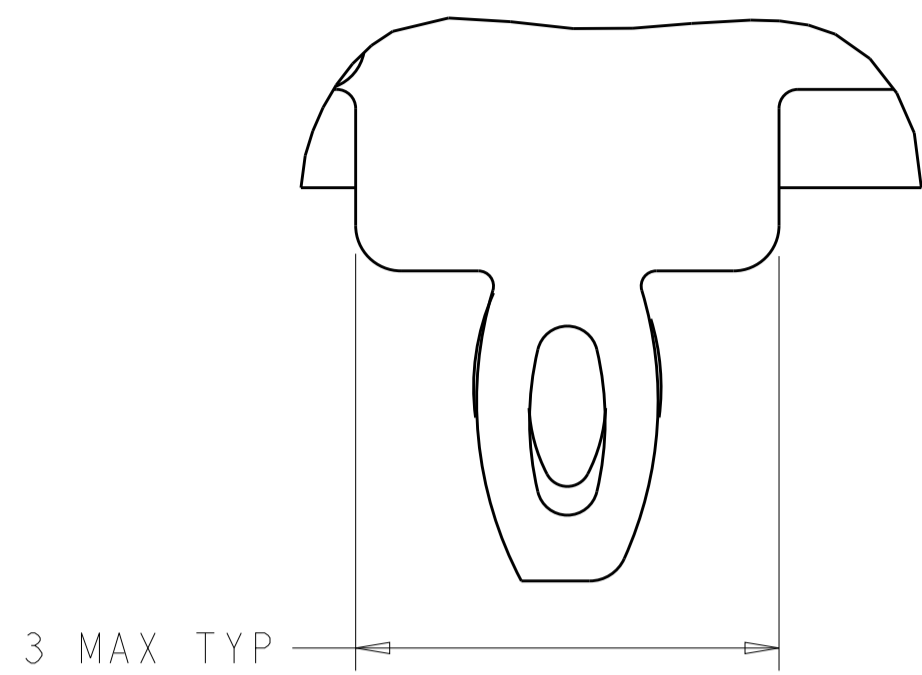


LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	DWN	APVD
		D		REVISED PER ECO-10-018054	04NOV2010	CJV	EJB
		E		REVISED PER ECO-12-005533	05APR2012	JY	AC
		F		REVISED PER ECO-14-016878	03DEC2014	RG	MC

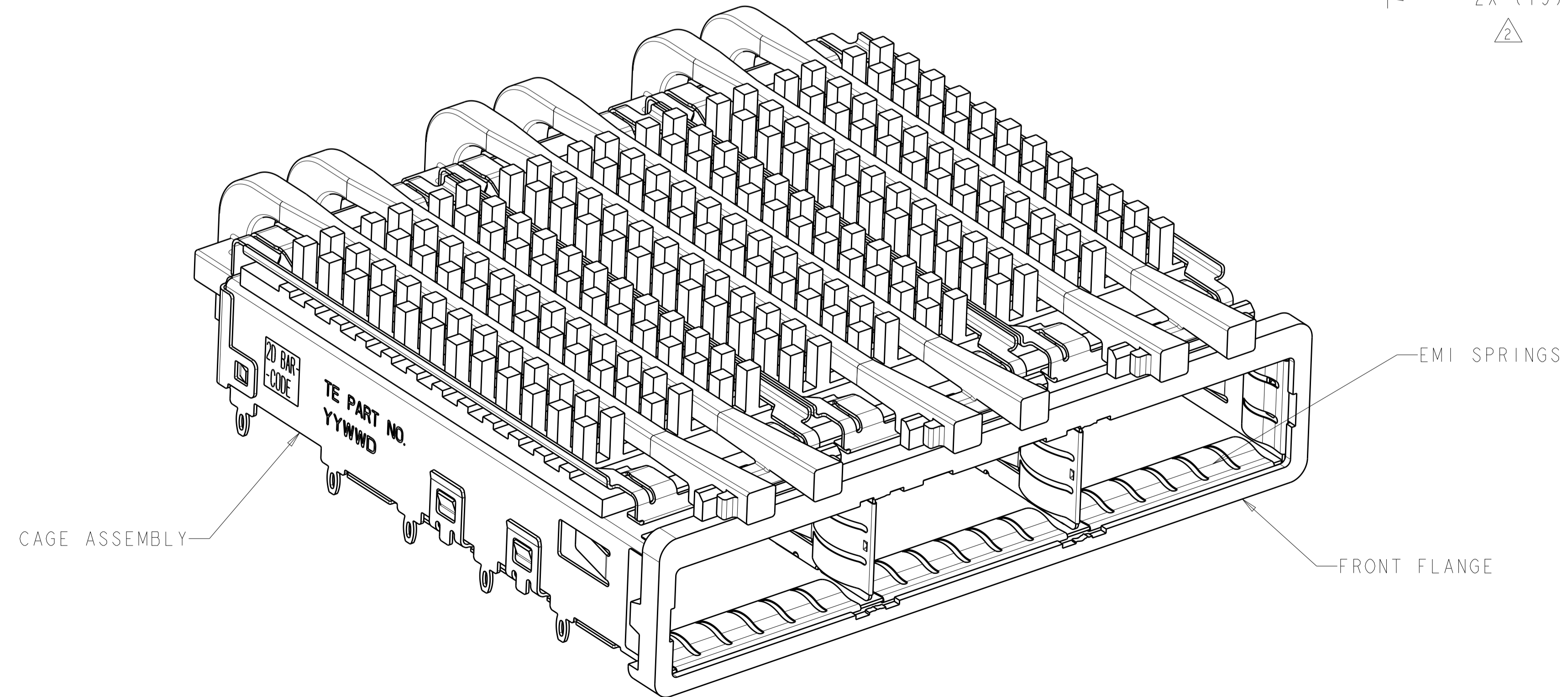
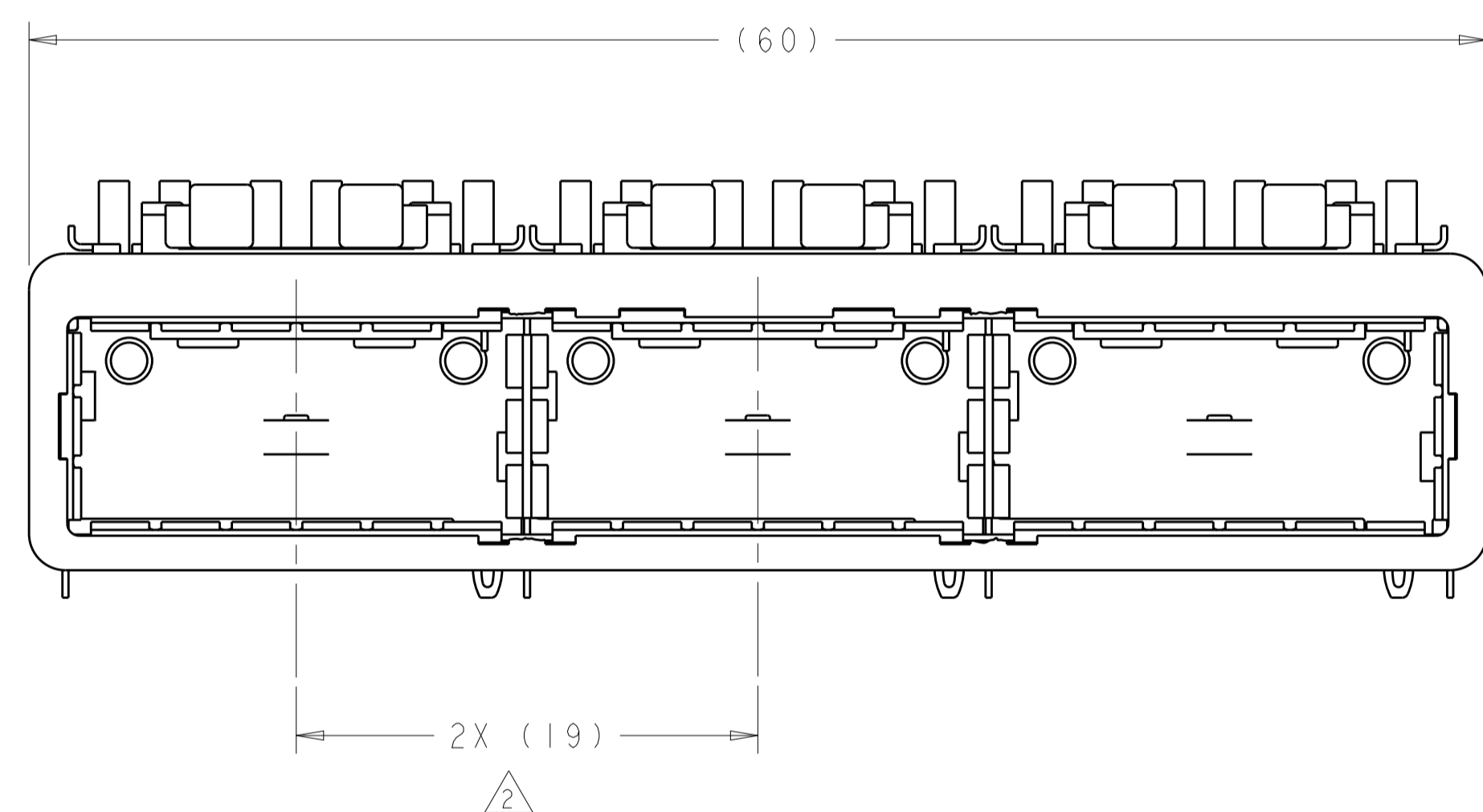
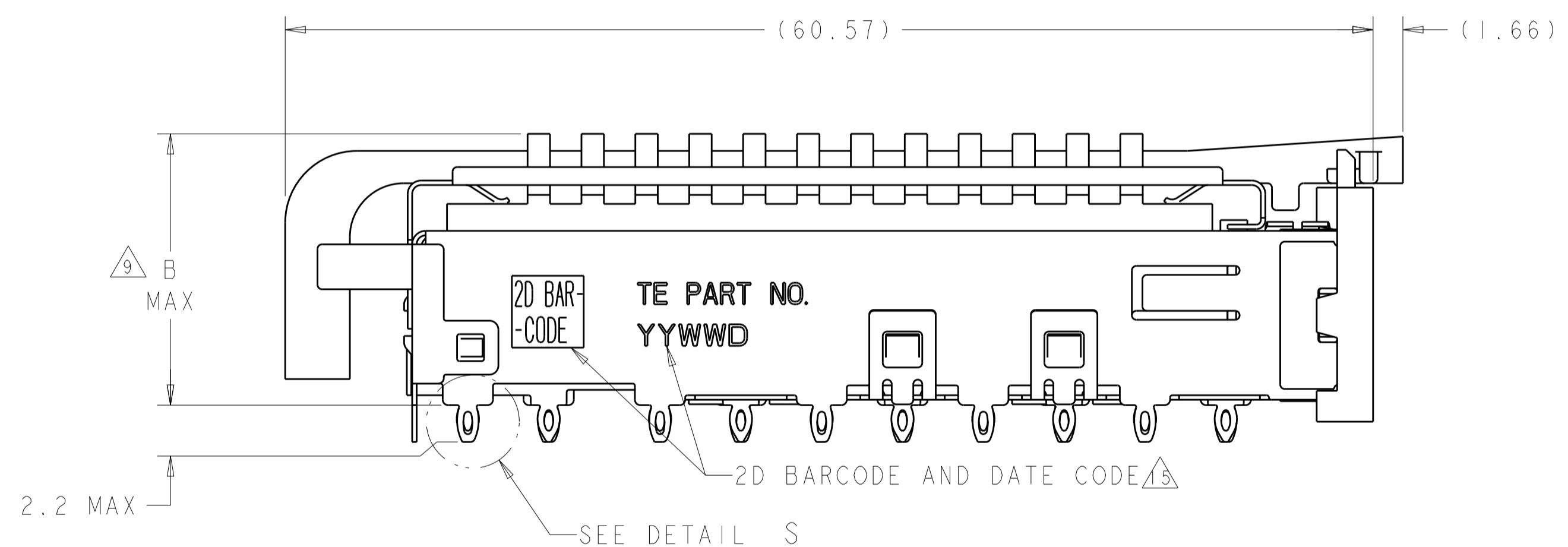


3 MAX TYP

DETAIL S $\Delta 3$
 SCALE 20:1

- $\Delta 1$ MATERIALS:
 CAGE ASSEMBLY: NICKEL SILVER, 0.25 THICK
 HEAT SINK: ALUMINUM
 HEAT SINK CLIP: STAINLESS STEEL
 EMI SPRING: COPPER ALLOY
 FRONT FLANGE: ZINC ALLOY
 LIGHT PIPE: CLEAR POLYCARBONATE
- $\Delta 2$ PITCH BETWEEN PORTS OF ONE 1X3 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 MIN THICKNESS = 1.45mm
 DOUBLE SIDED PC BOARD MIN THICKNESS = 2.2mm.
- $\Delta 7$ HEAT SINKS, LIGHT PIPES, AND CLIP SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED.
- $\Delta 8$ DATUM **-A-** IS TOP SURFACE OF PC BOARD.

- $\Delta 9$ DIMENSION APPLIES WITH MODULE INSERTED IN CAGE.
- $\Delta 10$ UNPLATED THRU HOLE.
- $\Delta 11$ MAXIMUM HEIGHT OF LED OFF BOARD: 0.9mm.
- 12. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- $\Delta 13$ SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL S, CONTACT PC BOARD.
- $\Delta 14$ BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- $\Delta 15$ 2D BARCODE AND DATE CODE (YYWWD) MARKED ON SIDE OF CAGE.
- $\Delta 16$ REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.
- $\Delta 17$ FINISH:
 EMI SPRING: 2 μ m MINIMUM TIN
 FRONT FLANGE: 3 μ m MINIMUM TIN OVER 1.27 μ m MINIMUM NICKEL OVER 5.08 μ m MINIMUM COPPER
 HEATSINK: NICKEL
- $\Delta 18$ HEAT SINKS AND CLIPS SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED. LIGHT PIPES, SHIPPED UNATTACHED, MUST BE ASSEMBLED BY CUSTOMER AFTER THE CAGE IS SEATED IN THE PCB.

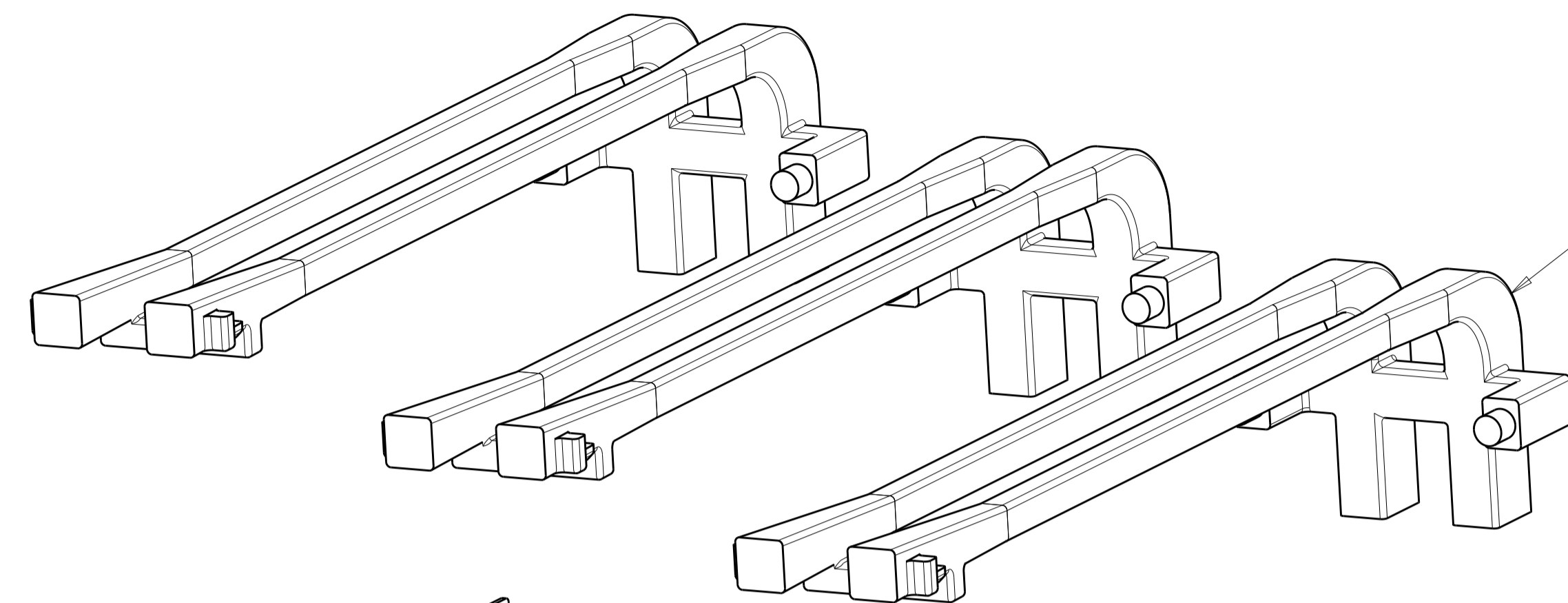


$\Delta 9$	23.0	NETWORKING	2110412-3
$\Delta 10$	16.0	SAN	2110412-2
$\Delta 11$	13.7	PCI	2110412-1
$\Delta 18$	B	HEAT SINK PROFILE	PART NUMBER

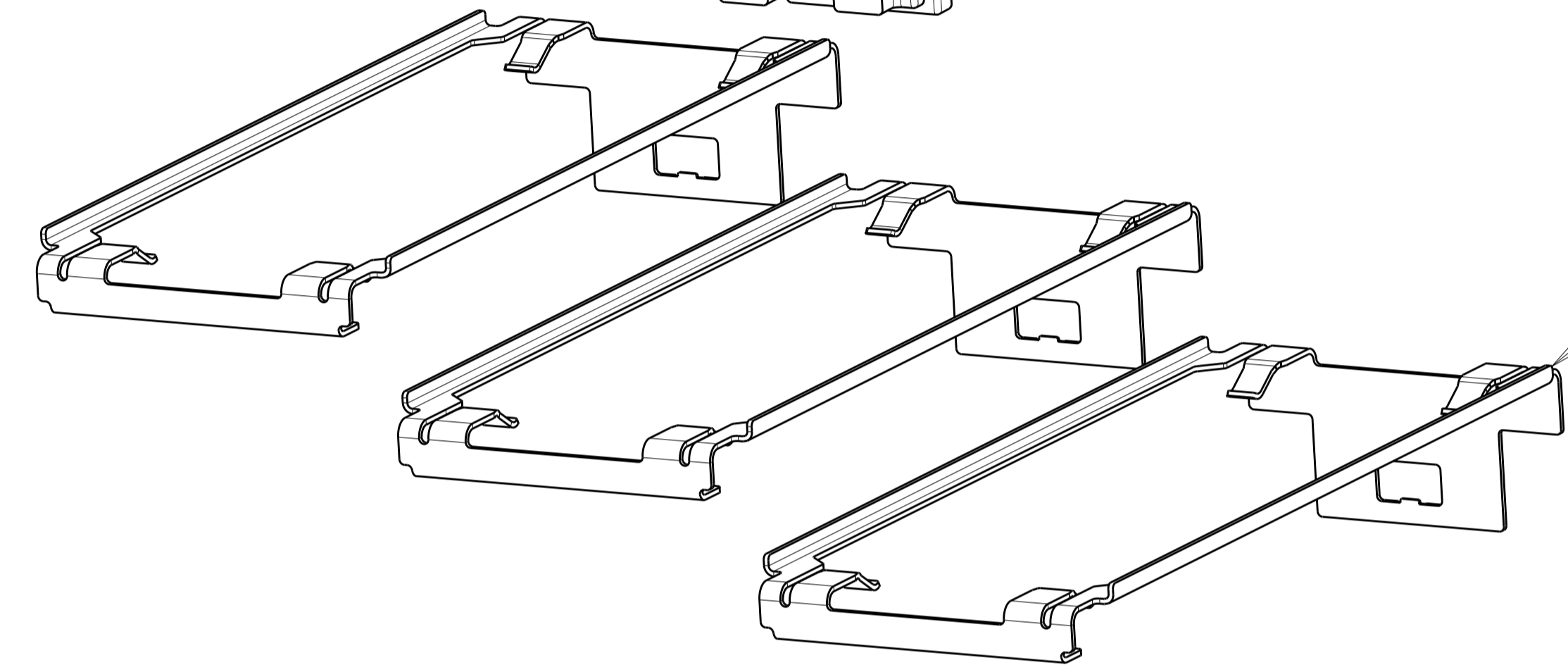
THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DWN C. VALENTINE 28FEB2008	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ SQUARE LIGHT PIPES AND HEAT SINKS QSFP
mm	0 PLC \pm	CHK J. PETERSON 28FEB2008	PRODUCT SPEC 108-2286
$\Delta 1$	1 PLC ± 0.1	APVD J. PETERSON 28FEB2008	APPLICATION SPEC 114-13218
	2 PLC ± 0.1		SIZE CAGE CODE DRAWING NO RESTRICTED TO
	3 PLC \pm		A100779C=2110412
	4 PLC \pm		SCALE 4:1 SHEET 1 OF 5 REV F
	ANGLES \pm		
MATERIAL $\Delta 1$	FINISH $\Delta 17$	WEIGHT	CUSTOMER DRAWING

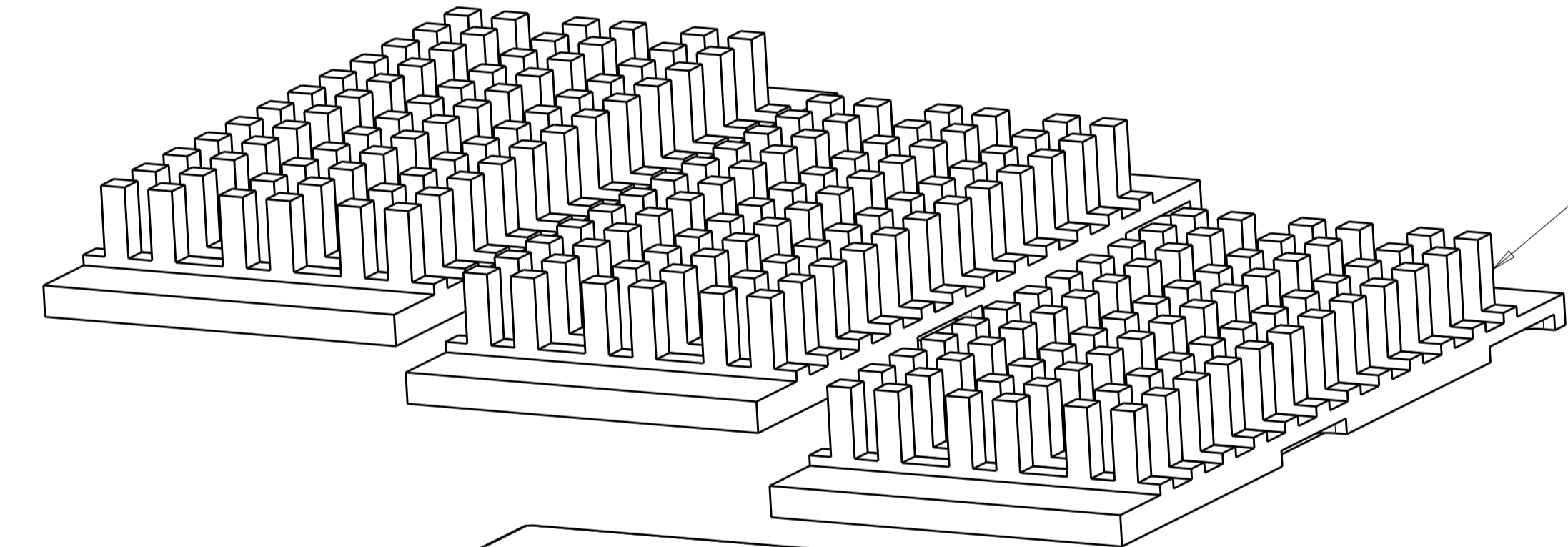
LOC		DIST		REVISIONS			
GP	00	P	LYR	DESCRIPTION	DATE	OWN	APVD
		-		SEE SHEET 1	-	-	-



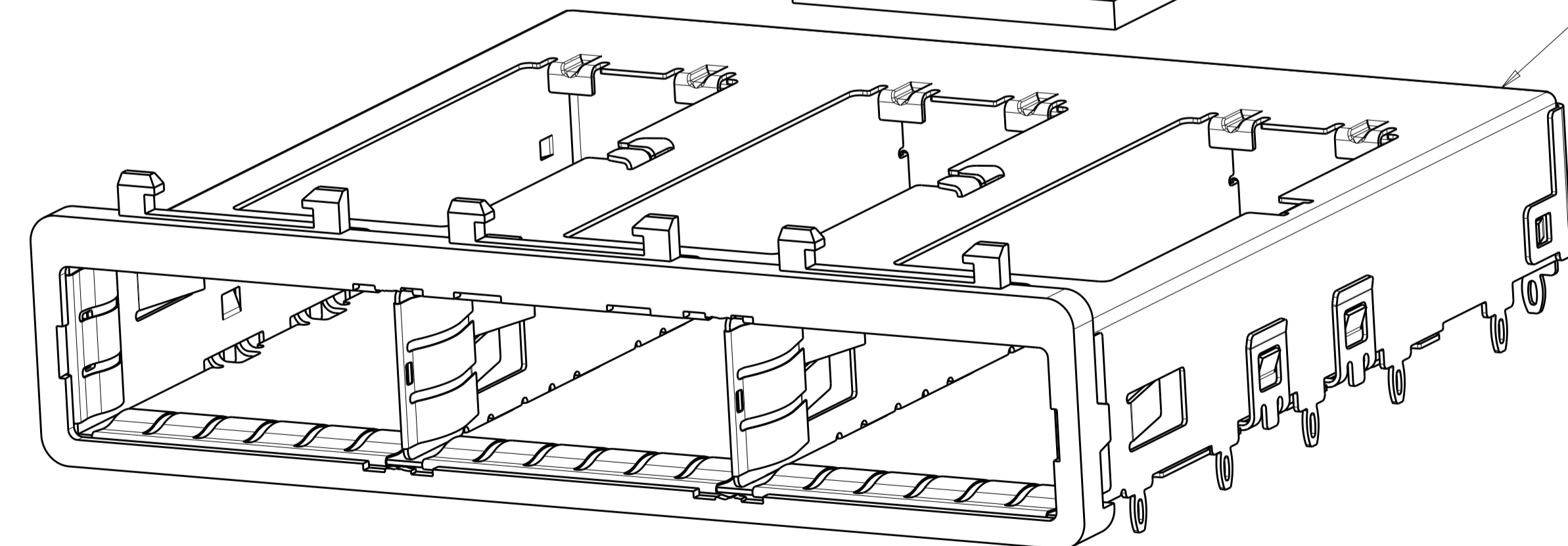
SQUARE DOUBLE LIGHT PIPES \triangle \triangle
 QUANTITY: 3



HEAT SINK CLIPS \triangle \triangle
 QUANTITY: 3



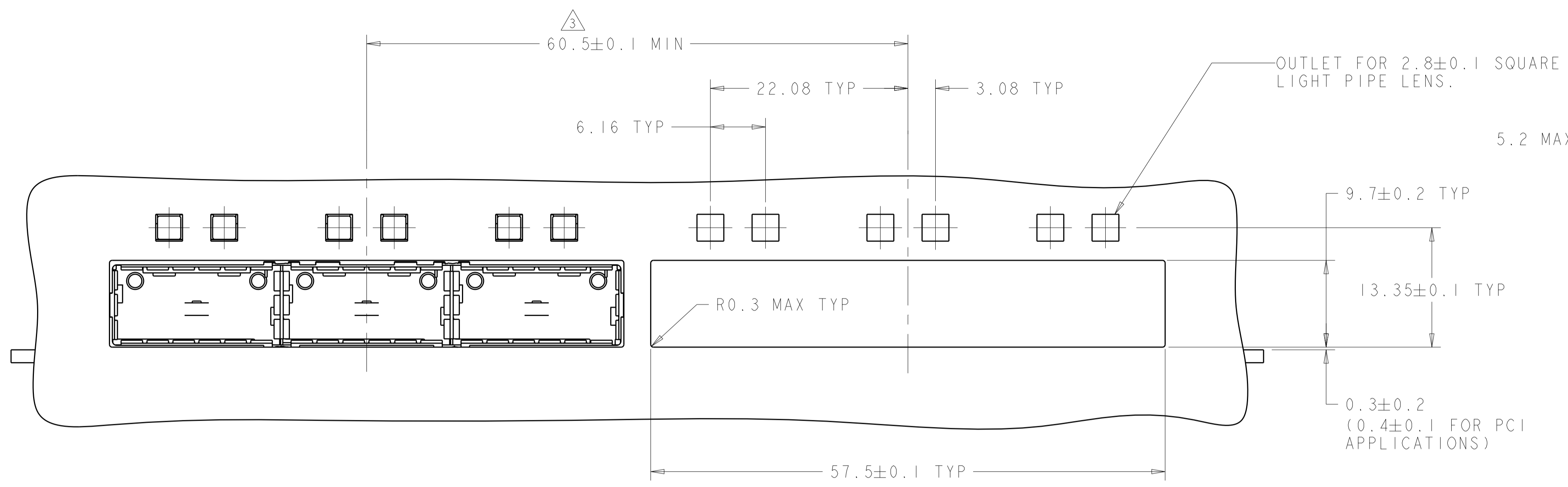
72 PIN HEAT SINKS \triangle \triangle
 QUANTITY: 3



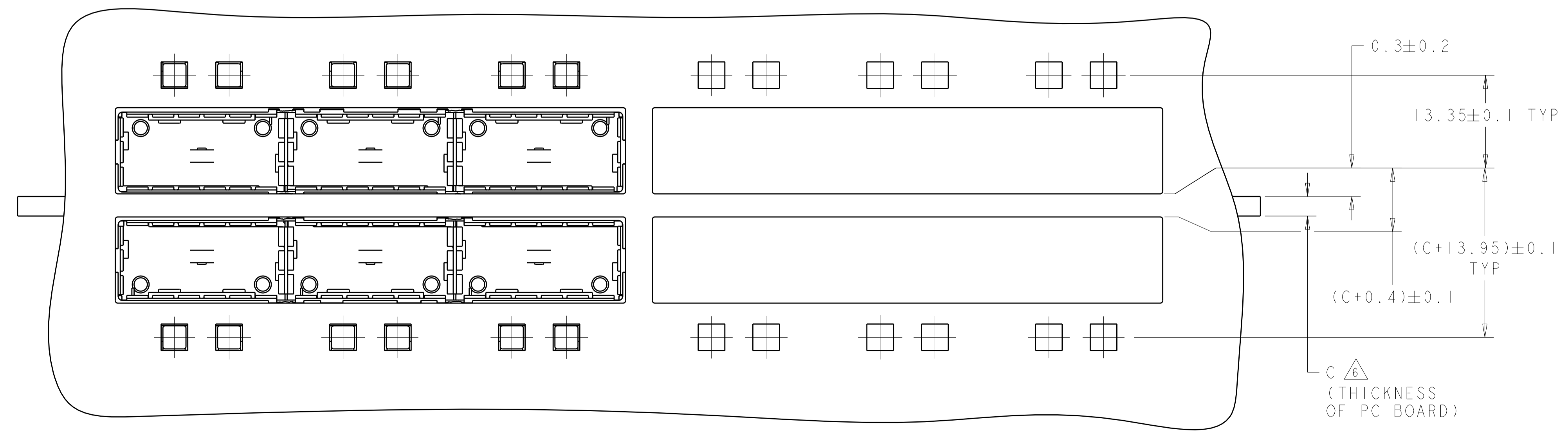
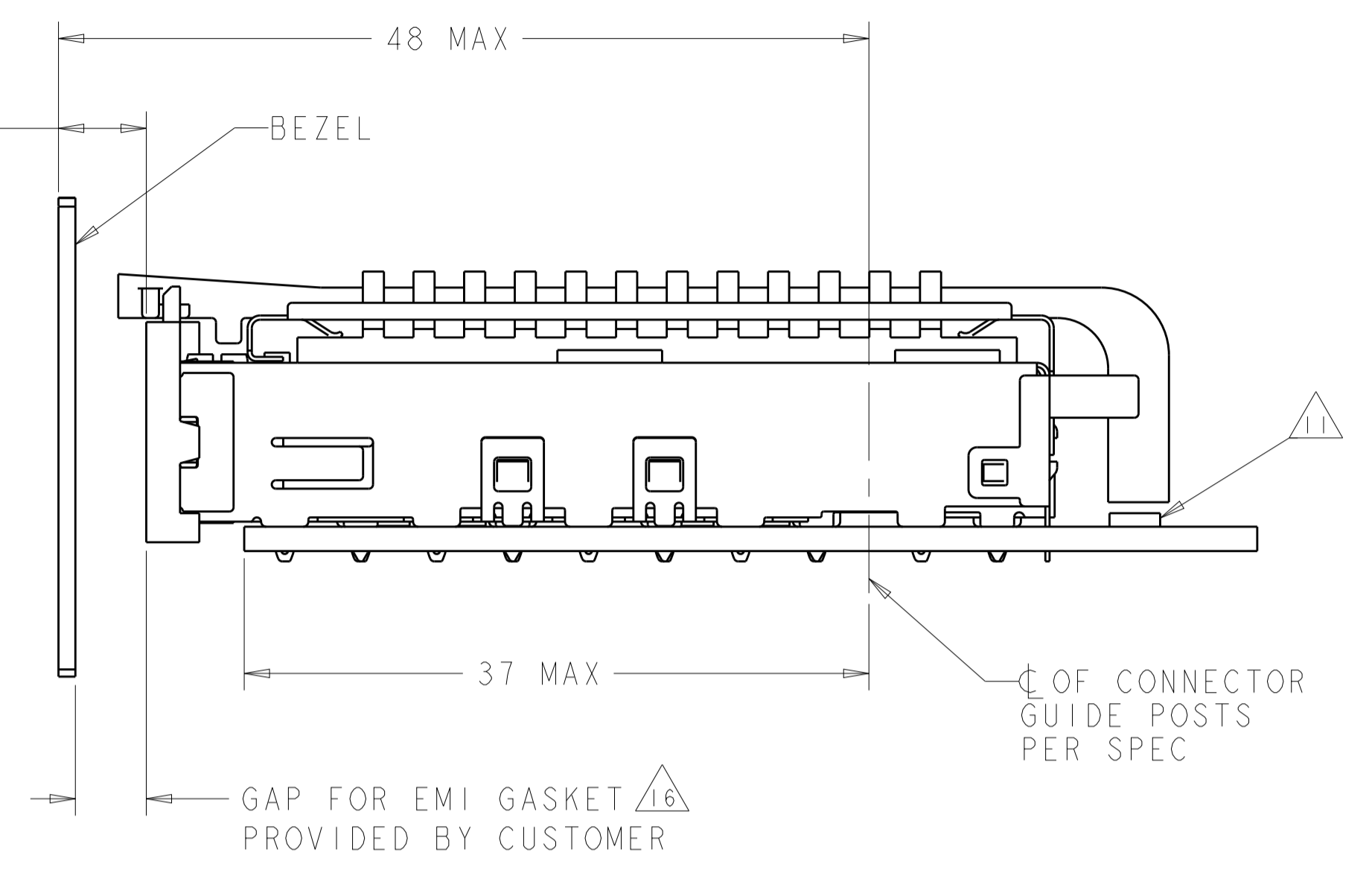
1X3 BEHIND BEZEL QSFP
 CAGE ASSEMBLY
 QUANTITY: 1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN C. VALENTINE 28FEB2008	TE Connectivity	
DIMENSIONS:		CHK J. PETERSON 28FEB2008		
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD J. PETERSON 28FEB2008	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ SQUARE LIGHT PIPES AND HEAT SINKS QSFP	
0 PLC	±	PRODUCT SPEC	SIZE CAGE CODE DRAWING NO	
1 PLC	±0.1	108-2286	A100779C=2110412	
2 PLC	±0.1	APPLICATION SPEC	RESTRICTED TO	
3 PLC	±	114-13218	CUSTOMER DRAWING	
4 PLC	±	WEIGHT	SCALE 4:1 SHEET 2 OF 5 REV F	
ANGLES	±			
FINISH				

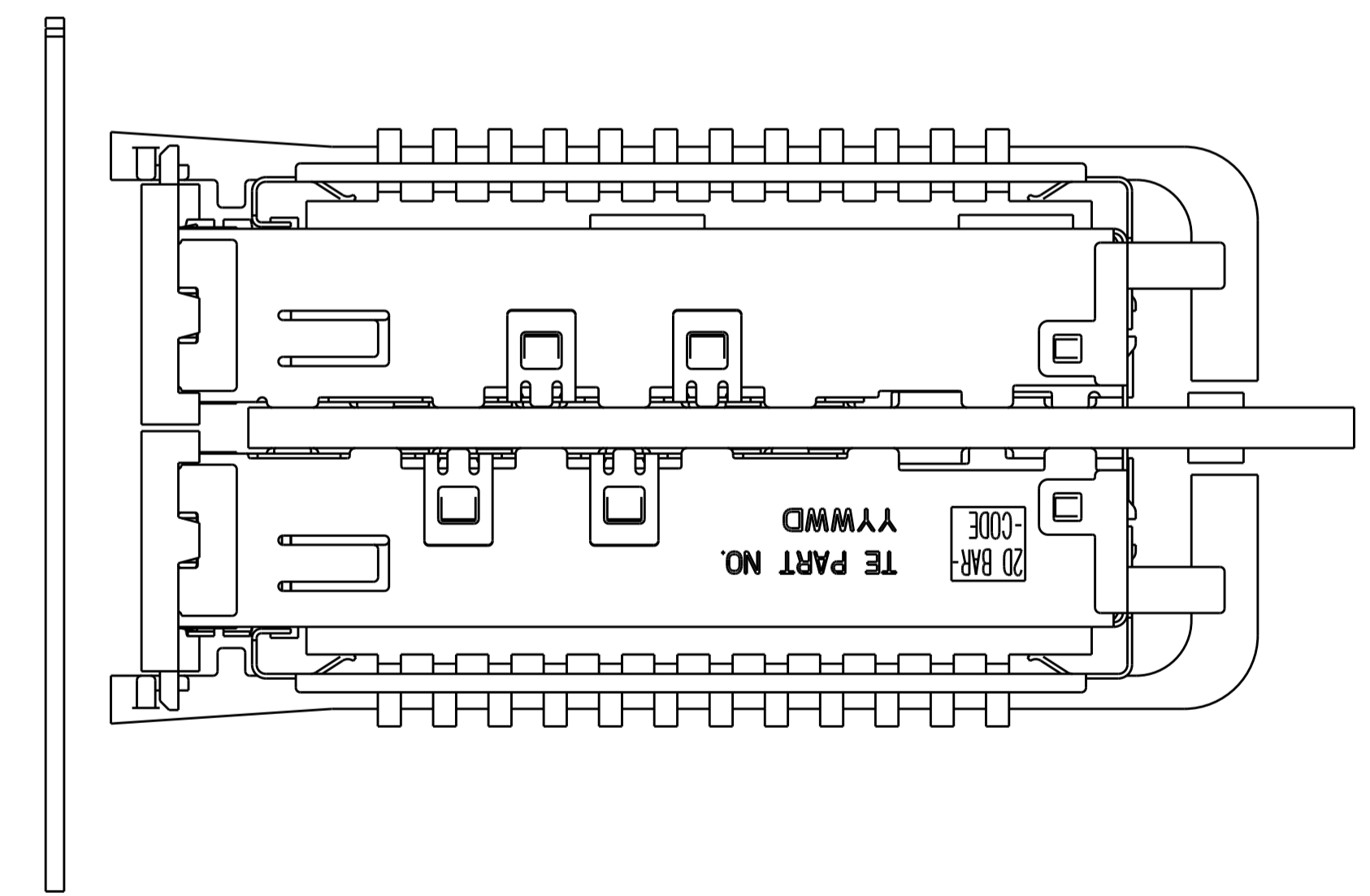
LOC		DIST		REVISIONS			
GP	00	P	LTN	DESCRIPTION	DATE	DMN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



ONE SIDED CONFIGURATION
 SCALE 3:1

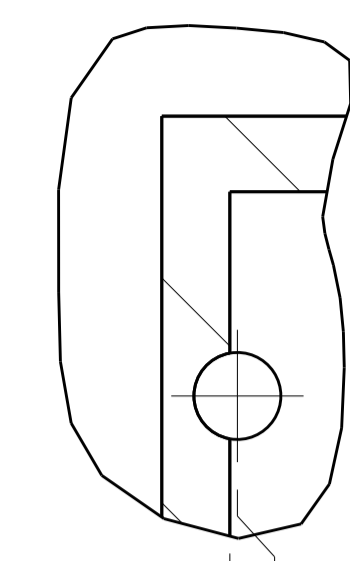


BELLY TO BELLY CONFIGURATION
 SIMILAR TO ONE SIDED
 EXCEPT WHERE NOTED
 SCALE 3:1

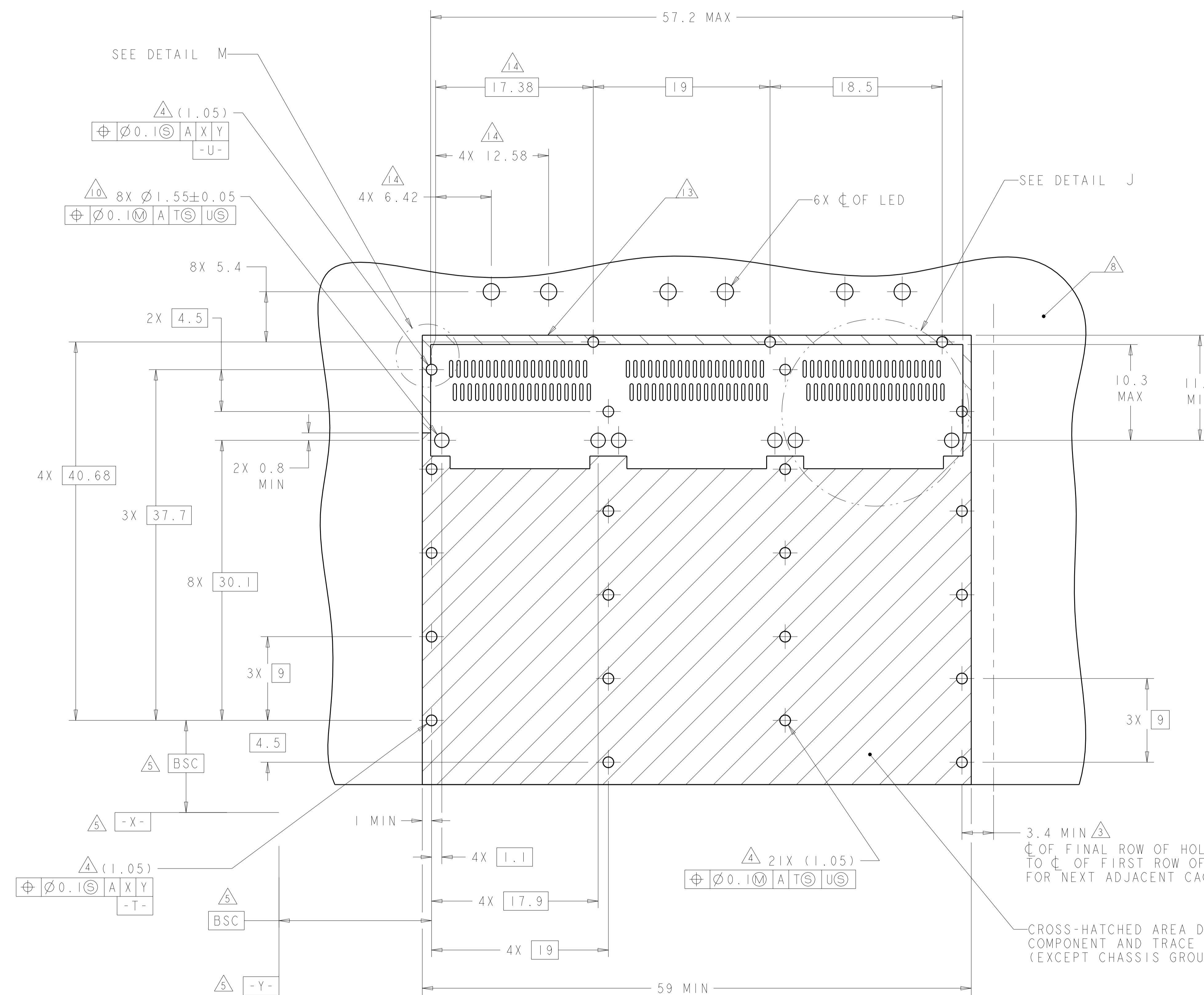


THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN C. VALENTINE 28FEB2008	
DIMENSIONS:		CHK J. PETERSON 28FEB2008	
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD J. PETERSON 28FEB2008	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ SQUARE LIGHT PIPES AND HEAT SINKS, QSFP
	0 PLC ± 1 PLC ±0.1 2 PLC ±0.1 3 PLC ± 4 PLC ± ANGLES ± FINISH ±	PRODUCT SPEC 108-2286	SIZE A100779C=2110412
MATERIAL		APPLICATION SPEC 114-13218	RESTRICTED TO
		WEIGHT	SCALE 4:1 SHEET 3 OF 5 REV F
		CUSTOMER DRAWING	

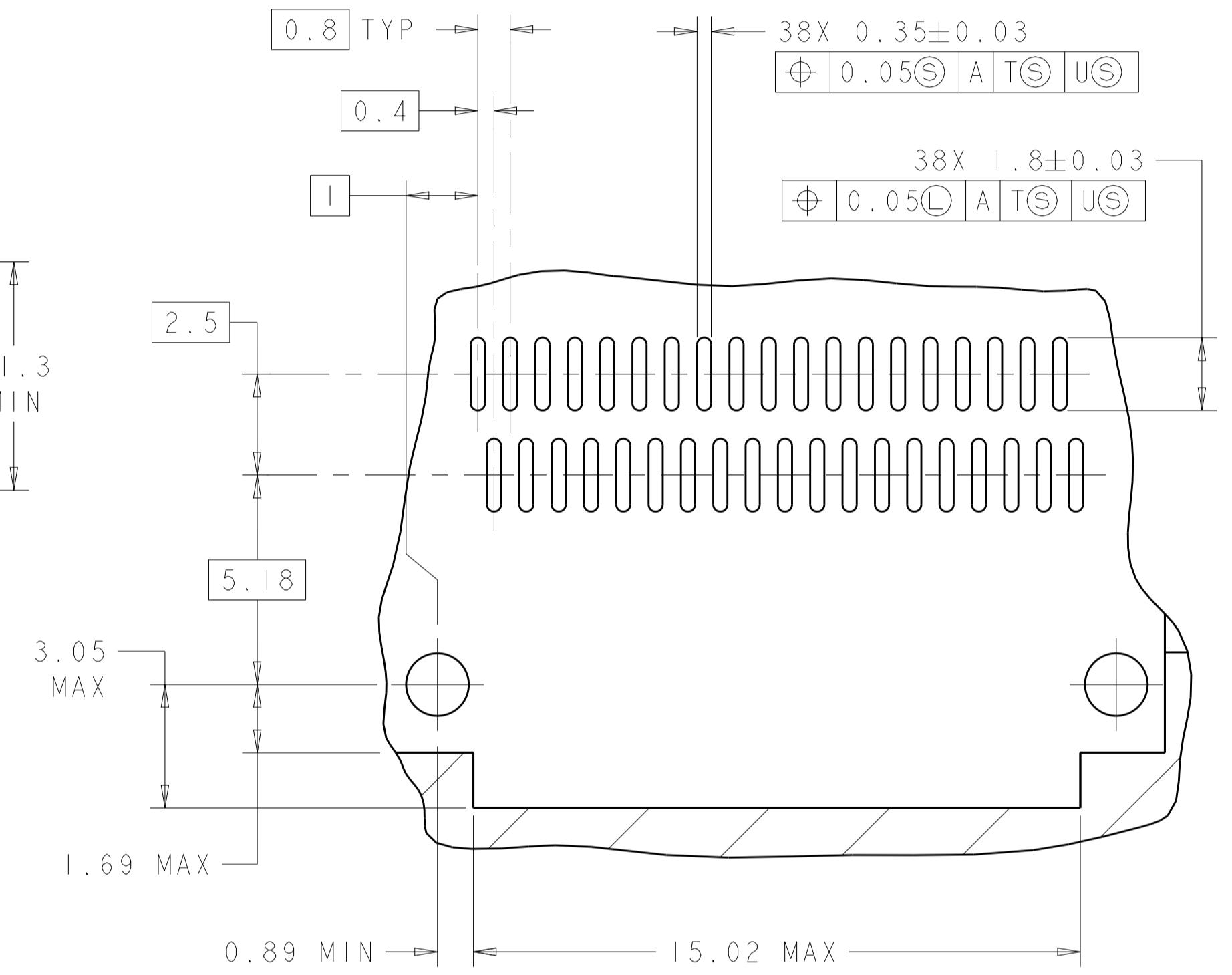
LOC	DIST	REVISIONS			
GP	00	REV	DATE	BY	APPV
-	-	SEE SHEET 1	-	-	-



DETAIL M
SCALE 10:1



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



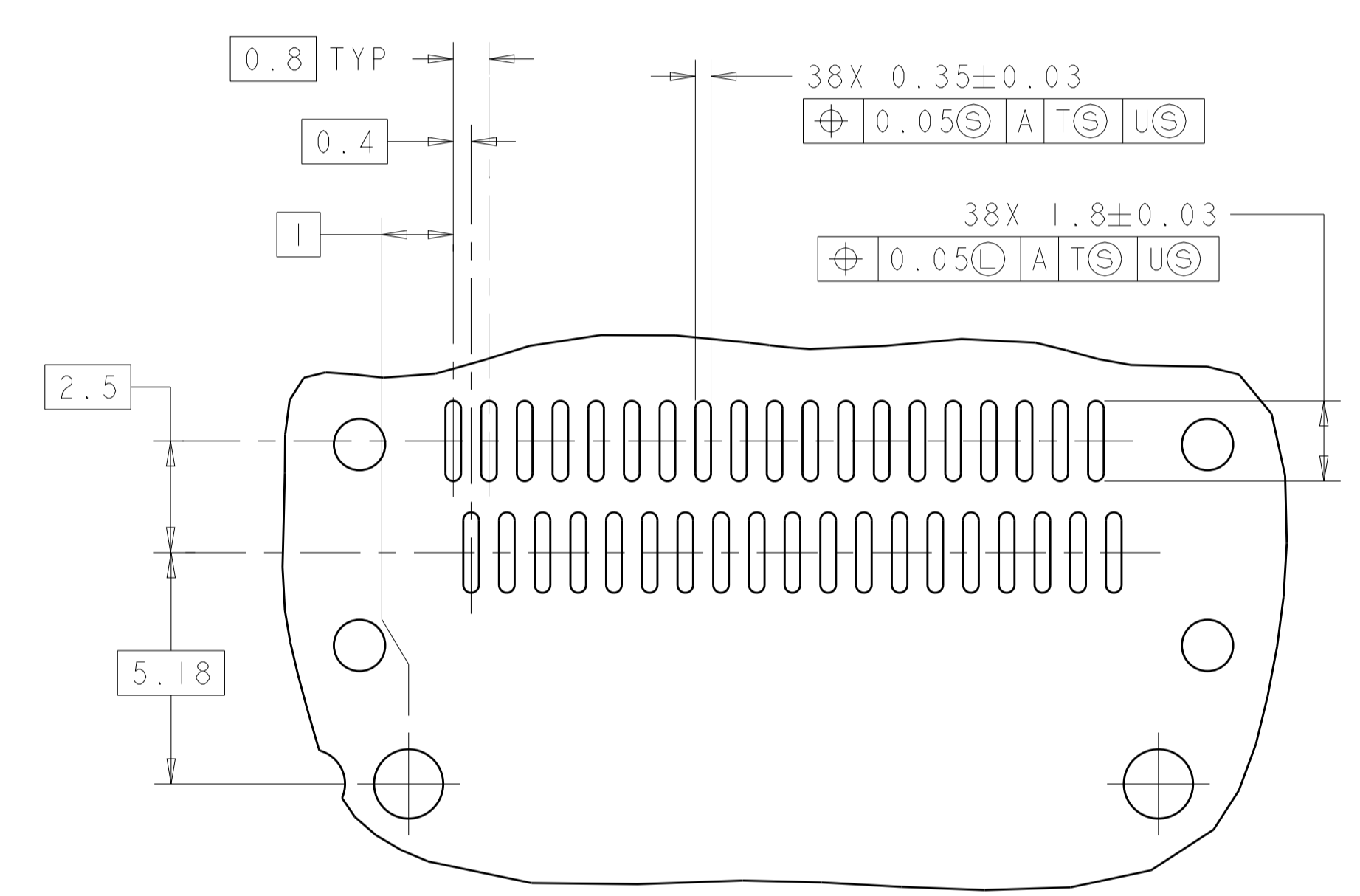
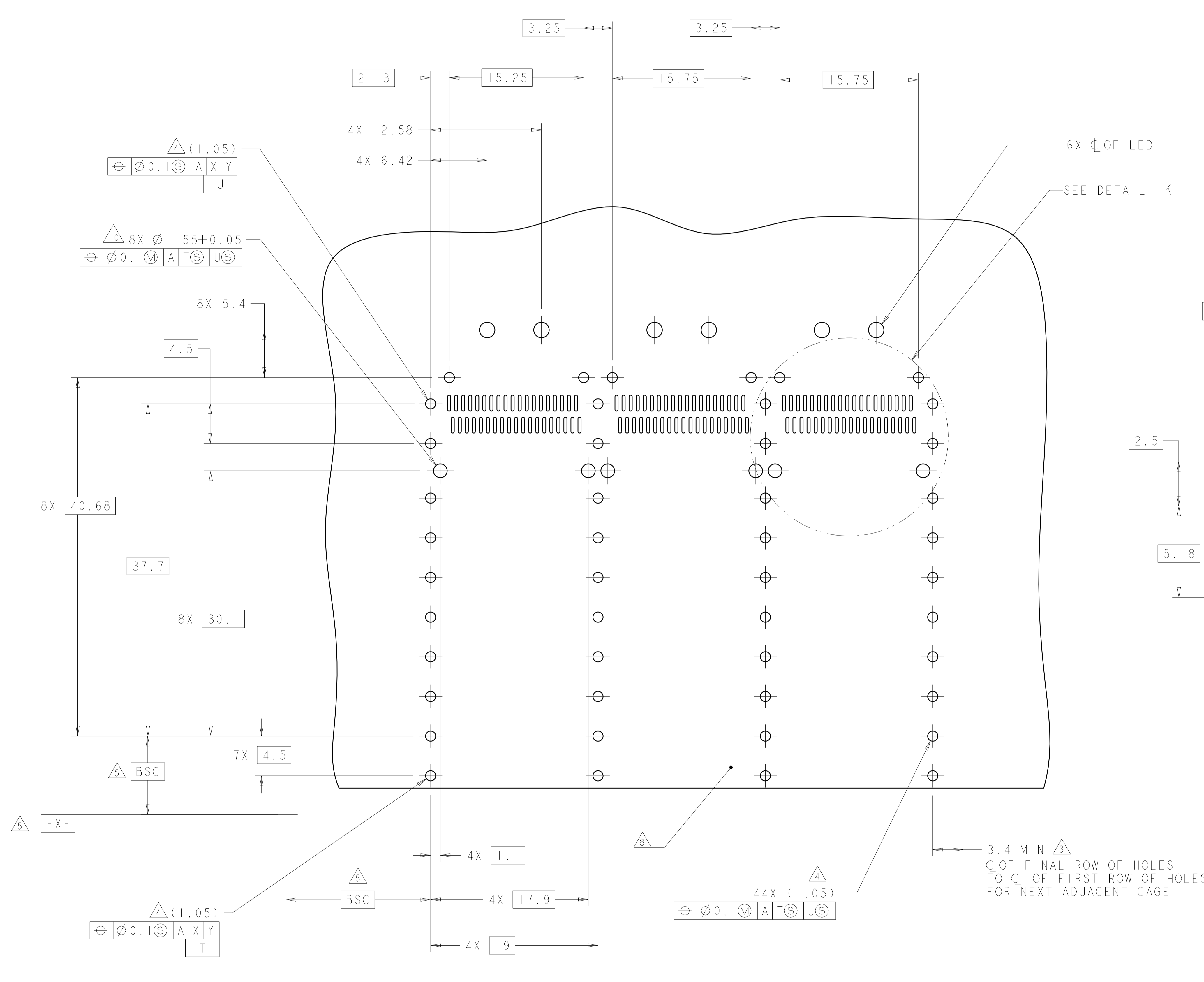
DETAIL J
 3 PLACES
 SCALE 8:1

3.4 MIN Δ
 CL OF FINAL ROW OF HOLES
 TO CL OF FIRST ROW OF HOLES
 FOR NEXT ADJACENT CAGE

CROSS-HATCHED AREA DENOTES
 COMPONENT AND TRACE KEEP-OUT
 (EXCEPT CHASSIS GROUND)

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: C. VALENTINE 28FEB2008	TE Connectivity
DIMENSIONS: mm		CHK: J. PETERSON 28FEB2008	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: J. PETERSON 28FEB2008	NAME: 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ SQUARE LIGHT PIPES AND HEAT SINKS QSFP
0 PLC ±	1 PLC ±0.1	PRODUCT SPEC: 108-2286	SIZE: CAGE CODE: DRAWING NO: A100779C=2110412
2 PLC ±0.1	3 PLC ±	APPLICATION SPEC: 114-13218	RESTRICTED TO: -
4 PLC ±	ANGLES ±	WEIGHT: -	CUSTOMER DRAWING
MATERIAL: -		SCALE: 4:1 SHEET 4 OF 5 REV F	

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



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

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN C. VALENTINE 28FEB2008	TE Connectivity
DIMENSIONS: mm		CHK J. PETERSON 28FEB2008	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD J. PETERSON 28FEB2008	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ SQUARE LIGHT PIPES AND HEAT SINKS QSFP
		PRODUCT SPEC 108-2286	RESTRICTED TO
MATERIAL		APPLICATION SPEC 114-13218	SIZE CAGE CODE DRAWING NO A100779C=2110412
FINISH		WEIGHT	SCALE 4:1 SHEET 5 OF 5 REV F
CUSTOMER DRAWING			