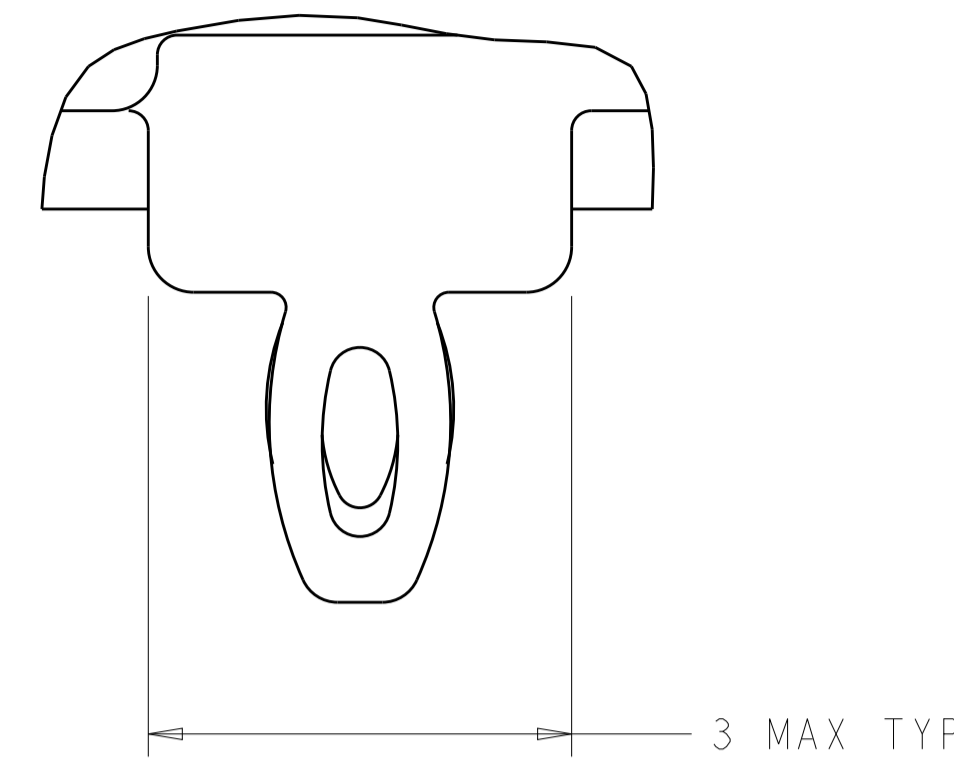


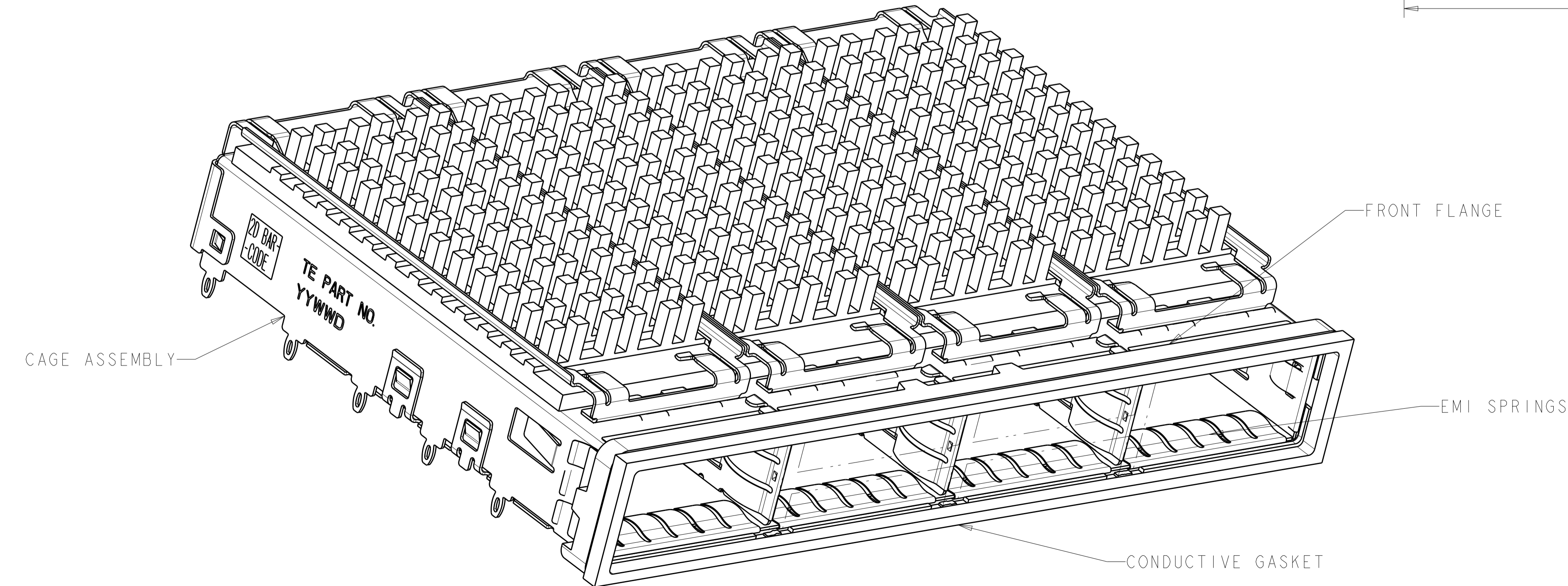
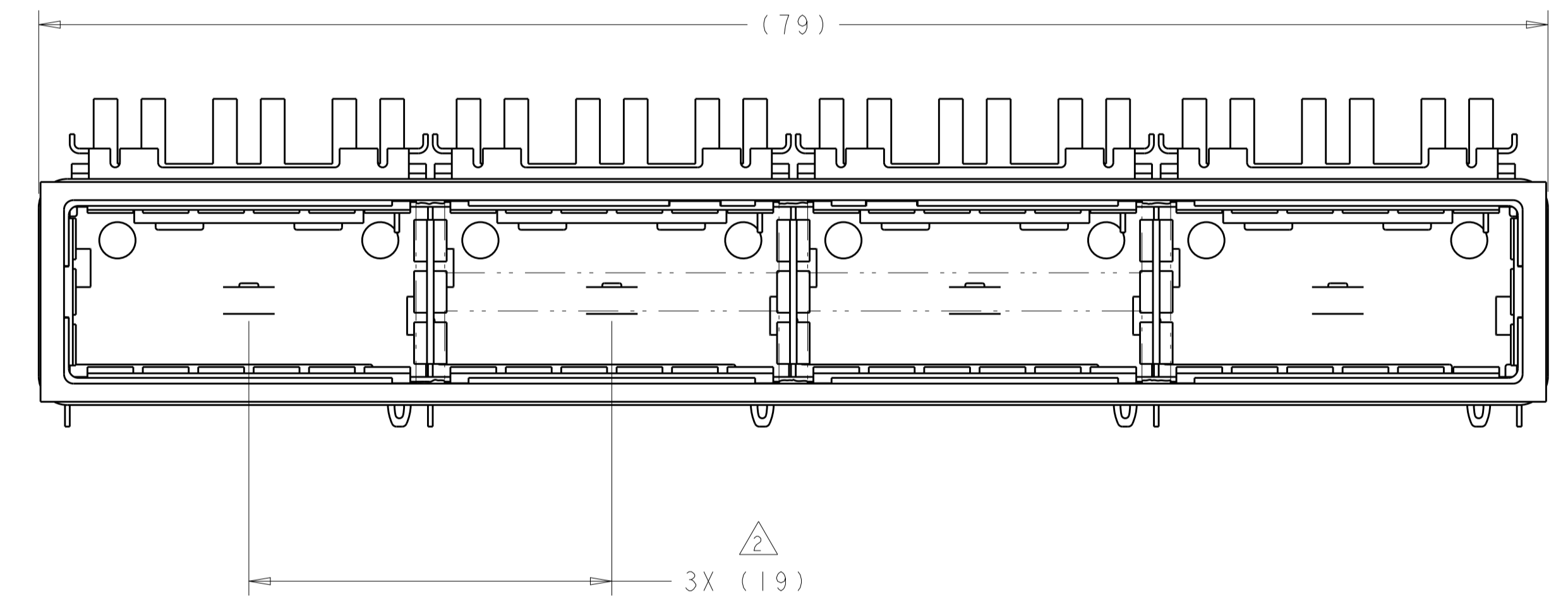
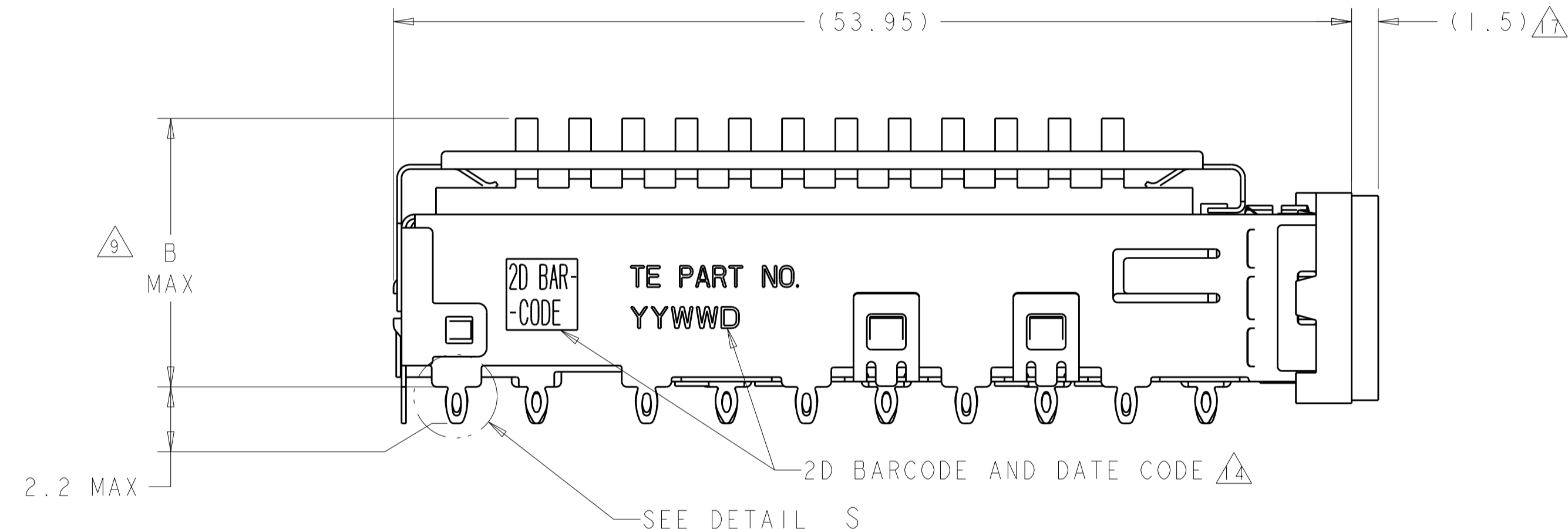
LOC	DIST	REVISIONS			
		REV	DATE	BY	CHK
GP	00	A	RELEASE PER ECO-16-002978	3MAR2016	RG SH



DETAIL S
SCALE 20:1

- 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
 LIGHT PIPE MATERIAL: CLEAR POLYCARBONATE
 CONDUCTIVE GASKET MATERIAL: BURRER FOAM
- 2 PITCH BETWEEN PORTS OF ONE 1X4 CAGE ASSEMBLY.
- 3 SPACING BETWEEN CAGES ON THE SAME PC BOARD, TO BE SPECIFIED BY CUSTOMER, MUST COMPLY WITH MINIMUM DIMENSIONS SHOWN.
- 4 REFERENCE APPLICATION SPEC 114-13218 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- 5 DATUMS AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- 6 DIMENSION F 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.
- 7 HEAT SINKS AND HEAT SINK CLIPS SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED.
- 8 DATUM -A- IS TOP SURFACE OF PC BOARD.
- 9 DIMENSION APPLIES WITH MODULE INSERTED IN CAGE.
- 10 UNPLATED THRU HOLE.
- 11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- 12 SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL S, CONTACT PC BOARD.
- 13 BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- 14 2D BARCODE AND DATE CODE (YYWWD) MARKED ON REAR OF CAGE.

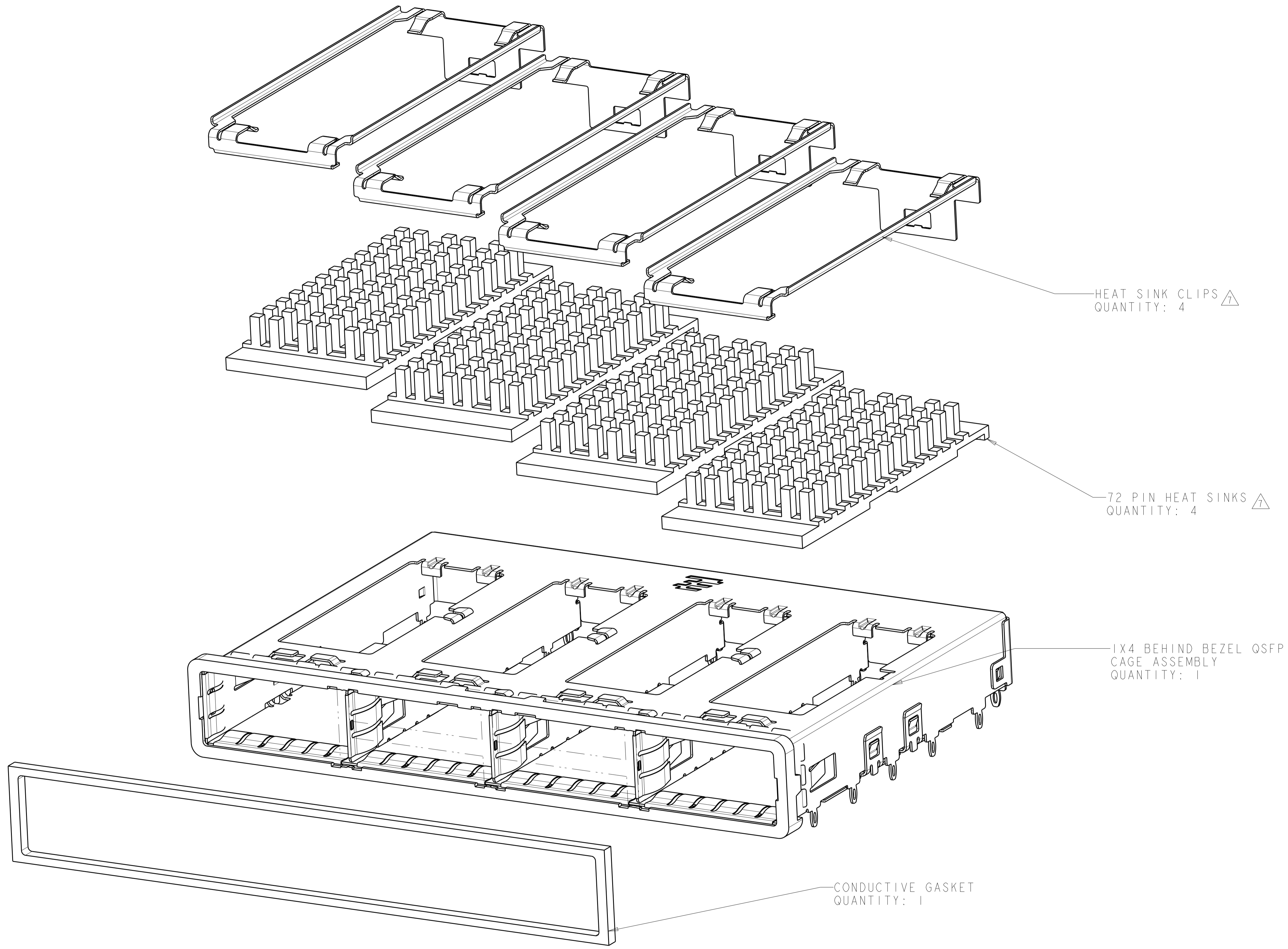
- 15 REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.
- 16 EMI SPRING FINISH: 2µm MINIMUM TIN
 FRONT FLANGE FINISH: 3µm MINIMUM TIN OVER 1.27µm MINIMUM NICKEL
 OVER 5.08µm MINIMUM COPPER.
 HEAT SINK FINISH: NICKEL
- 17 RECOMMENDED GAP FOR GASKET SHOULD BE 0.6mm-1.1mm.



23.0	NETWORKING	2170290-3
16.0	SAN	2170290-2
13.7	PCI	2170290-1
B	HEAT SINK PROFILE	PART NUMBER

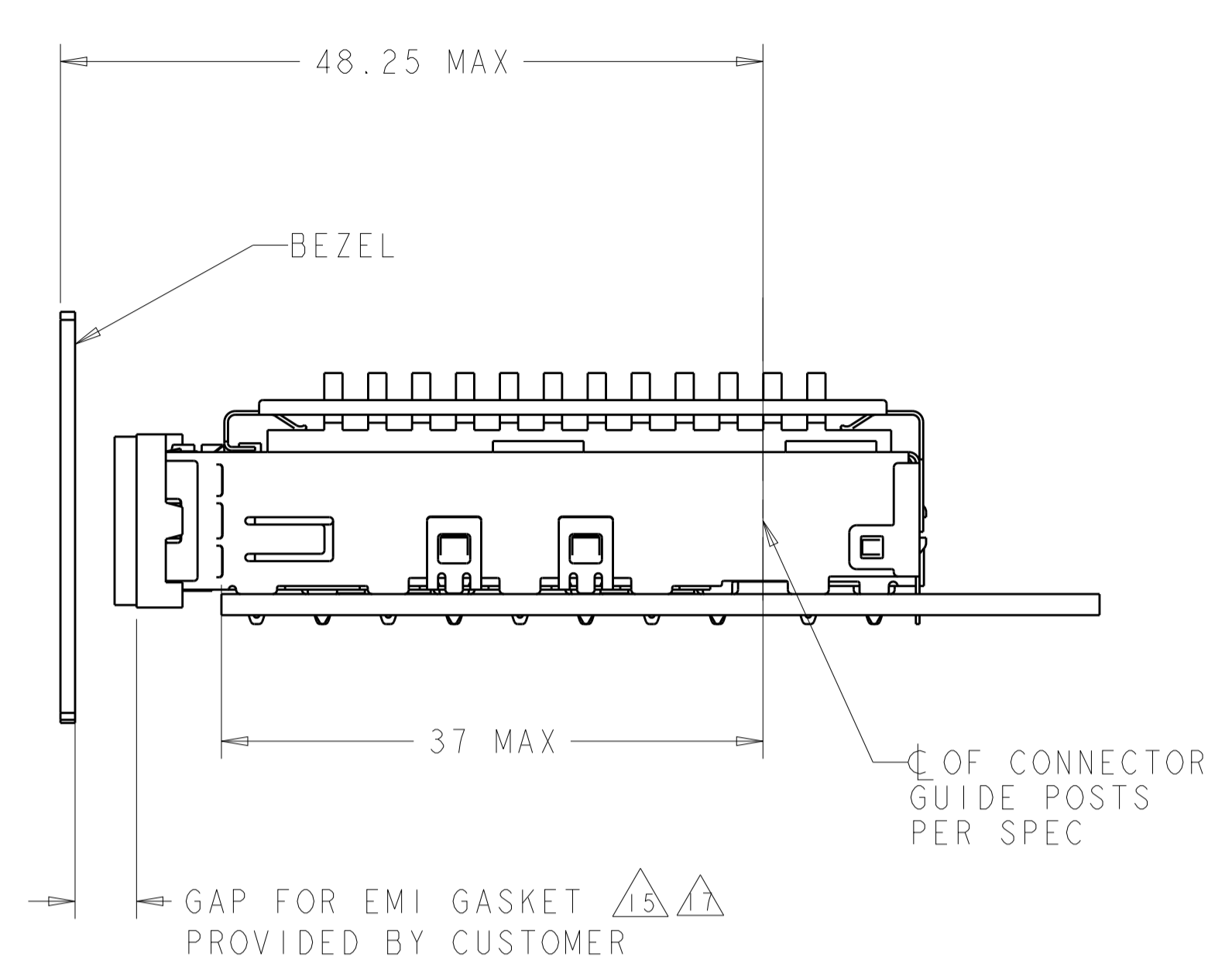
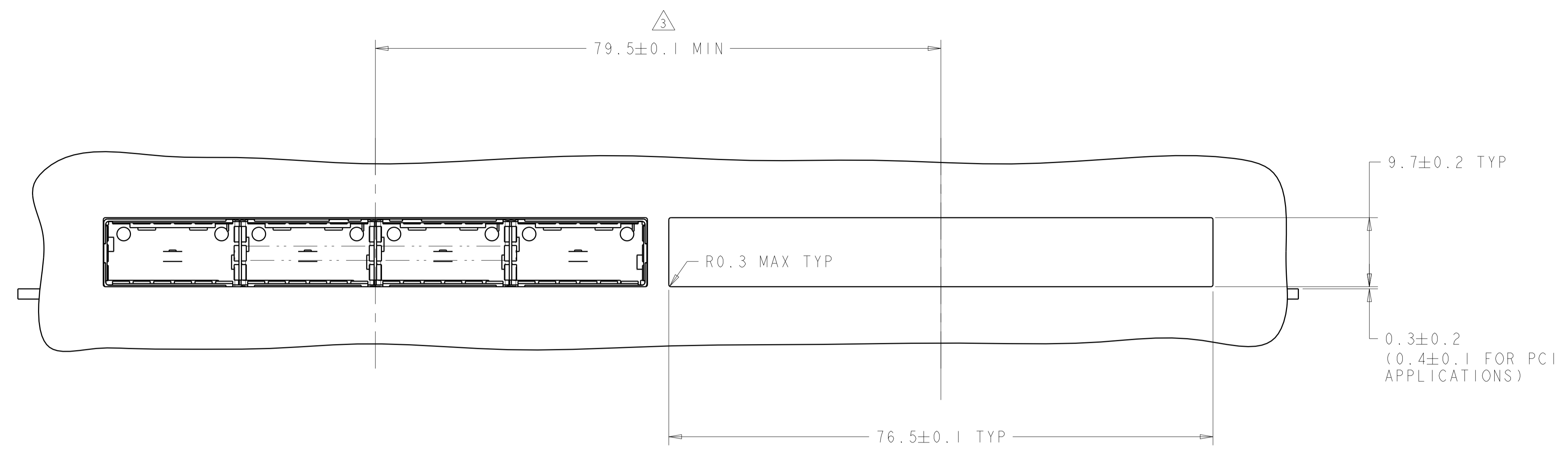
THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 29FEB2012	TE Connectivity	
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP'D: AILEY CAI 29FEB2012		
0 PLC	±	PRODUCT SPEC	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP	
1 PLC	±0.1	108-2286	SIZE: CAGE CODE DRAWING NO. RESTRICTED TO	
2 PLC	±0.13	APPLICATION SPEC	A100779C=2170290	
3 PLC	±0.0001	114-13218	SCALE: 4:1 SHEET 1 OF 5 REV A	
4 PLC	±	WEIGHT		
ANGLES	±	CUSTOMER DRAWING		
MATERIAL	FINISH			

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

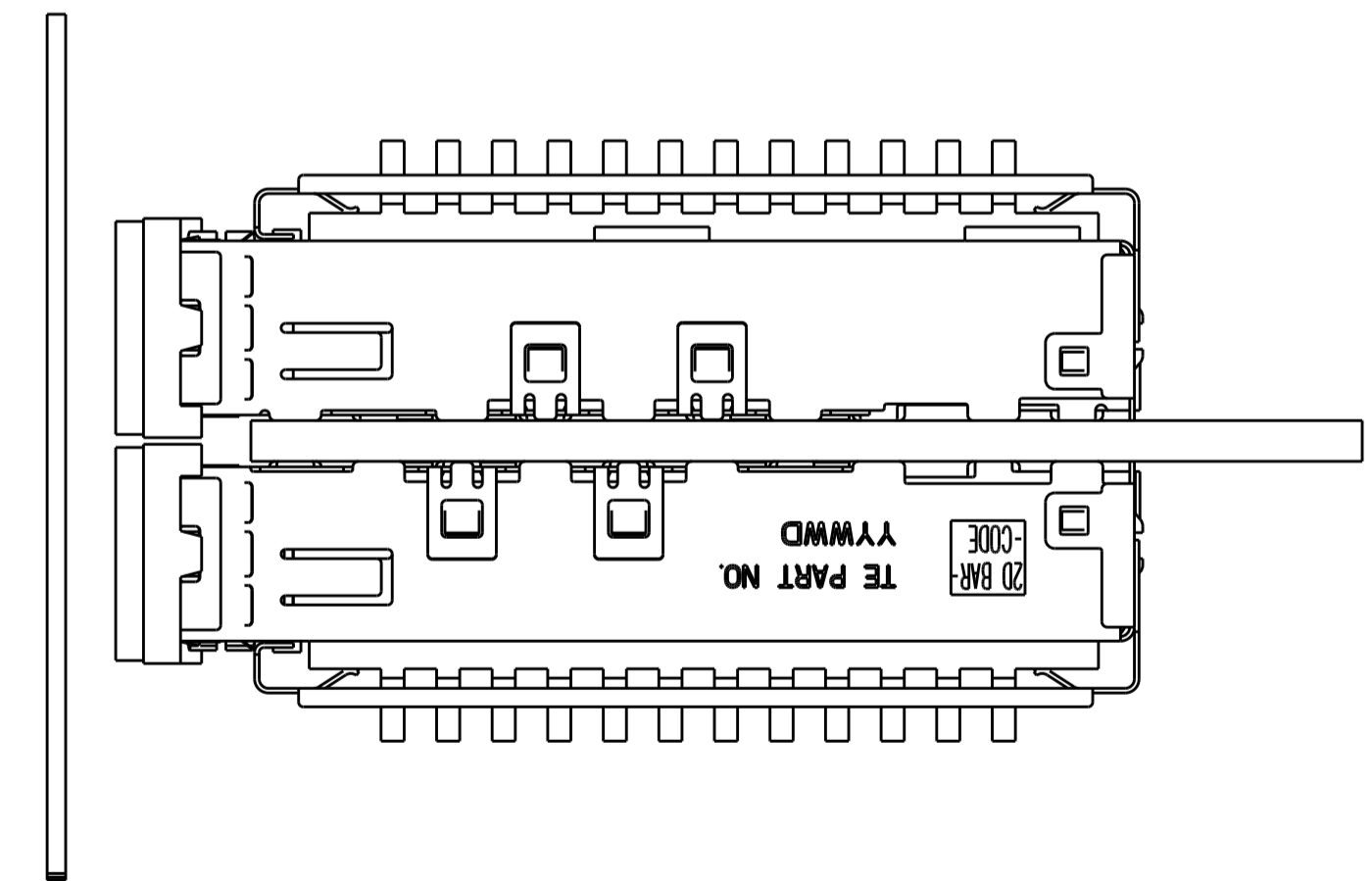
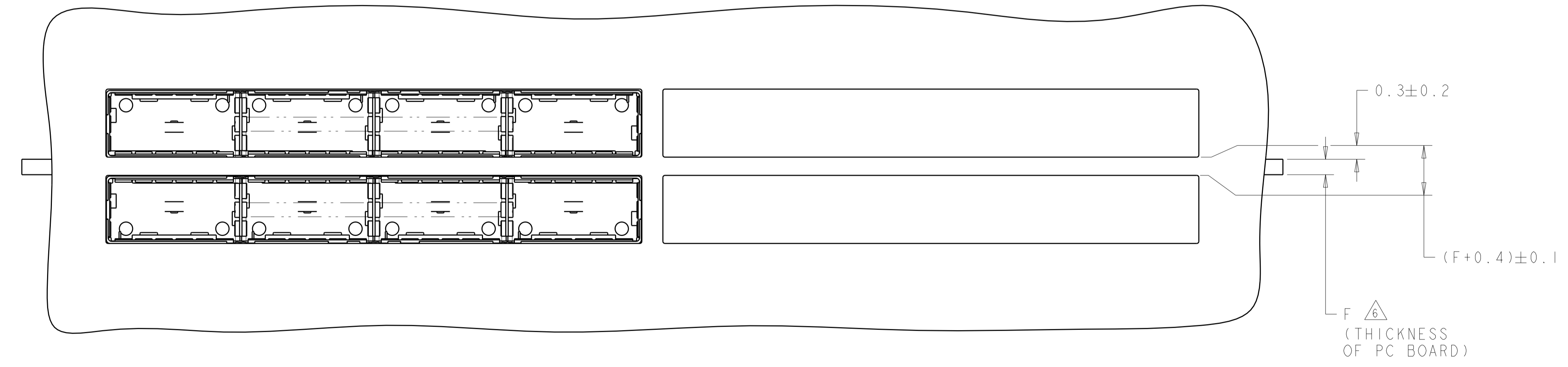


THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 29FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP
0 PLC	±	PRODUCT SPEC	SIZE: CAGE CODE DRAWING NO
1 PLC	±0.1	108-2286	RESTRICTED TO
2 PLC	±0.1	APPLICATION SPEC	A100779C=2170290
3 PLC	±0.013	114-13218	SCALE: 4:1 SHEET 2 OF 5 REV A
4 PLC	±0.0001	WEIGHT	CUSTOMER DRAWING
ANGLES	±		
MATERIAL	FINISH		

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



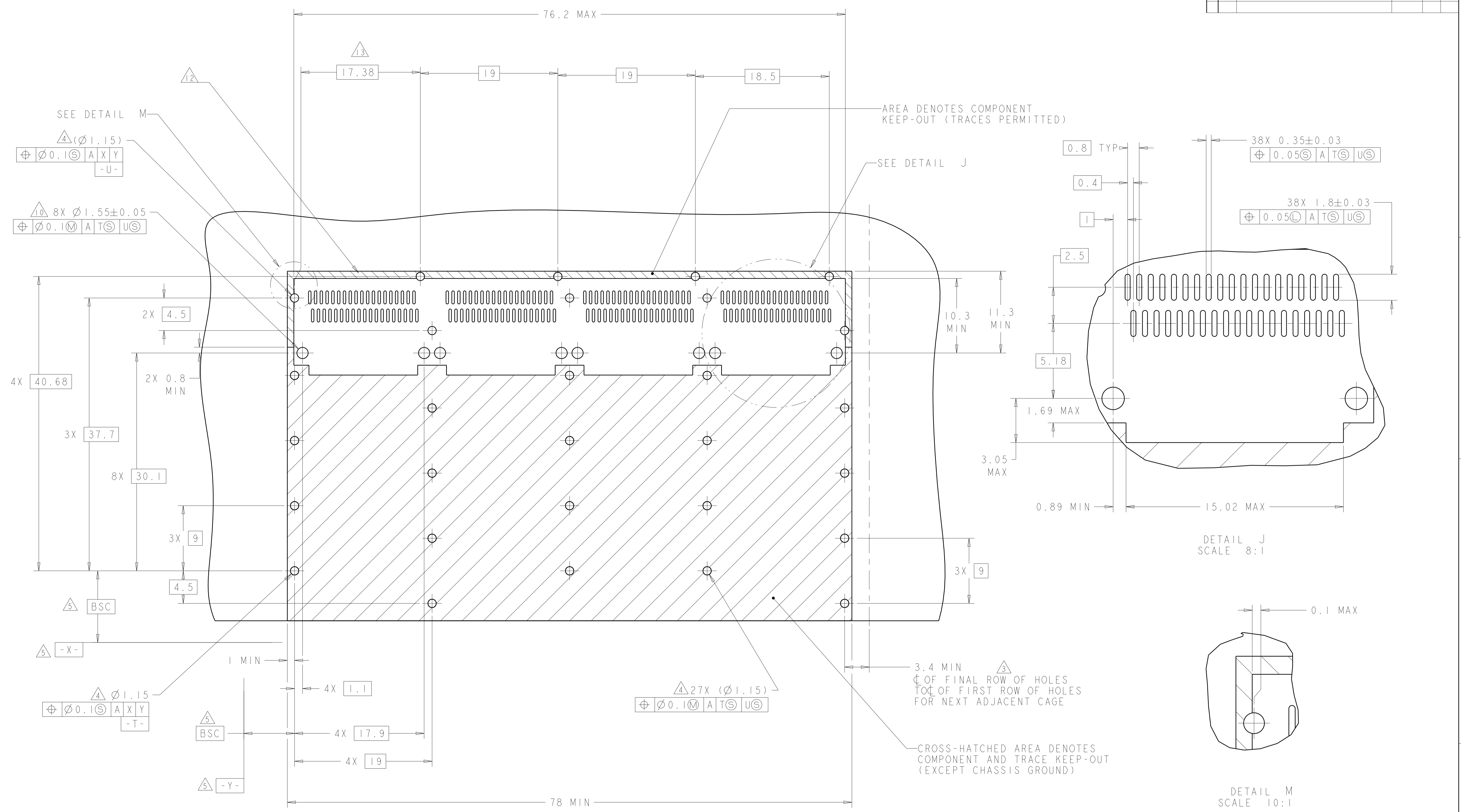
ONE SIDED CONFIGURATION
 SCALE 5:2



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

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: RINSEN SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPV: AILEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSPF
0 PLC ±.1		PRODUCT SPEC: 108-2286	
1 PLC ±0.1		APPLICATION SPEC: 114-13218	SIZE: CAGE CODE DRAWING NO. RESTRICTED TO A100779C=2170290
2 PLC ±0.1		WEIGHT: -	
3 PLC ±0.013		CUSTOMER DRAWING	SCALE: 4:1 SHEET 3 OF 5 REV A
4 PLC ±0.0001			
ANGLES ±.1			
FINISH: -			

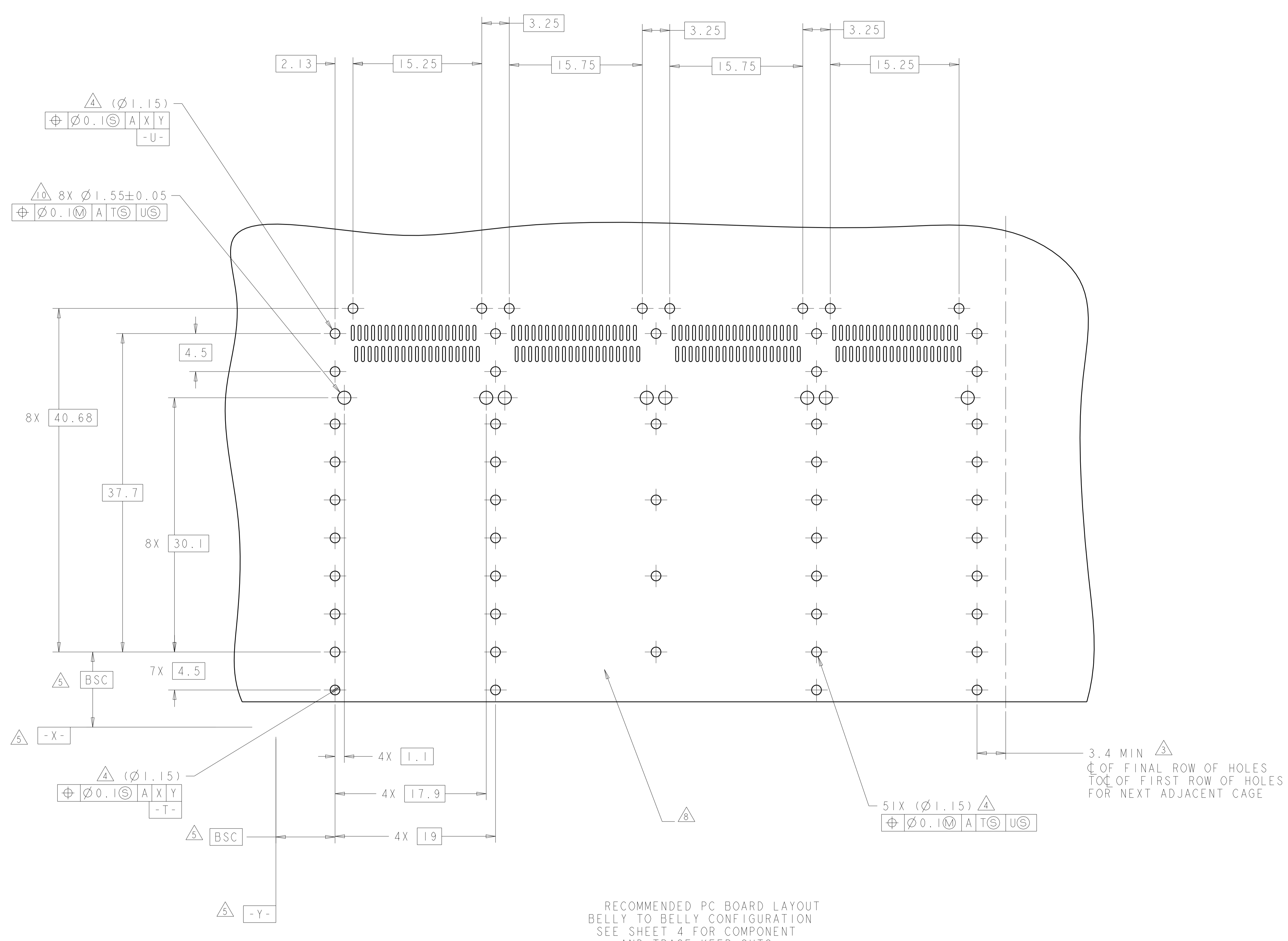
LOC	DIST	REVISIONS					
GP	00	P	LTH	DESCRIPTION	DATE	DWN	APVD
		-	-	SEE SHEET 1	-	-	-



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

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: RINSEN_SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY_ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY_CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSPF PRODUCT SPEC: 108-2286 APPLICATION SPEC: 114-13218 WEIGHT: - CUSTOMER DRAWING
0 PLC ±0.1		RESTRICTED TO:	
1 PLC ±0.1		SCALE: 4:1	
2 PLC ±0.1		SHEET 4 OF 5	
3 PLC ±0.013		REV: A	
4 PLC ±0.001			
ANGLES ±0.001			
FINISH: -			

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



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

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

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN KINSEN SUN 29FEB2012	TE Connectivity												
DIMENSIONS: mm		CHK DENNY ZHU 29FEB2012													
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD ALEX CAI 29FEB2012	NAME 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP												
<table border="1"> <tr> <td>0 PLC</td> <td>±</td> </tr> <tr> <td>2 PLC</td> <td>±0.1</td> </tr> <tr> <td>3 PLC</td> <td>±0.1</td> </tr> <tr> <td>4 PLC</td> <td>±0.013</td> </tr> <tr> <td>ANGLES</td> <td>±0.0001</td> </tr> <tr> <td>FINISH</td> <td>±</td> </tr> </table>		0 PLC	±	2 PLC	±0.1	3 PLC	±0.1	4 PLC	±0.013	ANGLES	±0.0001	FINISH	±	PRODUCT SPEC 108-2286	SIZE A100779C=2170290
0 PLC	±														
2 PLC	±0.1														
3 PLC	±0.1														
4 PLC	±0.013														
ANGLES	±0.0001														
FINISH	±														
MATERIAL		APPLICATION SPEC 114-13218	RESTRICTED TO												
CUSTOMER DRAWING		WEIGHT	SCALE 4:1 SHEET 5 OF 5 REV A												