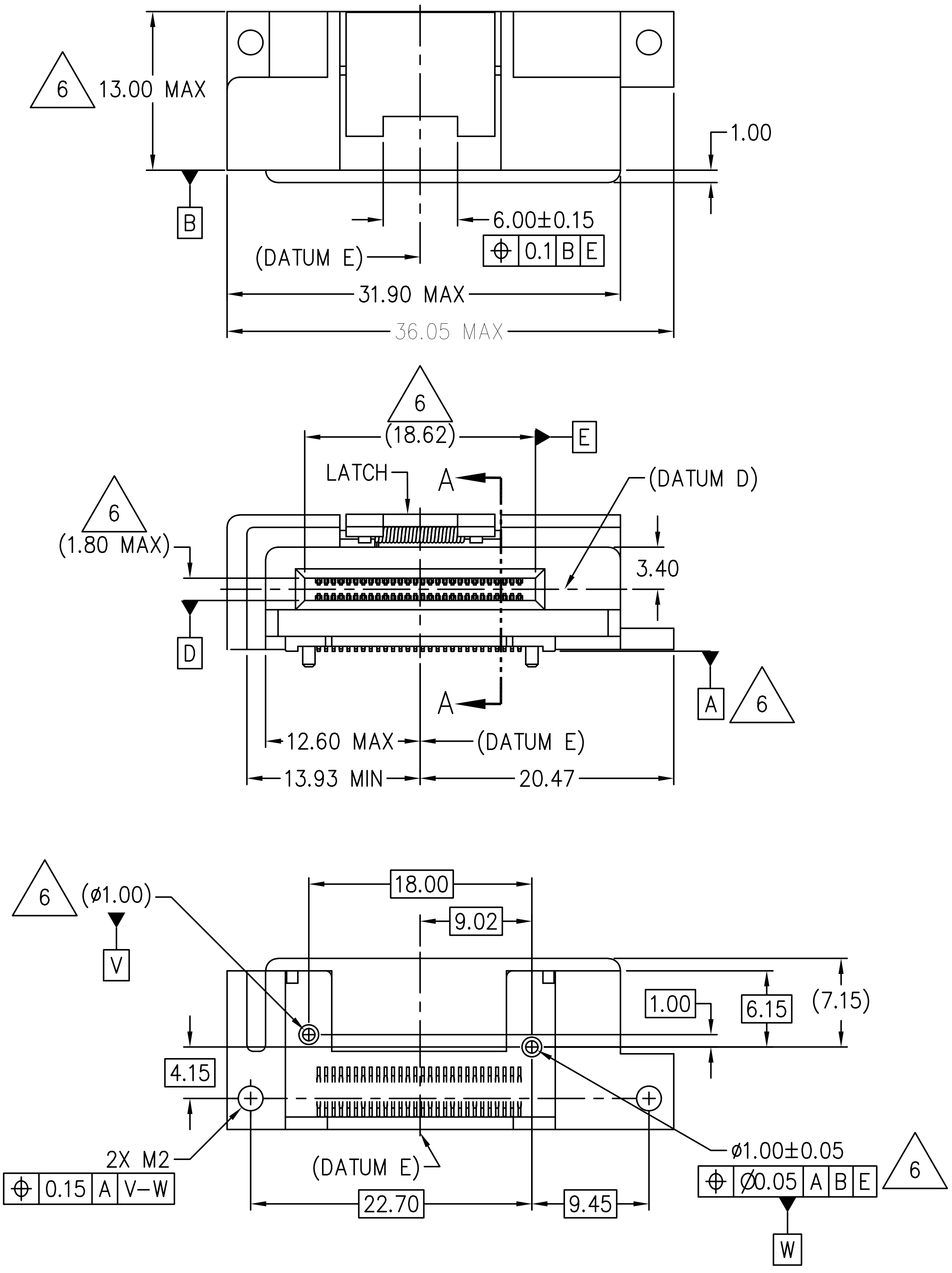
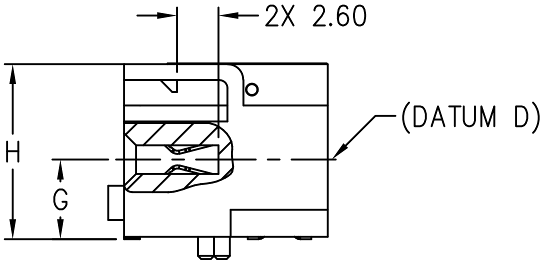


E1.S CONNECTOR FORM FACTOR

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2022 JEDEC	THIS *REGISTERED OUTLINE* HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USAGE IN THE ELECTRONICS INDUSTRY; CHANGES ARE LIKELY TO OCCUR.

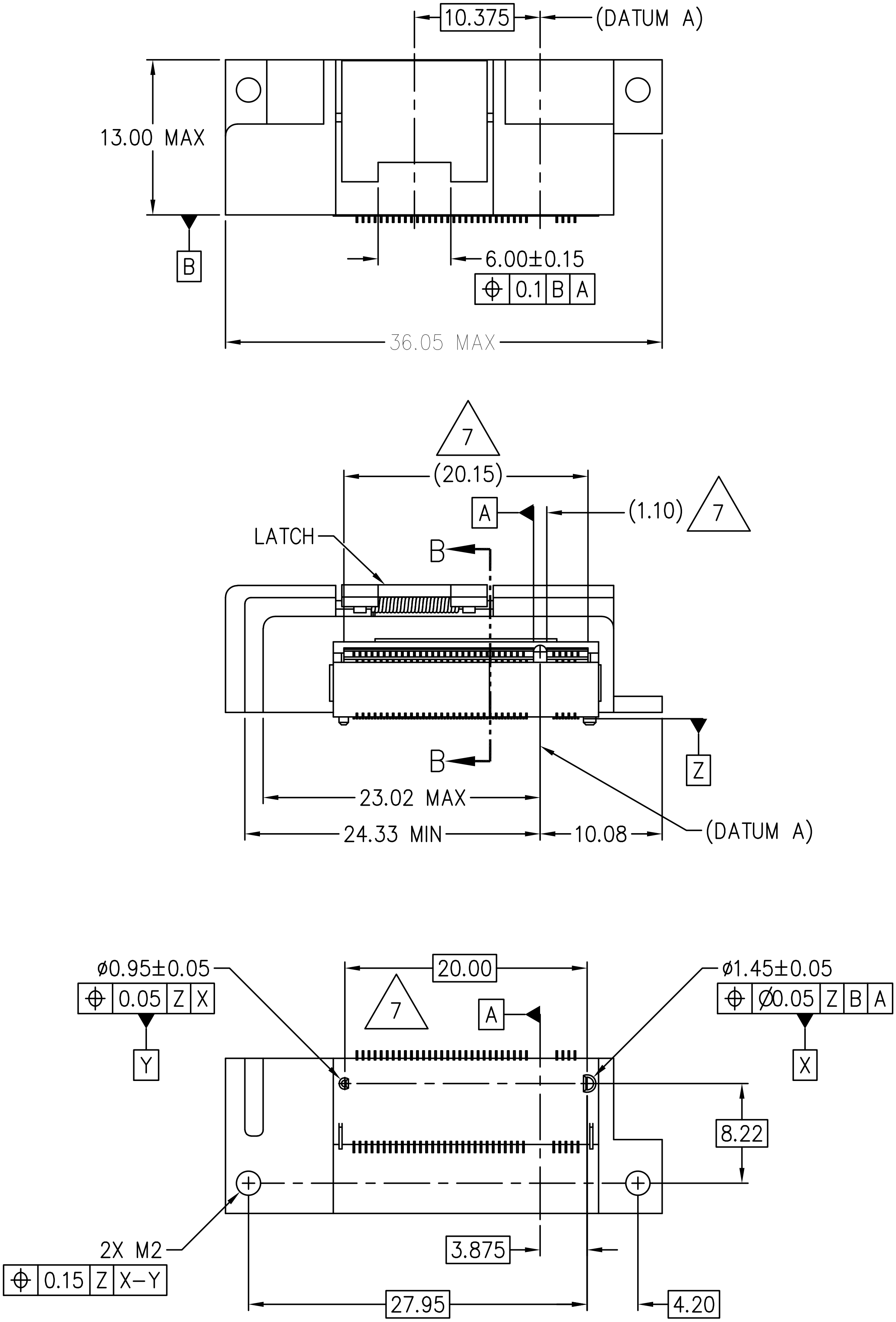
TITLE	PACKAGE DESIGNATOR	NUMBER	ISSUE	DATE	SHEET
ENCLOSURE FORM FACTOR FOR AUTOMOTIVE SSD CONNECTOR, BOARD MOUNT	PBCX-K4_...	SO-030	A	FEB 2022	1 OF 6



SECTION A-A
E1.S CONNECTOR SIDE VIEW

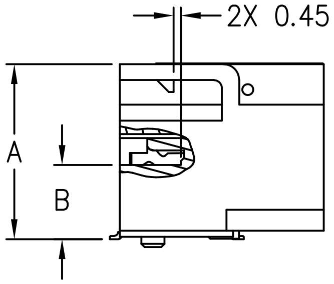
VARIATIONS IN SFF-TA-1002 RIGHT ANGLE CONNECTOR HEIGHT			
SYMBOL	HEIGHT 1	HEIGHT 2	NOTES
G	(3.05)	(4.05)	6
H	9.25 MAX	10.25 MAX	
NOTES	1, 2, 3, 4, 6	1, 2, 3, 4, 6	
REF	14-211	14-211	
ISSUE	A	A	

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2022 JEDEC	TITLE ENCLOSURE FORM FACTOR FOR AUTOMOTIVE SSD CONNECTOR, BOARD MOUNT	NUMBER SO-030	ISSUE A	DATE FEB 2022	SHEET 2 OF 6



M.2 M KEY CONNECTOR FORM FACTOR

	TITLE	NUMBER	ISSUE	DATE	SHEET
JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2022 JEDEC	ENCLOSURE FORM FACTOR FOR AUTOMOTIVE SSD CONNECTOR, BOARD MOUNT	SO-030	A	FEB 2022	3 OF 6



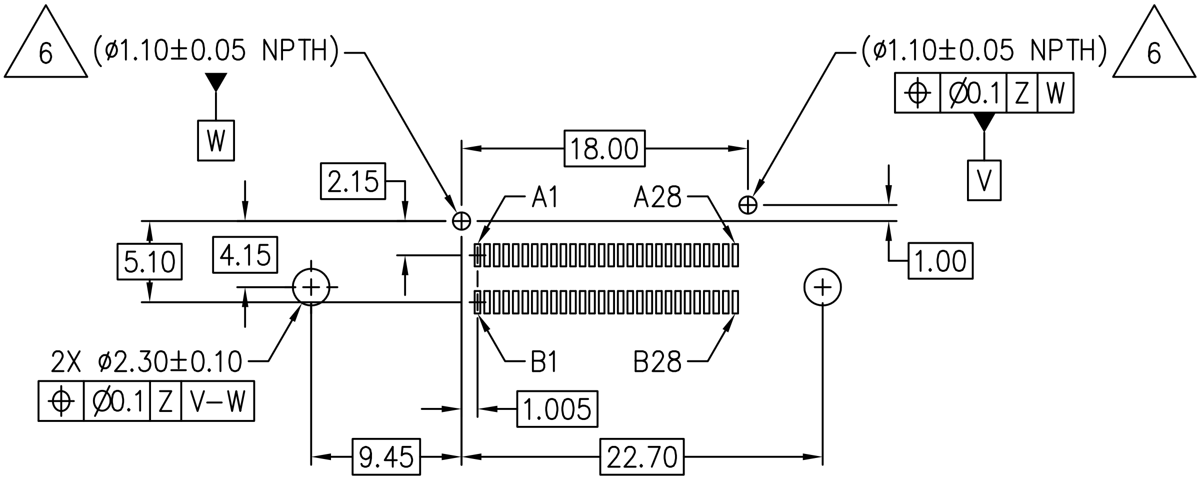
SECTION B–B
M.2 M KEY CONNECTOR SIDE VIEW

VARIATIONS IN PCI EXPRESS M.2 SPEC CONNECTOR HEIGHT						
SYMBOL	SEATING HEIGHT 1	SEATING HEIGHT 2	SEATING HEIGHT 3	SEATING HEIGHT 4	SEATING HEIGHT 5	NOTES
A	6.90 MAX	7.10 MAX	7.40 MAX	7.85 MAX	8.85 MAX	
B	(0.41)	(0.61)	(0.89)	(1.54)	(2.54)	7
NOTES	1, 2, 3, 4, 7					
REF	14–211					
ISSUE	A					

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2022 JEDEC	TITLE ENCLOSURE FORM FACTOR FOR AUTOMOTIVE SSD CONNECTOR, BOARD MOUNT	NUMBER	ISSUE	DATE	SHEET
		SO-030	A	FEB 2022	4 OF 6

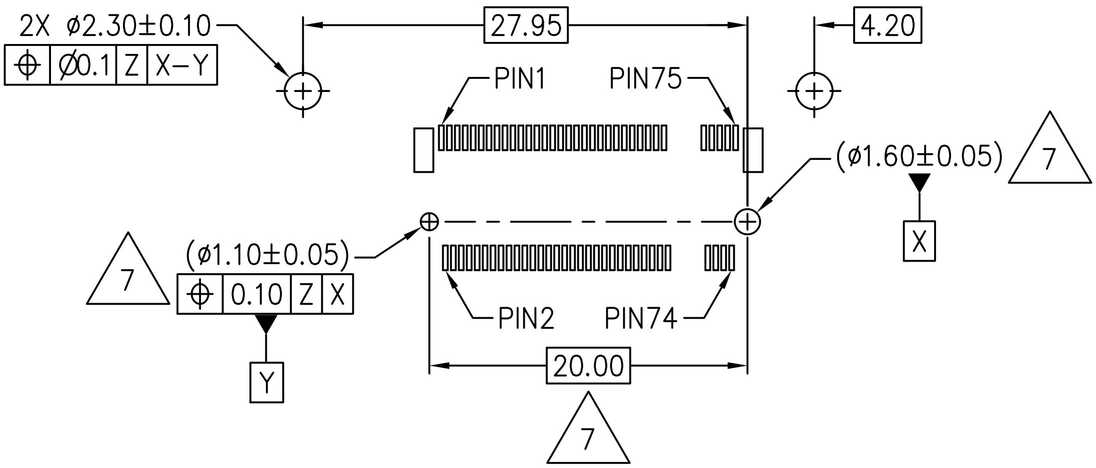
NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5–2009.
2. TOLERANCES ON ALL DIMENSIONS ±0.15 UNLESS OTHERWISE SPECIFIED.
3. ALL DIMENSIONS ARE MM.
4 METAL SURFACE SHALL BE FREE OF BURRS.
5 THIS DOCUMENT DEFINES CONNECTOR ENCLOSURE VOLUMETRIC FOR TWO VARIATION OF SSD INTERFACE: E1.S AND M.2 M KEY SSD
6 THE E1.S CONNECTOR DIMENSIONS AND DATUM REFER TO SNIA SFF–TA–1002 SPECIFICATION REV 1.3.
7 THE M.2 CONNECTOR DIMENSIONS AND DATUM REFER TO PCI EXPRESS M.2 SPECIFICATION R4.0 V1.0.
8. FOR E1.S CONNECTOR PCB TERMINAL PATTERN REFER TO BELOW.
REFER TO SNIA SFF–TA–1002, SPECIFICATION FOR PROTOCAL AGNOSTIC MULTI–LANE HIGH SPEED CONNECTOR DOCUMENT FOR TERMINAL PATTERN DIMENSIONS.



E1.S PCB FOOTPRINT
DATUM Z: PCB SOLDER SURFACE

9. FOR M.2 CONNECTOR PCB TERMINAL PATTERN REFER TO BELOW.
REFER TO PCI EXPRESS M.2 SPECIFICATION DOCUMENT FOR TERMINAL PATTERN DIMENSIONS AND MODULE MOUNTING SCREW GROUNDING INFORMATION.



M.2 M KEY PCB FOOTPRINT
DATUM Z: PCB SOLDER SURFACE

10. VARIOUS COMPANIES HAVE ISSUED PATENTS AND RELATED PATENT APPLICATIONS THAT MAY APPLY TO THIS REGISTRATION. IF THE CURRENT ISSUE PATENTS OR LATER PATENTS RESULTING FROM RELATED APPLICATION DO APPLY, THESE COMPANIES INTEND TO COMPLY WITH THE JEDEC PATENT POLICY AND LICENSE UNDER REASONABLE TERMS AND CONDITIONS THAT ARE DEMONSTRABLY FREE OF ANY UNFAIR DISCRIMINATION. REFERENCED PATENTS ARE AS FOLLOWS.

AMPHENOL	CHINA PATENT ZL202021981365.4 US17/402,280 & CN202010952023.8

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2022 JEDEC	TITLE ENCLOSURE FORM FACTOR FOR AUTOMOTIVE SSD CONNECTOR, BOARD MOUNT	NUMBER	ISSUE	DATE	SHEET
		SO-030	A	FEB 2022	6 OF 6

STP (3D) FILE RECORD

3D FILE NAMES MAY EXCEED LENGTH REQUIREMENTS FOR SOME SOFTWARE TOOLS.

STP FILE NAME	DATE	ITEM NUMBER
SO-030A_PBXC-K4_D6p972266-MR36p05x13p0Z9p25-HS_ES.1	FEB-2022	14-211
SO-030A_PBXC-K4_D6p972266-MR36p05x13p0Z10p25-HS_ES.1	FEB-2022	14-211
SO-030A_PBXC-K4_D9p23084-MR36p05x13p0Z6p9-HS_M.2	FEB-2022	14-211
SO-030A_PBXC-K4_D9p23084-MR36p05x13p0Z7p1-HS_M.2	FEB-2022	14-211
SO-030A_PBXC-K4_D9p23084-MR36p05x13p0Z7p4-HS_M.2	FEB-2022	14-211
SO-030A_PBXC-K4_D9p23084-MR36p05x13p076p85-HS_M.2	FEB-2022	14-211
SO-030A_PBXC-K4_D9p23084-MR36p05x13p0Z8p85-HS_M.2	FEB-2022	14-211

TASK GROUP CONTRIBUTORS

AMPHENOL

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2022 JEDEC	TITLE ENCLOSURE FORM FACTOR FOR AUTOMOTIVE SSD CONNECTOR, BOARD MOUNT	NUMBER SO-030	ISSUE A	DATE FEB 2022	SHEET ii

CHANGE RECORD

IF THE CHANGE INVOLVES ANY WORDS ADDED OR DELETED (EXCLUDING DELETION OF ACCIDENTALLY REPEATED WORDS), THE CHANGE IS TO BE INCLUDED BELOW. PUNCTUATION CHANGES MAY OR MAY NOT BE INCLUDED.

INITIAL ISSUE: A	DATE: FEBRUARY 2022	ITEM NUMBER: 14–211

CHANGE RECORD HISTORY:

INITIAL ISSUE:	DATE:	ITEM NUMBER: –

LOCATION:	CHANGED FROM:	CHANGED TO: