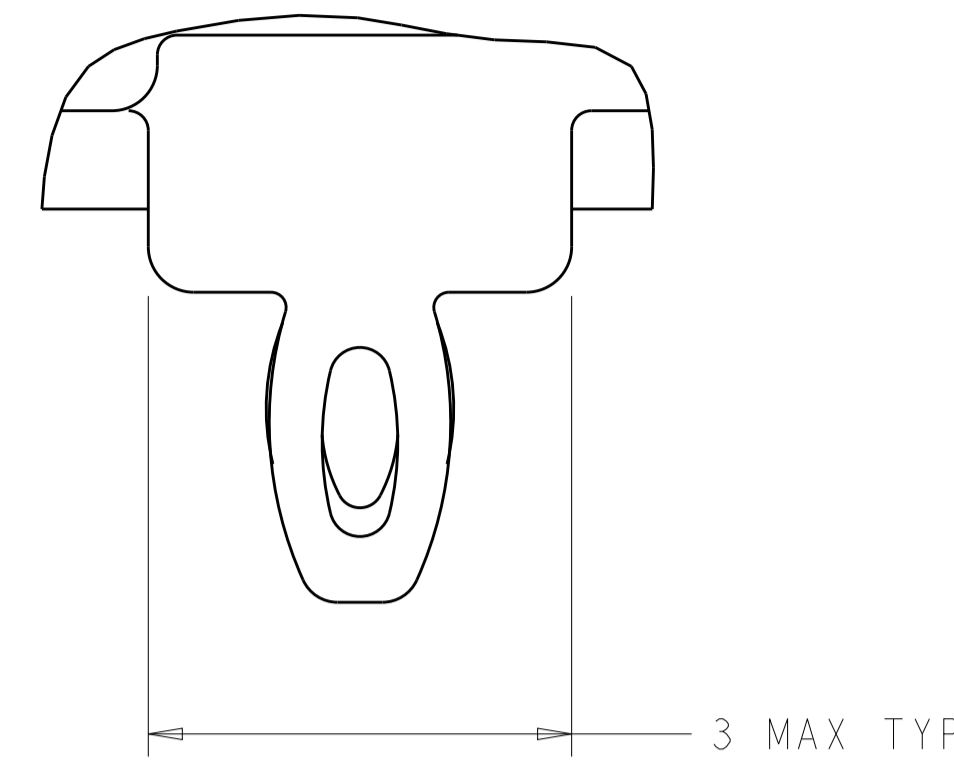


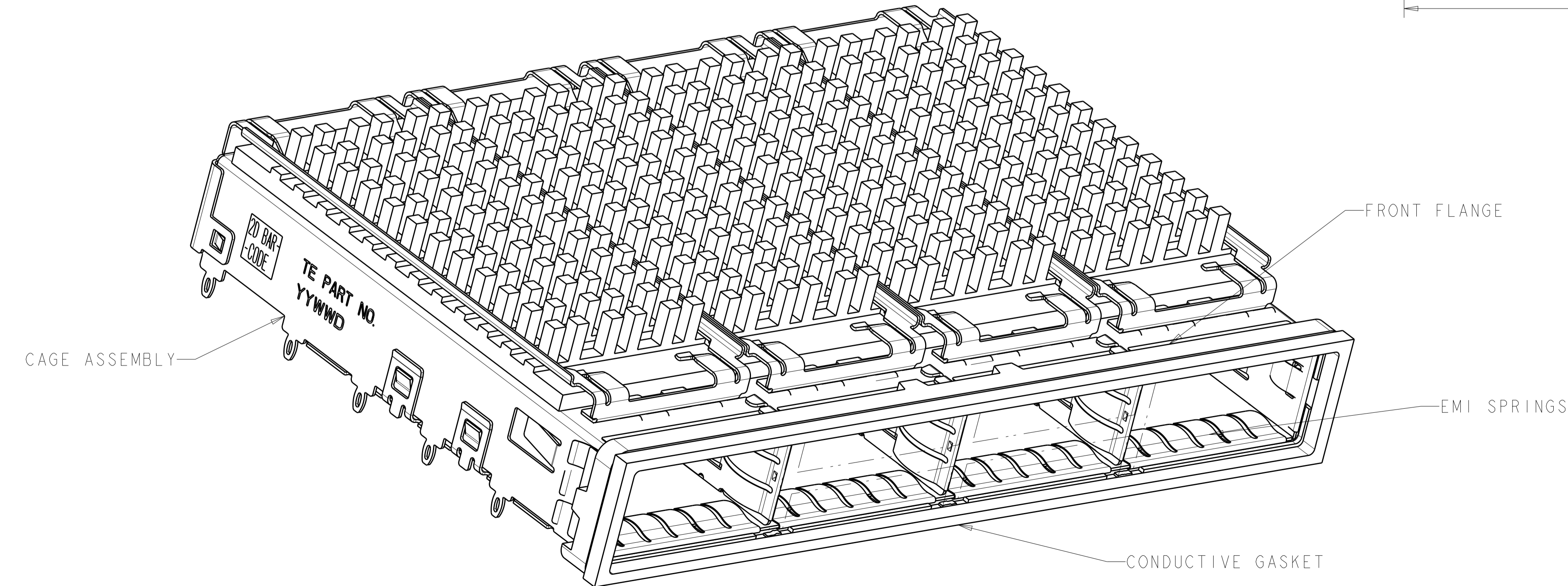
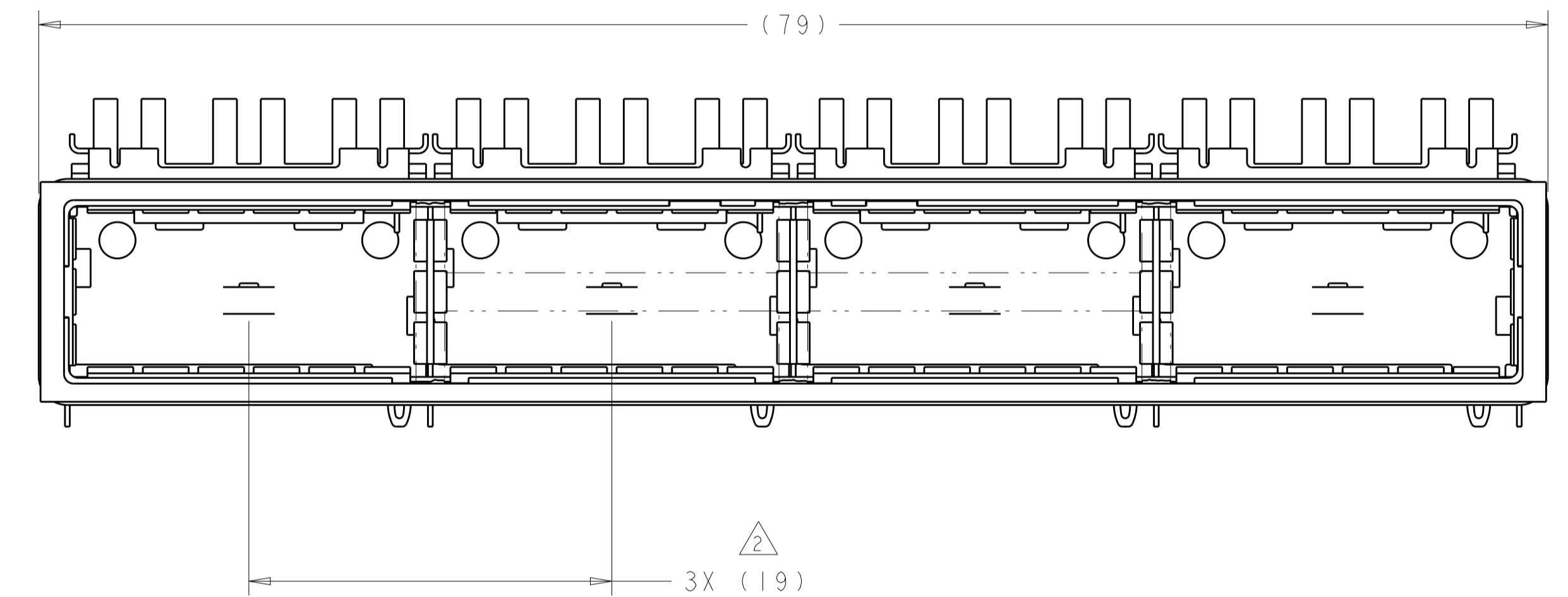
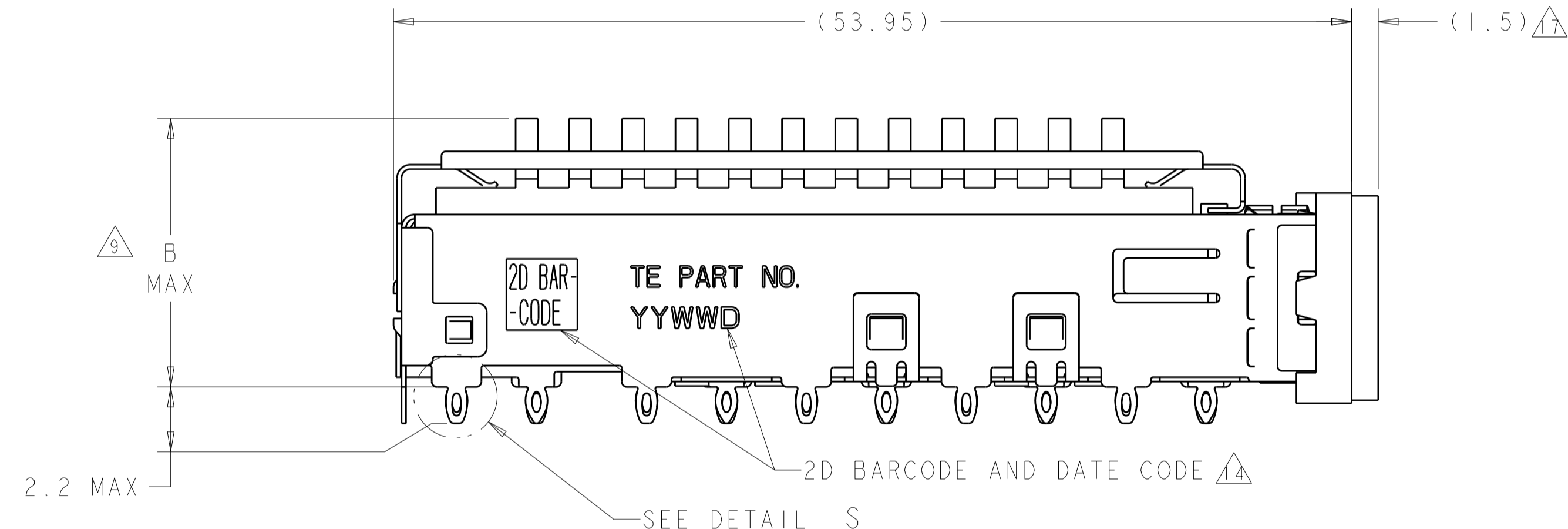
LOC	DIST	REVISIONS					
		P	LTN	DESCRIPTION	DATE	DWN	APVD
GP	00	A		RELEASE PER ECO-16-002978	3MAR2016	RG	SH



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.

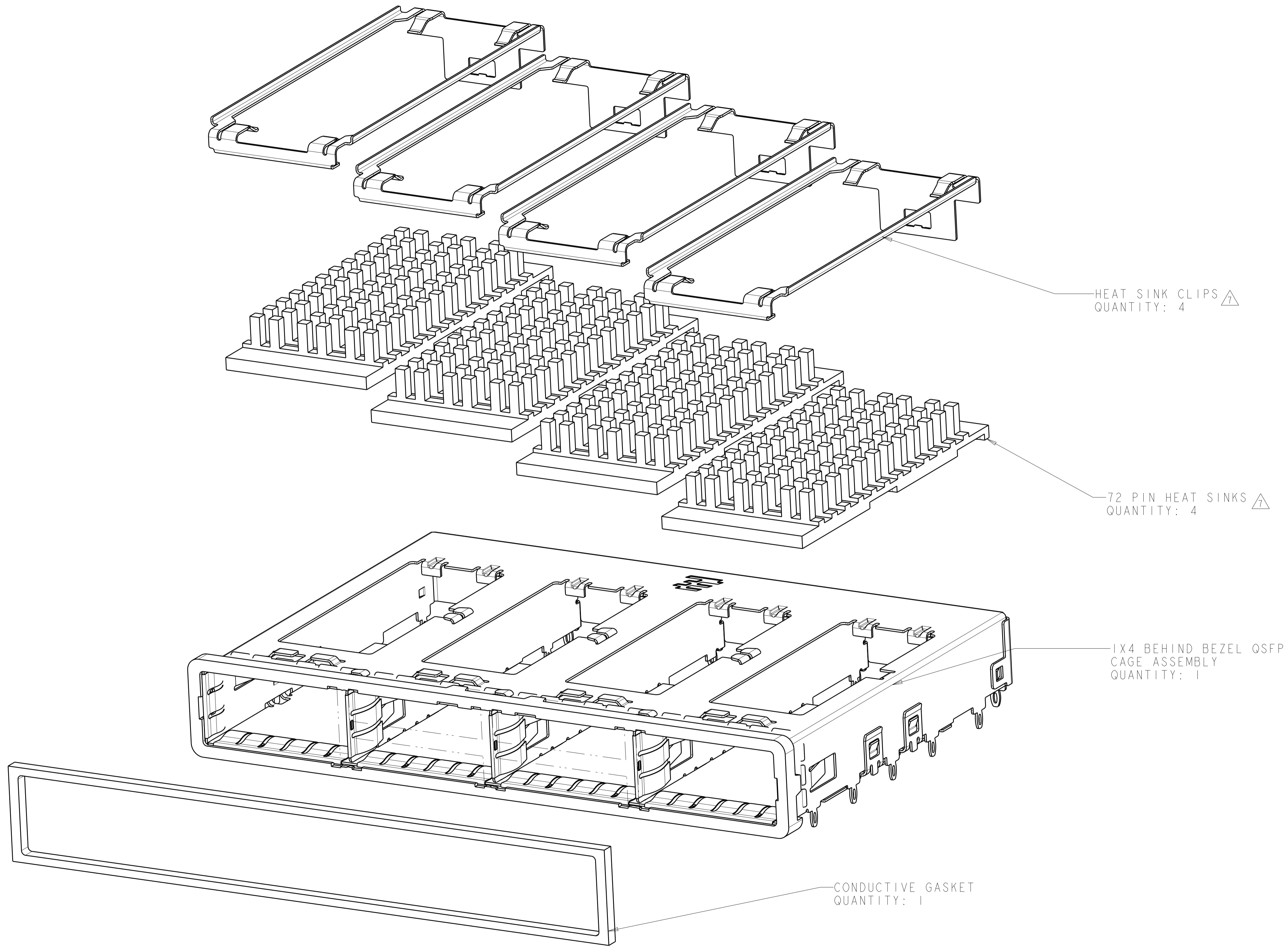
- 15 REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.
- 16 EMI SPRING FINISH: 2µm MINIMUM TIN  
 FRONT FLANGE FINISH: 3µm MINIMUM TIN OVER 1.27µm MINIMUM NICKEL  
 OVER 5.08µm MINIMUM COPPER.  
 HEAT SINK FINISH: NICKEL
- 17 RECOMMENDED GAP FOR GASKET SHOULD BE 0.6mm-1.1mm.



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

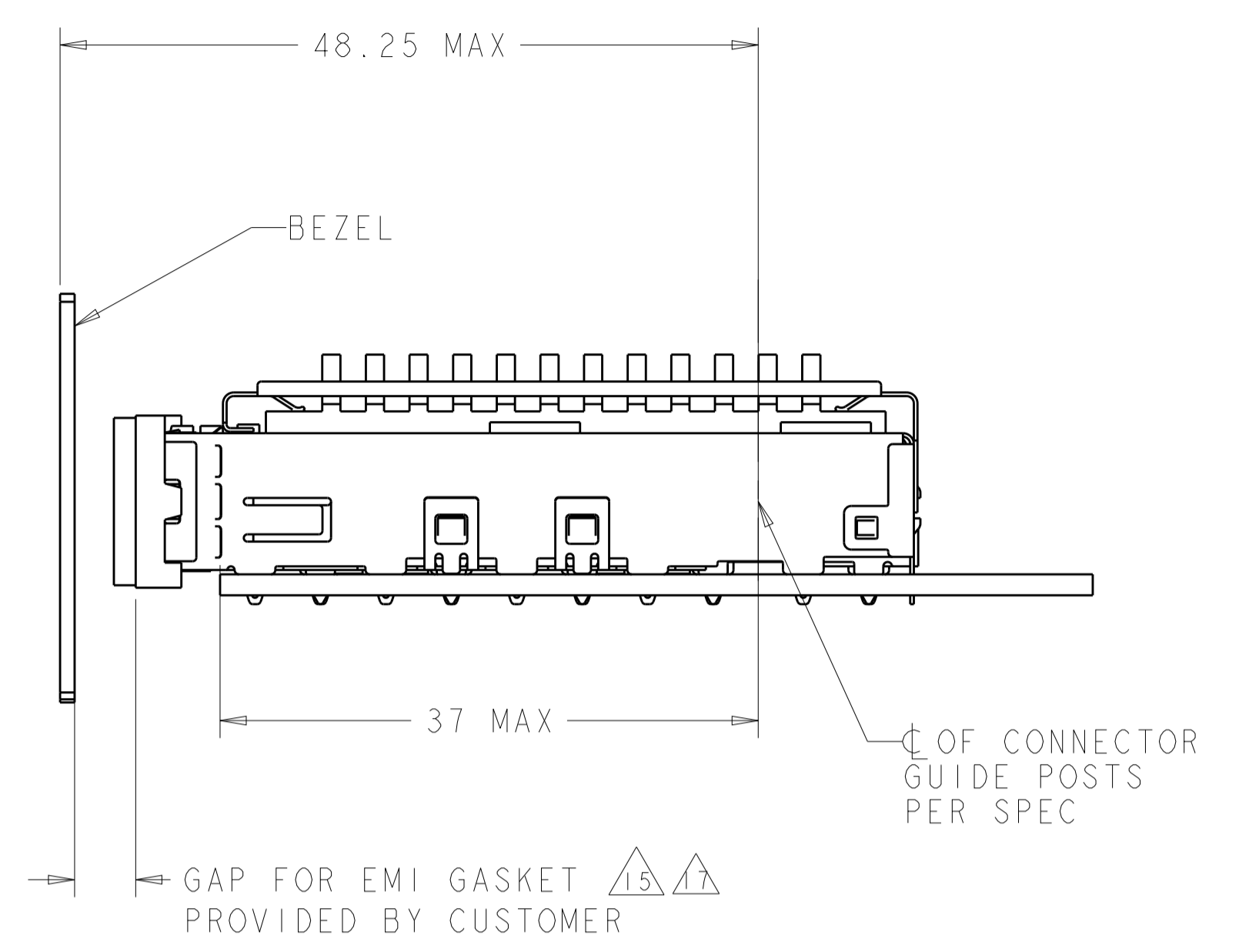
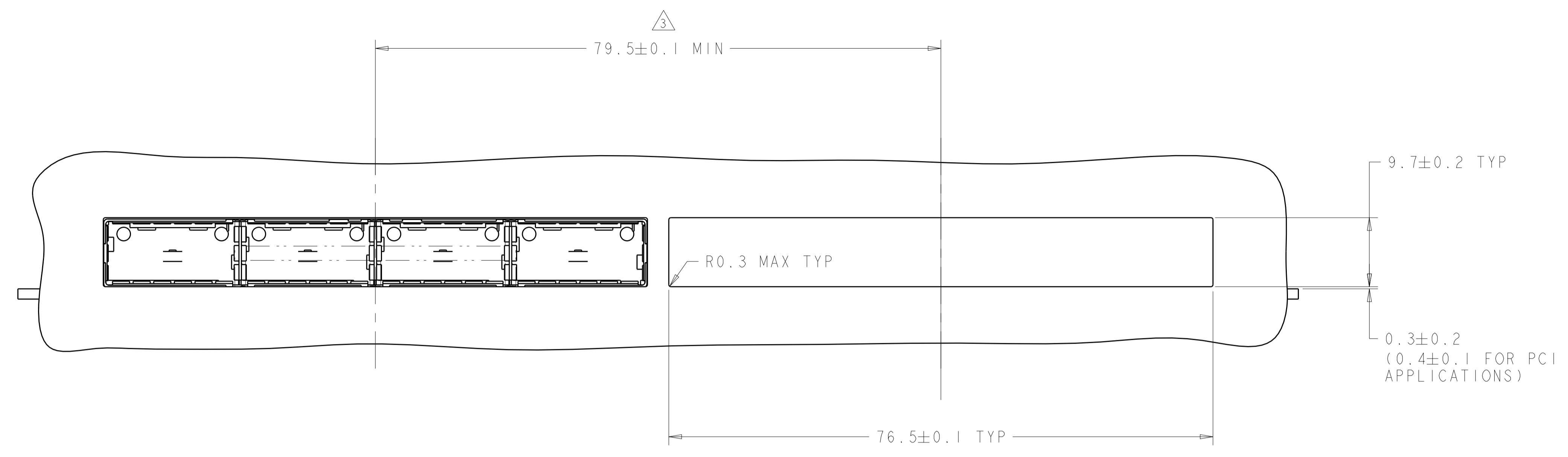
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: KINSEN SUN 29FEB2012	TE Connectivity	
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 29FEB2012		
0 PLC	±	PRODUCT SPEC	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP	
1 PLC	±0.1	108-2286	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	-	-	-

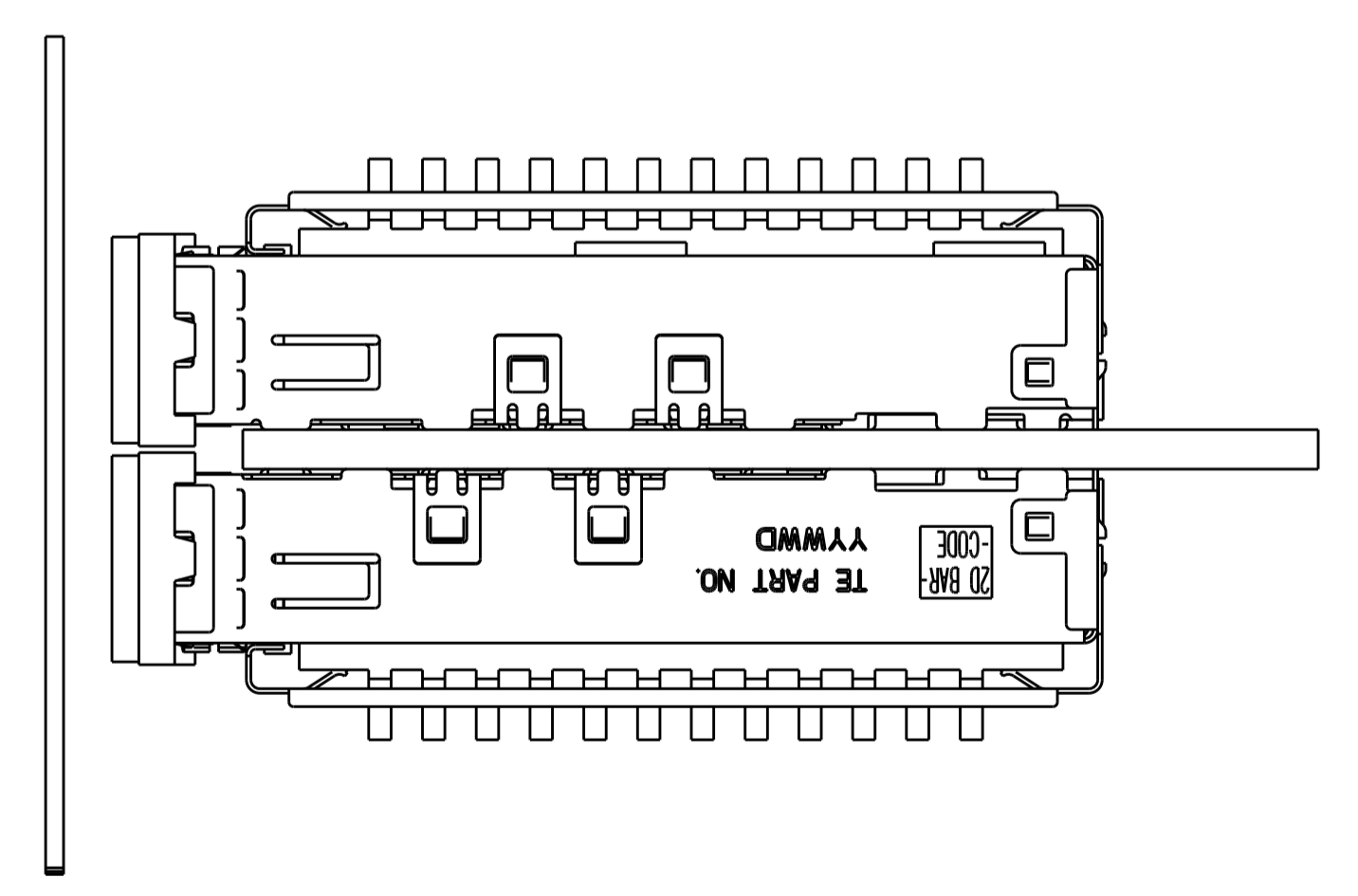
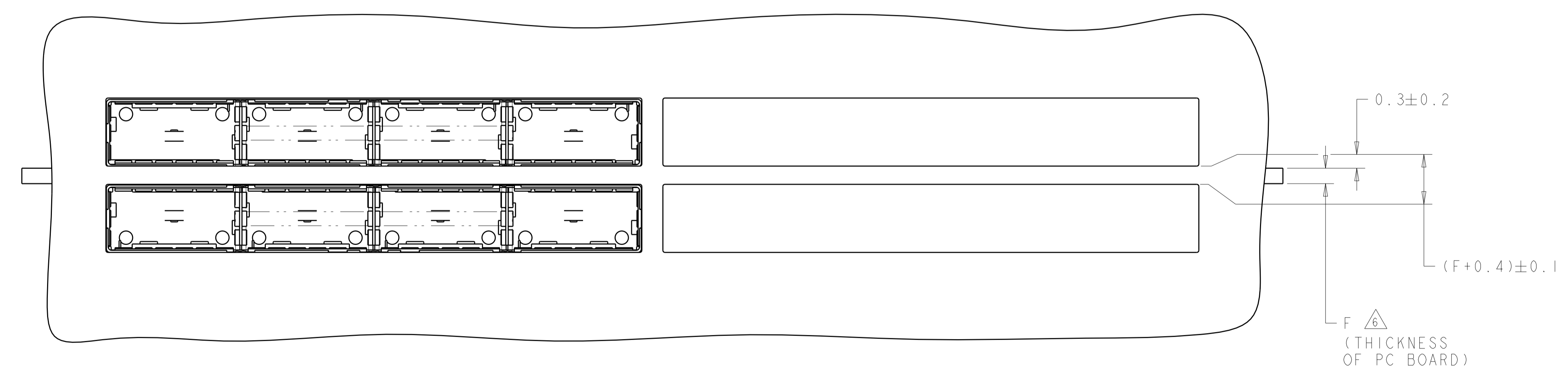


THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 29FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP
0 PLC	±	PRODUCT SPEC	SIZE: A1
1 PLC	±0.1	108-2286	CAGE CODE: 100779
2 PLC	±0.1	APPLICATION SPEC	DRAWING NO: C=2170290
3 PLC	±0.013	114-13218	RESTRICTED TO: -
4 PLC	±0.0001	WEIGHT: -	SCALE: 4:1
ANGLES	±	CUSTOMER DRAWING	SHEET 2 OF 5
MATERIAL: -	FINISH: -		REV: A

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



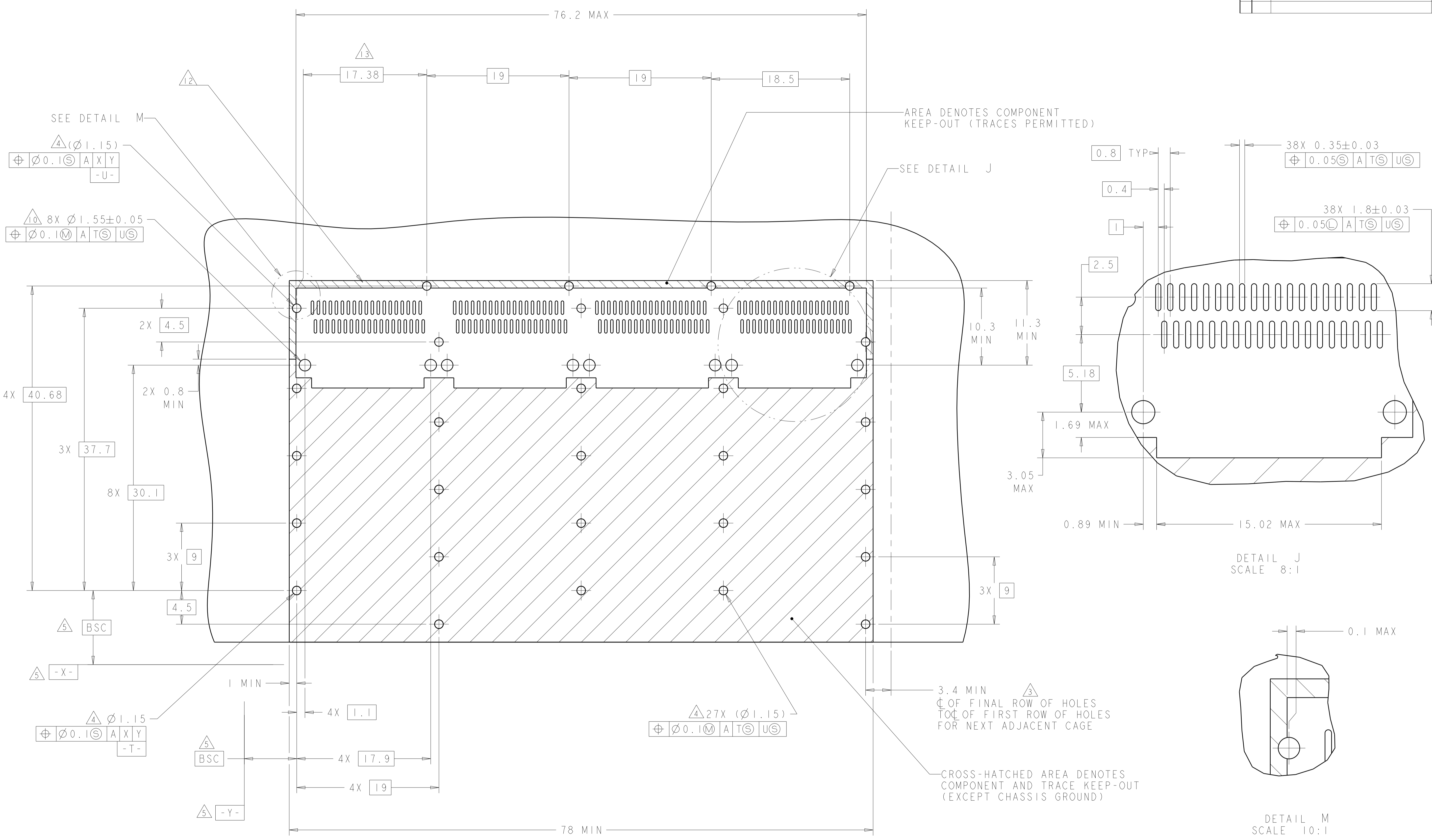
ONE SIDED CONFIGURATION  
 SCALE 5:2



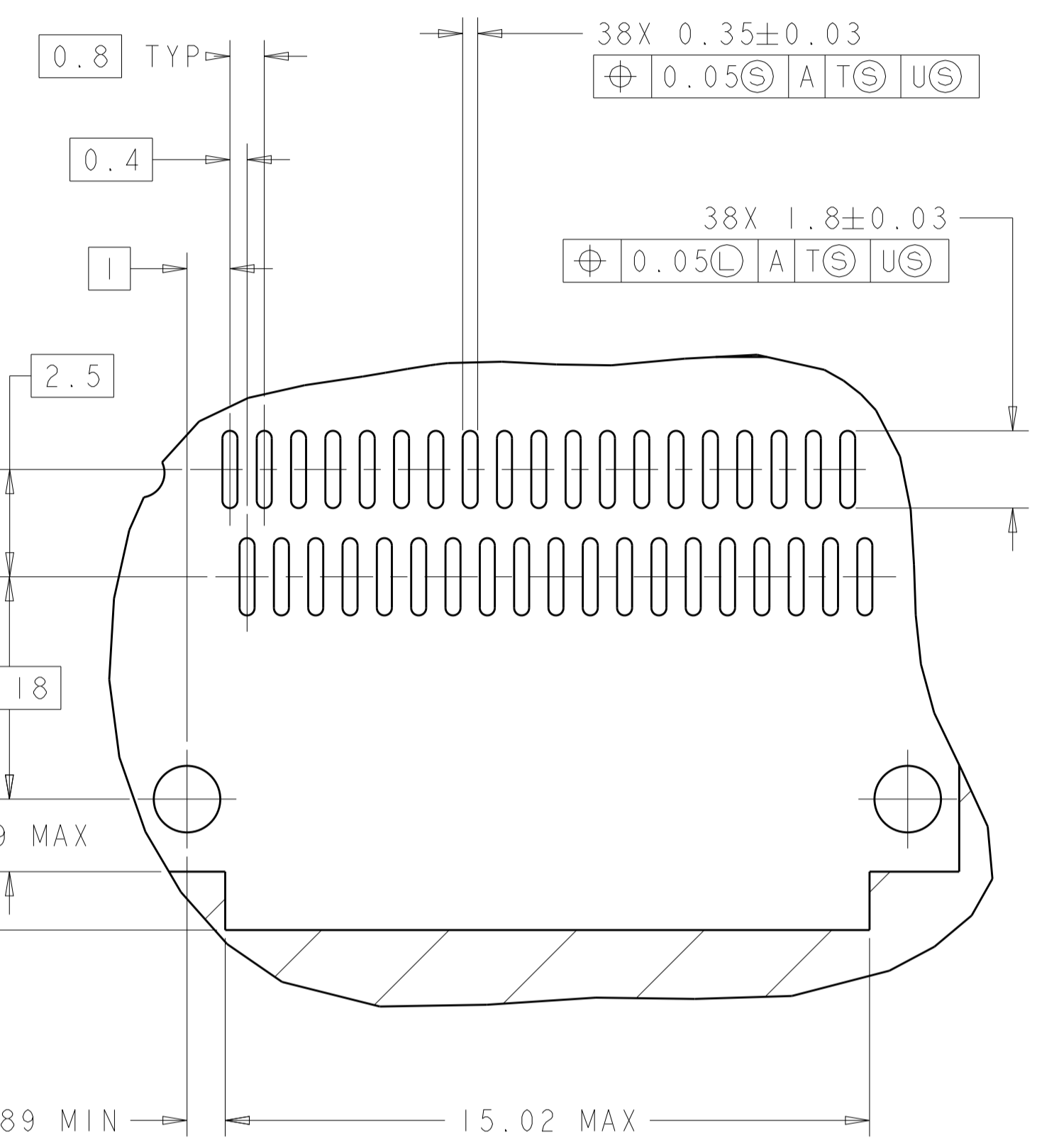
BELLY TO BELLY CONFIGURATION  
 SIMILAR TO ONE SIDED  
 EXCEPT WHERE NOTED  
 SCALE 5:2

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: RINSEN SUN 29FEB2012	TE Connectivity	
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 QSPF	
0 PLC ±	1 PLC ±0.1	PRODUCT SPEC	SIZE: CAGE CODE DRAWING NO	
2 PLC ±0.1	3 PLC ±0.013	108-2286	A100779C=2170290	
4 PLC ±0.0001	ANGLES ±	APPLICATION SPEC	RESTRICTED TO	
MATERIAL	FINISH	114-13218	SCALE 4:1 SHEET 3 OF 5 REV A	
CUSTOMER DRAWING		WEIGHT		

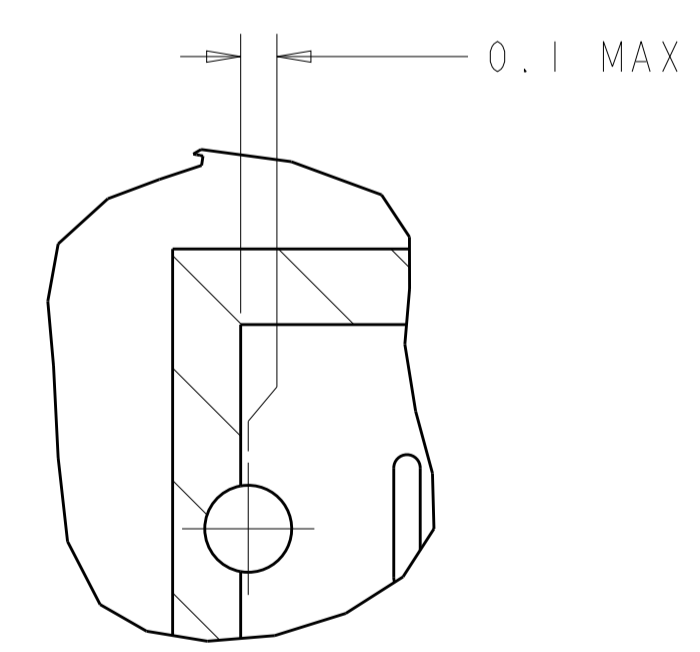
LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	DWN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



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



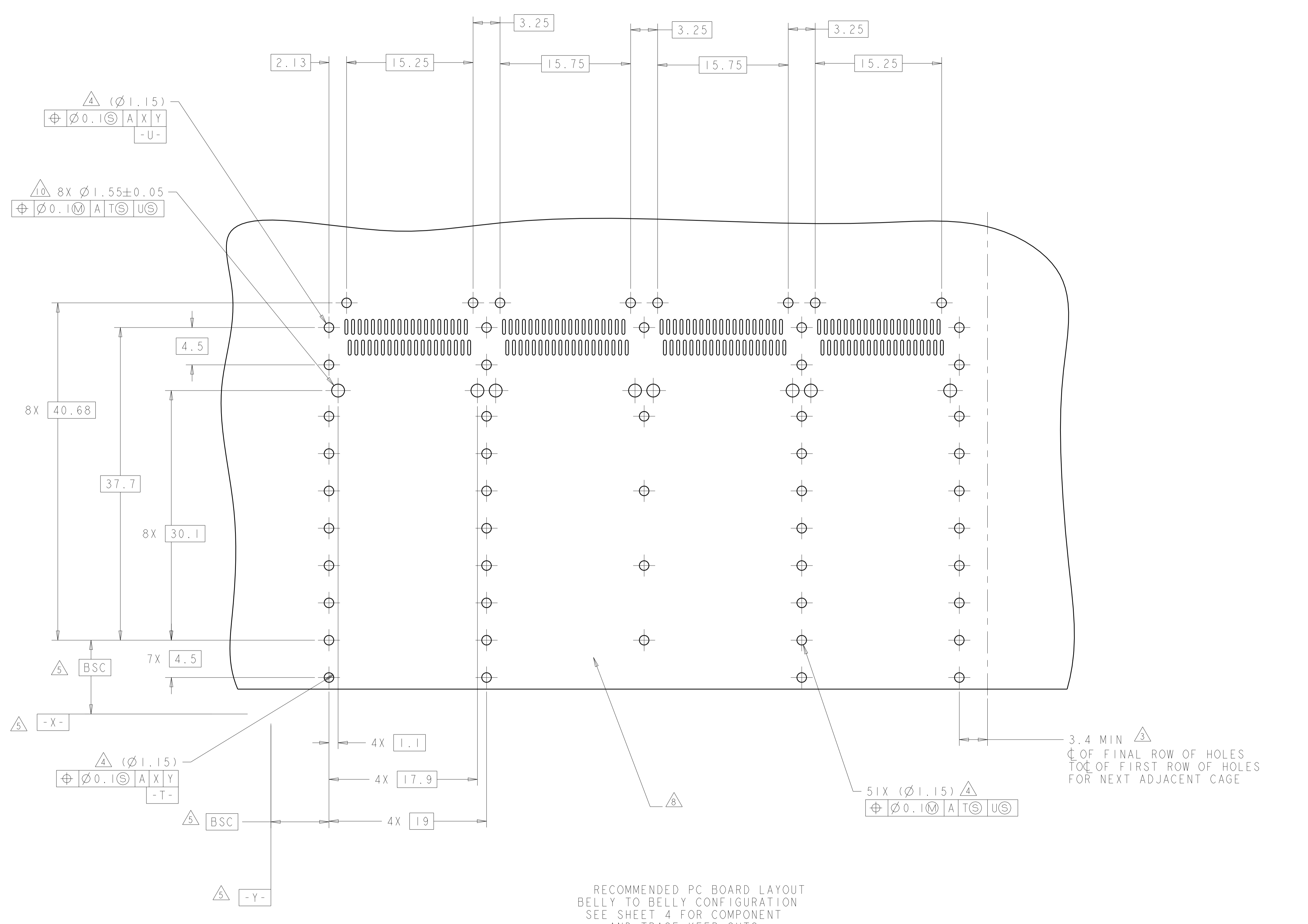
DETAIL J  
 SCALE 8:1



DETAIL M  
 SCALE 10:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: RINSEN_SUN 29FEB2012	TE Connectivity
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 QSPF
0 PLC ±0.1 1 PLC ±0.1 2 PLC ±0.1 3 PLC ±0.013 4 PLC ±0.0001 ANGLES ±0.0001		PRODUCT SPEC: 108-2286 APPLICATION SPEC: 114-13218 WEIGHT: -	
MATERIAL: -		SIZE: A100779 CAGE CODE: C=2170290 CUSTOMER DRAWING	RESTRICTED TO: - SCALE: 4:1 SHEET 4 OF 5 REV A

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  $\Delta$   
 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: 0 PLC ± 1 PLC ±0.1 2 PLC ±0.1 3 PLC ±0.013 4 PLC ±0.0001 ANGLES ±		APVD ALEX CAI 29FEB2012	NAME 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP
MATERIAL		PRODUCT SPEC 108-2286	SIZE A100779C=2170290
FINISH		APPLICATION SPEC 114-13218	RESTRICTED TO
CUSTOMER DRAWING		WEIGHT	SCALE 4:1 SHEET 5 OF 5 REV A