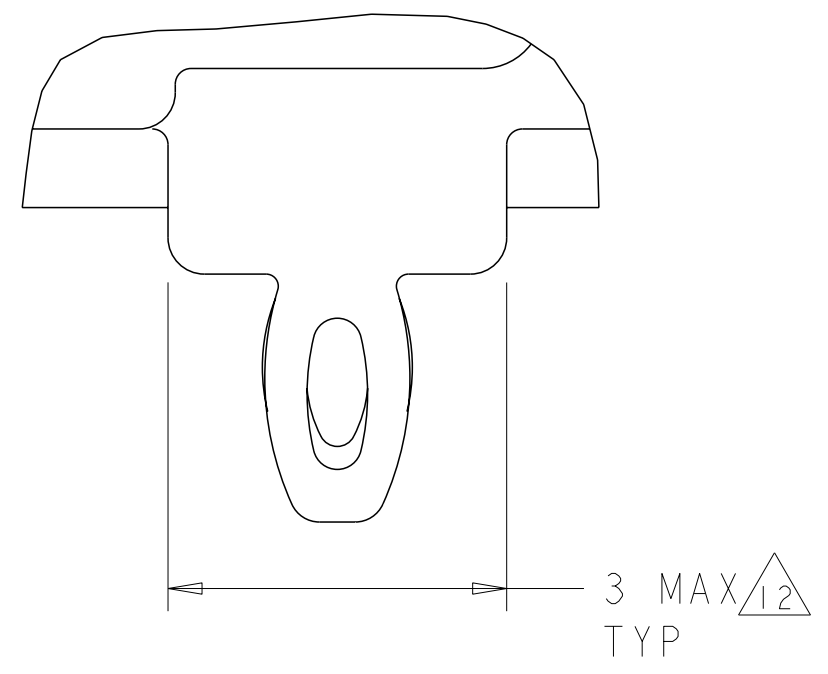


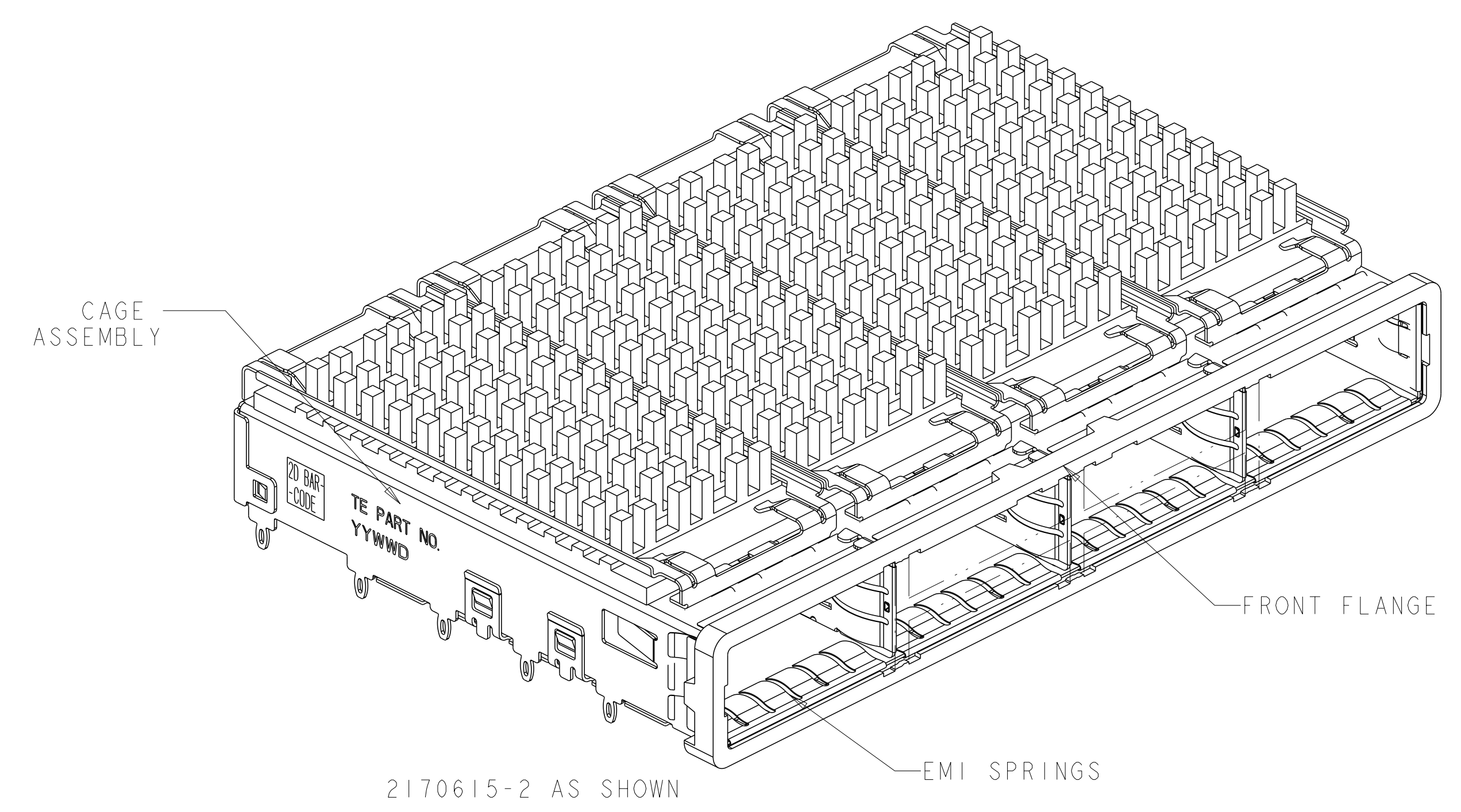
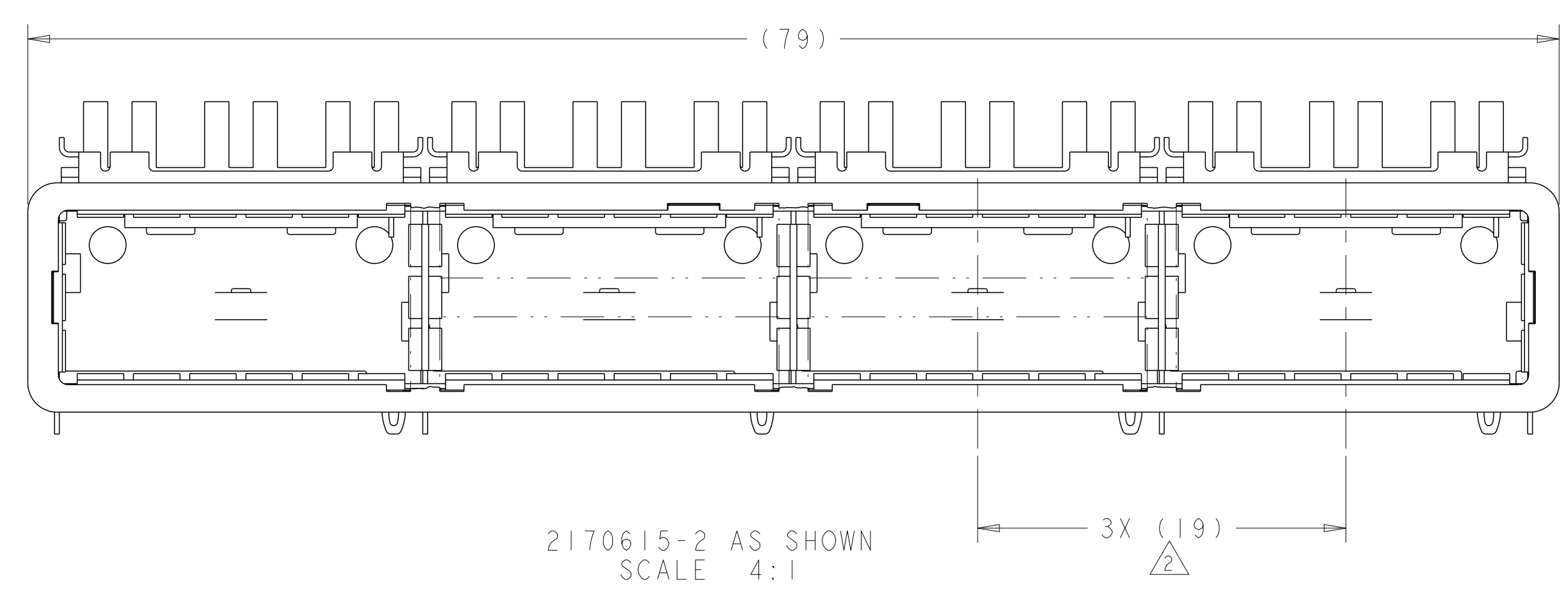
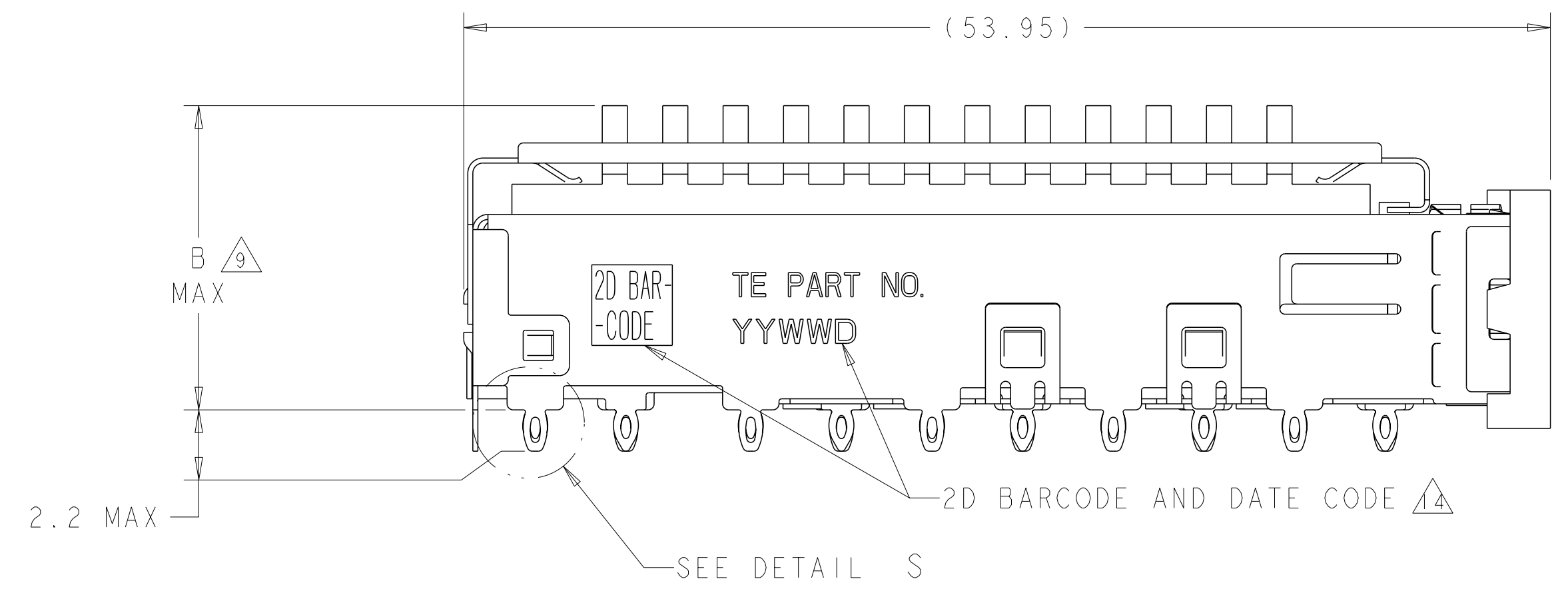
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GP	00	#	LY#	DESCRIPTION	DATE	OWN	APVD
		1		PRELIMINARY	24SEP2013	ZJ	JY
		A		ACTIVE THE DRAWING	31DEC2013	ZJ	JY
		B		REVISED PER ECO-15-005721	4AUG2015	RG	SH
		D		REVISED PER ECO-19-004279	20MAR2019	TX	SH



DETAIL S
SCALE 16:1

- 1. CAGE ASSEMBLY MATERIAL: NICKEL SILVER, 0.25 THICK
- 2. HEAT SINK MATERIAL: ALUMINUM
- 3. HEAT SINK CLIP MATERIAL: STAINLESS STEEL
- 4. EMI SPRING MATERIAL: COPPER ALLOY
- 5. FRONT FLANGE MATERIAL: ZINC ALLOY
- 6. PITCH BETWEEN PORTS OF ONE 1X4 CAGE ASSEMBLY.
- 7. SPACING BETWEEN CAGES ON THE SAME PC BOARD, TO BE SPECIFIED BY CUSTOMER, MUST COMPLY WITH MINIMUM DIMENSIONS SHOWN.
- 8. REFERENCE APPLICATION SPEC 114-13218 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- 9. DATUMS AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- 10. DIMENSION C IS THE NOMINAL THICKNESS OF CUSTOMER SUPPLIED PC BOARD, SINGLE SIDED PC BOARD MINIMUM THICKNESS = 1.45mm, DOUBLE SIDED PC BOARD MINIMUM THICKNESS = 2.2mm PER QSFP.
- 11. HEAT SINKS AND CLIPS SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED.
- 12. DATUM -A- IS TOP SURFACE OF PC BOARD.
- 13. DIMENSION APPLIES WITH MODULE INSERTED IN CAGE.
- 14. UNPLATED THRU HOLE.

- 11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- 12. SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL A AND S, CONTACT PC BOARD.
- 13. BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- 14. 2D BARCODE AND DATE CODE (YYWW) MARKED ON SIDE OF CAGE.
- 15. REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.
- 16. EMI SPRING FINISH: 2µm MINIMUM TIN
FRONT FLANGE FINISH: 3µm MINIMUM TIN OVER 1.27µm MINIMUM NICKEL OVER 5.08µm MINIMUM COPPER.
HEAT SINK FINISH: NICKEL.



23.0	NETWORKING	2170615-4
16.0	SAN	2170615-2
13.7	PCI	2170615-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT. OWN: ZJ, CHK: JY, APVD: MC, DATE: 24SEP2013

DIMENSIONS: mm. TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±, 1 PLC ±0.1, 2 PLC ±0.1, 3 PLC ±, 4 PLC ±, ANGLES FINISH ±.

MATERIAL: 1. FINISH: 16.

Customer Drawing

SCALE 1:1 SHEET 1 OF 6 REV D

TE Connectivity

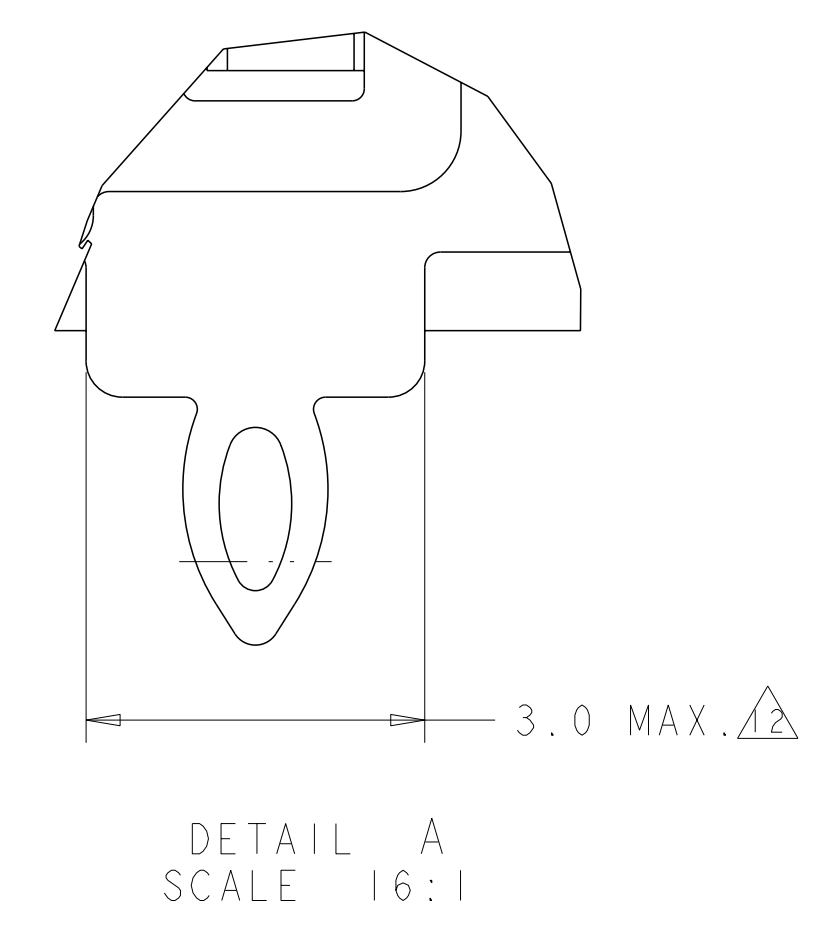
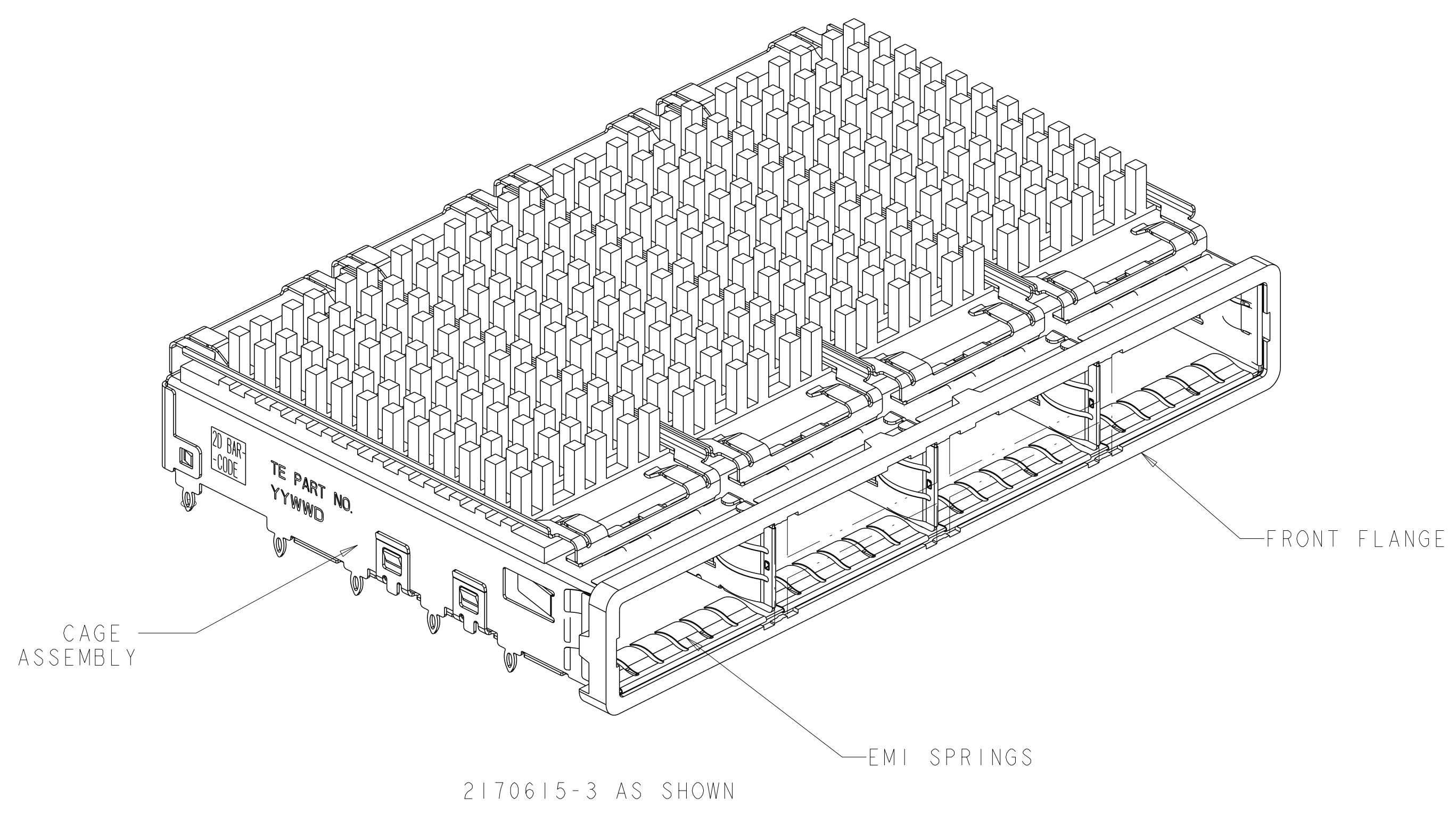
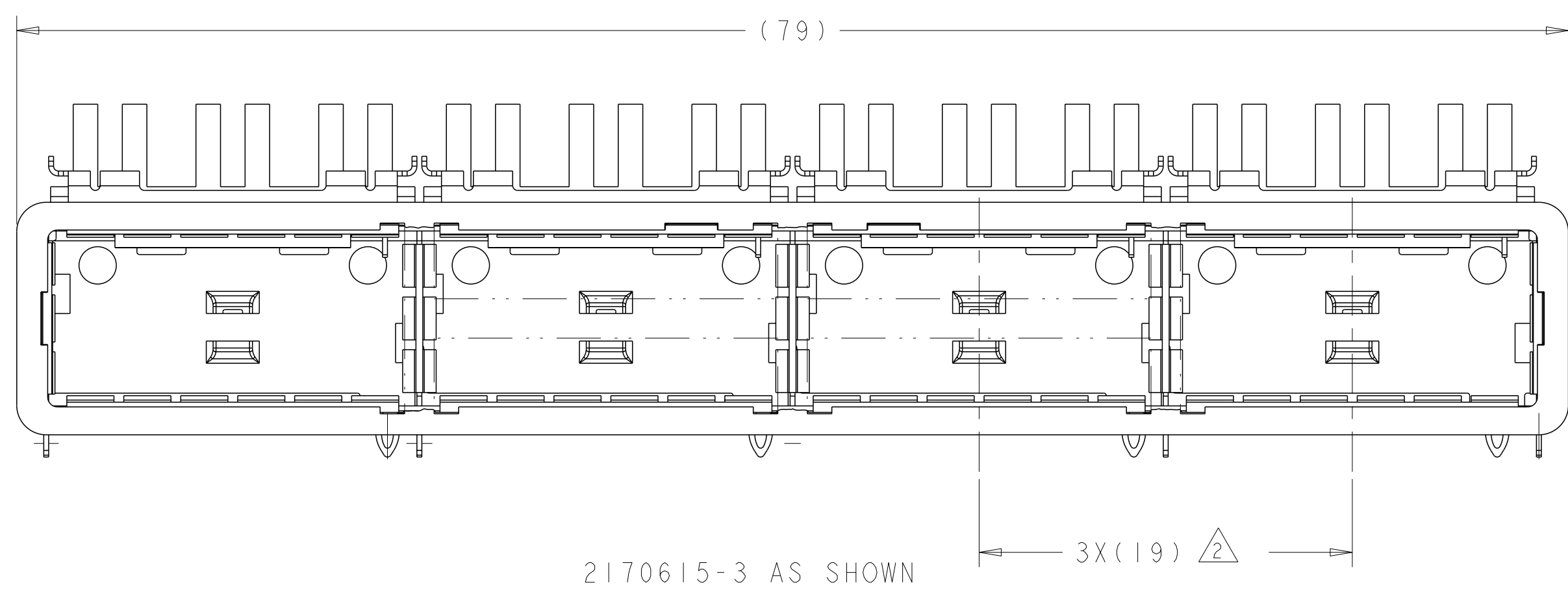
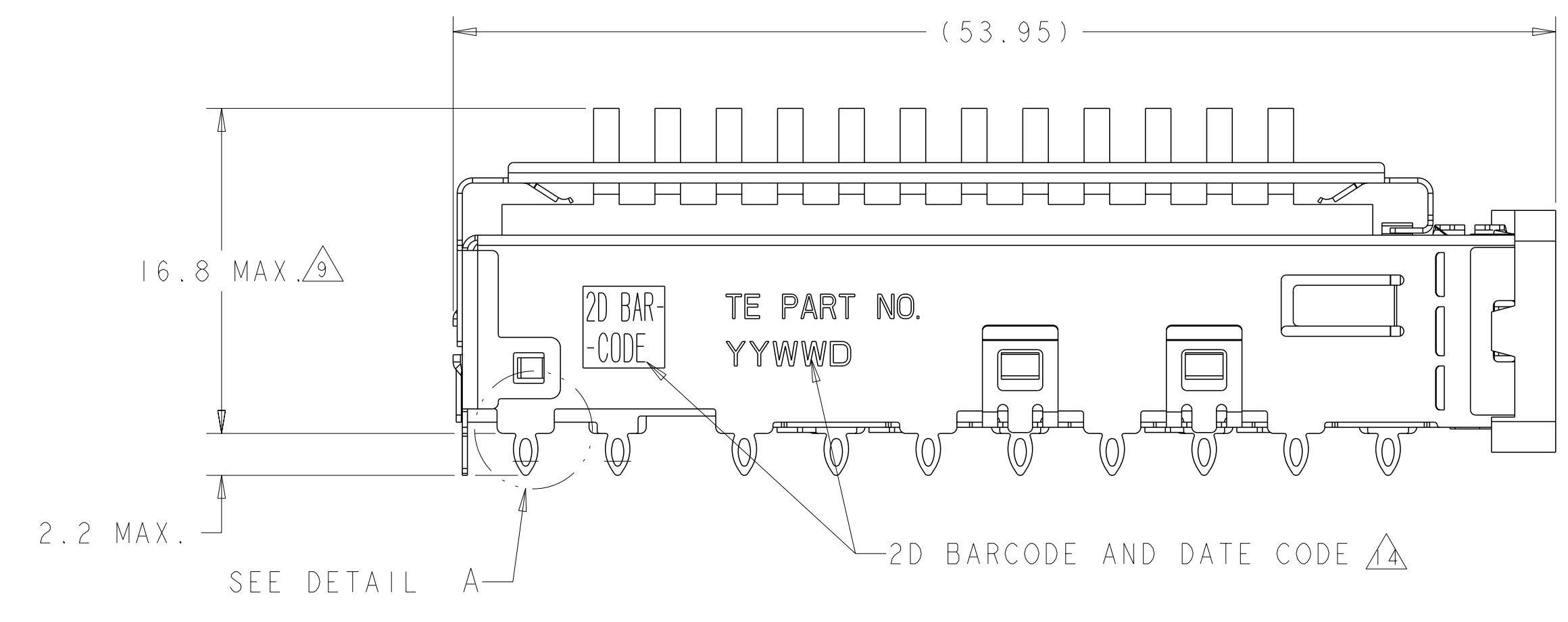
NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP

PRODUCT SPEC: 108-2286

APPLICATION SPEC: 114-13218

SIZE: A1 CAGE CODE: 00779 DRAWING NO: 2170615

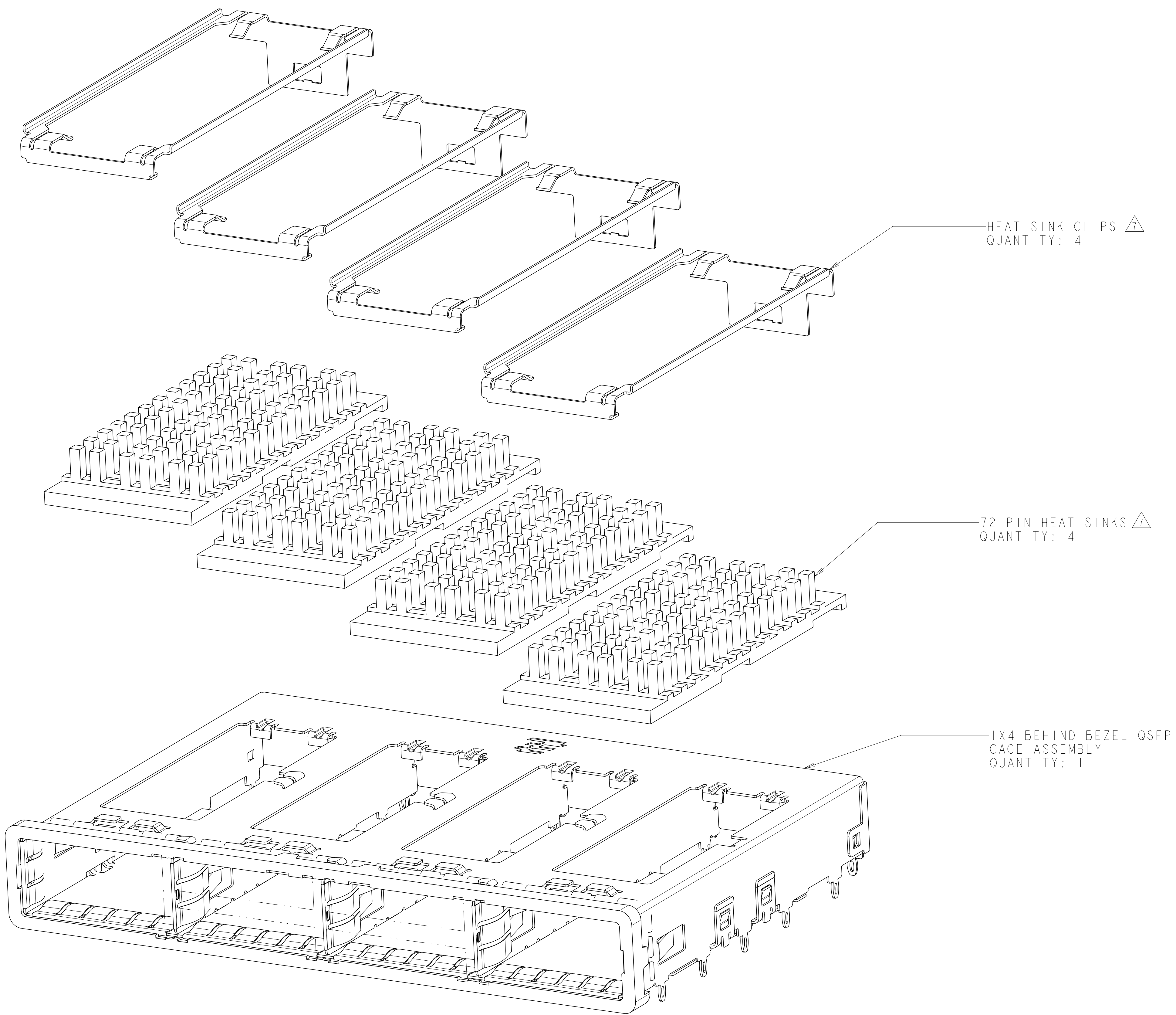
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GP	00	P	LYR	DESCRIPTION	DATE	OWN	APVD
		-		SEE SHEET 1	-	-	-



CUSTOMIZED	2170615-3
HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: ZJ	24SEP2013	TE Connectivity NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP PRODUCT SPEC: 108-2286 APPLICATION SPEC: 114-13218 WEIGHT: - Customer Drawing
DIMENSIONS:		CHK: JY	24SEP2013	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: MC	24SEP2013	
mm				
0 PLC	±			SIZE: A1
1 PLC	±0.1			CAGE CODE: 00779
2 PLC	±0.1			DRAWING NO: 2170615
3 PLC	±			RESTRICTED TO: -
4 PLC	±			SCALE: 1:1
ANGLES	±			SHEET: 2 OF 6
FINISH	±			REV: D

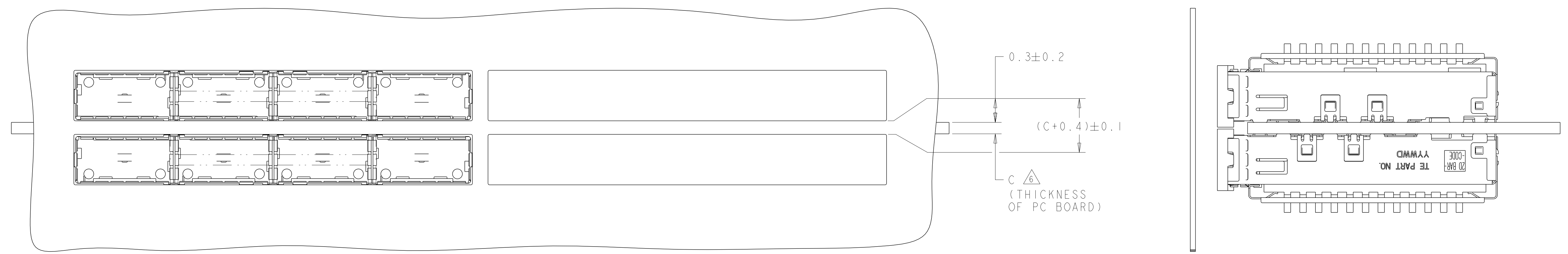
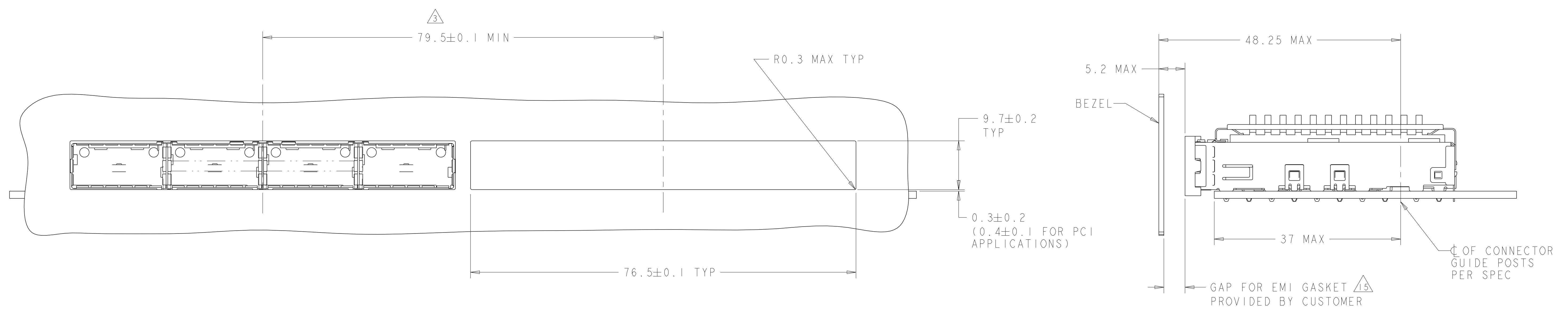
LOC		DIST		REVISIONS			
GP	00	P	LYR	DESCRIPTION	DATE	OWN	APVD
		-		SEE SHEET 1	-	-	-



2170615-2 AS SHOWN

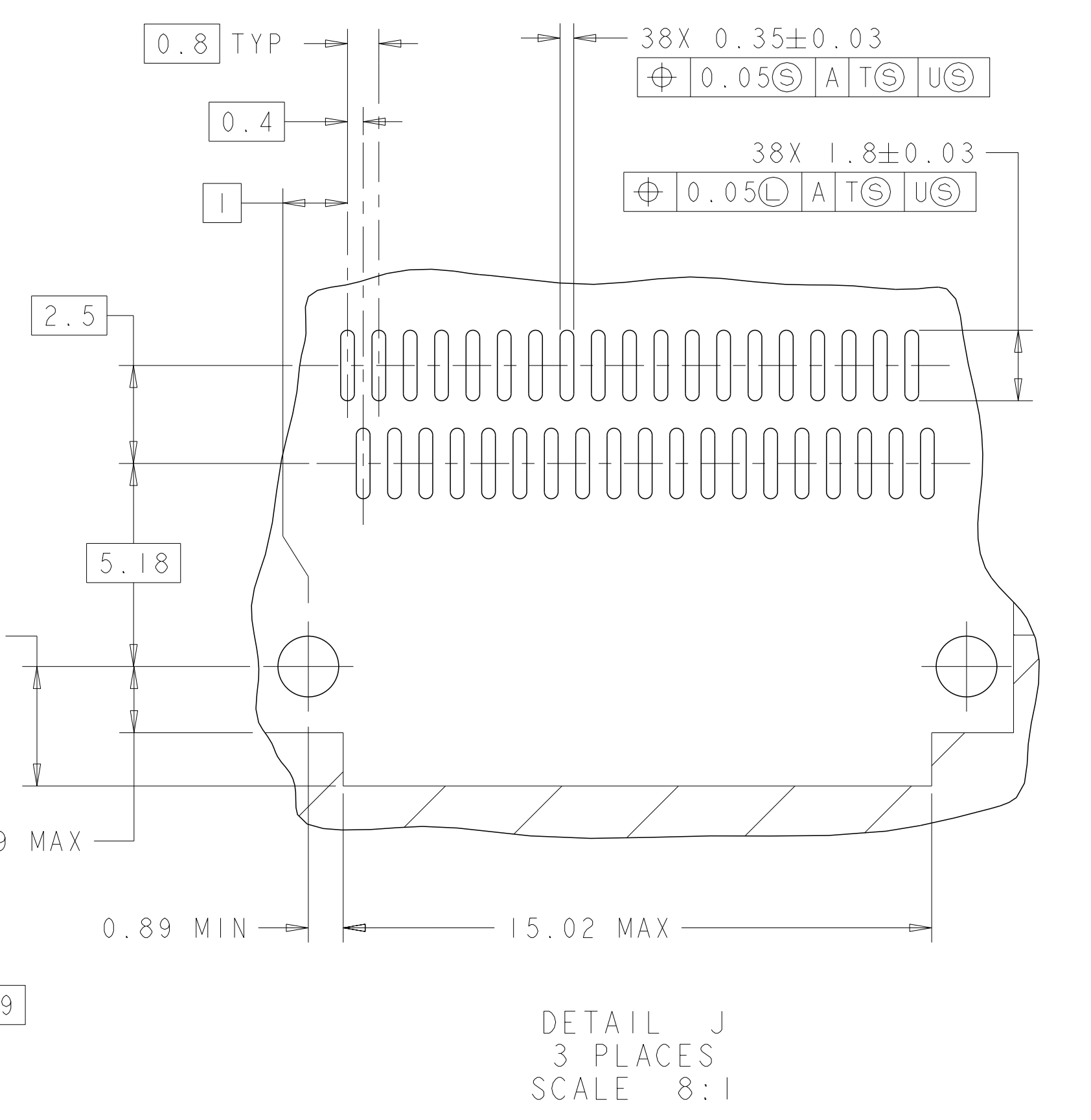
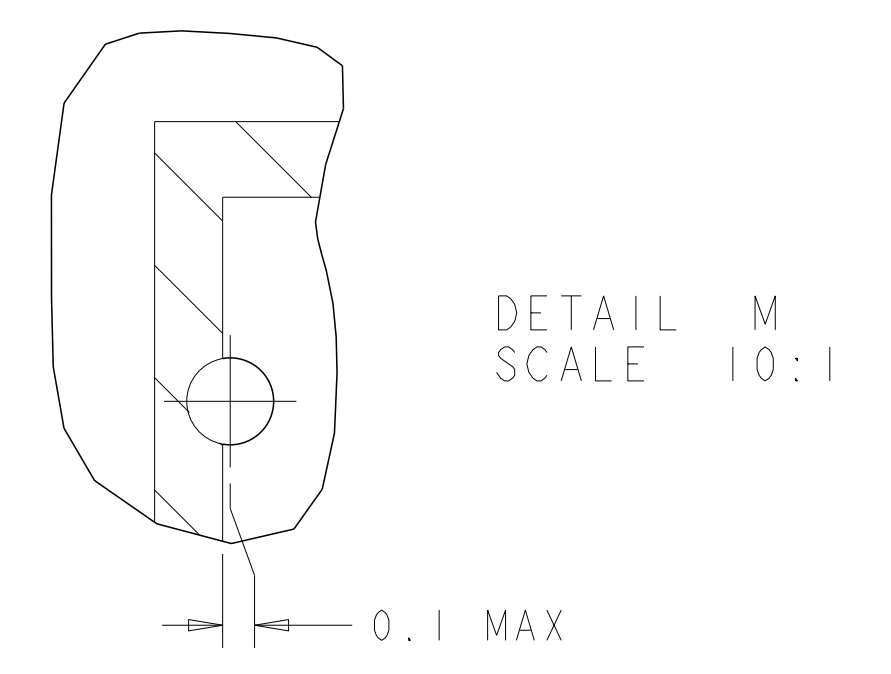
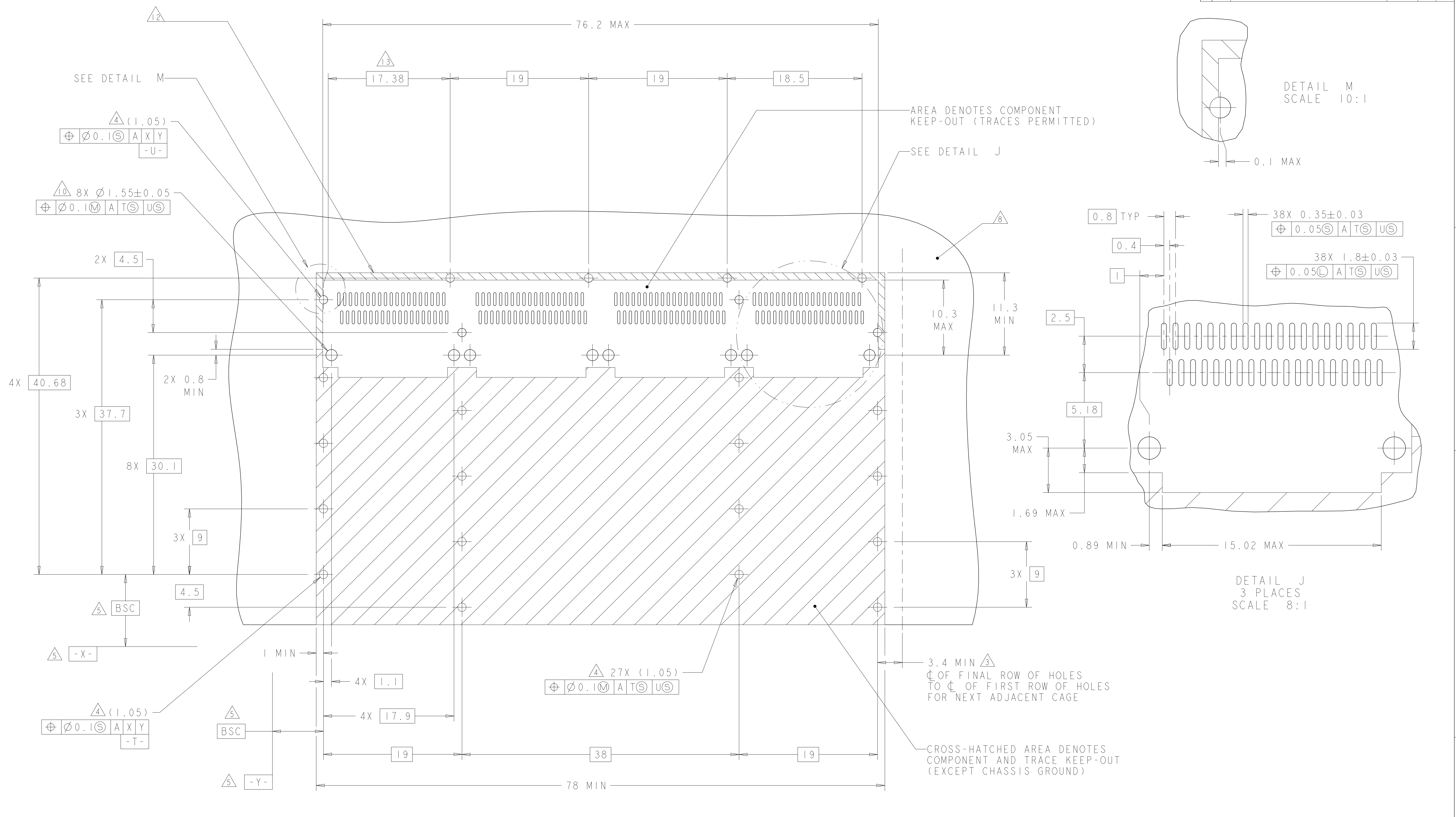
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		CHK	Z4SEP2013		
		APVD	Z4SEP2013	NAME	
DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC	
mm	0 PLC ±	0.1		108-2286	
	2 PLC ±0.1			APPLICATION SPEC	
	3 PLC ±			114-13218	
	4 PLC ±			WEIGHT	
	ANGLES ±			Customer Drawing	
	FINISH ±			SCALE 1:1 SHEET 3 OF 6 REV D	

LOC	DIST	REVISIONS			
GP	00	REV	DATE	OWN	APVD
-	SEE SHEET 1	-	-	-	-



THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: ZJ	24SEP2013	TE TE Connectivity
DIMENSIONS: mm		CHK: JY	24SEP2013	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: MC	24SEP2013	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP
0 PLC	±	PRODUCT SPEC	108-2286	SIZE: 114-13218
1 PLC	±0.1	APPLICATION SPEC	114-13218	RESTRICTED TO: -
2 PLC	±0.1	WEIGHT	-	SCALE: 1:1
3 PLC	±	Customer Drawing	Customer Drawing	SHEET 4 OF 6
4 PLC	±			REV D
ANGLES	±			
FINISH	-			

LOC	DIST	REVISIONS			
GP	00	REV	DATE	OWN	APPV
		1	SEE SHEET 1	-	-

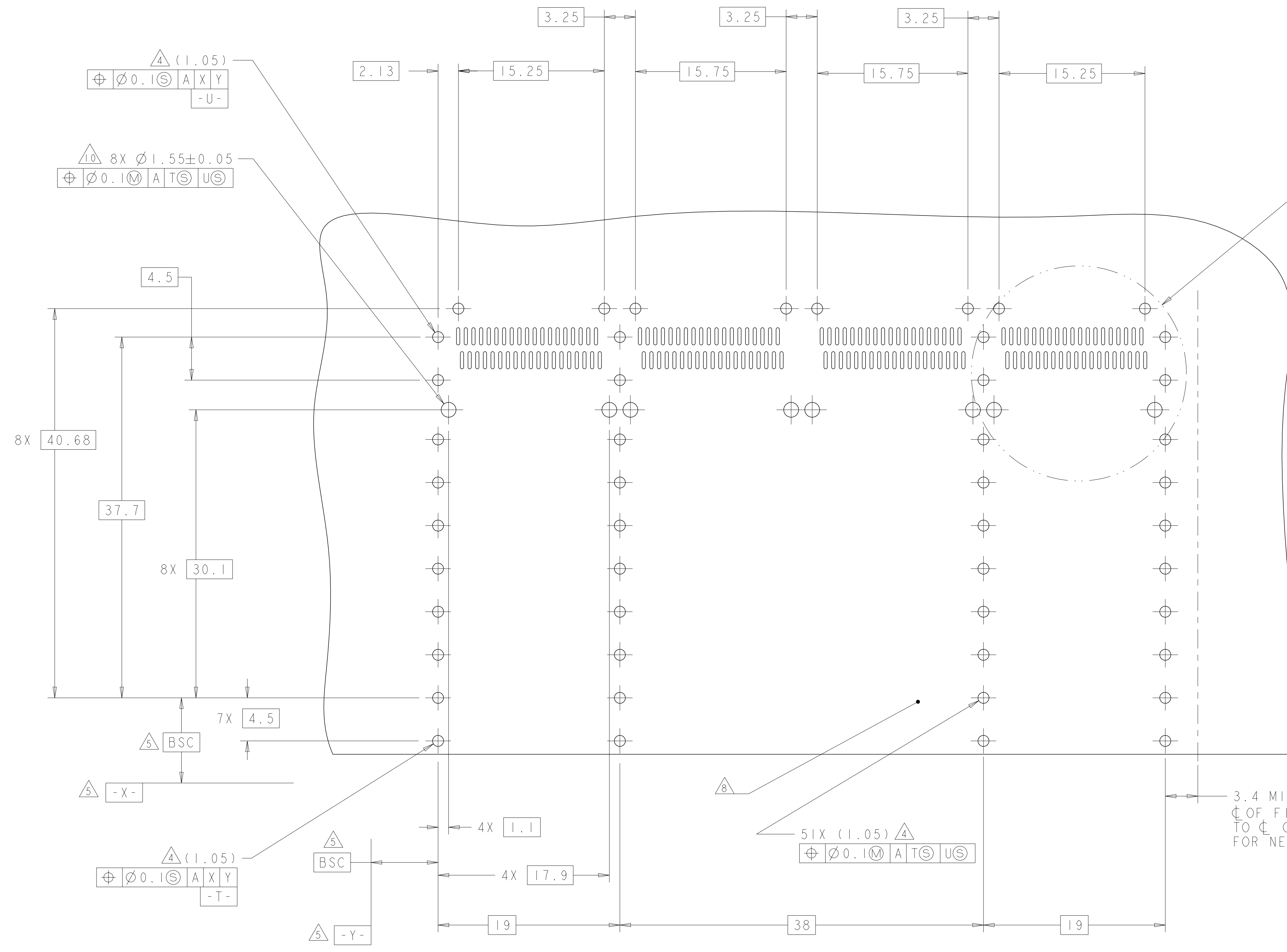


RECOMMENDED PC BOARD LAYOUT
 SINGLE SIDE MOUNT CONFIGURATION
 SCALE 4:1

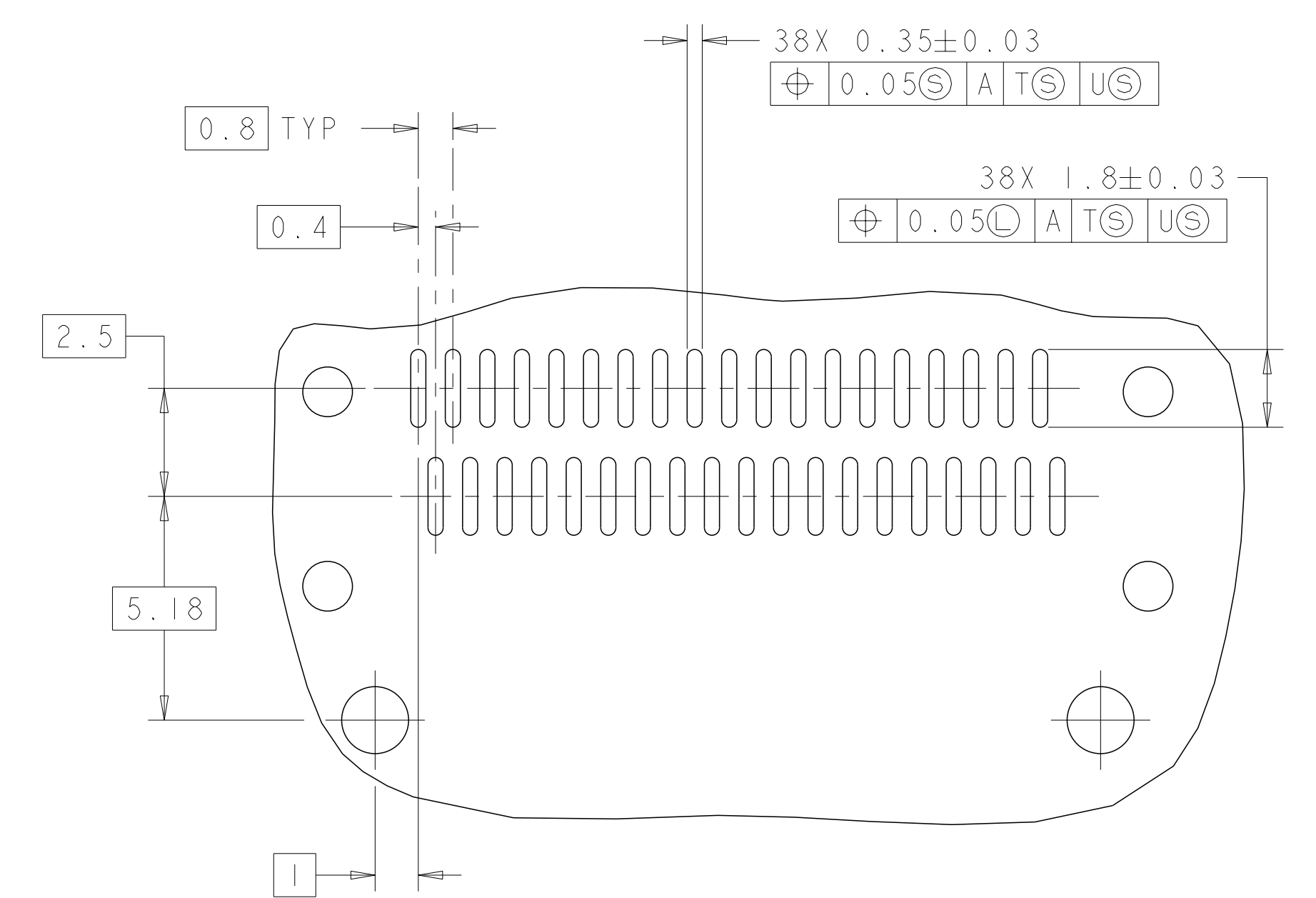
THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: ZJ	24SEP2013		TE Connectivity
DIMENSIONS: mm		CHK: JY	24SEP2013		NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: MC	24SEP2013	PRODUCT SPEC: 108-2286	
0 PLC ±0.1		APPLICATION SPEC: 114-13218		SIZE: A1	
1 PLC ±0.1		WEIGHT: -		CAGE CODE: 00779	
2 PLC ±0.1		FINISH: -		DRAWING NO: 2170615	
3 PLC ±0.1		MATERIAL: -		RESTRICTED TO: -	
4 PLC ±0.1		SCALE: 1:1		SHEET 5 OF 6	
ANGLES: ±0.1		Customer Drawing		REV D	

LOC	DIST	REVISIONS			
GP	00	REV	DATE	OWN	APVD
		-	SEE SHEET 1	-	-



SEE DETAIL K



RECOMMENDED PC BOARD LAYOUT
 BELLY TO BELLY CONFIGURATION
 SEE SHEET 4 FOR COMPONENT
 AND TRACE KEEP-OUTS
 SCALE 4:1

THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: ZJ	24SEP2013	TE Connectivity
DIMENSIONS: mm		CHK: JY	24SEP2013	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: MC	24SEP2013	
0 PLC \pm 1 PLC ± 0.1 2 PLC ± 0.1 3 PLC \pm 4 PLC \pm ANGLES FINISH \pm		PRODUCT SPEC: 108-2286	APPLICATION SPEC: 114-13218	
MATERIAL:		WEIGHT:		NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP SIZE: A1 CAGE CODE: 00779 DRAWING NO: 2170615 RESTRICTED TO: - SCALE: 1:1 SHEET: 6 OF 6 REV: D