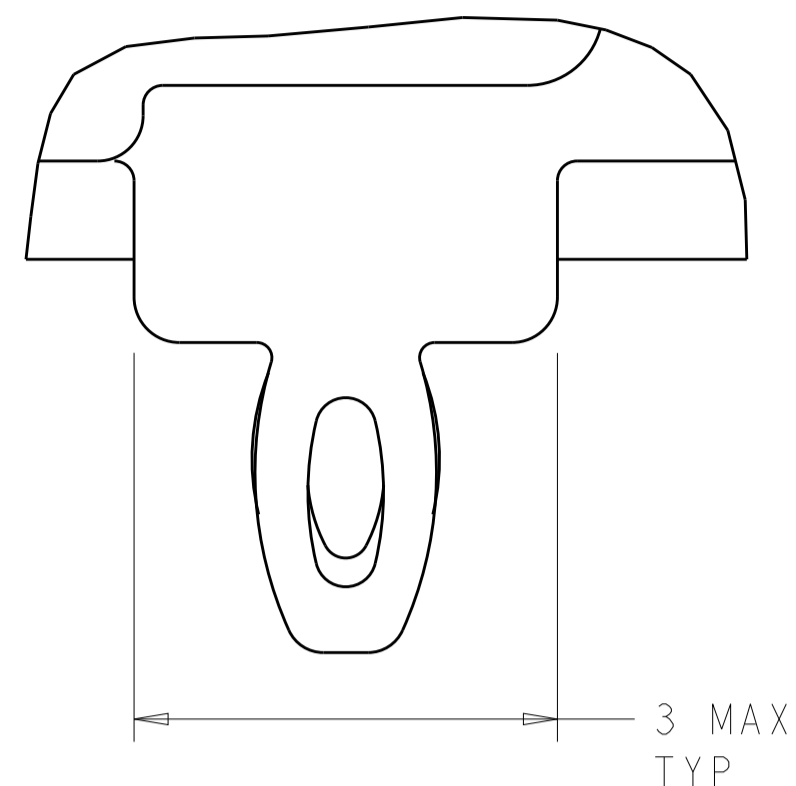


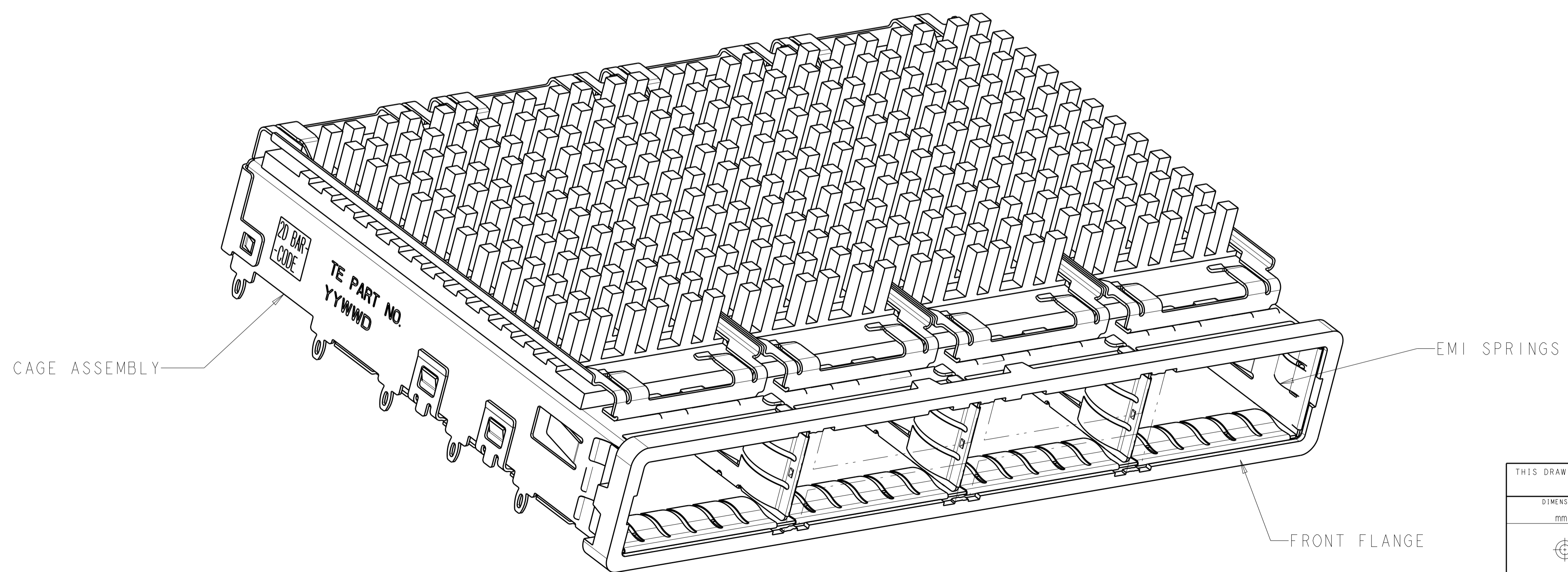
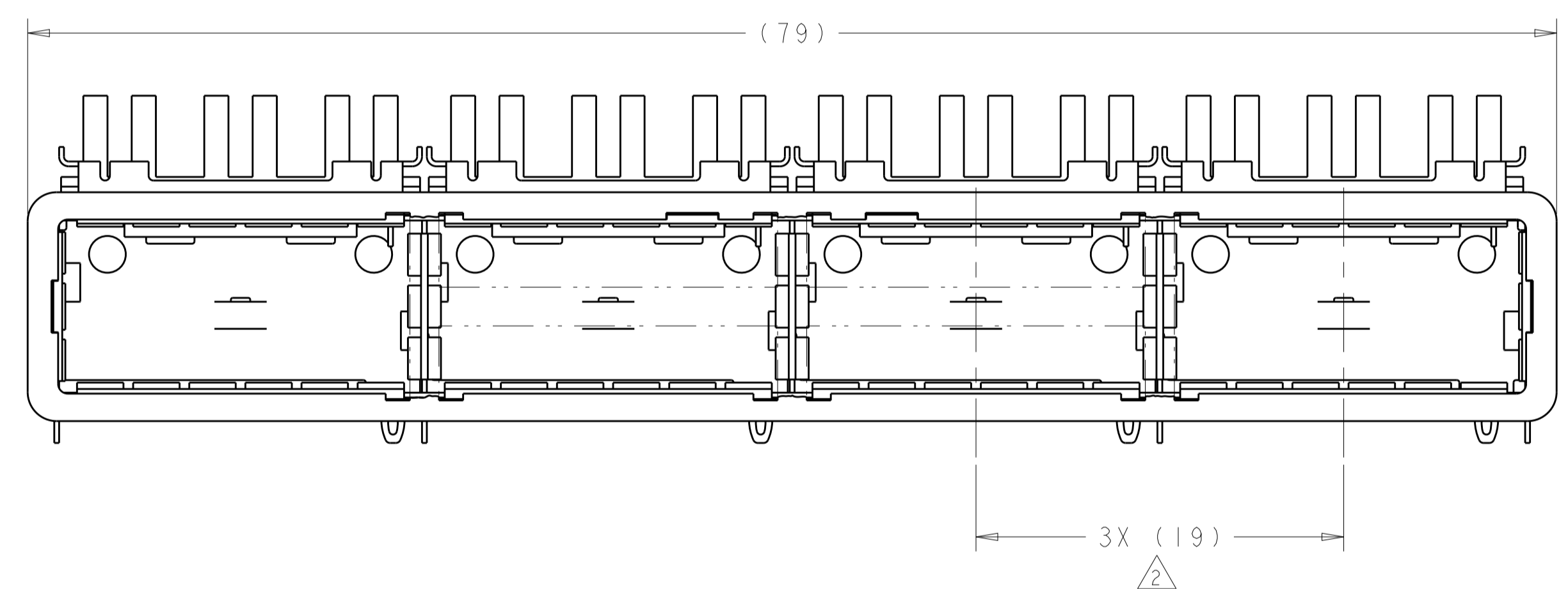
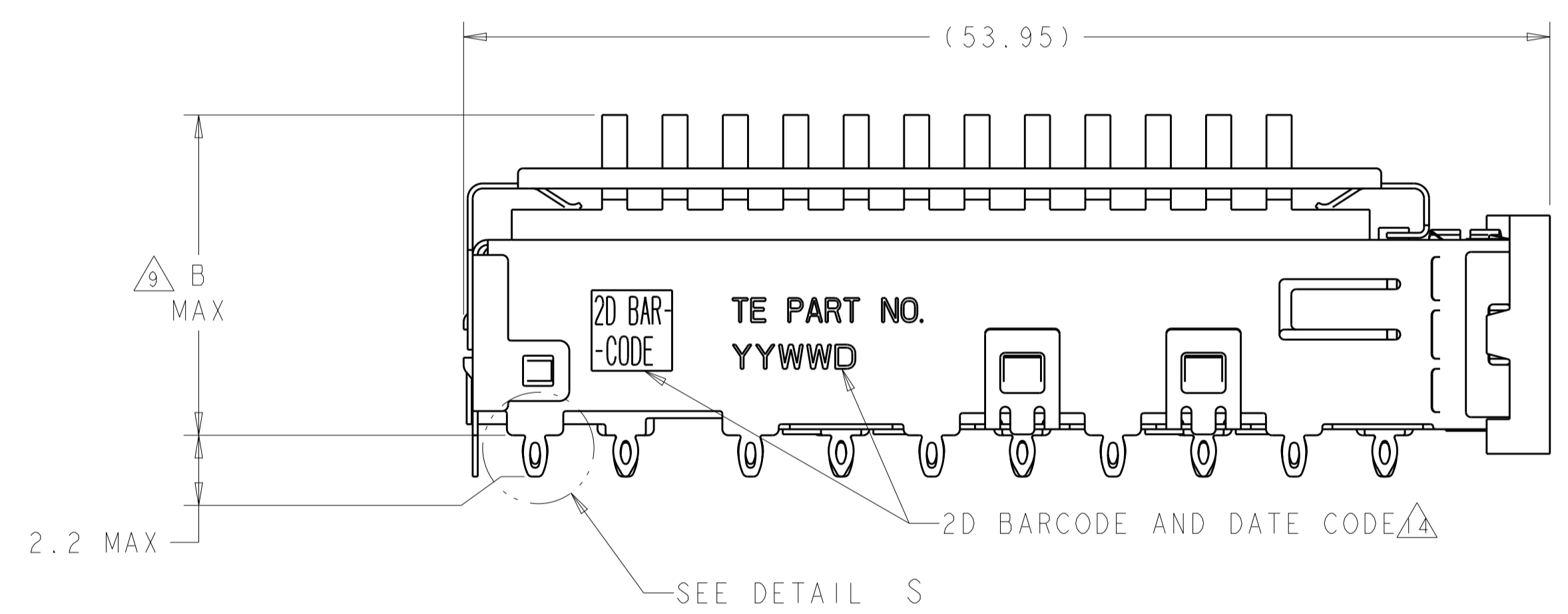
LOC	DIST	REVISIONS					
		P	LTN	DESCRIPTION	DATE	DMN	APVD
GP	00	I		PRELIMINARY	24SEP2013	ZJ	JY
		A		ACTIVE THE DRAWING	31DEC2013	ZJ	JY
		B		REVISED PER ECO-15-005721	4AUG2015	RG	SH



DETAIL S  $\Delta 12$   
 SCALE 20:1

- $\Delta 1$  CAGE ASSEMBLY MATERIAL: NICKEL SILVER, 0.25 THICK  
 HEAT SINK MATERIAL: ALUMINUM  
 HEAT SINK CLIP MATERIAL: STAINLESS STEEL  
 EMI SPRING MATERIAL: COPPER ALLOY  
 FRONT FLANGE MATERIAL: ZINC ALLOY
- $\Delta 2$  PITCH BETWEEN PORTS OF ONE 1X4 CAGE ASSEMBLY.
- $\Delta 3$  SPACING BETWEEN CAGES ON THE SAME PC BOARD, TO BE SPECIFIED BY CUSTOMER, MUST COMPLY WITH MINIMUM DIMENSIONS SHOWN.
- $\Delta 4$  REFERENCE APPLICATION SPEC 114-13218 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- $\Delta 5$  DATUMS AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- $\Delta 6$  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.
- $\Delta 7$  HEAT SINKS AND CLIPS SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED.
- $\Delta 8$  DATUM  $\square$ -A- IS TOP SURFACE OF PC BOARD.
- $\Delta 9$  DIMENSION APPLIES WITH MODULE INSERTED IN CAGE.
- $\Delta 10$  UNPLATED THRU HOLE.
- 11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- $\Delta 12$  SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL S, CONTACT PC BOARD.
- $\Delta 13$  BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- $\Delta 14$  2D BARCODE AND DATE CODE (YYWW) MARKED ON SIDE OF CAGE.
- $\Delta 15$  REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.

- $\Delta 16$  EMI SPRING FINISH: 2 $\mu$ m MINIMUM TIN  
 FRONT FLANGE FINISH: 3 $\mu$ m MINIMUM TIN OVER 1.27 $\mu$ m MINIMUM NICKEL OVER 5.08 $\mu$ m MINIMUM COPPER.  
 HEAT SINK FINISH: NICKEL.



23.0	NETWORKING	2170615-4
16.8	CUSTOMERIZED	2170615-3
16.0	SAN	2170615-2
13.7	PCI	2170615-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DMN	ZJ	24SEP2013
mm	0 PLC $\pm$	CHK	ZJ	24SEP2013
	1 PLC $\pm 0.1$	APVD	JY	24SEP2013
	2 PLC $\pm 0.1$	MC		
	3 PLC $\pm$	PRODUCT SPEC		
	4 PLC $\pm$	108-2286		
	ANGLES $\pm$	APPLICATION SPEC		
	FINISH	114-13218		
MATERIAL		WEIGHT		
$\Delta 1$				
	$\Delta 16$			

Customer Drawing

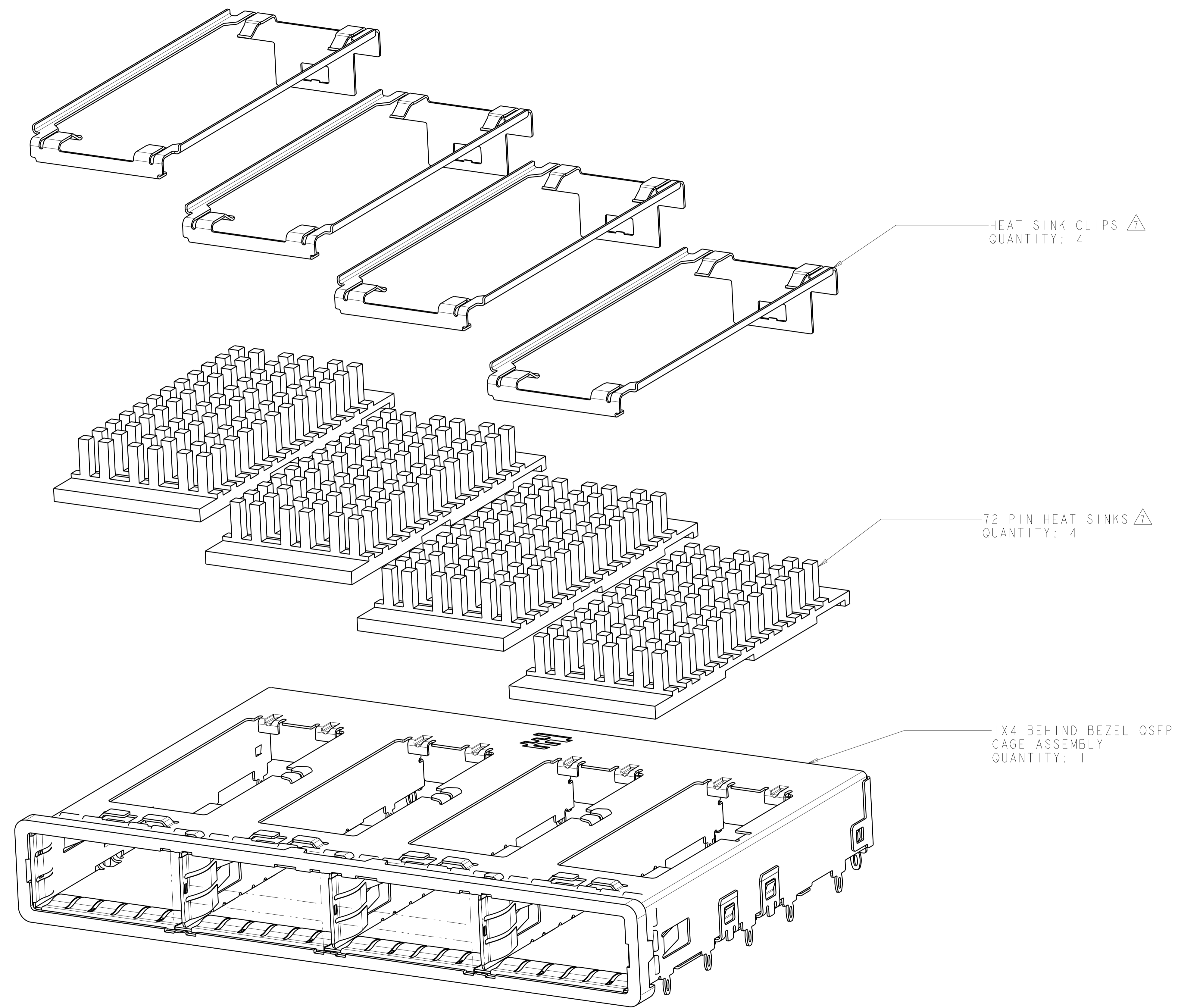
NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP

SIZE: A1 CAGE CODE: 00779 DRAWING NO: 2170615

RESTRICTED TO: -

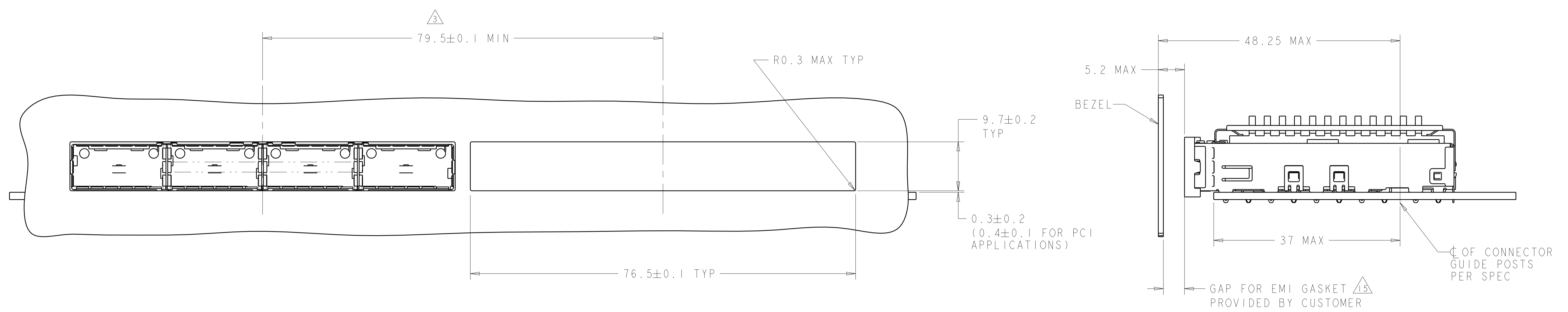
SCALE: 4:1 SHEET: 1 OF 5 REV: B

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

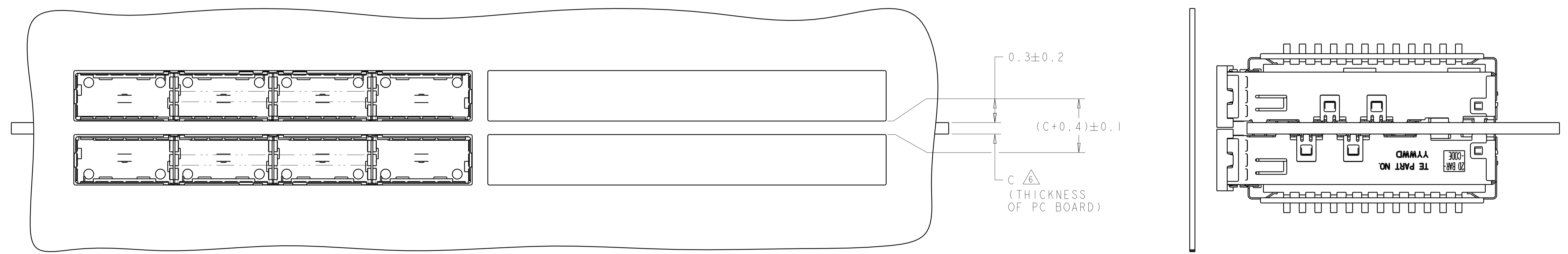


THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN	Z4SEP2013		NAME 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP
DIMENSIONS:		CHK	Z4SEP2013		
mm		APVD	Z4SEP2013		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.1 2 PLC ±0.1 3 PLC ± 4 PLC ± ANGLES ± FINISH		MC	MC		
DIMENSIONS: mm 		PRODUCT SPEC	108-2286	SIZE	A100779C=2170615
MATERIAL		APPLICATION SPEC	114-13218	RESTRICTED TO	-
		WEIGHT	-	SCALE	4:1
		Customer Drawing		SHEET	2 OF 5
				REV	B

LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	DMN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



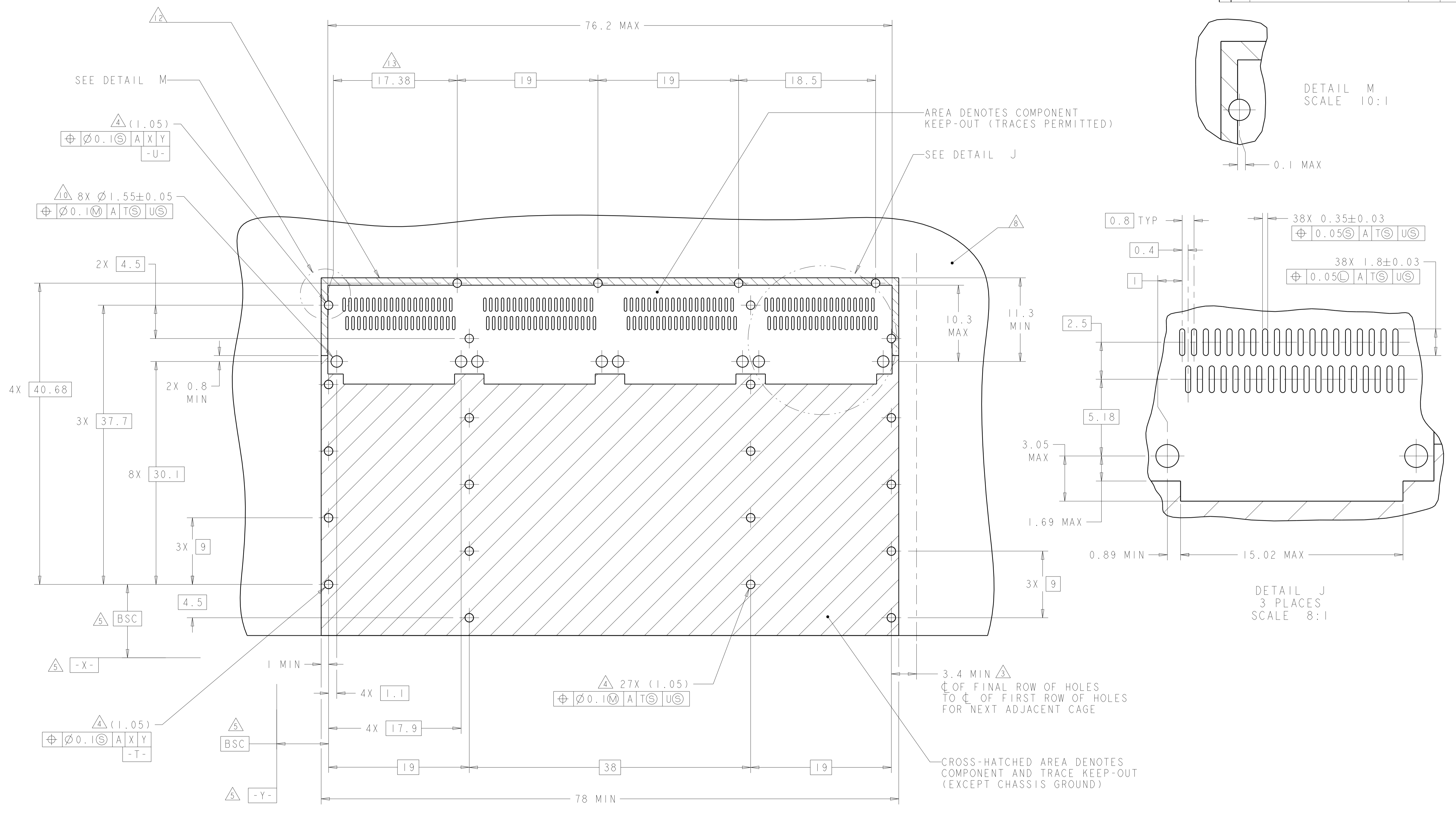
ONE SIDED CONFIGURATION  
 SCALE 5:2



BELLY TO BELLY CONFIGURATION SIMILAR  
 TO ONE SIDED EXCEPT WHERE NOTED  
 SCALE 5:2

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN: ZJ CHK: 24SEP2013 APVD: JY MC: 24SEP2013	24SEP2013		NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP		
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	PRODUCT SPEC: 108-2286	APPLICATION SPEC: 114-13218		SIZE: A1	CAGE CODE: 00779	DRAWING NO: C=2170615
MATERIAL: -	FINISH: -	WEIGHT: -	Customer Drawing	SCALE: 4:1	SHEET: 3	OF: 5	REV: B

LOC		DIST		REVISONS			
GP	00	P	LTH	DESCRIPTION	DATE	DWN	APVD
				SEE SHEET 1			

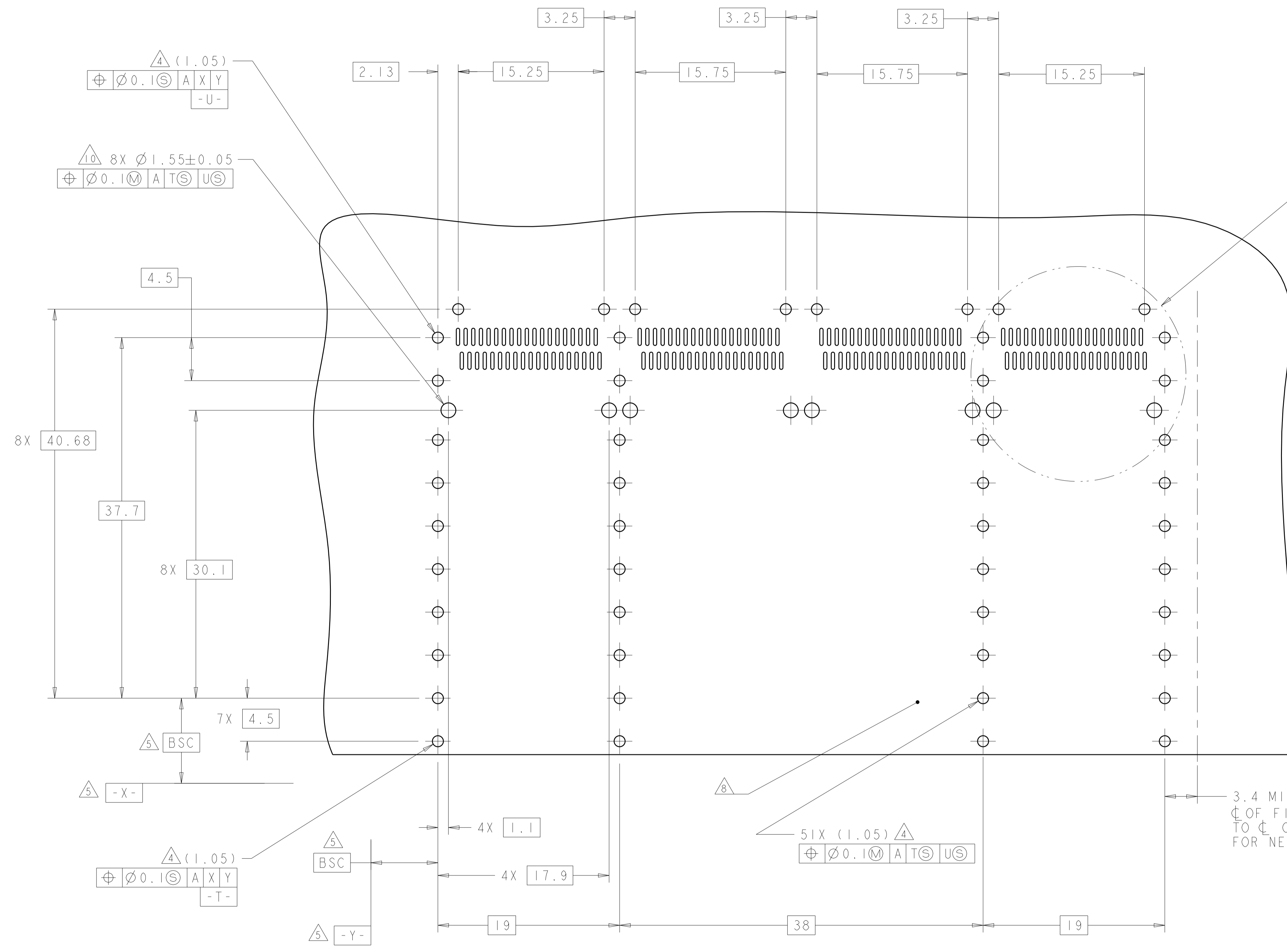


RECOMMENDED PC BOARD LAYOUT  
 SINGLE SIDE MOUNT CONFIGURATION  
 SCALE 4:1

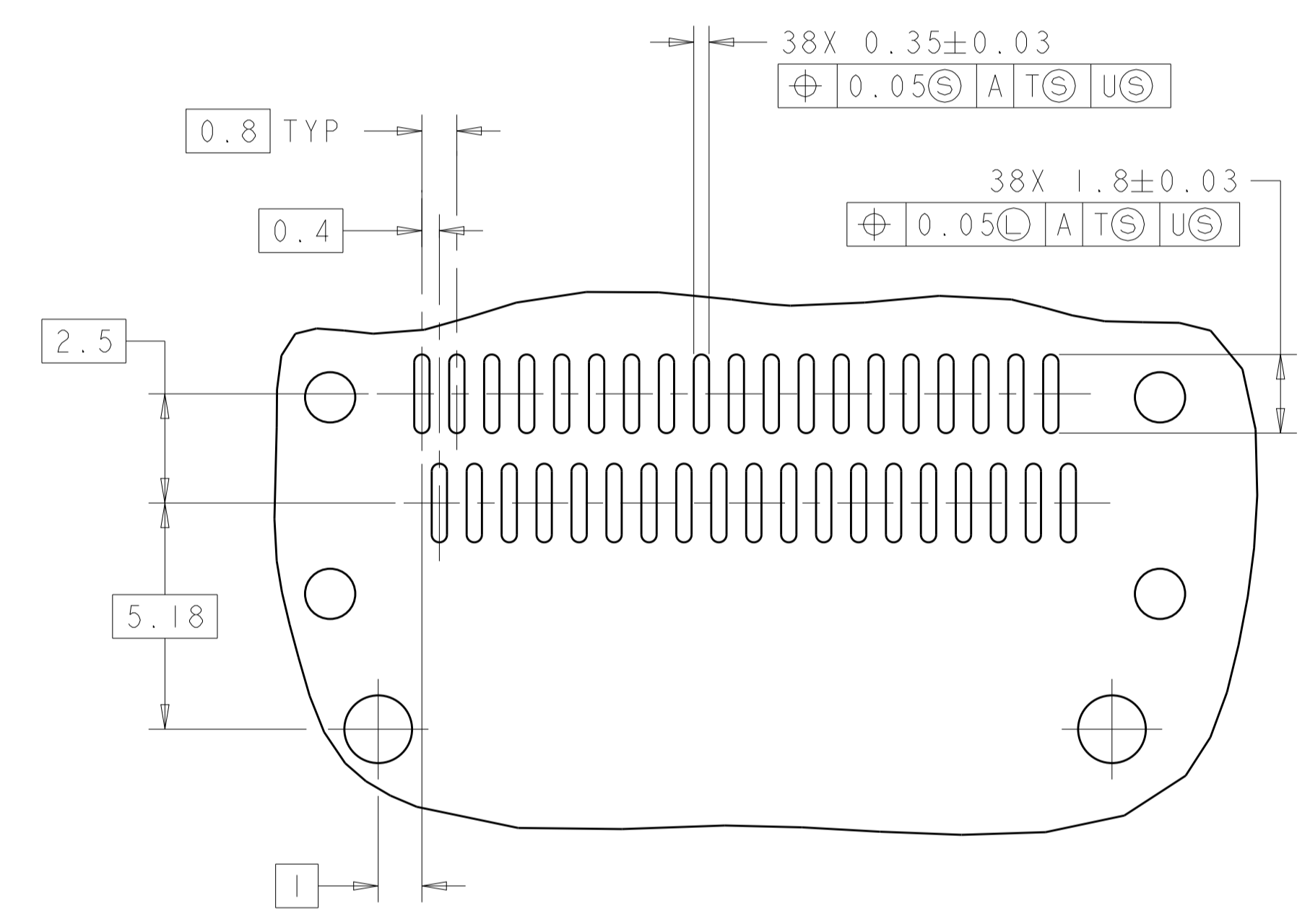
THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: ZJ	24SEP2013		TE Connectivity
		CHK: JY	24SEP2013		
		APVD: MC	24SEP2013	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC: 108-2286	
0 PLC $\pm 0.1$		1 PLC $\pm 0.1$		APPLICATION SPEC: 114-13218	
2 PLC $\pm 0.1$		3 PLC $\pm 0.1$		WEIGHT: -	
4 PLC $\pm 0.1$		5 PLC $\pm 0.1$		SIZE: A100779	
ANGLES: $\pm 0.1$		FINISH: -		CAGE CODE: -	
MATERIAL: -		CUSTOMER DRAWING		DRAWING NO: C=2170615	
				RESTRICTED TO: -	
				SCALE: 4:1 SHEET 4 OF 5 REV B	

LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	DMN	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.		DMN: 24SEP2013	TE Connectivity
DIMENSIONS: mm		CHK: 24SEP2013	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: 24SEP2013	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP
0 PLC ±0.1	1 PLC ±0.1	PRODUCT SPEC: 108-2286	SIZE: CAGE CODE: DRAWING NO: A100779C=2170615
2 PLC ±0.1	3 PLC ±0.1	APPLICATION SPEC: 114-13218	RESTRICTED TO: -
4 PLC ±0.1	ANGLES ±0.1	WEIGHT: -	SCALE: 4:1 SHEET 5 OF 5 REV B
MATERIAL: -	FINISH: -	Customer Drawing	