ptr → Xn	LD1R {Vt.2D},[Xn]	Vt.2D	ARMv7, ARMv8
poly64x1_t vld1_dup_p64 (poly64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv8
poly64x2_t vld1q_dup_p64 (poly64_t const * ptr)	ptr → Xn	LD1R {Vt.2D},[Xn]	Vt.2D	ARMv8

float16x4_t vld1_dup_f16 (float16_t const * ptr)	ptr → Xn	LD1R {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
float16x8_t vld1q_dup_f16 (float16_t const * ptr)	ptr → Xn	LD1R {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
float32x2_t vld1_dup_f32 (float32_t const * ptr)	ptr → Xn	LD1R {Vt.2S},[Xn]	Vt.2S	ARMv7, ARMv8
float32x4_t vld1q_dup_f32 (float32_t const * ptr)	ptr → Xn	LD1R {Vt.4S},[Xn]	Vt.4S	ARMv7, ARMv8
poly8x8_t vld1_dup_p8 (poly8_t const * ptr)	ptr → Xn	LD1R {Vt.8B},[Xn]	Vt.8B	ARMv7, ARMv8
poly8x16_t vld1q_dup_p8 (poly8_t const * ptr)	ptr → Xn	LD1R {Vt.16B},[Xn]	Vt.16B	ARMv7, ARMv8
poly16x4_t vld1_dup_p16 (poly16_t const * ptr)	ptr → Xn	LD1R {Vt.4H},[Xn]	Vt.4H	ARMv7, ARMv8
poly16x8_t vld1q_dup_p16 (poly16_t const * ptr)	ptr → Xn	LD1R {Vt.8H},[Xn]	Vt.8H	ARMv7, ARMv8
float64x1_t vld1_dup_f64 (float64_t const * ptr)	ptr → Xn	LD1 {Vt.1D},[Xn]	Vt.1D	ARMv8(AArch64)
float64x2_t vld1q_dup_f64 (float64_t const * ptr)	ptr → Xn	LD1R {Vt.2D},[Xn]	Vt.2D	ARMv8(AArch64)
void vst1_s8 (int8_t * ptr, int8x8_t val)	ptr → Xn val → Vt.8B	ST1 {Vt.8B},[Xn]		ARMv7, ARMv8
void vst1q_s8 (int8_t * ptr, int8x16_t val)	ptr → Xn val → Vt.16B	ST1 {Vt.16B},[Xn]		ARMv7, ARMv8
void vst1_s16 (int16_t * ptr, int16x4_t val)	ptr → Xn val → Vt.4H	ST1 {Vt.4H},[Xn]		ARMv7, ARMv8
void vst1q_s16 (int16_t * ptr, int16x8_t val)	ptr → Xn val → Vt.8H	ST1 {Vt.8H},[Xn]		ARMv7, ARMv8

void vst1_s32 (int32_t * ptr, int32x2_t val)	ptr → Xn val → Vt.2S	ST1 {Vt.2S},[Xn]		ARMv7, ARMv8
void vst1q_s32 (int32_t * ptr, int32x4_t val)	ptr → Xn val → Vt.4S	ST1 {Vt.4S},[Xn]		ARMv7, ARMv8
void vst1_s64 (int64_t * ptr, int64x1_t val)	ptr → Xn val → Vt.1D	ST1 {Vt.1D},[Xn]		ARMv7, ARMv8
void vst1q_s64 (int64_t * ptr, int64x2_t val)	ptr → Xn val → Vt.2D	ST1 {Vt.2D},[Xn]		ARMv7, ARMv8
void vst1_u8 (uint8_t * ptr, uint8x8_t val)	ptr → Xn val → Vt.8B	ST1 {Vt.8B},[Xn]		ARMv7, ARMv8
void vst1q_u8 (uint8_t * ptr, uint8x16_t val)	ptr → Xn val → Vt.16B	ST1 {Vt.16B},[Xn]		ARMv7, ARMv8
void vst1_u16 (uint16_t * ptr, uint16x4_t val)	ptr → Xn val → Vt.4H	ST1 {Vt.4H},[Xn]		ARMv7, ARMv8
void vst1q_u16 (uint16_t * ptr, uint16x8_t val)	ptr → Xn val → Vt.8H	ST1 {Vt.8H},[Xn]		ARMv7, ARMv8
void vst1_u32 (uint32_t * ptr, uint32x2_t val)	ptr → Xn val → Vt.2S	ST1 {Vt.2S},[Xn]		ARMv7, ARMv8
void vst1q_u32 (uint32_t * ptr, uint32x4_t val)	ptr → Xn val → Vt.4S	ST1 {Vt.4S},[Xn]		ARMv7, ARMv8
void vst1_u64 (uint64_t * ptr, uint64x1_t val)	ptr → Xn val → Vt.1D	ST1 {Vt.1D},[Xn]		ARMv7, ARMv8
void vst1q_u64 (uint64_t * ptr, uint64x2_t val)	ptr → Xn val → Vt.2D	ST1 {Vt.2D},[Xn]		ARMv7, ARMv8

void vst1_p64 (poly64_t * ptr, poly64x1_t val)	ptr → Xn val → Vt.1D	ST1 {Vt.1D},[Xn]		ARMv8
void vst1q_p64 (poly64_t * ptr, poly64x2_t val)	ptr → Xn val → Vt.2D	ST1 {Vt.2D},[Xn]		ARMv8
void vst1_f16 (float16_t * ptr, float16x4_t val)	ptr → Xn val → Vt.4H	ST1 {Vt.4H},[Xn]		ARMv7, ARMv8
void vst1q_f16 (float16_t * ptr, float16x8_t val)	ptr → Xn val → Vt.8H	ST1 {Vt.8H},[Xn]		ARMv7, ARMv8
void vst1_f32 (float32_t * ptr, float32x2_t val)	ptr → Xn val → Vt.2S	ST1 {Vt.2S},[Xn]		ARMv7, ARMv8
void vst1q_f32 (float32_t * ptr, float32x4_t val)	ptr → Xn val → Vt.4S	ST1 {Vt.4S},[Xn]		ARMv7, ARMv8
void vst1_p8 (poly8_t * ptr, poly8x8_t val)	ptr → Xn val → Vt.8B	ST1 {Vt.8B},[Xn]		ARMv7, ARMv8
void vst1q_p8 (poly8_t * ptr, poly8x16_t val)	ptr → Xn val → Vt.16B	ST1 {Vt.16B},[Xn]		ARMv7, ARMv8
void vst1_p16 (poly16_t * ptr, poly16x4_t val)	ptr → Xn val → Vt.4H	ST1 {Vt.4H},[Xn]		ARMv7, ARMv8
void vst1q_p16 (poly16_t * ptr, poly16x8_t val)	ptr → Xn val → Vt.8H	ST1 {Vt.8H},[Xn]		ARMv7, ARMv8
void vst1_f64 (float64_t * ptr, float64x1_t val)	ptr → Xn val → Vt.1D	ST1 {Vt.1D},[Xn]		ARMv8(AArch64)
void vst1q_f64 (float64_t * ptr, float64x2_t val)	ptr → Xn val → Vt.2D	ST1 {Vt.2D},[Xn]		ARMv8(AArch64)

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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8

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]		ARMv7, ARMv8
void vst1q_lane_u16 (uint16_t * ptr, uint16x8_t val, const int lane)	ptr → Xn val → Vt.8H 0 ≤ lane ≤ 7	ST1 {Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst1_lane_u32 (uint32_t * ptr, uint32x2_t val, const int lane)	ptr → Xn val → Vt.2S 0 ≤ lane ≤ 1	ST1 {Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst1q_lane_u32 (uint32_t * ptr, uint32x4_t val, const int lane)	ptr → Xn val → Vt.4S 0 ≤ lane ≤ 3	ST1 {Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst1_lane_u64 (uint64_t * ptr, uint64x1_t val, const int lane)	ptr → Xn val → Vt.1D lane == 0	ST1 {Vt.d}[lane],[Xn]		ARMv7, ARMv8
void vst1q_lane_u64 (uint64_t * ptr, uint64x2_t val, const int lane)	ptr → Xn val → Vt.2D 0 ≤ lane ≤ 1	ST1 {Vt.d}[lane],[Xn]		ARMv7, ARMv8
void vst1_lane_p64 (poly64_t * ptr, poly64x1_t val, const int lane)	ptr → Xn val → Vt.1D lane == 0	ST1 {Vt.d}[lane],[Xn]		ARMv8
void vst1q_lane_p64 (poly64_t * ptr, poly64x2_t val, const int lane)	ptr → Xn val → Vt.2D 0 ≤ lane ≤ 1	ST1 {Vt.d}[lane],[Xn]		ARMv8
void vst1_lane_f16 (float16_t * ptr, float16x4_t val, const int lane)	ptr → Xn val → Vt.4H 0 ≤ lane ≤ 3	ST1 {Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst1q_lane_f16 (float16_t * ptr, float16x8_t val, const int lane)	ptr → Xn val → Vt.8H 0 ≤ lane ≤ 7	ST1 {Vt.h}[lane],[Xn]		ARMv7, ARMv8

void vst1_lane_f32 (float32_t * ptr, float32x2_t val, const int lane)	ptr → Xn val → Vt.2S 0 ≤ lane ≤ 1	ST1 {Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst1q_lane_f32 (float32_t * ptr, float32x4_t val, const int lane)	ptr → Xn val → Vt.4S 0 ≤ lane ≤ 3	ST1 {Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst1_lane_p8 (poly8_t * ptr, poly8x8_t val, const int lane)	ptr → Xn val → Vt.8B 0 ≤ lane ≤ 7	ST1 {Vt.b}[lane],[Xn]		ARMv7, ARMv8
void vst1q_lane_p8 (poly8_t * ptr, poly8x16_t val, const int lane)	ptr → Xn val → Vt.16B 0 ≤ lane ≤ 15	ST1 {Vt.b}[lane],[Xn]		ARMv7, ARMv8
void vst1_lane_p16 (poly16_t * ptr, poly16x4_t val, const int lane)	ptr → Xn val → Vt.4H 0 ≤ lane ≤ 3	ST1 {Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst1q_lane_p16 (poly16_t * ptr, poly16x8_t val, const int lane)	ptr → Xn val → Vt.8H 0 ≤ lane ≤ 7	ST1 {Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst1_lane_f64 (float64_t * ptr, float64x1_t val, const int lane)	ptr → Xn val → Vt.1D lane == 0	ST1 {Vt.d}[lane],[Xn]		ARMv8(AArch64)
void vst1q_lane_f64 (float64_t * ptr, float64x2_t val, const int lane)	ptr → Xn val → Vt.2D 0 ≤ lane ≤ 1	ST1 {Vt.d}[lane],[Xn]		ARMv8(AArch64)
int8x8x2_t vld2_s8 (int8_t const * ptr)	ptr → Xn	LD2 {Vt.8B - Vt.8B},[Xn]	Vt.8B → result.val[1] Vt.8B → result.val[0]	ARMv7, ARMv8
int8x16x2_t vld2q_s8 (int8_t const * ptr)	ptr → Xn	LD2 {Vt.16B - Vt.16B},[Xn]	Vt.16B → result.val[1] Vt.16B → result.val[0]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
float32x2x2_t vld2_f32 (float32_t const * ptr)	ptr → Xn	LD2 {Vt.2S - Vt2.2S},[Xn]	Vt2.2S → result.val[1] Vt.2S → result.val[0]	ARMv7, ARMv8
float32x4x2_t vld2q_f32 (float32_t const * ptr)	ptr → Xn	LD2 {Vt.4S - Vt2.4S},[Xn]	Vt2.4S → result.val[1] Vt.4S → result.val[0]	ARMv7, ARMv8
poly8x8x2_t vld2_p8 (poly8_t const * ptr)	ptr → Xn	LD2 {Vt.8B - Vt2.8B},[Xn]	Vt2.8B → result.val[1] Vt.8B → result.val[0]	ARMv7, ARMv8
poly8x16x2_t vld2q_p8 (poly8_t const * ptr)	ptr → Xn	LD2 {Vt.16B - Vt2.16B},[Xn]	Vt2.16B → result.val[1] Vt.16B → result.val[0]	ARMv7, ARMv8
poly16x4x2_t vld2_p16 (poly16_t const * ptr)	ptr → Xn	LD2 {Vt.4H - Vt2.4H},[Xn]	Vt2.4H → result.val[1] Vt.4H → result.val[0]	ARMv7, ARMv8
poly16x8x2_t vld2q_p16 (poly16_t const * ptr)	ptr → Xn	LD2 {Vt.8H - Vt2.8H},[Xn]	Vt2.8H → result.val[1] Vt.8H → result.val[0]	ARMv7, ARMv8
int64x1x2_t vld2_s64 (int64_t const * ptr)	ptr → Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D → result.val[1] Vt.1D → result.val[0]	ARMv7, ARMv8
uint64x1x2_t vld2_u64 (uint64_t const * ptr)	ptr → Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D → result.val[1] Vt.1D → result.val[0]	ARMv7, ARMv8

poly64x1x2_t vld2_p64 (poly64_t const * ptr)	ptr → Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D → result.val[1] Vt.1D → result.val[0]	ARMv8
int64x2x2_t vld2q_s64 (int64_t const * ptr)	ptr → Xn	LD2 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
uint64x2x2_t vld2q_u64 (uint64_t const * ptr)	ptr → Xn	LD2 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
poly64x2x2_t vld2q_p64 (poly64_t const * ptr)	ptr → Xn	LD2 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
float64x1x2_t vld2_f64 (float64_t const * ptr)	ptr → Xn	LD1 {Vt.1D - Vt2.1D},[Xn]	Vt2.1D → result.val[1] Vt.1D → result.val[0]	ARMv8(AArch64)
float64x2x2_t vld2q_f64 (float64_t const * ptr)	ptr → Xn	LD2 {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
int8x8x3_t vld3_s8 (int8_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]	ARMv7, ARMv8
int8x16x3_t vld3q_s8 (int8_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]	ARMv7, ARMv8
int16x4x3_t vld3_s16 (int16_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]	ARMv7, ARMv8

int16x8x3_t vld3q_s16 (int16_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]	ARMv7, ARMv8
int32x2x3_t vld3_s32 (int32_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]	ARMv7, ARMv8
int32x4x3_t vld3q_s32 (int32_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]	ARMv7, ARMv8
uint8x8x3_t vld3_u8 (uint8_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]	ARMv7, ARMv8
uint8x16x3_t vld3q_u8 (uint8_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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]	ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8

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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv8
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]	ARMv8(AArch64)
uint64x2x2_t vld2q_dup_u64 (uint64_t const * ptr)	ptr → Xn	LD2R {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
poly64x2x2_t vld2q_dup_p64 (poly64_t const * ptr)	ptr → Xn	LD2R {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
float64x1x2_t vld2_dup_f64 (float64_t const * ptr)	ptr → Xn	LD2R {Vt.1D - Vt2.1D},[Xn]	Vt2.1D → result.val[1] Vt.1D → result.val[0]	ARMv8(AArch64)
float64x2x2_t vld2q_dup_f64 (float64_t const * ptr)	ptr → Xn	LD2R {Vt.2D - Vt2.2D},[Xn]	Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
int8x8x3_t vld3_dup_s8 (int8_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]	ARMv7, ARMv8
int8x16x3_t vld3q_dup_s8 (int8_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]	ARMv7, ARMv8
int16x4x3_t vld3_dup_s16 (int16_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]	ARMv7, ARMv8

int16x8x3_t vld3q_dup_s16 (int16_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]	ARMv7, ARMv8
int32x2x3_t vld3_dup_s32 (int32_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]	ARMv7, ARMv8
int32x4x3_t vld3q_dup_s32 (int32_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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]	ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
float16x4x4_t vld4_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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
float32x2x4_t vld4_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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
poly8x8x4_t vld4_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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8

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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8

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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
void vst2q_u8 (uint8_t * ptr, uint8x16x2_t val)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST2 {Vt.16B - Vt2.16B},[Xn]		ARMv7, ARMv8
void vst2_u16 (uint16_t * ptr, uint16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST2 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst2q_u16 (uint16_t * ptr, uint16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST2 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst2_u32 (uint32_t * ptr, uint32x2x2_t val)	ptr → Xn val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST2 {Vt.2S - Vt2.2S},[Xn]		ARMv7, ARMv8
void vst2q_u32 (uint32_t * ptr, uint32x4x2_t val)	ptr → Xn val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST2 {Vt.4S - Vt2.4S},[Xn]		ARMv7, ARMv8

void vst2_f16 (float16_t * ptr, float16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST2 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst2q_f16 (float16_t * ptr, float16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST2 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst2_f32 (float32_t * ptr, float32x2x2_t val)	ptr → Xn val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST2 {Vt.2S - Vt2.2S},[Xn]		ARMv7, ARMv8
void vst2q_f32 (float32_t * ptr, float32x4x2_t val)	ptr → Xn val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST2 {Vt.4S - Vt2.4S},[Xn]		ARMv7, ARMv8
void vst2_p8 (poly8_t * ptr, poly8x8x2_t val)	ptr → Xn val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST2 {Vt.8B - Vt2.8B},[Xn]		ARMv7, ARMv8
void vst2q_p8 (poly8_t * ptr, poly8x16x2_t val)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST2 {Vt.16B - Vt2.16B},[Xn]		ARMv7, ARMv8
void vst2_p16 (poly16_t * ptr, poly16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST2 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst2q_p16 (poly16_t * ptr, poly16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST2 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst2_s64 (int64_t * ptr, int64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv7, ARMv8
void vst2_u64 (uint64_t * ptr, uint64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv7, ARMv8

void vst2_p64 (poly64_t * ptr, poly64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv8
void vst2q_s64 (int64_t * ptr, int64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST2 {Vt.2D - Vt2.2D},[Xn]		ARMv8(AArch64)
void vst2q_u64 (uint64_t * ptr, uint64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST2 {Vt.2D - Vt2.2D},[Xn]		ARMv8(AArch64)
void vst2q_p64 (poly64_t * ptr, poly64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST2 {Vt.2D - Vt2.2D},[Xn]		ARMv8(AArch64)
void vst2_f64 (float64_t * ptr, float64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv8(AArch64)
void vst2q_f64 (float64_t * ptr, float64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST2 {Vt.2D - Vt2.2D},[Xn]		ARMv8(AArch64)
void vst3_s8 (int8_t * ptr, int8x8x3_t val)	ptr → Xn val.val[2] → Vt3.8B val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST3 {Vt.8B - Vt3.8B},[Xn]		ARMv7, ARMv8
void vst3q_s8 (int8_t * ptr, int8x16x3_t val)	ptr → Xn val.val[2] → Vt3.16B val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST3 {Vt.16B - Vt3.16B},[Xn]		ARMv7, ARMv8
void vst3_s16 (int16_t * ptr, int16x4x3_t val)	ptr → Xn val.val[2] → Vt3.4H val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST3 {Vt.4H - Vt3.4H},[Xn]		ARMv7, ARMv8

void vst3q_s16 (int16_t * ptr, int16x8x3_t val)	ptr → Xn val.val[2] → Vt3.8H val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST3 {Vt.8H - Vt3.8H},[Xn]		ARMv7, ARMv8
void vst3_s32 (int32_t * ptr, int32x2x3_t val)	ptr → Xn val.val[2] → Vt3.2S val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST3 {Vt.2S - Vt3.2S},[Xn]		ARMv7, ARMv8
void vst3q_s32 (int32_t * ptr, int32x4x3_t val)	ptr → Xn val.val[2] → Vt3.4S val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST3 {Vt.4S - Vt3.4S},[Xn]		ARMv7, ARMv8
void vst3_u8 (uint8_t * ptr, uint8x8x3_t val)	ptr → Xn val.val[2] → Vt3.8B val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST3 {Vt.8B - Vt3.8B},[Xn]		ARMv7, ARMv8
void vst3q_u8 (uint8_t * ptr, uint8x16x3_t val)	ptr → Xn val.val[2] → Vt3.16B val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST3 {Vt.16B - Vt3.16B},[Xn]		ARMv7, ARMv8
void vst3_u16 (uint16_t * ptr, uint16x4x3_t val)	ptr → Xn val.val[2] → Vt3.4H val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST3 {Vt.4H - Vt3.4H},[Xn]		ARMv7, ARMv8
void vst3q_u16 (uint16_t * ptr, uint16x8x3_t val)	ptr → Xn val.val[2] → Vt3.8H val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST3 {Vt.8H - Vt3.8H},[Xn]		ARMv7, ARMv8
void vst3_u32 (uint32_t * ptr, uint32x2x3_t val)	ptr → Xn val.val[2] → Vt3.2S val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST3 {Vt.2S - Vt3.2S},[Xn]		ARMv7, ARMv8

void vst3q_u32 (uint32_t * ptr, uint32x4x3_t val)	ptr → Xn val.val[2] → Vt3.4S val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST3 {Vt.4S - Vt3.4S},[Xn]		ARMv7, ARMv8
void vst3_f16 (float16_t * ptr, float16x4x3_t val)	ptr → Xn val.val[2] → Vt3.4H val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST3 {Vt.4H - Vt3.4H},[Xn]		ARMv7, ARMv8
void vst3q_f16 (float16_t * ptr, float16x8x3_t val)	ptr → Xn val.val[2] → Vt3.8H val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST3 {Vt.8H - Vt3.8H},[Xn]		ARMv7, ARMv8
void vst3_f32 (float32_t * ptr, float32x2x3_t val)	ptr → Xn val.val[2] → Vt3.2S val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST3 {Vt.2S - Vt3.2S},[Xn]		ARMv7, ARMv8
void vst3q_f32 (float32_t * ptr, float32x4x3_t val)	ptr → Xn val.val[2] → Vt3.4S val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST3 {Vt.4S - Vt3.4S},[Xn]		ARMv7, ARMv8
void vst3_p8 (poly8_t * ptr, poly8x8x3_t val)	ptr → Xn val.val[2] → Vt3.8B val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST3 {Vt.8B - Vt3.8B},[Xn]		ARMv7, ARMv8
void vst3q_p8 (poly8_t * ptr, poly8x16x3_t val)	ptr → Xn val.val[2] → Vt3.16B val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST3 {Vt.16B - Vt3.16B},[Xn]		ARMv7, ARMv8
void vst3_p16 (poly16_t * ptr, poly16x4x3_t val)	ptr → Xn val.val[2] → Vt3.4H val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST3 {Vt.4H - Vt3.4H},[Xn]		ARMv7, ARMv8

void vst3q_p16 (poly16_t * ptr, poly16x8x3_t val)	ptr → Xn val.val[2] → Vt3.8H val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST3 {Vt.8H - Vt3.8H},[Xn]		ARMv7, ARMv8
void vst3_s64 (int64_t * ptr, int64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv7, ARMv8
void vst3_u64 (uint64_t * ptr, uint64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv7, ARMv8
void vst3_p64 (poly64_t * ptr, poly64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv8
void vst3q_s64 (int64_t * ptr, int64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST3 {Vt.2D - Vt3.2D},[Xn]		ARMv8(AArch64)
void vst3q_u64 (uint64_t * ptr, uint64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST3 {Vt.2D - Vt3.2D},[Xn]		ARMv8(AArch64)
void vst3q_p64 (poly64_t * ptr, poly64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST3 {Vt.2D - Vt3.2D},[Xn]		ARMv8(AArch64)
void vst3_f64 (float64_t * ptr, float64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv8(AArch64)

void vst3q_f64 (float64_t * ptr, float64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST3 {Vt.2D - Vt3.2D},[Xn]		ARMv8(AArch64)
void vst4_s8 (int8_t * ptr, int8x8x4_t val)	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]		ARMv7, ARMv8
void vst4q_s8 (int8_t * ptr, int8x16x4_t val)	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]		ARMv7, ARMv8
void vst4_s16 (int16_t * ptr, int16x4x4_t val)	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]		ARMv7, ARMv8
void vst4q_s16 (int16_t * ptr, int16x8x4_t val)	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]		ARMv7, ARMv8
void vst4_s32 (int32_t * ptr, int32x2x4_t val)	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]		ARMv7, ARMv8

void vst4q_s32 (int32_t * ptr, int32x4x4_t val)	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]		ARMv7, ARMv8
void vst4_u8 (uint8_t * ptr, uint8x8x4_t val)	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]		ARMv7, ARMv8
void vst4q_u8 (uint8_t * ptr, uint8x16x4_t val)	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]		ARMv7, ARMv8
void vst4_u16 (uint16_t * ptr, uint16x4x4_t val)	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]		ARMv7, ARMv8
void vst4q_u16 (uint16_t * ptr, uint16x8x4_t val)	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]		ARMv7, ARMv8
void vst4_u32 (uint32_t * ptr, uint32x2x4_t val)	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]		ARMv7, ARMv8

void vst4q_u32 (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	ST4 {Vt.4S - Vt4.4S},[Xn]		ARMv7, ARMv8
void vst4_f16 (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	ST4 {Vt.4H - Vt4.4H},[Xn]		ARMv7, ARMv8
void vst4q_f16 (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	ST4 {Vt.8H - Vt4.8H},[Xn]		ARMv7, ARMv8
void vst4_f32 (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	ST4 {Vt.2S - Vt4.2S},[Xn]		ARMv7, ARMv8
void vst4q_f32 (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	ST4 {Vt.4S - Vt4.4S},[Xn]		ARMv7, ARMv8
void vst4_p8 (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	ST4 {Vt.8B - Vt4.8B},[Xn]		ARMv7, ARMv8

void vst4q_p8 (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	ST4 {Vt.16B - Vt4.16B},[Xn]		ARMv7, ARMv8
void vst4_p16 (poly16_t * ptr, poly16x4x4_t val)	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]		ARMv7, ARMv8
void vst4q_p16 (poly16_t * ptr, poly16x8x4_t val)	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]		ARMv7, ARMv8
void vst4_s64 (int64_t * ptr, int64x1x4_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]		ARMv7, ARMv8
void vst4_u64 (uint64_t * ptr, uint64x1x4_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]		ARMv7, ARMv8
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]		ARMv8

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	ST4 {Vt.2D - Vt4.2D},[Xn]		ARMv8(AArch64)
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]		ARMv8(AArch64)
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]		ARMv8(AArch64)
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]		ARMv8(AArch64)
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]		ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

int32x2x2_t vld2_lane_s32 (int32_t const * ptr, int32x2x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.2S src.val[0] → Vt.2S 0 ≤ lane ≤ 1	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt2.2S → result.val[1] Vt.2S → result.val[0]	ARMv7, ARMv8
int32x4x2_t vld2q_lane_s32 (int32_t const * ptr, int32x4x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.4S src.val[0] → Vt.4S 0 ≤ lane ≤ 3	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt2.4S → result.val[1] Vt.4S → result.val[0]	ARMv7, ARMv8
uint16x4x2_t vld2_lane_u16 (uint16_t const * ptr, uint16x4x2_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]	ARMv7, ARMv8
uint16x8x2_t vld2q_lane_u16 (uint16_t const * ptr, uint16x8x2_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]	ARMv7, ARMv8
uint32x2x2_t vld2_lane_u32 (uint32_t const * ptr, uint32x2x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.2S src.val[0] → Vt.2S 0 ≤ lane ≤ 1	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt2.2S → result.val[1] Vt.2S → result.val[0]	ARMv7, ARMv8
uint32x4x2_t vld2q_lane_u32 (uint32_t const * ptr, uint32x4x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.4S src.val[0] → Vt.4S 0 ≤ lane ≤ 3	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt2.4S → result.val[1] Vt.4S → result.val[0]	ARMv7, ARMv8
float16x4x2_t vld2_lane_f16 (float16_t const * ptr, float16x4x2_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]	ARMv7, ARMv8
float16x8x2_t vld2q_lane_f16 (float16_t const * ptr, float16x8x2_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]	ARMv7, ARMv8
float32x2x2_t vld2_lane_f32 (float32_t const * ptr, float32x2x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.2S src.val[0] → Vt.2S 0 ≤ lane ≤ 1	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt2.2S → result.val[1] Vt.2S → result.val[0]	ARMv7, ARMv8

float32x4x2_t vld2q_lane_f32 (float32_t const * ptr, float32x4x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.4S src.val[0] → Vt.4S 0 ≤ lane ≤ 3	LD2 {Vt.s - Vt2.s}[lane],[Xn]	Vt2.4S → result.val[1] Vt.4S → result.val[0]	ARMv7, ARMv8
poly16x4x2_t vld2_lane_p16 (poly16_t const * ptr, poly16x4x2_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]	ARMv7, ARMv8
poly16x8x2_t vld2q_lane_p16 (poly16_t const * ptr, poly16x8x2_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]	ARMv7, ARMv8
int8x8x2_t vld2_lane_s8 (int8_t const * ptr, int8x8x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.8B src.val[0] → Vt.8B 0 ≤ lane ≤ 7	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt2.8B → result.val[1] Vt.8B → result.val[0]	ARMv7, ARMv8
uint8x8x2_t vld2_lane_u8 (uint8_t const * ptr, uint8x8x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.8B src.val[0] → Vt.8B 0 ≤ lane ≤ 7	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt2.8B → result.val[1] Vt.8B → result.val[0]	ARMv7, ARMv8
poly8x8x2_t vld2_lane_p8 (poly8_t const * ptr, poly8x8x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.8B src.val[0] → Vt.8B 0 ≤ lane ≤ 7	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt2.8B → result.val[1] Vt.8B → result.val[0]	ARMv7, ARMv8
int8x16x2_t vld2q_lane_s8 (int8_t const * ptr, int8x16x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.16B src.val[0] → Vt.16B 0 ≤ lane ≤ 15	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt2.16B → result.val[1] Vt.16B → result.val[0]	ARMv8(AArch64)
uint8x16x2_t vld2q_lane_u8 (uint8_t const * ptr, uint8x16x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.16B src.val[0] → Vt.16B 0 ≤ lane ≤ 15	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt2.16B → result.val[1] Vt.16B → result.val[0]	ARMv8(AArch64)

poly8x16x2_t vld2q_lane_p8 (poly8_t const * ptr, poly8x16x2_t src, const int lane)	ptr → Xn src.val[1] → Vt2.16B src.val[0] → Vt.16B 0 ≤ lane ≤ 15	LD2 {Vt.b - Vt2.b}[lane],[Xn]	Vt2.16B → result.val[1] Vt.16B → result.val[0]	ARMv8(AArch64)
int64x1x2_t vld2_lane_s64 (int64_t const * ptr, int64x1x2_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]	ptr → Xn Vt2.1D → result.val[1] Vt.1D → result.val[0]	ARMv8(AArch64)
int64x2x2_t vld2q_lane_s64 (int64_t const * ptr, int64x2x2_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]	ptr → Xn Vt2.2D → result.val[1] Vt.2D → result.val[0]	ARMv8(AArch64)
uint64x1x2_t vld2_lane_u64 (uint64_t const * ptr, uint64x1x2_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]	ARMv8(AArch64)
uint64x2x2_t vld2q_lane_u64 (uint64_t const * ptr, uint64x2x2_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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]	ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)

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]		ARMv7, ARMv8
void vst2_lane_u8 (uint8_t * ptr, uint8x8x2_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]		ARMv7, ARMv8
void vst2_lane_p8 (poly8_t * ptr, poly8x8x2_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]		ARMv7, ARMv8
void vst3_lane_s8 (int8_t * ptr, int8x8x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_u8 (uint8_t * ptr, uint8x8x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_p8 (poly8_t * ptr, poly8x8x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_s8 (int8_t * ptr, int8x8x4_t val, const int lane)	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]		ARMv7, ARMv8

void vst4_lane_u8 (uint8_t * ptr, uint8x8x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_p8 (poly8_t * ptr, poly8x8x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst2_lane_s16 (int16_t * ptr, int16x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H 0 ≤ lane ≤ 3	ST2 {Vt.h - Vt2.h}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_s16 (int16_t * ptr, int16x8x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H 0 ≤ lane ≤ 7	ST2 {Vt.h - Vt2.h}[lane],[Xn]		ARMv7, ARMv8
void vst2_lane_s32 (int32_t * ptr, int32x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.2S val.val[0] → Vt.2S 0 ≤ lane ≤ 1	ST2 {Vt.s - Vt2.s}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_s32 (int32_t * ptr, int32x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.4S val.val[0] → Vt.4S 0 ≤ lane ≤ 3	ST2 {Vt.s - Vt2.s}[lane],[Xn]		ARMv7, ARMv8
void vst2_lane_u16 (uint16_t * ptr, uint16x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H 0 ≤ lane ≤ 3	ST2 {Vt.h - Vt2.h}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_u16 (uint16_t * ptr, uint16x8x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H 0 ≤ lane ≤ 7	ST2 {Vt.h - Vt2.h}[lane],[Xn]		ARMv7, ARMv8

void vst2_lane_u32 (uint32_t * ptr, uint32x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.2S val.val[0] → Vt.2S 0 ≤ lane ≤ 1	ST2 {Vt.s - Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_u32 (uint32_t * ptr, uint32x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.4S val.val[0] → Vt.4S 0 ≤ lane ≤ 3	ST2 {Vt.s - Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst2_lane_f16 (float16_t * ptr, float16x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.4H val.val[0] → Vt.4H 0 ≤ lane ≤ 3	ST2 {Vt.h - Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_f16 (float16_t * ptr, float16x8x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.8H val.val[0] → Vt.8H 0 ≤ lane ≤ 7	ST2 {Vt.h - Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst2_lane_f32 (float32_t * ptr, float32x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.2S val.val[0] → Vt.2S 0 ≤ lane ≤ 1	ST2 {Vt.s - Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_f32 (float32_t * ptr, float32x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.4S val.val[0] → Vt.4S 0 ≤ lane ≤ 3	ST2 {Vt.s - Vt.s}[lane],[Xn]		ARMv7, ARMv8
void vst2_lane_p16 (poly16_t * ptr, poly16x4x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.4H val.val[0] → Vt.4H 0 ≤ lane ≤ 3	ST2 {Vt.h - Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_p16 (poly16_t * ptr, poly16x8x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.8H val.val[0] → Vt.8H 0 ≤ lane ≤ 7	ST2 {Vt.h - Vt.h}[lane],[Xn]		ARMv7, ARMv8
void vst2q_lane_s8 (int8_t * ptr, int8x16x2_t val, const int lane)	ptr → Xn val.val[1] → Vt.16B val.val[0] → Vt.16B 0 ≤ lane ≤ 15	ST2 {Vt.b - Vt.b}[lane],[Xn]		ARMv8(AArch64)

void vst2q_lane_u8 (uint8_t * ptr, uint8x16x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B 0 ≤ lane ≤ 15	ST2 {Vt.b - Vt2.b}[lane],[Xn]		ARMv8(AArch64)
void vst2q_lane_p8 (poly8_t * ptr, poly8x16x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B 0 ≤ lane ≤ 15	ST2 {Vt.b - Vt2.b}[lane],[Xn]		ARMv8(AArch64)
void vst2_lane_s64 (int64_t * ptr, int64x1x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst2q_lane_s64 (int64_t * ptr, int64x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D 0 ≤ lane ≤ 1	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst2_lane_u64 (uint64_t * ptr, uint64x1x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst2q_lane_u64 (uint64_t * ptr, uint64x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D 0 ≤ lane ≤ 1	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst2_lane_p64 (poly64_t * ptr, poly64x1x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst2q_lane_p64 (poly64_t * ptr, poly64x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D 0 ≤ lane ≤ 1	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst2_lane_f64 (float64_t * ptr, float64x1x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D lane == 0	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)

void vst2q_lane_f64 (float64_t * ptr, float64x2x2_t val, const int lane)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D 0 ≤ lane ≤ 2	ST2 {Vt.d - Vt2.d}[lane],[Xn]		ARMv8(AArch64)
void vst3_lane_s16 (int16_t * ptr, int16x4x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_s16 (int16_t * ptr, int16x8x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_s32 (int32_t * ptr, int32x2x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_s32 (int32_t * ptr, int32x4x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_u16 (uint16_t * ptr, uint16x4x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_u16 (uint16_t * ptr, uint16x8x3_t val, const int lane)	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]		ARMv7, ARMv8

void vst3_lane_u32 (uint32_t * ptr, uint32x2x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_u32 (uint32_t * ptr, uint32x4x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_f16 (float16_t * ptr, float16x4x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_f16 (float16_t * ptr, float16x8x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_f32 (float32_t * ptr, float32x2x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_f32 (float32_t * ptr, float32x4x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_p16 (poly16_t * ptr, poly16x4x3_t val, const int lane)	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]		ARMv7, ARMv8

void vst3q_lane_p16 (poly16_t * ptr, poly16x8x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_s8 (int8_t * ptr, int8x16x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_u8 (uint8_t * ptr, uint8x16x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3q_lane_p8 (poly8_t * ptr, poly8x16x3_t val, const int lane)	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]		ARMv7, ARMv8
void vst3_lane_s64 (int64_t * ptr, int64x1x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst3q_lane_s64 (int64_t * ptr, int64x2x3_t val, const int lane)	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]		ARMv8(AArch64)

void vst3_lane_u64 (uint64_t * ptr, uint64x1x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst3q_lane_u64 (uint64_t * ptr, uint64x2x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst3_lane_p64 (poly64_t * ptr, poly64x1x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst3q_lane_p64 (poly64_t * ptr, poly64x2x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst3_lane_f64 (float64_t * ptr, float64x1x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst3q_lane_f64 (float64_t * ptr, float64x2x3_t val, const int lane)	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]		ARMv8(AArch64)
void vst4_lane_s16 (int16_t * ptr, int16x4x4_t val, const int lane)	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]		ARMv7, ARMv8

void vst4q_lane_s16 (int16_t * ptr, int16x8x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_s32 (int32_t * ptr, int32x2x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4q_lane_s32 (int32_t * ptr, int32x4x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_u16 (uint16_t * ptr, uint16x4x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4q_lane_u16 (uint16_t * ptr, uint16x8x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_u32 (uint32_t * ptr, uint32x2x4_t val, const int lane)	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]		ARMv7, ARMv8

void vst4q_lane_u32 (uint32_t * ptr, uint32x4x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_f16 (float16_t * ptr, float16x4x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4q_lane_f16 (float16_t * ptr, float16x8x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_f32 (float32_t * ptr, float32x2x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4q_lane_f32 (float32_t * ptr, float32x4x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4_lane_p16 (poly16_t * ptr, poly16x4x4_t val, const int lane)	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]		ARMv7, ARMv8

void vst4q_lane_p16 (poly16_t * ptr, poly16x8x4_t val, const int lane)	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]		ARMv7, ARMv8
void vst4q_lane_s8 (int8_t * ptr, int8x16x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4q_lane_u8 (uint8_t * ptr, uint8x16x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4q_lane_p8 (poly8_t * ptr, poly8x16x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4_lane_s64 (int64_t * ptr, int64x1x4_t val, const int lane)	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]		ARMv8(AArch64)

void vst4q_lane_s64 (int64_t * ptr, int64x2x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4_lane_u64 (uint64_t * ptr, uint64x1x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4q_lane_u64 (uint64_t * ptr, uint64x2x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4_lane_p64 (poly64_t * ptr, poly64x1x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4q_lane_p64 (poly64_t * ptr, poly64x2x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst4_lane_f64 (float64_t * ptr, float64x1x4_t val, const int lane)	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]		ARMv8(AArch64)

void vst4q_lane_f64 (float64_t * ptr, float64x2x4_t val, const int lane)	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]		ARMv8(AArch64)
void vst1_s8_x2 (int8_t * ptr, int8x8x2_t val)	ptr → Xn val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST1 {Vt.8B - Vt2.8B},[Xn]		ARMv7, ARMv8
void vst1q_s8_x2 (int8_t * ptr, int8x16x2_t val)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST1 {Vt.16B - Vt2.16B},[Xn]		ARMv7, ARMv8
void vst1_s16_x2 (int16_t * ptr, int16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST1 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst1q_s16_x2 (int16_t * ptr, int16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST1 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst1_s32_x2 (int32_t * ptr, int32x2x2_t val)	ptr → Xn val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST1 {Vt.2S - Vt2.2S},[Xn]		ARMv7, ARMv8
void vst1q_s32_x2 (int32_t * ptr, int32x4x2_t val)	ptr → Xn val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST1 {Vt.4S - Vt2.4S},[Xn]		ARMv7, ARMv8
void vst1_u8_x2 (uint8_t * ptr, uint8x8x2_t val)	ptr → Xn val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST1 {Vt.8B - Vt2.8B},[Xn]		ARMv7, ARMv8
void vst1q_u8_x2 (uint8_t * ptr, uint8x16x2_t val)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST1 {Vt.16B - Vt2.16B},[Xn]		ARMv7, ARMv8

void vst1_u16_x2 (uint16_t * ptr, uint16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST1 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst1q_u16_x2 (uint16_t * ptr, uint16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST1 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst1_u32_x2 (uint32_t * ptr, uint32x2x2_t val)	ptr → Xn val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST1 {Vt.2S - Vt2.2S},[Xn]		ARMv7, ARMv8
void vst1q_u32_x2 (uint32_t * ptr, uint32x4x2_t val)	ptr → Xn val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST1 {Vt.4S - Vt2.4S},[Xn]		ARMv7, ARMv8
void vst1_f16_x2 (float16_t * ptr, float16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST1 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst1q_f16_x2 (float16_t * ptr, float16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST1 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst1_f32_x2 (float32_t * ptr, float32x2x2_t val)	ptr → Xn val.val[1] → Vt2.2S val.val[0] → Vt.2S	ST1 {Vt.2S - Vt2.2S},[Xn]		ARMv7, ARMv8
void vst1q_f32_x2 (float32_t * ptr, float32x4x2_t val)	ptr → Xn val.val[1] → Vt2.4S val.val[0] → Vt.4S	ST1 {Vt.4S - Vt2.4S},[Xn]		ARMv7, ARMv8
void vst1_p8_x2 (poly8_t * ptr, poly8x8x2_t val)	ptr → Xn val.val[1] → Vt2.8B val.val[0] → Vt.8B	ST1 {Vt.8B - Vt2.8B},[Xn]		ARMv7, ARMv8
void vst1q_p8_x2 (poly8_t * ptr, poly8x16x2_t val)	ptr → Xn val.val[1] → Vt2.16B val.val[0] → Vt.16B	ST1 {Vt.16B - Vt2.16B},[Xn]		ARMv7, ARMv8

void vst1_p16_x2 (poly16_t * ptr, poly16x4x2_t val)	ptr → Xn val.val[1] → Vt2.4H val.val[0] → Vt.4H	ST1 {Vt.4H - Vt2.4H},[Xn]		ARMv7, ARMv8
void vst1q_p16_x2 (poly16_t * ptr, poly16x8x2_t val)	ptr → Xn val.val[1] → Vt2.8H val.val[0] → Vt.8H	ST1 {Vt.8H - Vt2.8H},[Xn]		ARMv7, ARMv8
void vst1_s64_x2 (int64_t * ptr, int64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv7, ARMv8
void vst1_u64_x2 (uint64_t * ptr, uint64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv7, ARMv8
void vst1_p64_x2 (poly64_t * ptr, poly64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv8
void vst1q_s64_x2 (int64_t * ptr, int64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt2.2D},[Xn]		ARMv7, ARMv8
void vst1q_u64_x2 (uint64_t * ptr, uint64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt2.2D},[Xn]		ARMv7, ARMv8
void vst1q_p64_x2 (poly64_t * ptr, poly64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt2.2D},[Xn]		ARMv8
void vst1_f64_x2 (float64_t * ptr, float64x1x2_t val)	ptr → Xn val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt2.1D},[Xn]		ARMv8(AArch64)
void vst1q_f64_x2 (float64_t * ptr, float64x2x2_t val)	ptr → Xn val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt2.2D},[Xn]		ARMv8(AArch64)

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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
void vst1_u8_x3 (uint8_t * ptr, uint8x8x3_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]		ARMv7, ARMv8

void vst1q_u8_x3 (uint8_t * ptr, uint8x16x3_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]		ARMv7, ARMv8
void vst1_u16_x3 (uint16_t * ptr, uint16x4x3_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]		ARMv7, ARMv8
void vst1q_u16_x3 (uint16_t * ptr, uint16x8x3_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]		ARMv7, ARMv8
void vst1_u32_x3 (uint32_t * ptr, uint32x2x3_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]		ARMv7, ARMv8
void vst1q_u32_x3 (uint32_t * ptr, uint32x4x3_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]		ARMv7, ARMv8
void vst1_f16_x3 (float16_t * ptr, float16x4x3_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]		ARMv7, ARMv8
void vst1q_f16_x3 (float16_t * ptr, float16x8x3_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]		ARMv7, ARMv8
void vst1_f32_x3 (float32_t * ptr, float32x2x3_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]		ARMv7, ARMv8

void vst1q_f32_x3 (float32_t * ptr, float32x4x3_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]		ARMv7, ARMv8
void vst1_p8_x3 (poly8_t * ptr, poly8x8x3_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]		ARMv7, ARMv8
void vst1q_p8_x3 (poly8_t * ptr, poly8x16x3_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]		ARMv7, ARMv8
void vst1_p16_x3 (poly16_t * ptr, poly16x4x3_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]		ARMv7, ARMv8
void vst1q_p16_x3 (poly16_t * ptr, poly16x8x3_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]		ARMv7, ARMv8
void vst1_s64_x3 (int64_t * ptr, int64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv7, ARMv8
void vst1_u64_x3 (uint64_t * ptr, uint64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv7, ARMv8
void vst1_p64_x3 (poly64_t * ptr, poly64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv8

void vst1q_s64_x3 (int64_t * ptr, int64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt3.2D},[Xn]		ARMv7, ARMv8
void vst1q_u64_x3 (uint64_t * ptr, uint64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt3.2D},[Xn]		ARMv7, ARMv8
void vst1q_p64_x3 (poly64_t * ptr, poly64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt3.2D},[Xn]		ARMv7, ARMv8
void vst1_f64_x3 (float64_t * ptr, float64x1x3_t val)	ptr → Xn val.val[2] → Vt3.1D val.val[1] → Vt2.1D val.val[0] → Vt.1D	ST1 {Vt.1D - Vt3.1D},[Xn]		ARMv8(AArch64)
void vst1q_f64_x3 (float64_t * ptr, float64x2x3_t val)	ptr → Xn val.val[2] → Vt3.2D val.val[1] → Vt2.2D val.val[0] → Vt.2D	ST1 {Vt.2D - Vt3.2D},[Xn]		ARMv8(AArch64)
void vst1_s8_x4 (int8_t * ptr, int8x8x4_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]		ARMv7, ARMv8
void vst1q_s8_x4 (int8_t * ptr, int8x16x4_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]		ARMv7, ARMv8

void vst1_s16_x4 (int16_t * ptr, int16x4x4_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]		ARMv7, ARMv8
void vst1q_s16_x4 (int16_t * ptr, int16x8x4_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]		ARMv7, ARMv8
void vst1_s32_x4 (int32_t * ptr, int32x2x4_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]		ARMv7, ARMv8
void vst1q_s32_x4 (int32_t * ptr, int32x4x4_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]		ARMv7, ARMv8
void vst1_u8_x4 (uint8_t * ptr, uint8x8x4_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]		ARMv7, ARMv8
void vst1q_u8_x4 (uint8_t * ptr, uint8x16x4_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]		ARMv7, ARMv8

void vst1_u16_x4 (uint16_t * ptr, uint16x4x4_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]		ARMv7, ARMv8
void vst1q_u16_x4 (uint16_t * ptr, uint16x8x4_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]		ARMv7, ARMv8
void vst1_u32_x4 (uint32_t * ptr, uint32x2x4_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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8

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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
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]		ARMv7, ARMv8
void vst1_p16_x4 (poly16_t * ptr, poly16x4x4_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]		ARMv7, ARMv8
void vst1q_p16_x4 (poly16_t * ptr, poly16x8x4_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]		ARMv7, ARMv8

void vst1_s64_x4 (int64_t * ptr, int64x1x4_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]		ARMv7, ARMv8
void vst1_u64_x4 (uint64_t * ptr, uint64x1x4_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]		ARMv7, ARMv8
void vst1_p64_x4 (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]		ARMv8
void vst1q_s64_x4 (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]		ARMv7, ARMv8
void vst1q_u64_x4 (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	ST1 {Vt.2D - Vt4.2D},[Xn]		ARMv7, ARMv8
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]		ARMv8

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]		ARMv8(AArch64)
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]		ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8
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]	ARMv8(AArch64)

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]	ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8
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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8

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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8
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]	ARMv7, ARMv8
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]	ARMv7, ARMv8
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]	ARMv8

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]	ARMv8(AArch64)
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]	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv8(AArch64)

int16x8_t vpaddq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ADDP Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int32x4_t vpaddq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ADDP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
int64x2_t vpaddq_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ADDP Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint8x16_t vpaddq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ADDP Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
uint16x8_t vpaddq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ADDP Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
uint32x4_t vpaddq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ADDP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint64x2_t vpaddq_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ADDP Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32x4_t vpaddq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	FADDP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vpaddq_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	FADDP Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
int16x4_t vpaddl_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	SADDLP Vd.4H,Vn.8B	Vd.4H	ARMv7, ARMv8
int16x8_t vpaddlq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	SADDLP Vd.8H,Vn.16B	Vd.8H	ARMv7, ARMv8
int32x2_t vpaddl_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	SADDLP Vd.2S,Vn.4H	Vd.2S	ARMv7, ARMv8
int32x4_t vpaddlq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SADDLP Vd.4S,Vn.8H	Vd.4S	ARMv7, ARMv8

int64x1_t vpaddl_s32 (int32x2_t a)	$a \rightarrow Vn.2S$	SADDLP Vd.1D,Vn.2S	Vd.1D	ARMv7, ARMv8
int64x2_t vpaddlq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SADDLP Vd.2D,Vn.4S	Vd.2D	ARMv7, ARMv8
uint16x4_t vpaddl_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	UADDLP Vd.4H,Vn.8B	Vd.4H	ARMv7, ARMv8
uint16x8_t vpaddlq_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	UADDLP Vd.8H,Vn.16B	Vd.8H	ARMv7, ARMv8
uint32x2_t vpaddl_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	UADDLP Vd.2S,Vn.4H	Vd.2S	ARMv7, ARMv8
uint32x4_t vpaddlq_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	UADDLP Vd.4S,Vn.8H	Vd.4S	ARMv7, ARMv8
uint64x1_t vpaddl_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	UADDLP Vd.1D,Vn.2S	Vd.1D	ARMv7, ARMv8
uint64x2_t vpaddlq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	UADDLP Vd.2D,Vn.4S	Vd.2D	ARMv7, ARMv8
int16x4_t vpadal_s8 (int16x4_t a, int8x8_t b)	$a \rightarrow Vd.4H$ $b \rightarrow Vn.8B$	SADALP Vd.4H,Vn.8B	Vd.4H	ARMv7, ARMv8
int16x8_t vpadalq_s8 (int16x8_t a, int8x16_t b)	$a \rightarrow Vd.8H$ $b \rightarrow Vn.16B$	SADALP Vd.8H,Vn.16B	Vd.8H	ARMv7, ARMv8
int32x2_t vpadal_s16 (int32x2_t a, int16x4_t b)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.4H$	SADALP Vd.2S,Vn.4H	Vd.2S	ARMv7, ARMv8
int32x4_t vpadalq_s16 (int32x4_t a, int16x8_t b)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.8H$	SADALP Vd.4S,Vn.8H	Vd.4S	ARMv7, ARMv8
int64x1_t vpadal_s32 (int64x1_t a, int32x2_t b)	$a \rightarrow Vd.1D$ $b \rightarrow Vn.2S$	SADALP Vd.1D,Vn.2S	Vd.1D	ARMv7, ARMv8
int64x2_t vpadalq_s32 (int64x2_t a, int32x4_t b)	$a \rightarrow Vd.2D$ $b \rightarrow Vn.4S$	SADALP Vd.2D,Vn.4S	Vd.2D	ARMv7, ARMv8

uint16x4_t vpadal_u8 (uint16x4_t a, uint8x8_t b)	$a \rightarrow \text{Vd.4H}$ $b \rightarrow \text{Vn.8B}$	UADALP Vd.4H,Vn.8B	Vd.4H	ARMv7, ARMv8
uint16x8_t vpadalq_u8 (uint16x8_t a, uint8x16_t b)	$a \rightarrow \text{Vd.8H}$ $b \rightarrow \text{Vn.16B}$	UADALP Vd.8H,Vn.16B	Vd.8H	ARMv7, ARMv8
uint32x2_t vpadal_u16 (uint32x2_t a, uint16x4_t b)	$a \rightarrow \text{Vd.2S}$ $b \rightarrow \text{Vn.4H}$	UADALP Vd.2S,Vn.4H	Vd.2S	ARMv7, ARMv8
uint32x4_t vpadalq_u16 (uint32x4_t a, uint16x8_t b)	$a \rightarrow \text{Vd.4S}$ $b \rightarrow \text{Vn.8H}$	UADALP Vd.4S,Vn.8H	Vd.4S	ARMv7, ARMv8
uint64x1_t vpadal_u32 (uint64x1_t a, uint32x2_t b)	$a \rightarrow \text{Vd.1D}$ $b \rightarrow \text{Vn.2S}$	UADALP Vd.1D,Vn.2S	Vd.1D	ARMv7, ARMv8
uint64x2_t vpadalq_u32 (uint64x2_t a, uint32x4_t b)	$a \rightarrow \text{Vd.2D}$ $b \rightarrow \text{Vn.4S}$	UADALP Vd.2D,Vn.4S	Vd.2D	ARMv7, ARMv8
int8x8_t vpmax_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	SMAXP Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int16x4_t vpmax_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	SMAXP Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int32x2_t vpmax_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.2S}$	SMAXP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
uint8x8_t vpmax_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	UMAXP Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint16x4_t vpmax_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	UMAXP Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint32x2_t vpmax_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.2S}$	UMAXP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8

float32x2_t vpmmax_f32 (float32x2_t a, float32x2_t b)	a → Vn.2S b → Vm.2S	FMAXP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int8x16_t vpmmaxq_s8 (int8x16_t a, int8x16_t b)	a → Vn.16B b → Vm.16B	SMAXP Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
int16x8_t vpmmaxq_s16 (int16x8_t a, int16x8_t b)	a → Vn.8H b → Vm.8H	SMAXP Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int32x4_t vpmmaxq_s32 (int32x4_t a, int32x4_t b)	a → Vn.4S b → Vm.4S	SMAXP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint8x16_t vpmmaxq_u8 (uint8x16_t a, uint8x16_t b)	a → Vn.16B b → Vm.16B	UMAXP Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
uint16x8_t vpmmaxq_u16 (uint16x8_t a, uint16x8_t b)	a → Vn.8H b → Vm.8H	UMAXP Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
uint32x4_t vpmmaxq_u32 (uint32x4_t a, uint32x4_t b)	a → Vn.4S b → Vm.4S	UMAXP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float32x4_t vpmmaxq_f32 (float32x4_t a, float32x4_t b)	a → Vn.4S b → Vm.4S	FMAXP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vpmmaxq_f64 (float64x2_t a, float64x2_t b)	a → Vn.2D b → Vm.2D	FMAXP Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
int8x8_t vpmmin_s8 (int8x8_t a, int8x8_t b)	a → Vn.8B b → Vm.8B	SMINP Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
int16x4_t vpmmin_s16 (int16x4_t a, int16x4_t b)	a → Vn.4H b → Vm.4H	SMINP Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
int32x2_t vpmmin_s32 (int32x2_t a, int32x2_t b)	a → Vn.2S b → Vm.2S	SMINP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8

uint8x8_t vpmi <u>n</u> _u8 (uint8x8_t a, uint8x8_t b)	a → Vn.8B b → Vm.8B	UMINP Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv7, ARMv8
uint16x4_t vpmi <u>n</u> _u16 (uint16x4_t a, uint16x4_t b)	a → Vn.4H b → Vm.4H	UMINP Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv7, ARMv8
uint32x2_t vpmi <u>n</u> _u32 (uint32x2_t a, uint32x2_t b)	a → Vn.2S b → Vm.2S	UMINP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
float32x2_t vpmi <u>n</u> _f32 (float32x2_t a, float32x2_t b)	a → Vn.2S b → Vm.2S	FMINP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv7, ARMv8
int8x16_t vpmi <u>nq</u> _s8 (int8x16_t a, int8x16_t b)	a → Vn.16B b → Vm.16B	SMINP Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
int16x8_t vpmi <u>nq</u> _s16 (int16x8_t a, int16x8_t b)	a → Vn.8H b → Vm.8H	SMINP Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int32x4_t vpmi <u>nq</u> _s32 (int32x4_t a, int32x4_t b)	a → Vn.4S b → Vm.4S	SMINP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint8x16_t vpmi <u>nq</u> _u8 (uint8x16_t a, uint8x16_t b)	a → Vn.16B b → Vm.16B	UMINP Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
uint16x8_t vpmi <u>nq</u> _u16 (uint16x8_t a, uint16x8_t b)	a → Vn.8H b → Vm.8H	UMINP Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
uint32x4_t vpmi <u>nq</u> _u32 (uint32x4_t a, uint32x4_t b)	a → Vn.4S b → Vm.4S	UMINP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float32x4_t vpmi <u>nq</u> _f32 (float32x4_t a, float32x4_t b)	a → Vn.4S b → Vm.4S	FMINP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vpmi <u>nq</u> _f64 (float64x2_t a, float64x2_t b)	a → Vn.2D b → Vm.2D	FMINP Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

float32x2_t vpmxnm_f32 (float32x2_t a, float32x2_t b)	a → Vn.2S b → Vm.2S	FMAXNMP Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vpmxnmq_f32 (float32x4_t a, float32x4_t b)	a → Vn.4S b → Vm.4S	FMAXNMP Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vpmxnmq_f64 (float64x2_t a, float64x2_t b)	a → Vn.2D b → Vm.2D	FMAXNMP Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
int64_t vpadd_s64 (int64x2_t a)	a → Vn.2D	ADDP Dd,Vn.2D	Dd	ARMv8(AArch64)
uint64_t vpadd_u64 (uint64x2_t a)	a → Vn.2D	ADDP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vpadd_s_f32 (float32x2_t a)	a → Vn.2S	FADDP Sd,Vn.2S	Sd	ARMv8(AArch64)
float64_t vpadd_f64 (float64x2_t a)	a → Vn.2D	FADDP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vpmxs_f32 (float32x2_t a)	a → Vn.2S	FMAXP Sd,Vn.2S	Sd	ARMv8(AArch64)
float64_t vpmxqd_f64 (float64x2_t a)	a → Vn.2D	FMAXP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vpmns_f32 (float32x2_t a)	a → Vn.2S	FMINP Sd,Vn.2S	Sd	ARMv8(AArch64)
float64_t vpminqd_f64 (float64x2_t a)	a → Vn.2D	FMINP Dd,Vn.2D	Dd	ARMv8(AArch64)

float32_t vpmxnms_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FMAXNMP Sd,Vn.2S	Sd	ARMv8(AArch64)
float64_t vpmxnmqd_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FMAXNMP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vpminnms_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FMINNMP Sd,Vn.2S	Sd	ARMv8(AArch64)
float64_t vpminnmqd_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FMINNMP Dd,Vn.2D	Dd	ARMv8(AArch64)
int8_t vaddv_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	ADDV Bd,Vn.8B	Bd	ARMv8(AArch64)
int8_t vaddvq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	ADDV Bd,Vn.16B	Bd	ARMv8(AArch64)
int16_t vaddv_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	ADDV Hd,Vn.4H	Hd	ARMv8(AArch64)
int16_t vaddvq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	ADDV Hd,Vn.8H	Hd	ARMv8(AArch64)
int32_t vaddv_s32 (int32x2_t a)	$a \rightarrow Vn.2S$ $a \rightarrow Vm.2S$	ADDP Vd.2S,Vn.2S,Vm.2S	Vd.S[0]	ARMv8(AArch64)
int32_t vaddvq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	ADDV Sd,Vn.4S	Sd	ARMv8(AArch64)
int64_t vaddvq_s64 (int64x2_t a)	$a \rightarrow Vn.2D$	ADDP Dd,Vn.2D	Dd	ARMv8(AArch64)
uint8_t vaddv_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	ADDV Bd,Vn.8B	Bd	ARMv8(AArch64)
uint8_t vaddvq_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	ADDV Bd,Vn.16B	Bd	ARMv8(AArch64)
uint16_t vaddv_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	ADDV Hd,Vn.4H	Hd	ARMv8(AArch64)
uint16_t vaddvq_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	ADDV Hd,Vn.8H	Hd	ARMv8(AArch64)

uint32_t vaddv_u32 (uint32x2_t a)	a → Vn.2S a → Vm.2S	ADDP Vd.2S,Vn.2S,Vm.2S	Vd.S[0]	ARMv8(AArch64)
uint32_t vaddvq_u32 (uint32x4_t a)	a → Vn.4S	ADDV Sd,Vn.4S	Sd	ARMv8(AArch64)
uint64_t vaddvq_u64 (uint64x2_t a)	a → Vn.2D	ADDP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vaddv_f32 (float32x2_t a)	a → Vn.2S	FADDP Sd,Vn.2S	Sd	ARMv8(AArch64)
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	ARMv8(AArch64)
float64_t vaddvq_f64 (float64x2_t a)	a → Vn.2D	FADDP Dd,Vn.2D	Dd	ARMv8(AArch64)
int16_t vaddlv_s8 (int8x8_t a)	a → Vn.8B	SADDLV Hd,Vn.8B	Hd	ARMv8(AArch64)
int16_t vaddlvq_s8 (int8x16_t a)	a → Vn.16B	SADDLV Hd,Vn.16B	Hd	ARMv8(AArch64)
int32_t vaddlv_s16 (int16x4_t a)	a → Vn.4H	SADDLV Sd,Vn.4H	Sd	ARMv8(AArch64)
int32_t vaddlvq_s16 (int16x8_t a)	a → Vn.8H	SADDLV Sd,Vn.8H	Sd	ARMv8(AArch64)
int64_t vaddlv_s32 (int32x2_t a)	a → Vn.2S	SADDLP Vd.1D,Vn.2S	Dd	ARMv8(AArch64)
int64_t vaddlvq_s32 (int32x4_t a)	a → Vn.4S	SADDLV Dd,Vn.4S	Dd	ARMv8(AArch64)
uint16_t vaddlv_u8 (uint8x8_t a)	a → Vn.8B	UADDLV Hd,Vn.8B	Hd	ARMv8(AArch64)
uint16_t vaddlvq_u8 (uint8x16_t a)	a → Vn.16B	UADDLV Hd,Vn.16B	Hd	ARMv8(AArch64)
uint32_t vaddlv_u16 (uint16x4_t a)	a → Vn.4H	UADDLV Sd,Vn.4H	Sd	ARMv8(AArch64)

uint32_t vaddlvq_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	UADDLV Sd,Vn.8H	Sd	ARMv8(AArch64)
uint64_t vaddlv_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$	UADDLP Vd.1D,Vn.2S	Dd	ARMv8(AArch64)
uint64_t vaddlvq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	UADDLV Dd,Vn.4S	Dd	ARMv8(AArch64)
int8_t vmaxv_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	SMAXV Bd,Vn.8B	Bd	ARMv8(AArch64)
int8_t vmaxvq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	SMAXV Bd,Vn.16B	Bd	ARMv8(AArch64)
int16_t vmaxv_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	SMAXV Hd,Vn.4H	Hd	ARMv8(AArch64)
int16_t vmaxvq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SMAXV Hd,Vn.8H	Hd	ARMv8(AArch64)
int32_t vmaxv_s32 (int32x2_t a)	$a \rightarrow Vn.2S$ $a \rightarrow Vm.2S$	SMAXP Vd.2S,Vn.2S,Vm.2S	Vd.S[0]	ARMv8(AArch64)
int32_t vmaxvq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SMAXV Sd,Vn.4S	Sd	ARMv8(AArch64)
uint8_t vmaxv_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	UMAXV Bd,Vn.8B	Bd	ARMv8(AArch64)
uint8_t vmaxvq_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	UMAXV Bd,Vn.16B	Bd	ARMv8(AArch64)
uint16_t vmaxv_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	UMAXV Hd,Vn.4H	Hd	ARMv8(AArch64)
uint16_t vmaxvq_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	UMAXV Hd,Vn.8H	Hd	ARMv8(AArch64)
uint32_t vmaxv_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$ $a \rightarrow Vm.2S$	UMAXP Vd.2S,Vn.2S,Vm.2S	Vd.S[0]	ARMv8(AArch64)
uint32_t vmaxvq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	UMAXV Sd,Vn.4S	Sd	ARMv8(AArch64)

float32_t vmaxv_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FMAXP Sd,Vn.2S	Sd	ARMv8(AArch64)
float32_t vmaxvq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FMAXV Sd,Vn.4S	Sd	ARMv8(AArch64)
float64_t vmaxvq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FMAXP Dd,Vn.2D	Dd	ARMv8(AArch64)
int8_t vminv_s8 (int8x8_t a)	$a \rightarrow Vn.8B$	SMINV Bd,Vn.8B	Bd	ARMv8(AArch64)
int8_t vminvq_s8 (int8x16_t a)	$a \rightarrow Vn.16B$	SMINV Bd,Vn.16B	Bd	ARMv8(AArch64)
int16_t vminv_s16 (int16x4_t a)	$a \rightarrow Vn.4H$	SMINV Hd,Vn.4H	Hd	ARMv8(AArch64)
int16_t vminvq_s16 (int16x8_t a)	$a \rightarrow Vn.8H$	SMINV Hd,Vn.8H	Hd	ARMv8(AArch64)
int32_t vminv_s32 (int32x2_t a)	$a \rightarrow Vn.2S$ $a \rightarrow Vm.2S$	SMINP Vd.2S,Vn.2S,Vm.2S	Vd.S[0]	ARMv8(AArch64)
int32_t vminvq_s32 (int32x4_t a)	$a \rightarrow Vn.4S$	SMINV Sd,Vn.4S	Sd	ARMv8(AArch64)
uint8_t vminv_u8 (uint8x8_t a)	$a \rightarrow Vn.8B$	UMINV Bd,Vn.8B	Bd	ARMv8(AArch64)
uint8_t vminvq_u8 (uint8x16_t a)	$a \rightarrow Vn.16B$	UMINV Bd,Vn.16B	Bd	ARMv8(AArch64)
uint16_t vminv_u16 (uint16x4_t a)	$a \rightarrow Vn.4H$	UMINV Hd,Vn.4H	Hd	ARMv8(AArch64)
uint16_t vminvq_u16 (uint16x8_t a)	$a \rightarrow Vn.8H$	UMINV Hd,Vn.8H	Hd	ARMv8(AArch64)
uint32_t vminv_u32 (uint32x2_t a)	$a \rightarrow Vn.2S$ $a \rightarrow Vm.2S$	UMINP Vd.2S,Vn.2S,Vm.2S	Vd.S[0]	ARMv8(AArch64)
uint32_t vminvq_u32 (uint32x4_t a)	$a \rightarrow Vn.4S$	UMINV Sd,Vn.4S	Sd	ARMv8(AArch64)

float32_t vminvq_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FMINP Sd,Vn.2S	Sd	ARMv8(AArch64)
float32_t vminvq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FMINV Sd,Vn.4S	Sd	ARMv8(AArch64)
float64_t vminvq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FMINP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vmaxnmv_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FMAXNMP Sd,Vn.2S	Sd	ARMv8(AArch64)
float32_t vmaxnmvq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FMAXNMV Sd,Vn.4S	Sd	ARMv8(AArch64)
float64_t vmaxnmvq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FMAXNMP Dd,Vn.2D	Dd	ARMv8(AArch64)
float32_t vminnmv_f32 (float32x2_t a)	$a \rightarrow Vn.2S$	FMINNMP Sd,Vn.2S	Sd	ARMv8(AArch64)
float32_t vminnmvq_f32 (float32x4_t a)	$a \rightarrow Vn.4S$	FMINNMV Sd,Vn.4S	Sd	ARMv8(AArch64)
float64_t vminnmvq_f64 (float64x2_t a)	$a \rightarrow Vn.2D$	FMINNMP Dd,Vn.2D	Dd	ARMv8(AArch64)
int8x8_t vext_s8 (int8x8_t a, int8x8_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 7$	EXT Vd.8B,Vn.8B,Vm.8B,#n	Vd.8B	ARMv7, ARMv8
int8x16_t vextq_s8 (int8x16_t a, int8x16_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 15$	EXT Vd.16B,Vn.16B,Vm.16B,#n	Vd.16B	ARMv7, ARMv8
int16x4_t vext_s16 (int16x4_t a, int16x4_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 3$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B	ARMv7, ARMv8
int16x8_t vextq_s16 (int16x8_t a, int16x8_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 7$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B	ARMv7, ARMv8

int32x2_t vext_s32 (int32x2_t a, int32x2_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 1$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<2)	Vd.8B	ARMv7, ARMv8
int32x4_t vextq_s32 (int32x4_t a, int32x4_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 3$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<2)	Vd.16B	ARMv7, ARMv8
int64x1_t vext_s64 (int64x1_t a, int64x1_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $n == 0$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B	ARMv7, ARMv8
int64x2_t vextq_s64 (int64x2_t a, int64x2_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 1$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B	ARMv7, ARMv8
uint8x8_t vext_u8 (uint8x8_t a, uint8x8_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 7$	EXT Vd.8B,Vn.8B,Vm.8B,#n	Vd.8B	ARMv7, ARMv8
uint8x16_t vextq_u8 (uint8x16_t a, uint8x16_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 15$	EXT Vd.16B,Vn.16B,Vm.16B,#n	Vd.16B	ARMv7, ARMv8
uint16x4_t vext_u16 (uint16x4_t a, uint16x4_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 3$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B	ARMv7, ARMv8
uint16x8_t vextq_u16 (uint16x8_t a, uint16x8_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 7$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B	ARMv7, ARMv8
uint32x2_t vext_u32 (uint32x2_t a, uint32x2_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 1$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<2)	Vd.8B	ARMv7, ARMv8
uint32x4_t vextq_u32 (uint32x4_t a, uint32x4_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 3$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<2)	Vd.16B	ARMv7, ARMv8

uint64x1_t vext_u64 (uint64x1_t a, uint64x1_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $n == 0$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B	ARMv7, ARMv8
uint64x2_t vextq_u64 (uint64x2_t a, uint64x2_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 1$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B	ARMv7, ARMv8
poly64x1_t vext_p64 (poly64x1_t a, poly64x1_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $n == 0$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B	ARMv8
poly64x2_t vextq_p64 (poly64x2_t a, poly64x2_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 1$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B	ARMv8
float32x2_t vext_f32 (float32x2_t a, float32x2_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 1$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<2)	Vd.8B	ARMv7, ARMv8
float32x4_t vextq_f32 (float32x4_t a, float32x4_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 3$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<2)	Vd.16B	ARMv7, ARMv8
float64x1_t vext_f64 (float64x1_t a, float64x1_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $n == 0$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<3)	Vd.8B	ARMv8(AArch64)
float64x2_t vextq_f64 (float64x2_t a, float64x2_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 1$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<3)	Vd.16B	ARMv8(AArch64)
poly8x8_t vext_p8 (poly8x8_t a, poly8x8_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 7$	EXT Vd.8B,Vn.8B,Vm.8B,#n	Vd.8B	ARMv7, ARMv8
poly8x16_t vextq_p8 (poly8x16_t a, poly8x16_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 15$	EXT Vd.16B,Vn.16B,Vm.16B,#n	Vd.16B	ARMv7, ARMv8

poly16x4_t vext_p16 (poly16x4_t a, poly16x4_t b, const int n)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$ $0 \leq n \leq 3$	EXT Vd.8B,Vn.8B,Vm.8B,#(n<<1)	Vd.8B	ARMv7, ARMv8
poly16x8_t vextq_p16 (poly16x8_t a, poly16x8_t b, const int n)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$ $0 \leq n \leq 7$	EXT Vd.16B,Vn.16B,Vm.16B,#(n<<1)	Vd.16B	ARMv7, ARMv8
int8x8_t vrev64_s8 (int8x8_t vec)	$vec \rightarrow Vn.8B$	REV64 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vrev64q_s8 (int8x16_t vec)	$vec \rightarrow Vn.16B$	REV64 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vrev64_s16 (int16x4_t vec)	$vec \rightarrow Vn.4H$	REV64 Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vrev64q_s16 (int16x8_t vec)	$vec \rightarrow Vn.8H$	REV64 Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int32x2_t vrev64_s32 (int32x2_t vec)	$vec \rightarrow Vn.2S$	REV64 Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
int32x4_t vrev64q_s32 (int32x4_t vec)	$vec \rightarrow Vn.4S$	REV64 Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
uint8x8_t vrev64_u8 (uint8x8_t vec)	$vec \rightarrow Vn.8B$	REV64 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vrev64q_u8 (uint8x16_t vec)	$vec \rightarrow Vn.16B$	REV64 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vrev64_u16 (uint16x4_t vec)	$vec \rightarrow Vn.4H$	REV64 Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vrev64q_u16 (uint16x8_t vec)	$vec \rightarrow Vn.8H$	REV64 Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
uint32x2_t vrev64_u32 (uint32x2_t vec)	$vec \rightarrow Vn.2S$	REV64 Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
uint32x4_t vrev64q_u32 (uint32x4_t vec)	$vec \rightarrow Vn.4S$	REV64 Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8

float32x2_t vrev64_f32 (float32x2_t vec)	vec → Vn.2S	REV64 Vd.2S,Vn.2S	Vd.2S	ARMv7, ARMv8
float32x4_t vrev64q_f32 (float32x4_t vec)	vec → Vn.4S	REV64 Vd.4S,Vn.4S	Vd.4S	ARMv7, ARMv8
poly8x8_t vrev64_p8 (poly8x8_t vec)	vec → Vn.8B	REV64 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
poly8x16_t vrev64q_p8 (poly8x16_t vec)	vec → Vn.16B	REV64 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
poly16x4_t vrev64_p16 (poly16x4_t vec)	vec → Vn.4H	REV64 Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
poly16x8_t vrev64q_p16 (poly16x8_t vec)	vec → Vn.8H	REV64 Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int8x8_t vrev32_s8 (int8x8_t vec)	vec → Vn.8B	REV32 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vrev32q_s8 (int8x16_t vec)	vec → Vn.16B	REV32 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
int16x4_t vrev32_s16 (int16x4_t vec)	vec → Vn.4H	REV32 Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
int16x8_t vrev32q_s16 (int16x8_t vec)	vec → Vn.8H	REV32 Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
uint8x8_t vrev32_u8 (uint8x8_t vec)	vec → Vn.8B	REV32 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vrev32q_u8 (uint8x16_t vec)	vec → Vn.16B	REV32 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint16x4_t vrev32_u16 (uint16x4_t vec)	vec → Vn.4H	REV32 Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
uint16x8_t vrev32q_u16 (uint16x8_t vec)	vec → Vn.8H	REV32 Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
poly8x8_t vrev32_p8 (poly8x8_t vec)	vec → Vn.8B	REV32 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8

poly8x16_t vrev32q_p8 (poly8x16_t vec)	vec → Vn.16B	REV32 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
poly16x4_t vrev32_p16 (poly16x4_t vec)	vec → Vn.4H	REV32 Vd.4H,Vn.4H	Vd.4H	ARMv7, ARMv8
poly16x8_t vrev32q_p16 (poly16x8_t vec)	vec → Vn.8H	REV32 Vd.8H,Vn.8H	Vd.8H	ARMv7, ARMv8
int8x8_t vrev16_s8 (int8x8_t vec)	vec → Vn.8B	REV16 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
int8x16_t vrev16q_s8 (int8x16_t vec)	vec → Vn.16B	REV16 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
uint8x8_t vrev16_u8 (uint8x8_t vec)	vec → Vn.8B	REV16 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
uint8x16_t vrev16q_u8 (uint8x16_t vec)	vec → Vn.16B	REV16 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
poly8x8_t vrev16_p8 (poly8x8_t vec)	vec → Vn.8B	REV16 Vd.8B,Vn.8B	Vd.8B	ARMv7, ARMv8
poly8x16_t vrev16q_p8 (poly8x16_t vec)	vec → Vn.16B	REV16 Vd.16B,Vn.16B	Vd.16B	ARMv7, ARMv8
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

int32x4_t vzip1q_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
int64x2_t vzip1q_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint8x8_t vzip1_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
uint8x16_t vzip1q_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
uint16x4_t vzip1_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
uint16x8_t vzip1q_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
uint32x2_t vzip1_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
uint32x4_t vzip1q_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint64x2_t vzip1q_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly64x2_t vzip1q_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vzip1_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vzip1q_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)

float64x2_t vzip1q_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly8x8_t vzip1_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
poly8x16_t vzip1q_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
poly16x4_t vzip1_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
poly16x8_t vzip1q_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int8x8_t vzip2_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
int8x16_t vzip2q_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
int16x4_t vzip2_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
int16x8_t vzip2q_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int32x2_t vzip2_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
int32x4_t vzip2q_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
int64x2_t vzip2q_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)

uint8x8_t vzip2_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
uint8x16_t vzip2q_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
uint16x4_t vzip2_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
uint16x8_t vzip2q_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
uint32x2_t vzip2_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
uint32x4_t vzip2q_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint64x2_t vzip2q_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly64x2_t vzip2q_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vzip2_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vzip2q_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vzip2q_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	ZIP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly8x8_t vzip2_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)

poly8x16_t vzip2q_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	ZIP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
poly16x4_t vzip2_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	ZIP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
poly16x8_t vzip2q_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	ZIP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int8x8_t vuzp1_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	UZP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
int8x16_t vuzp1q_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	UZP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
int16x4_t vuzp1_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
int16x8_t vuzp1q_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int32x2_t vuzp1_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.2S}$	UZP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
int32x4_t vuzp1q_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow \text{Vn.4S}$ $b \rightarrow \text{Vm.4S}$	UZP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
int64x2_t vuzp1q_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow \text{Vn.2D}$ $b \rightarrow \text{Vm.2D}$	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint8x8_t vuzp1_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	UZP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
uint8x16_t vuzp1q_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	UZP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)

uint16x4_t vuzp1_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
uint16x8_t vuzp1q_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
uint32x2_t vuzp1_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
uint32x4_t vuzp1q_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint64x2_t vuzp1q_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly64x2_t vuzp1q_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vuzp1_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP1 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vuzp1q_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vuzp1q_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UZP1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly8x8_t vuzp1_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UZP1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
poly8x16_t vuzp1q_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UZP1 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
poly16x4_t vuzp1_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UZP1 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)

poly16x8_t vuzp1q_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	UZP1 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int8x8_t vuzp2_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	UZP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
int8x16_t vuzp2q_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	UZP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
int16x4_t vuzp2_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
int16x8_t vuzp2q_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int32x2_t vuzp2_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow \text{Vn.2S}$ $b \rightarrow \text{Vm.2S}$	UZP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
int32x4_t vuzp2q_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow \text{Vn.4S}$ $b \rightarrow \text{Vm.4S}$	UZP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
int64x2_t vuzp2q_s64 (int64x2_t a, int64x2_t b)	$a \rightarrow \text{Vn.2D}$ $b \rightarrow \text{Vm.2D}$	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
uint8x8_t vuzp2_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow \text{Vn.8B}$ $b \rightarrow \text{Vm.8B}$	UZP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
uint8x16_t vuzp2q_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow \text{Vn.16B}$ $b \rightarrow \text{Vm.16B}$	UZP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
uint16x4_t vuzp2_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow \text{Vn.4H}$ $b \rightarrow \text{Vm.4H}$	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
uint16x8_t vuzp2q_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow \text{Vn.8H}$ $b \rightarrow \text{Vm.8H}$	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)

uint32x2_t vuzp2_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
uint32x4_t vuzp2q_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
uint64x2_t vuzp2q_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly64x2_t vuzp2q_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vuzp2_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP2 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vuzp2q_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP2 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vuzp2q_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	UZP2 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly8x8_t vuzp2_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UZP2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
poly8x16_t vuzp2q_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UZP2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
poly16x4_t vuzp2_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UZP2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
poly16x8_t vuzp2q_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UZP2 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int8x8_t vtrn1_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	TRN1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

uint64x2_t vtrn1q_u64 (uint64x2_t a, uint64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly64x2_t vtrn1q_p64 (poly64x2_t a, poly64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
float32x2_t vtrn1_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	TRN1 Vd.2S,Vn.2S,Vm.2S	Vd.2S	ARMv8(AArch64)
float32x4_t vtrn1q_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	TRN1 Vd.4S,Vn.4S,Vm.4S	Vd.4S	ARMv8(AArch64)
float64x2_t vtrn1q_f64 (float64x2_t a, float64x2_t b)	$a \rightarrow Vn.2D$ $b \rightarrow Vm.2D$	TRN1 Vd.2D,Vn.2D,Vm.2D	Vd.2D	ARMv8(AArch64)
poly8x8_t vtrn1_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	TRN1 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
poly8x16_t vtrn1q_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	TRN1 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
poly16x4_t vtrn1_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	TRN1 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)
poly16x8_t vtrn1q_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	TRN1 Vd.8H,Vn.8H,Vm.8H	Vd.8H	ARMv8(AArch64)
int8x8_t vtrn2_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	TRN2 Vd.8B,Vn.8B,Vm.8B	Vd.8B	ARMv8(AArch64)
int8x16_t vtrn2q_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	TRN2 Vd.16B,Vn.16B,Vm.16B	Vd.16B	ARMv8(AArch64)
int16x4_t vtrn2_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	TRN2 Vd.4H,Vn.4H,Vm.4H	Vd.4H	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8
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	ARMv7, ARMv8

poly8x8_t vtbx1_p8 (poly8x8_t a, poly8x8_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow \text{Zeros}(64):b$ $c \rightarrow Vm$	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	ARMv7, ARMv8
int8x8_t vtbl2_s8 (int8x8x2_t a, int8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x8_t vtbl2_u8 (uint8x8x2_t a, uint8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
poly8x8_t vtbl2_p8 (poly8x8x2_t a, uint8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
int8x8_t vtbl3_s8 (int8x8x3_t a, int8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $Vn+1 \rightarrow$ $\text{Zeros}(64):a.val[2]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x8_t vtbl3_u8 (uint8x8x3_t a, uint8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $Vn+1 \rightarrow$ $\text{Zeros}(64):a.val[2]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
poly8x8_t vtbl3_p8 (poly8x8x3_t a, uint8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $Vn+1 \rightarrow$ $\text{Zeros}(64):a.val[2]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
int8x8_t vtbl4_s8 (int8x8x4_t a, int8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $Vn+1 \rightarrow$ $a.val[3]:a.val[2]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x8_t vtbl4_u8 (uint8x8x4_t a, uint8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $Vn+1 \rightarrow$ $a.val[3]:a.val[2]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
poly8x8_t vtbl4_p8 (poly8x8x4_t a, uint8x8_t b)	$Vn \rightarrow$ $a.val[1]:a.val[0]$ $Vn+1 \rightarrow$ $a.val[3]:a.val[2]$ $b \rightarrow Vm$	TBL Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8

int8x8_t vtbx2_s8 (int8x8_t a, int8x8x2_t b, int8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $c \rightarrow Vm$	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x8_t vtbx2_u8 (uint8x8_t a, uint8x8x2_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $c \rightarrow Vm$	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
poly8x8_t vtbx2_p8 (poly8x8_t a, poly8x8x2_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $c \rightarrow Vm$	TBX Vd.8B,{Vn.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
int8x8_t vtbx3_s8 (int8x8_t a, int8x8x3_t b, int8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $Vn+1 \rightarrow$ Zeros(64):b.val[2] $c \rightarrow Vm$	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	ARMv7, ARMv8
uint8x8_t vtbx3_u8 (uint8x8_t a, uint8x8x3_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $Vn+1 \rightarrow$ Zeros(64):b.val[2] $c \rightarrow Vm$	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	ARMv7, ARMv8
poly8x8_t vtbx3_p8 (poly8x8_t a, poly8x8x3_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $Vn+1 \rightarrow$ Zeros(64):b.val[2] $c \rightarrow Vm$	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	ARMv7, ARMv8
int8x8_t vtbx4_s8 (int8x8_t a, int8x8x4_t b, int8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $Vn+1 \rightarrow$ $b.val[3]:b.val[2]$ $c \rightarrow Vm$	TBX Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8
uint8x8_t vtbx4_u8 (uint8x8_t a, uint8x8x4_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $Vn+1 \rightarrow$ $b.val[3]:b.val[2]$ $c \rightarrow Vm$	TBX Vd.8B,{Vn.16B,Vn+1.16B},Vm.8B	Vd.8B	ARMv7, ARMv8

poly8x8_t vtbx4_p8 (poly8x8_t a, poly8x8x4_t b, uint8x8_t c)	$a \rightarrow Vd$ $Vn \rightarrow$ $b.val[1]:b.val[0]$ $Vn+1 \rightarrow$ $b.val[3]:b.val[2]$ $c \rightarrow Vm$	TBX $Vd.8B, \{Vn.16B, Vn+1.16B\}, Vm.8B$	Vd.8B	ARMv7, ARMv8
int8x8_t vqtbl1_s8 (int8x16_t t, uint8x8_t idx)	$t \rightarrow Vn.16B$ $idx \rightarrow Vm.8B$	TBL $Vd.8B, \{Vn.16B\}, Vm.8B$	Vd.8B	ARMv8(AArch64)
int8x16_t vqtbl1q_s8 (int8x16_t t, uint8x16_t idx)	$t \rightarrow Vn.16B$ $idx \rightarrow Vm.16B$	TBL $Vd.16B, \{Vn.16B\}, Vm.16B$	Vd.16B	ARMv8(AArch64)
uint8x8_t vqtbl1_u8 (uint8x16_t t, uint8x8_t idx)	$t \rightarrow Vn.16B$ $idx \rightarrow Vm.8B$	TBL $Vd.8B, \{Vn.16B\}, Vm.8B$	Vd.8B	ARMv8(AArch64)
uint8x16_t vqtbl1q_u8 (uint8x16_t t, uint8x16_t idx)	$t \rightarrow Vn.16B$ $idx \rightarrow Vm.16B$	TBL $Vd.16B, \{Vn.16B\}, Vm.16B$	Vd.16B	ARMv8(AArch64)
poly8x8_t vqtbl1_p8 (poly8x16_t t, uint8x8_t idx)	$t \rightarrow Vn.16B$ $idx \rightarrow Vm.8B$	TBL $Vd.8B, \{Vn.16B\}, Vm.8B$	Vd.8B	ARMv8(AArch64)
poly8x16_t vqtbl1q_p8 (poly8x16_t t, uint8x16_t idx)	$t \rightarrow Vn.16B$ $idx \rightarrow Vm.16B$	TBL $Vd.16B, \{Vn.16B\}, Vm.16B$	Vd.16B	ARMv8(AArch64)
int8x8_t vqtbx1_s8 (int8x8_t a, int8x16_t t, uint8x8_t idx)	$a \rightarrow Vd.8B$ $t \rightarrow Vn.16B$ $idx \rightarrow Vm.8B$	TBX $Vd.8B, \{Vn.16B\}, Vm.8B$	Vd.8B	ARMv8(AArch64)
int8x16_t vqtbx1q_s8 (int8x16_t a, int8x16_t t, uint8x16_t idx)	$a \rightarrow Vd.16B$ $t \rightarrow Vn.16B$ $idx \rightarrow Vm.16B$	TBX $Vd.16B, \{Vn.16B\}, Vm.16B$	Vd.16B	ARMv8(AArch64)
uint8x8_t vqtbx1_u8 (uint8x8_t a, uint8x16_t t, uint8x8_t idx)	$a \rightarrow Vd.8B$ $t \rightarrow Vn.16B$ $idx \rightarrow Vm.8B$	TBX $Vd.8B, \{Vn.16B\}, Vm.8B$	Vd.8B	ARMv8(AArch64)
uint8x16_t vqtbx1q_u8 (uint8x16_t a, uint8x16_t t, uint8x16_t idx)	$a \rightarrow Vd.16B$ $t \rightarrow Vn.16B$ $idx \rightarrow Vm.16B$	TBX $Vd.16B, \{Vn.16B\}, Vm.16B$	Vd.16B	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)
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	ARMv8(AArch64)

uint8_t vget_lane_u8 (uint8x8_t v, const int lane)	$v \rightarrow Vn.8B$ $0 \leq lane \leq 7$	UMOV Rd,Vn.B[lane]	Rd	ARMv7, ARMv8
uint16_t vget_lane_u16 (uint16x4_t v, const int lane)	$v \rightarrow Vn.4H$ $0 \leq lane \leq 3$	UMOV Rd,Vn.H[lane]	Rd	ARMv7, ARMv8
uint32_t vget_lane_u32 (uint32x2_t v, const int lane)	$v \rightarrow Vn.2S$ $0 \leq lane \leq 1$	UMOV Rd,Vn.S[lane]	Rd	ARMv7, ARMv8
uint64_t vget_lane_u64 (uint64x1_t v, const int lane)	$v \rightarrow Vn.1D$ lane == 0	UMOV Rd,Vn.D[lane]	Rd	ARMv7, ARMv8
poly64_t vget_lane_p64 (poly64x1_t v, const int lane)	$v \rightarrow Vn.1D$ lane == 0	UMOV Rd,Vn.D[lane]	Rd	ARMv8
int8_t vget_lane_s8 (int8x8_t v, const int lane)	$v \rightarrow Vn.8B$ $0 \leq lane \leq 7$	SMOV Rd,Vn.B[lane]	Rd	ARMv7, ARMv8
int16_t vget_lane_s16 (int16x4_t v, const int lane)	$v \rightarrow Vn.4H$ $0 \leq lane \leq 3$	SMOV Rd,Vn.H[lane]	Rd	ARMv7, ARMv8
int32_t vget_lane_s32 (int32x2_t v, const int lane)	$v \rightarrow Vn.2S$ $0 \leq lane \leq 1$	SMOV Rd,Vn.S[lane]	Rd	ARMv7, ARMv8
int64_t vget_lane_s64 (int64x1_t v, const int lane)	$v \rightarrow Vn.1D$ lane == 0	UMOV Rd,Vn.D[lane]	Rd	ARMv7, ARMv8
poly8_t vget_lane_p8 (poly8x8_t v, const int lane)	$v \rightarrow Vn.8B$ $0 \leq lane \leq 7$	UMOV Rd,Vn.B[lane]	Rd	ARMv7, ARMv8
poly16_t vget_lane_p16 (poly16x4_t v, const int lane)	$v \rightarrow Vn.4H$ $0 \leq lane \leq 3$	UMOV Rd,Vn.H[lane]	Rd	ARMv7, ARMv8
float32_t vget_lane_f32 (float32x2_t v, const int lane)	$v \rightarrow Vn.2S$ $0 \leq lane \leq 1$	DUP Sd,Vn.S[lane]	Sd	ARMv7, ARMv8

float64_t vget_lane_f64 (float64x1_t v, const int lane)	$v \rightarrow Vn.1D$ lane == 0	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
uint8_t vgetq_lane_u8 (uint8x16_t v, const int lane)	$v \rightarrow Vn.16B$ 0 <= lane <= 15	UMOV Rd,Vn.B[lane]	Rd	ARMv7, ARMv8
uint16_t vgetq_lane_u16 (uint16x8_t v, const int lane)	$v \rightarrow Vn.8H$ 0 <= lane <= 7	UMOV Rd,Vn.H[lane]	Rd	ARMv7, ARMv8
uint32_t vgetq_lane_u32 (uint32x4_t v, const int lane)	$v \rightarrow Vn.4S$ 0 <= lane <= 3	UMOV Rd,Vn.S[lane]	Rd	ARMv7, ARMv8
uint64_t vgetq_lane_u64 (uint64x2_t v, const int lane)	$v \rightarrow Vn.2D$ 0 <= lane <= 1	UMOV Rd,Vn.D[lane]	Rd	ARMv7, ARMv8
poly64_t vgetq_lane_p64 (poly64x2_t v, const int lane)	$v \rightarrow Vn.2D$ 0 <= lane <= 1	UMOV Rd,Vn.D[lane]	Rd	ARMv8
int8_t vgetq_lane_s8 (int8x16_t v, const int lane)	$v \rightarrow Vn.16B$ 0 <= lane <= 15	SMOV Rd,Vn.B[lane]	Rd	ARMv7, ARMv8
int16_t vgetq_lane_s16 (int16x8_t v, const int lane)	$v \rightarrow Vn.8H$ 0 <= lane <= 7	SMOV Rd,Vn.H[lane]	Rd	ARMv7, ARMv8
int32_t vgetq_lane_s32 (int32x4_t v, const int lane)	$v \rightarrow Vn.4S$ 0 <= lane <= 3	SMOV Rd,Vn.S[lane]	Rd	ARMv7, ARMv8
int64_t vgetq_lane_s64 (int64x2_t v, const int lane)	$v \rightarrow Vn.2D$ 0 <= lane <= 1	UMOV Rd,Vn.D[lane]	Rd	ARMv7, ARMv8
poly8_t vgetq_lane_p8 (poly8x16_t v, const int lane)	$v \rightarrow Vn.16B$ 0 <= lane <= 15	UMOV Rd,Vn.B[lane]	Rd	ARMv7, ARMv8
poly16_t vgetq_lane_p16 (poly16x8_t v, const int lane)	$v \rightarrow Vn.8H$ 0 <= lane <= 7	UMOV Rd,Vn.H[lane]	Rd	ARMv7, ARMv8

float16_t vget_lane_f16 (float16x4_t v, const int lane)	$v \rightarrow Vn.4H$ $0 \leq \text{lane} \leq 3$	DUP Hd,Vn.H[lane]	Hd	ARMv7, ARMv8
float16_t vgetq_lane_f16 (float16x8_t v, const int lane)	$v \rightarrow Vn.8H$ $0 \leq \text{lane} \leq 7$	DUP Hd,Vn.H[lane]	Hd	ARMv7, ARMv8
float32_t vgetq_lane_f32 (float32x4_t v, const int lane)	$v \rightarrow Vn.4S$ $0 \leq \text{lane} \leq 3$	DUP Sd,Vn.S[lane]	Sd	ARMv7, ARMv8
float64_t vgetq_lane_f64 (float64x2_t v, const int lane)	$v \rightarrow Vn.2D$ $0 \leq \text{lane} \leq 1$	DUP Dd,Vn.D[lane]	Dd	ARMv8(AArch64)
uint8x8_t vset_lane_u8 (uint8_t a, uint8x8_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.8B$ $0 \leq \text{lane} \leq 7$	INS Vd.B[lane],Rn	Vd.8B	ARMv7, ARMv8
uint16x4_t vset_lane_u16 (uint16_t a, uint16x4_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.4H$ $0 \leq \text{lane} \leq 3$	INS Vd.H[lane],Rn	Vd.4H	ARMv7, ARMv8
uint32x2_t vset_lane_u32 (uint32_t a, uint32x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2S$ $0 \leq \text{lane} \leq 1$	INS Vd.S[lane],Rn	Vd.2S	ARMv7, ARMv8
uint64x1_t vset_lane_u64 (uint64_t a, uint64x1_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.1D$ lane == 0	INS Vd.D[lane],Rn	Vd.1D	ARMv7, ARMv8
poly64x1_t vset_lane_p64 (poly64_t a, poly64x1_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.1D$ lane == 0	INS Vd.D[lane],Rn	Vd.1D	ARMv8
int8x8_t vset_lane_s8 (int8_t a, int8x8_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.8B$ $0 \leq \text{lane} \leq 7$	INS Vd.B[lane],Rn	Vd.8B	ARMv7, ARMv8
int16x4_t vset_lane_s16 (int16_t a, int16x4_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.4H$ $0 \leq \text{lane} \leq 3$	INS Vd.H[lane],Rn	Vd.4H	ARMv7, ARMv8

int32x2_t vset_lane_s32 (int32_t a, int32x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2S$ $0 \leq lane \leq 1$	INS Vd.S[lane],Rn	Vd.2S	ARMv7, ARMv8
int64x1_t vset_lane_s64 (int64_t a, int64x1_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.1D$ lane == 0	INS Vd.D[lane],Rn	Vd.1D	ARMv7, ARMv8
poly8x8_t vset_lane_p8 (poly8_t a, poly8x8_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.8B$ $0 \leq lane \leq 7$	INS Vd.B[lane],Rn	Vd.8B	ARMv7, ARMv8
poly16x4_t vset_lane_p16 (poly16_t a, poly16x4_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.4H$ $0 \leq lane \leq 3$	INS Vd.H[lane],Rn	Vd.4H	ARMv7, ARMv8
float16x4_t vset_lane_f16 (float16_t a, float16x4_t v, const int lane)	$a \rightarrow VnH$ $v \rightarrow Vd.4H$ $0 \leq lane \leq 3$	INS Vd.H[lane],Vn.H[0]	Vd.4H	ARMv7, ARMv8
float16x8_t vsetq_lane_f16 (float16_t a, float16x8_t v, const int lane)	$a \rightarrow VnH$ $v \rightarrow Vd.8H$ $0 \leq lane \leq 7$	INS Vd.H[lane],Vn.H[0]	Vd.8H	ARMv7, ARMv8
float32x2_t vset_lane_f32 (float32_t a, float32x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2S$ $0 \leq lane \leq 1$	INS Vd.S[lane],Rn	Vd.2S	ARMv7, ARMv8
float64x1_t vset_lane_f64 (float64_t a, float64x1_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.1D$ lane == 0	INS Vd.D[lane],Rn	Vd.1D	ARMv8(AArch64)
uint8x16_t vsetq_lane_u8 (uint8_t a, uint8x16_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.16B$ $0 \leq lane \leq 15$	INS Vd.B[lane],Rn	Vd.16B	ARMv7, ARMv8
uint16x8_t vsetq_lane_u16 (uint16_t a, uint16x8_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.8H$ $0 \leq lane \leq 7$	INS Vd.H[lane],Rn	Vd.8H	ARMv7, ARMv8

uint32x4_t vsetq_lane_u32 (uint32_t a, uint32x4_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.4S$ $0 \leq lane \leq 3$	INS Vd.S[lane],Rn	Vd.4S	ARMv7, ARMv8
uint64x2_t vsetq_lane_u64 (uint64_t a, uint64x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2D$ $0 \leq lane \leq 1$	INS Vd.D[lane],Rn	Vd.2D	ARMv7, ARMv8
poly64x2_t vsetq_lane_p64 (poly64_t a, poly64x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2D$ $0 \leq lane \leq 1$	INS Vd.D[lane],Rn	Vd.2D	ARMv8
int8x16_t vsetq_lane_s8 (int8_t a, int8x16_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.16B$ $0 \leq lane \leq 15$	INS Vd.B[lane],Rn	Vd.16B	ARMv7, ARMv8
int16x8_t vsetq_lane_s16 (int16_t a, int16x8_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.8H$ $0 \leq lane \leq 7$	INS Vd.H[lane],Rn	Vd.8H	ARMv7, ARMv8
int32x4_t vsetq_lane_s32 (int32_t a, int32x4_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.4S$ $0 \leq lane \leq 3$	INS Vd.S[lane],Rn	Vd.4S	ARMv7, ARMv8
int64x2_t vsetq_lane_s64 (int64_t a, int64x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2D$ $0 \leq lane \leq 1$	INS Vd.D[lane],Rn	Vd.2D	ARMv7, ARMv8
poly8x16_t vsetq_lane_p8 (poly8_t a, poly8x16_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.16B$ $0 \leq lane \leq 15$	INS Vd.B[lane],Rn	Vd.16B	ARMv7, ARMv8
poly16x8_t vsetq_lane_p16 (poly16_t a, poly16x8_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.8H$ $0 \leq lane \leq 7$	INS Vd.H[lane],Rn	Vd.8H	ARMv7, ARMv8
float32x4_t vsetq_lane_f32 (float32_t a, float32x4_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.4S$ $0 \leq lane \leq 3$	INS Vd.S[lane],Rn	Vd.4S	ARMv7, ARMv8

float64x2_t vsetq_lane_f64 (float64_t a, float64x2_t v, const int lane)	$a \rightarrow Rn$ $v \rightarrow Vd.2D$ $0 \leq lane \leq 1$	INS Vd.D[lane],Rn	Vd.2D	ARMv8(AArch64)
float32_t vrecpxs_f32 (float32_t a)	$a \rightarrow Sn$	FRECPX Sd,Sn	Sd	ARMv8(AArch64)
float64_t vrecpxd_f64 (float64_t a)	$a \rightarrow Dn$	FRECPX Dd,Dn	Dd	ARMv8(AArch64)
float32x2_t vfma_n_f32 (float32x2_t a, float32x2_t b, float32_t n)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $n \rightarrow Vm.S[0]$	FMLA Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv7, ARMv8
float32x4_t vfmaq_n_f32 (float32x4_t a, float32x4_t b, float32_t n)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $n \rightarrow Vm.S[0]$	FMLA Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv7, ARMv8
float32x2_t vfms_n_f32 (float32x2_t a, float32x2_t b, float32_t n)	$a \rightarrow Vd.2S$ $b \rightarrow Vn.2S$ $n \rightarrow Vm.S[0]$	FMLS Vd.2S,Vn.2S,Vm.S[0]	Vd.2S	ARMv8(AArch64)
float32x4_t vfmsq_n_f32 (float32x4_t a, float32x4_t b, float32_t n)	$a \rightarrow Vd.4S$ $b \rightarrow Vn.4S$ $n \rightarrow Vm.S[0]$	FMLS Vd.4S,Vn.4S,Vm.S[0]	Vd.4S	ARMv8(AArch64)
float64x1_t vfma_n_f64 (float64x1_t a, float64x1_t b, float64_t n)	$a \rightarrow Da$ $b \rightarrow Dn$ $n \rightarrow Dm$	FMADD Dd,Dn,Dm,Da	Dd	ARMv8(AArch64)
float64x2_t vfmaq_n_f64 (float64x2_t a, float64x2_t b, float64_t n)	$a \rightarrow Vd.2D$ $b \rightarrow Vn.2D$ $n \rightarrow Vm.D[0]$	FMLA Vd.2D,Vn.2D,Vm.D[0]	Vd.2D	ARMv8(AArch64)
float64x1_t vfms_n_f64 (float64x1_t a, float64x1_t b, float64_t n)	$a \rightarrow Da$ $b \rightarrow Dn$ $n \rightarrow Dm$	FMSUB Dd,Dn,Dm,Da	Dd	ARMv8(AArch64)
float64x2_t vfmsq_n_f64 (float64x2_t a, float64x2_t b, float64_t n)	$a \rightarrow Vd.2D$ $b \rightarrow Vn.2D$ $n \rightarrow Vm.D[0]$	FMLS Vd.2D,Vn.2D,Vm.D[0]	Vd.2D	ARMv8(AArch64)

int8x8x2_t vtrn_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	TRN1 Vd1.8B,Vn.8B,Vm.8B TRN2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
int16x4x2_t vtrn_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
uint8x8x2_t vtrn_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	TRN1 Vd1.8B,Vn.8B,Vm.8B TRN2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
uint16x4x2_t vtrn_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
poly8x8x2_t vtrn_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	TRN1 Vd1.8B,Vn.8B,Vm.8B TRN2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
poly16x4x2_t vtrn_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	TRN1 Vd1.4H,Vn.4H,Vm.4H TRN2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
int32x2x2_t vtrn_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	TRN1 Vd1.2S,Vn.2S,Vm.2S TRN2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
float32x2x2_t vtrn_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	TRN1 Vd1.2S,Vn.2S,Vm.2S TRN2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
uint32x2x2_t vtrn_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	TRN1 Vd1.2S,Vn.2S,Vm.2S TRN2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
int8x16x2_t vtrnq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	TRN1 Vd1.16B,Vn.16B,Vm.16B TRN2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8

int16x8x2_t vtrnq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
int32x4x2_t vtrnq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	TRN1 Vd1.4S,Vn.4S,Vm.4S TRN2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
float32x4x2_t vtrnq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	TRN1 Vd1.4S,Vn.4S,Vm.4S TRN2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
uint8x16x2_t vtrnq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	TRN1 Vd1.16B,Vn.16B,Vm.16B TRN2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
uint16x8x2_t vtrnq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
uint32x4x2_t vtrnq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	TRN1 Vd1.4S,Vn.4S,Vm.4S TRN2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
poly8x16x2_t vtrnq_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	TRN1 Vd1.16B,Vn.16B,Vm.16B TRN2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
poly16x8x2_t vtrnq_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	TRN1 Vd1.8H,Vn.8H,Vm.8H TRN2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
int8x8x2_t vzip_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP1 Vd1.8B,Vn.8B,Vm.8B ZIP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
int16x4x2_t vzip_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8

uint8x8x2_t vzip_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP1 Vd1.8B,Vn.8B,Vm.8B ZIP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
uint16x4x2_t vzip_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
poly8x8x2_t vzip_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	ZIP1 Vd1.8B,Vn.8B,Vm.8B ZIP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
poly16x4x2_t vzip_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	ZIP1 Vd1.4H,Vn.4H,Vm.4H ZIP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
int32x2x2_t vzip_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP1 Vd1.2S,Vn.2S,Vm.2S ZIP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
float32x2x2_t vzip_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP1 Vd1.2S,Vn.2S,Vm.2S ZIP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
uint32x2x2_t vzip_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	ZIP1 Vd1.2S,Vn.2S,Vm.2S ZIP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
int8x16x2_t vzipq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP1 Vd1.16B,Vn.16B,Vm.16B ZIP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
int16x8x2_t vzipq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
int32x4x2_t vzipq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP1 Vd1.4S,Vn.4S,Vm.4S ZIP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8

float32x4x2_t vzipq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP1 Vd1.4S,Vn.4S,Vm.4S ZIP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
uint8x16x2_t vzipq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP1 Vd1.16B,Vn.16B,Vm.16B ZIP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
uint16x8x2_t vzipq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
uint32x4x2_t vzipq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	ZIP1 Vd1.4S,Vn.4S,Vm.4S ZIP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
poly8x16x2_t vzipq_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	ZIP1 Vd1.16B,Vn.16B,Vm.16B ZIP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
poly16x8x2_t vzipq_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	ZIP1 Vd1.8H,Vn.8H,Vm.8H ZIP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
int8x8x2_t vuzp_s8 (int8x8_t a, int8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UZP1 Vd1.8B,Vn.8B,Vm.8B UZP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
int16x4x2_t vuzp_s16 (int16x4_t a, int16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
int32x2x2_t vuzp_s32 (int32x2_t a, int32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP1 Vd1.2S,Vn.2S,Vm.2S UZP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
float32x2x2_t vuzp_f32 (float32x2_t a, float32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP1 Vd1.2S,Vn.2S,Vm.2S UZP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8

uint8x8x2_t vuzp_u8 (uint8x8_t a, uint8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UZP1 Vd1.8B,Vn.8B,Vm.8B UZP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
uint16x4x2_t vuzp_u16 (uint16x4_t a, uint16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
uint32x2x2_t vuzp_u32 (uint32x2_t a, uint32x2_t b)	$a \rightarrow Vn.2S$ $b \rightarrow Vm.2S$	UZP1 Vd1.2S,Vn.2S,Vm.2S UZP2 Vd2.2S,Vn.2S,Vm.2S	Vd1.2S \rightarrow result.val[0] Vd2.2S \rightarrow result.val[1]	ARMv7, ARMv8
poly8x8x2_t vuzp_p8 (poly8x8_t a, poly8x8_t b)	$a \rightarrow Vn.8B$ $b \rightarrow Vm.8B$	UZP1 Vd1.8B,Vn.8B,Vm.8B UZP2 Vd2.8B,Vn.8B,Vm.8B	Vd1.8B \rightarrow result.val[0] Vd2.8B \rightarrow result.val[1]	ARMv7, ARMv8
poly16x4x2_t vuzp_p16 (poly16x4_t a, poly16x4_t b)	$a \rightarrow Vn.4H$ $b \rightarrow Vm.4H$	UZP1 Vd1.4H,Vn.4H,Vm.4H UZP2 Vd2.4H,Vn.4H,Vm.4H	Vd1.4H \rightarrow result.val[0] Vd2.4H \rightarrow result.val[1]	ARMv7, ARMv8
int8x16x2_t vuzpq_s8 (int8x16_t a, int8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UZP1 Vd1.16B,Vn.16B,Vm.16B UZP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
int16x8x2_t vuzpq_s16 (int16x8_t a, int16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
int32x4x2_t vuzpq_s32 (int32x4_t a, int32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP1 Vd1.4S,Vn.4S,Vm.4S UZP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
float32x4x2_t vuzpq_f32 (float32x4_t a, float32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP1 Vd1.4S,Vn.4S,Vm.4S UZP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
uint8x16x2_t vuzpq_u8 (uint8x16_t a, uint8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UZP1 Vd1.16B,Vn.16B,Vm.16B UZP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8

uint16x8x2_t vuzpq_u16 (uint16x8_t a, uint16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
uint32x4x2_t vuzpq_u32 (uint32x4_t a, uint32x4_t b)	$a \rightarrow Vn.4S$ $b \rightarrow Vm.4S$	UZP1 Vd1.4S,Vn.4S,Vm.4S UZP2 Vd2.4S,Vn.4S,Vm.4S	Vd1.4S \rightarrow result.val[0] Vd2.4S \rightarrow result.val[1]	ARMv7, ARMv8
poly8x16x2_t vuzpq_p8 (poly8x16_t a, poly8x16_t b)	$a \rightarrow Vn.16B$ $b \rightarrow Vm.16B$	UZP1 Vd1.16B,Vn.16B,Vm.16B UZP2 Vd2.16B,Vn.16B,Vm.16B	Vd1.16B \rightarrow result.val[0] Vd2.16B \rightarrow result.val[1]	ARMv7, ARMv8
poly16x8x2_t vuzpq_p16 (poly16x8_t a, poly16x8_t b)	$a \rightarrow Vn.8H$ $b \rightarrow Vm.8H$	UZP1 Vd1.8H,Vn.8H,Vm.8H UZP2 Vd2.8H,Vn.8H,Vm.8H	Vd1.8H \rightarrow result.val[0] Vd2.8H \rightarrow result.val[1]	ARMv7, ARMv8
int16x4_t vreinterpret_s16_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_s8 (int8x8_t a)	$a \rightarrow Vd.8B$	NOP	Vd.1D	ARMv7, ARMv8

int64x1_t vreinterpret_s64_s8 (int8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_s8 (int8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_s8 (int8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_s8 (int8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
int32x2_t vreinterpret_s32_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8(AArch64)

poly64x1_t vreinterpret_p64_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_s16 (int16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
float32x2_t vreinterpret_f32_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_s32 (int32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8

int8x8_t vreinterpret_s8_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv8
poly64x1_t vreinterpret_p64_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8(AArch64)
float16x4_t vreinterpret_f16_f32 (float32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.8B	ARMv7, ARMv8

int16x4_t vreinterpret_s16_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.2S	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_u8 (uint8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8

float32x2_t vreinterpret_f32_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_u16 (uint16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8

uint16x4_t vreinterpret_u16_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_u32 (uint32x2_t a)	$a \rightarrow \text{Vd.2S}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.2S	ARMv7, ARMv8

poly16x4_t vreinterpret_p16_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_p8 (poly8x8_t a)	$a \rightarrow \text{Vd.8B}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8

int64x1_t vreinterpret_s64_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_p16 (poly16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
int64x1_t vreinterpret_s64_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8(AArch64)

poly64x1_t vreinterpret_p64_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_u64 (uint64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
int8x8_t vreinterpret_s8_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8(AArch64)
uint64x1_t vreinterpret_u64_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8
float16x4_t vreinterpret_f16_s64 (int64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv7, ARMv8

int8x8_t vreinterpret_s8_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
int16x4_t vreinterpret_s16_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
int32x2_t vreinterpret_s32_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
float32x2_t vreinterpret_f32_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
uint8x8_t vreinterpret_u8_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
uint16x4_t vreinterpret_u16_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
uint32x2_t vreinterpret_u32_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.2S	ARMv7, ARMv8
poly8x8_t vreinterpret_p8_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.8B	ARMv7, ARMv8
poly16x4_t vreinterpret_p16_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.4H	ARMv7, ARMv8
uint64x1_t vreinterpret_u64_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
int64x1_t vreinterpret_s64_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv7, ARMv8
float64x1_t vreinterpret_f64_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8(AArch64)
poly64x1_t vreinterpret_p64_f16 (float16x4_t a)	$a \rightarrow \text{Vd.4H}$	NOP	Vd.1D	ARMv8
int16x8_t vreinterpretq_s16_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8

float32x4_t vreinterpretq_f32_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_s8 (int8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8

uint8x16_t vreinterpretq_u8_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_s16 (int16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8

uint16x8_t vreinterpretq_u16_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_s32 (int32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8

uint32x4_t vreinterpretq_u32_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.1Q	ARMv8
poly64x2_t vreinterpretq_p64_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8(AArch64)
poly128_t vreinterpretq_p128_f64 (float64x2_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.2D	ARMv8(AArch64)
float16x8_t vreinterpretq_f16_f32 (float32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8

uint16x8_t vreinterpretq_u16_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_u8 (uint8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8

uint32x4_t reinterpretq_u32_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t reinterpretq_p8_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t reinterpretq_p16_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t reinterpretq_u64_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t reinterpretq_s64_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t reinterpretq_f64_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t reinterpretq_p64_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8
poly128_t reinterpretq_p128_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.1Q	ARMv8
float16x8_t reinterpretq_f16_u16 (uint16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t reinterpretq_s8_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t reinterpretq_s16_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t reinterpretq_s32_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t reinterpretq_f32_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t reinterpretq_u8_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t reinterpretq_u16_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8

poly8x16_t vreinterpretq_p8_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_u32 (uint32x4_t a)	$a \rightarrow \text{Vd.4S}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.4S	ARMv7, ARMv8

poly16x8_t vreinterpretq_p16_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_p8 (poly8x16_t a)	$a \rightarrow \text{Vd.16B}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8

uint64x2_t vreinterpretq_u64_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
int64x2_t vreinterpretq_s64_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.1Q	ARMv8
float16x8_t vreinterpretq_f16_p16 (poly16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8

int64x2_t vreinterpretq_s64_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_s64 (int64x2_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.2D	ARMv8
poly64x2_t vreinterpretq_p64_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.2D	ARMv8
float16x8_t vreinterpretq_f16_u64 (uint64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv7, ARMv8

poly8x16_t vreinterpretq_p8_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8
float16x8_t vreinterpretq_f16_s64 (int64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv7, ARMv8
int8x16_t vreinterpretq_s8_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
int16x8_t vreinterpretq_s16_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
int32x4_t vreinterpretq_s32_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
float32x4_t vreinterpretq_f32_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
uint8x16_t vreinterpretq_u8_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
uint16x8_t vreinterpretq_u16_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
uint32x4_t vreinterpretq_u32_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.4S	ARMv7, ARMv8
poly8x16_t vreinterpretq_p8_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.16B	ARMv7, ARMv8
poly16x8_t vreinterpretq_p16_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.8H	ARMv7, ARMv8
uint64x2_t vreinterpretq_u64_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8

int64x2_t vreinterpretq_s64_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv7, ARMv8
float64x2_t vreinterpretq_f64_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8(AArch64)
poly64x2_t vreinterpretq_p64_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.2D	ARMv8
poly128_t vreinterpretq_p128_f16 (float16x8_t a)	$a \rightarrow \text{Vd.8H}$	NOP	Vd.1Q	ARMv8
int8x8_t vreinterpret_s8_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv8(AArch64)
int16x4_t vreinterpret_s16_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8(AArch64)
int32x2_t vreinterpret_s32_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv8(AArch64)
uint8x8_t vreinterpret_u8_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv8(AArch64)
uint16x4_t vreinterpret_u16_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8(AArch64)
uint32x2_t vreinterpret_u32_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv8(AArch64)
poly8x8_t vreinterpret_p8_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv8(AArch64)
poly16x4_t vreinterpret_p16_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8(AArch64)
uint64x1_t vreinterpret_u64_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8(AArch64)
int64x1_t vreinterpret_s64_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8(AArch64)
float16x4_t vreinterpret_f16_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8(AArch64)

float32x2_t vreinterpretq_f32_f64 (float64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv8(AArch64)
int8x16_t vreinterpretq_s8_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv8(AArch64)
int16x8_t vreinterpretq_s16_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8(AArch64)
int32x4_t vreinterpretq_s32_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv8(AArch64)
uint8x16_t vreinterpretq_u8_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv8(AArch64)
uint16x8_t vreinterpretq_u16_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8(AArch64)
uint32x4_t vreinterpretq_u32_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv8(AArch64)
poly8x16_t vreinterpretq_p8_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv8(AArch64)
poly16x8_t vreinterpretq_p16_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8(AArch64)
uint64x2_t vreinterpretq_u64_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8(AArch64)
int64x2_t vreinterpretq_s64_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8(AArch64)
float16x8_t vreinterpretq_f16_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8(AArch64)
float32x4_t vreinterpretq_f32_f64 (float64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv8(AArch64)
int8x8_t vreinterpret_s8_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv8
int16x4_t vreinterpret_s16_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8

int32x2_t vreinterpret_s32_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv8
uint8x8_t vreinterpret_u8_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv8
uint16x4_t vreinterpret_u16_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8
uint32x2_t vreinterpret_u32_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.2S	ARMv8
poly8x8_t vreinterpret_p8_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.8B	ARMv8
poly16x4_t vreinterpret_p16_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8
uint64x1_t vreinterpret_u64_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8
int64x1_t vreinterpret_s64_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8
float64x1_t vreinterpret_f64_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.1D	ARMv8(AArch64)
float16x4_t vreinterpret_f16_p64 (poly64x1_t a)	$a \rightarrow \text{Vd.1D}$	NOP	Vd.4H	ARMv8
int8x16_t vreinterpretq_s8_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv8
int16x8_t vreinterpretq_s16_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8
int32x4_t vreinterpretq_s32_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv8
uint8x16_t vreinterpretq_u8_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv8
uint16x8_t vreinterpretq_u16_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8

uint32x4_t vreinterpretq_u32_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.4S	ARMv8
poly8x16_t vreinterpretq_p8_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.16B	ARMv8
poly16x8_t vreinterpretq_p16_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8
uint64x2_t vreinterpretq_u64_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8
int64x2_t vreinterpretq_s64_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8
float64x2_t vreinterpretq_f64_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.2D	ARMv8(AArch64)
float16x8_t vreinterpretq_f16_p64 (poly64x2_t a)	$a \rightarrow \text{Vd.2D}$	NOP	Vd.8H	ARMv8
int8x16_t vreinterpretq_s8_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.16B	ARMv8
int16x8_t vreinterpretq_s16_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.8H	ARMv8
int32x4_t vreinterpretq_s32_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.4S	ARMv8
uint8x16_t vreinterpretq_u8_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.16B	ARMv8
uint16x8_t vreinterpretq_u16_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.8H	ARMv8
uint32x4_t vreinterpretq_u32_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.4S	ARMv8
poly8x16_t vreinterpretq_p8_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.16B	ARMv8
poly16x8_t vreinterpretq_p16_p128 (poly128_t a)	$a \rightarrow \text{Vd.1Q}$	NOP	Vd.8H	ARMv8

uint64x2_t vreinterpretq_u64_p128 (poly128_t a)	a → Vd.1Q	NOP	Vd.2D	ARMv8
int64x2_t vreinterpretq_s64_p128 (poly128_t a)	a → Vd.1Q	NOP	Vd.2D	ARMv8
float64x2_t vreinterpretq_f64_p128 (poly128_t a)	a → Vd.1Q	NOP	Vd.2D	ARMv8(AArch64)
float16x8_t vreinterpretq_f16_p128 (poly128_t a)	a → Vd.1Q	NOP	Vd.8H	ARMv8
poly128_t vldrq_p128 (poly128_t const * ptr)	ptr → Xn	LDR Qd,[Xn]	Qd	ARMv8
void vstrq_p128 (poly128_t * ptr, poly128_t val)	ptr → Xn val → Qt	STR Qt,[Xn]		ARMv8
uint8x16_t vaeseq_u8 (uint8x16_t data, uint8x16_t key)	data → Vd.16B key → Vn.16B	AESE Vd.16B,Vn.16B	Vd.16B	ARMv8
uint8x16_t vaesdq_u8 (uint8x16_t data, uint8x16_t key)	data → Vd.16B key → Vn.16B	AESD Vd.16B,Vn.16B	Vd.16B	ARMv8
uint8x16_t vaesmcq_u8 (uint8x16_t data)	data → Vn.16B	AESMC Vd.16B,Vn.16B	Vd.16B	ARMv8
uint8x16_t vaesimcq_u8 (uint8x16_t data)	data → Vn.16B	AESIMC Vd.16B,Vn.16B	Vd.16B	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8

uint32_t vsha1h_u32 (uint32_t hash_e)	hash_e → Sn	SHA1H Sd,Sn	Sd	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8
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	ARMv8