



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

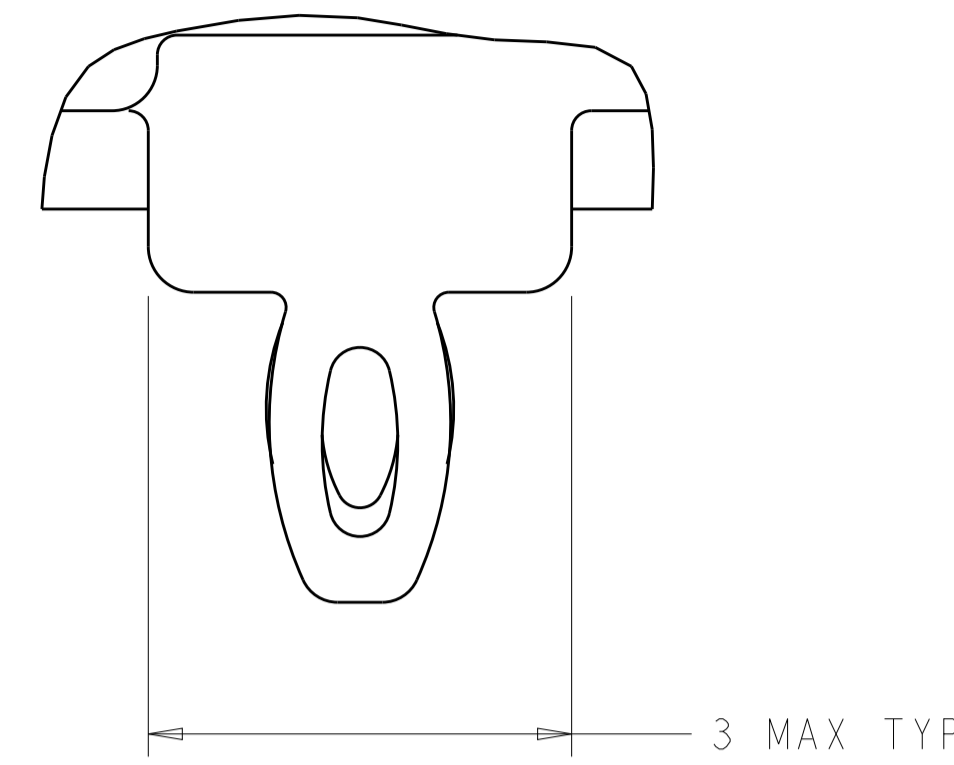
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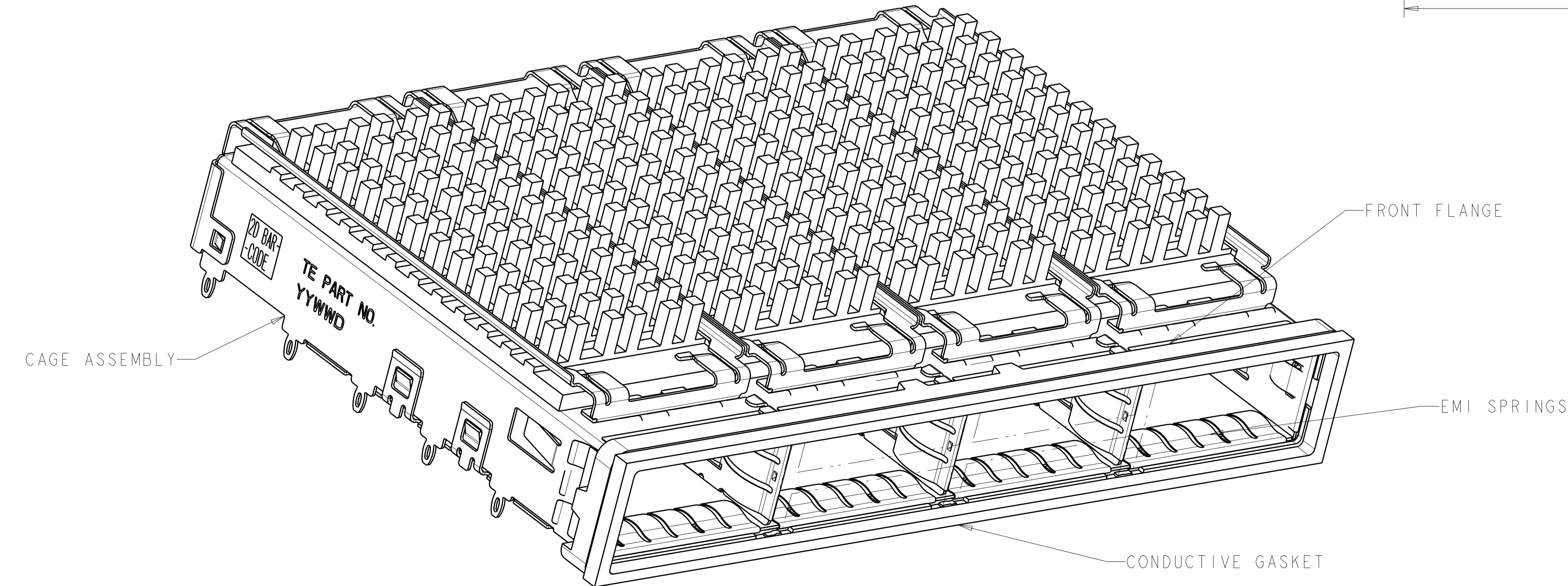
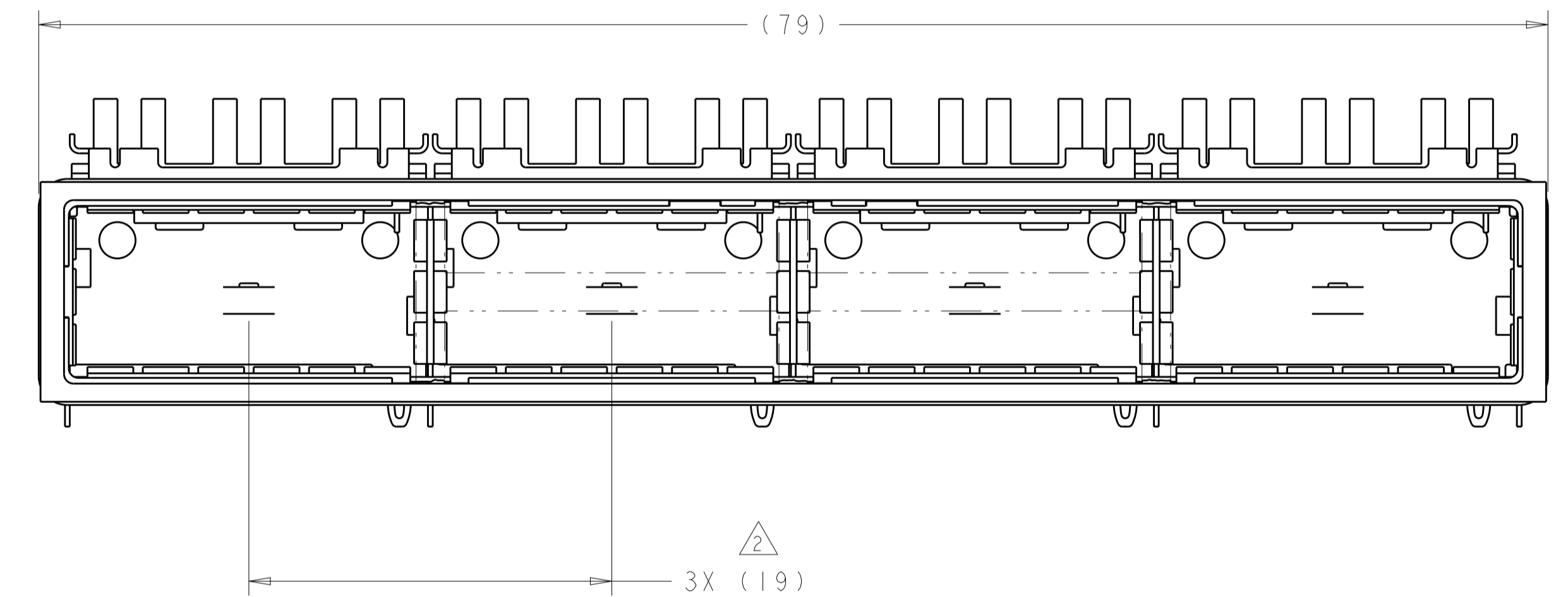
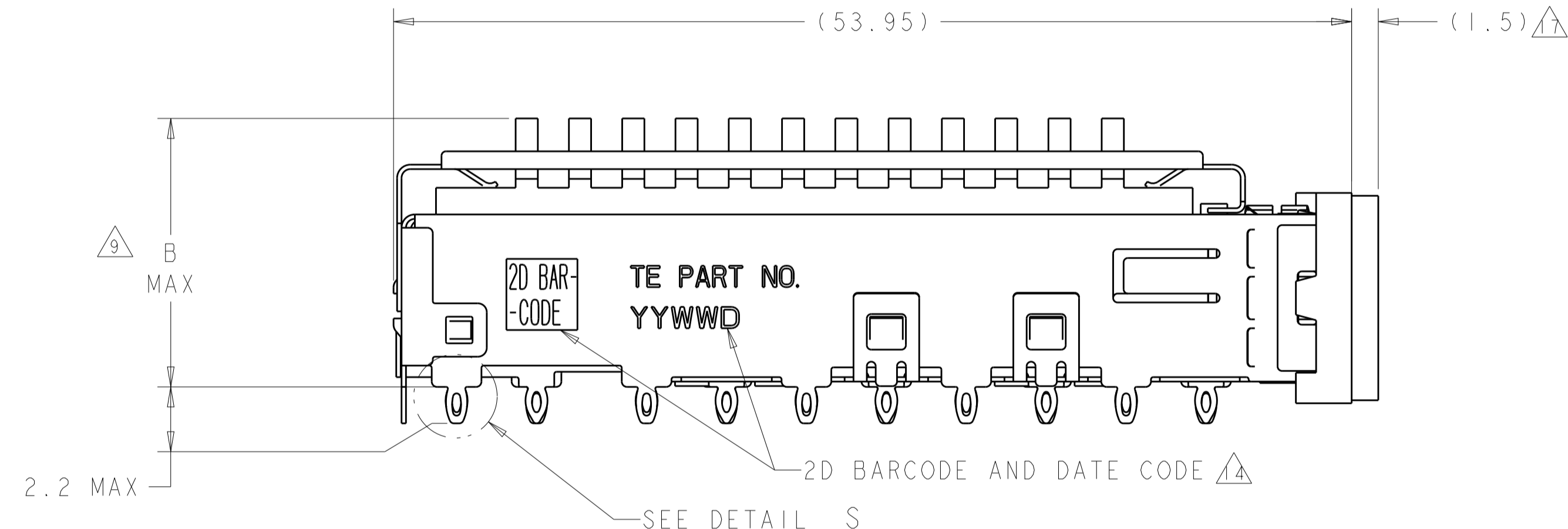
LOC	DIST	REVISIONS					
		P	LTN	DESCRIPTION	DATE	DWN	APVD
GP	00	A		RELEASE PER ECO-16-002978	3MAR2016	RG	SH



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 (YYWW) MARKED ON REAR OF CAGE.

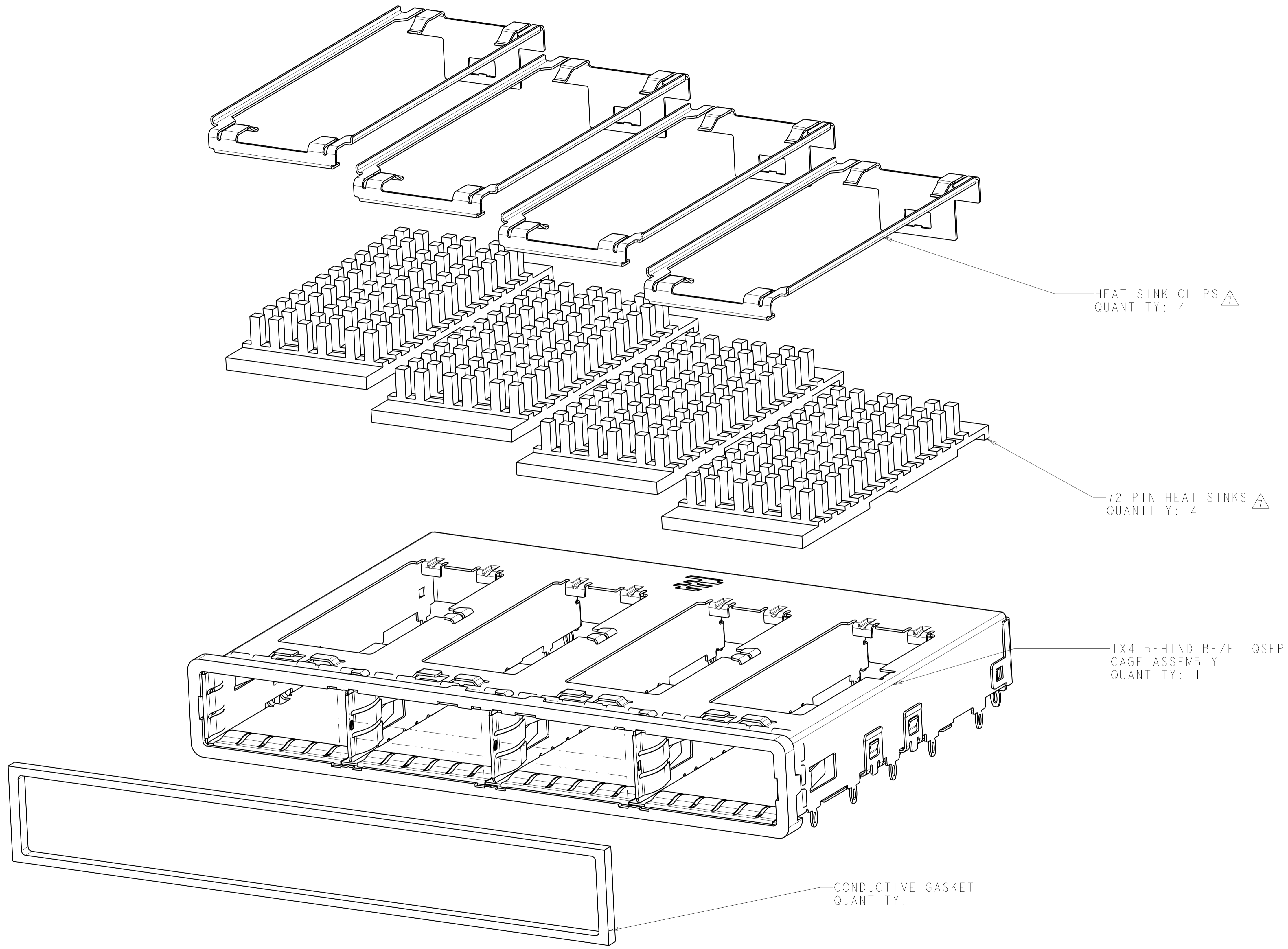
- 15 REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.
- 16 EMI SPRING FINISH: 2µm MINIMUM TIN  
 FRONT FLANGE FINISH: 3µm MINIMUM TIN OVER 1.27µm MINIMUM NICKEL  
 OVER 5.08µm MINIMUM COPPER.  
 HEAT SINK FINISH: NICKEL
- 17 RECOMMENDED GAP FOR GASKET SHOULD BE 0.6mm-1.1mm.



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

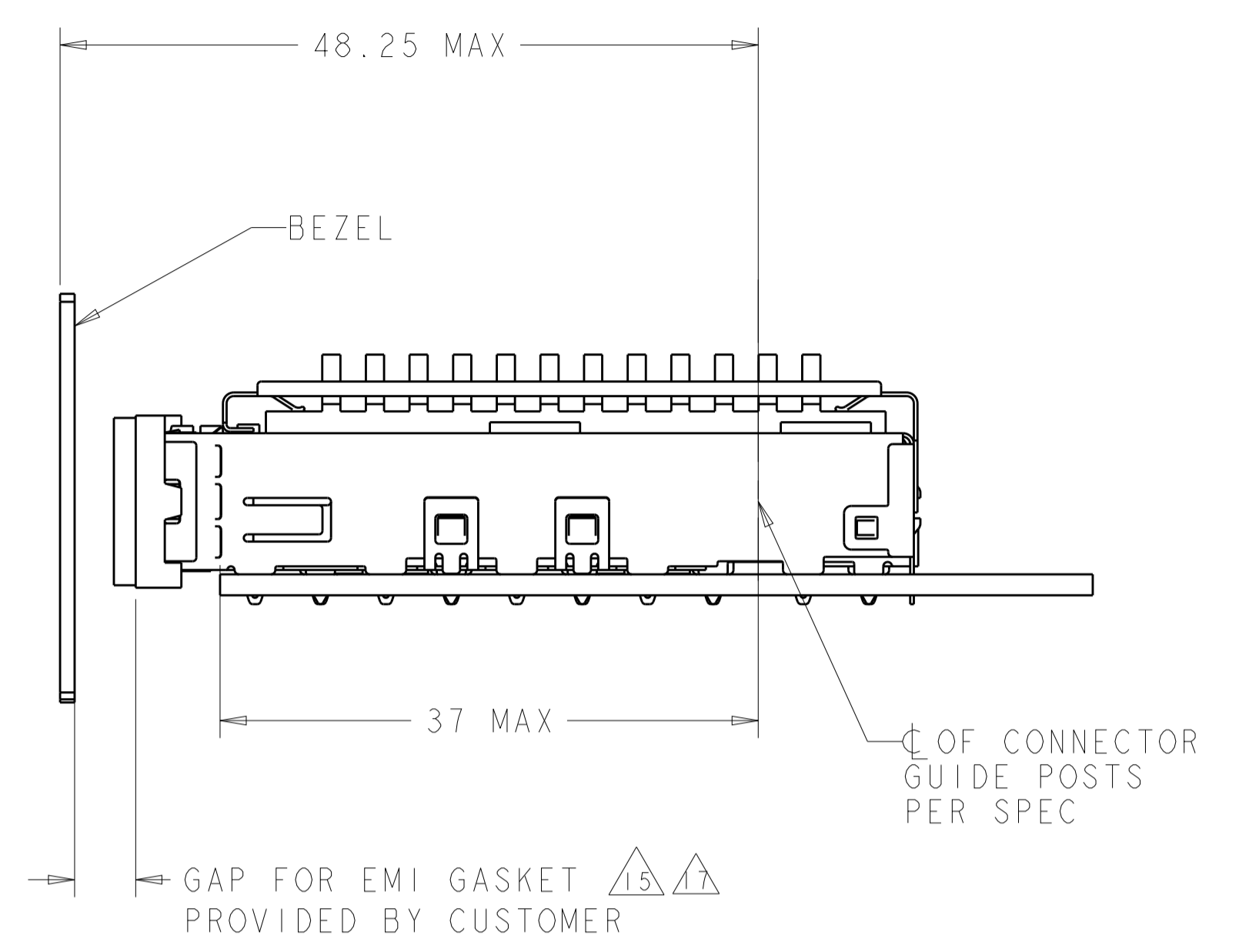
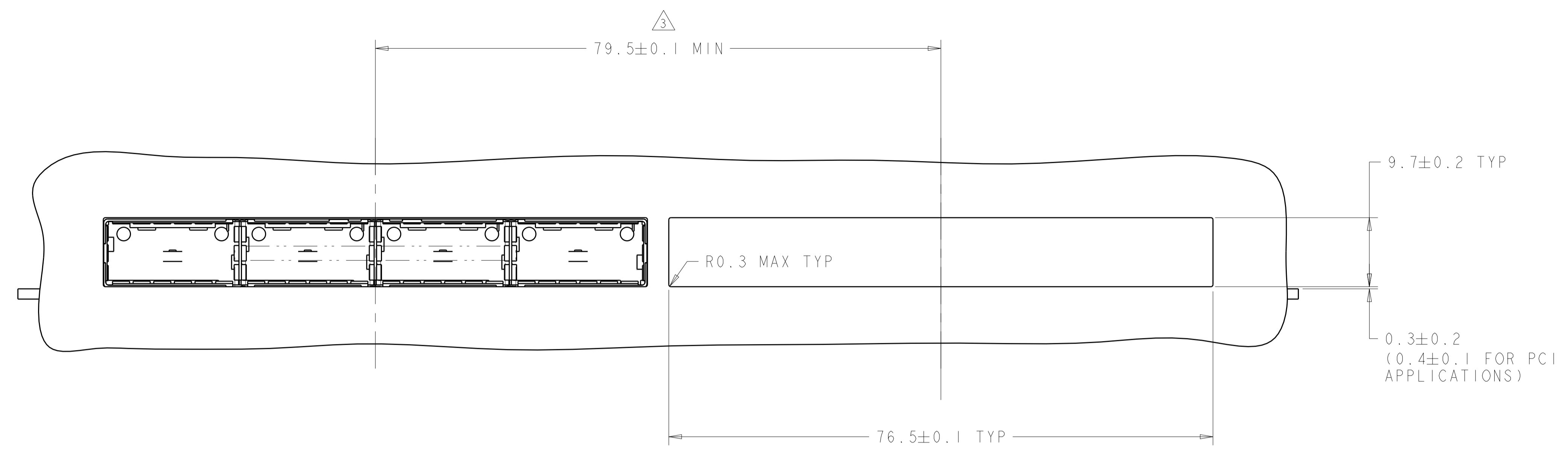
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: KINSEN SUN 29FEB2012	TE Connectivity	
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 29FEB2012	SIZE: CAGE CODE DRAWING NO. RESTRICTED TO	
0 PLC	±	PRODUCT SPEC	A100779C=2170290	
1 PLC	±0.1	108-2286	SCALE 4:1 SHEET 1 OF 5 REV A	
2 PLC	±0.13	APPLICATION SPEC		
3 PLC	±0.001	114-13218		
4 PLC	±0.001	WEIGHT		
ANGLES	±	CUSTOMER DRAWING		
MATERIAL	FINISH			

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

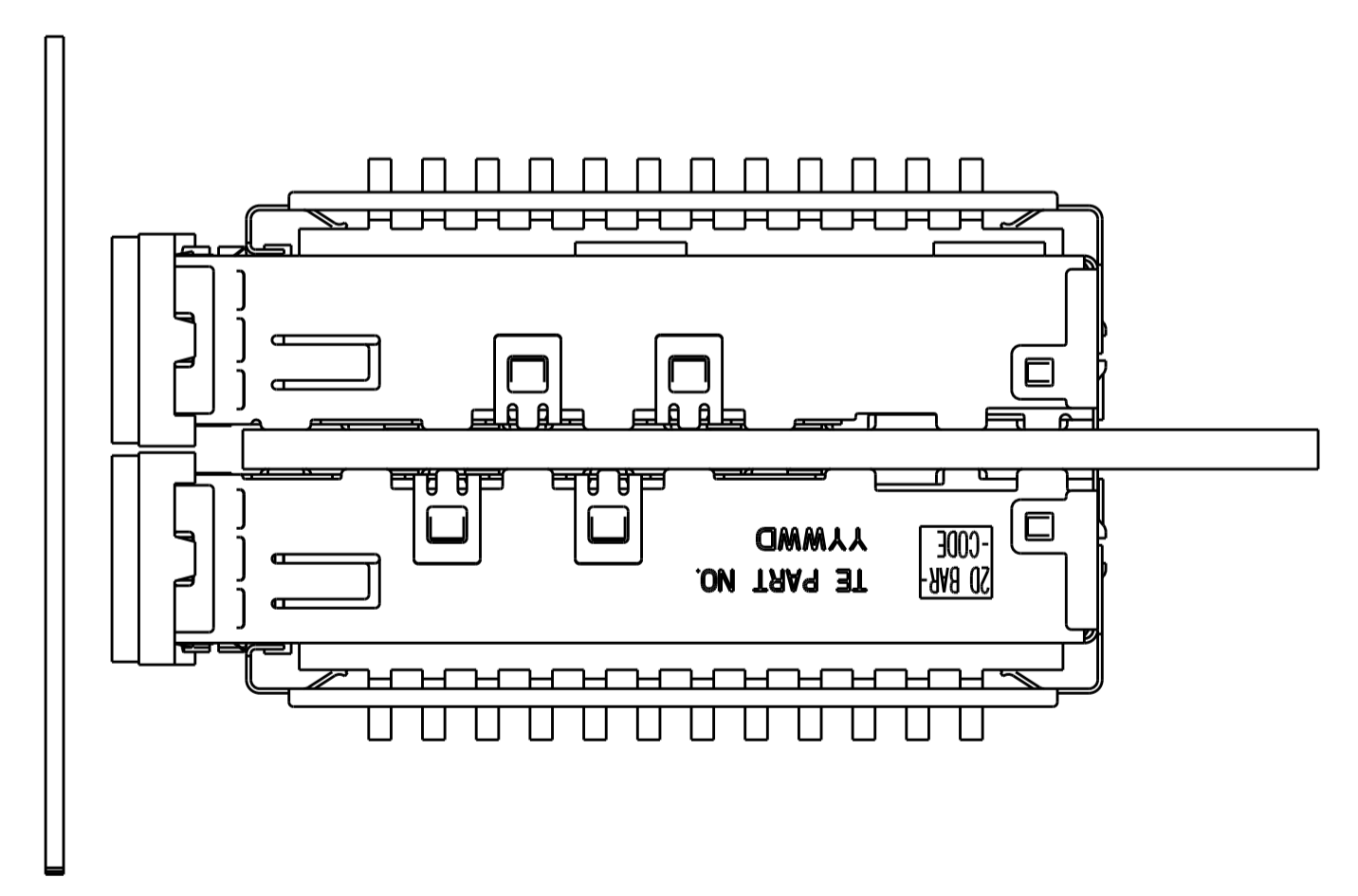
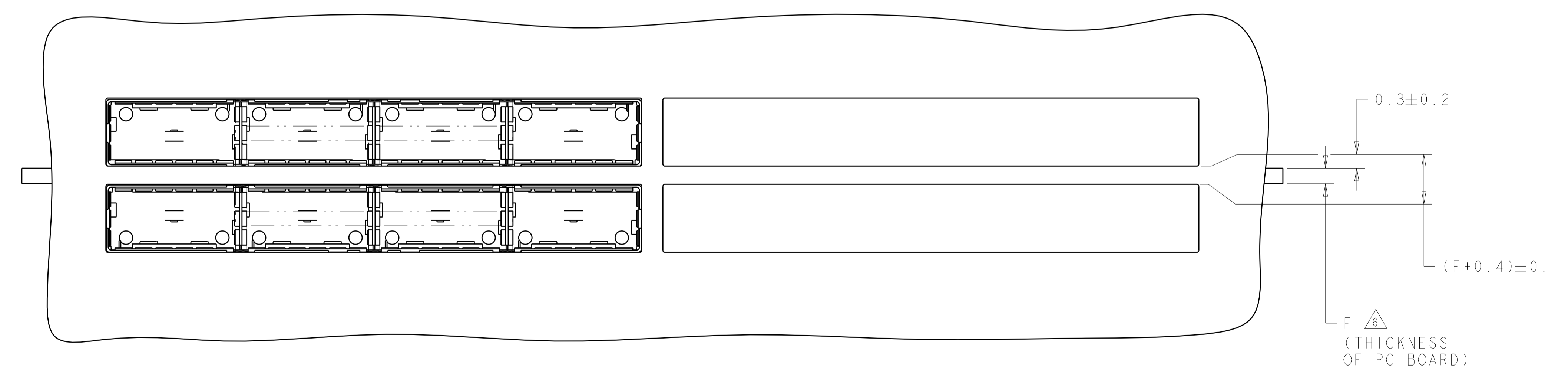


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: KINSEN SUN 29FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ FOAM GASKET AND HEAT SINK QSFP
0 PLC	±	PRODUCT SPEC	SIZE: CAGE CODE DRAWING NO. RESTRICTED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

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



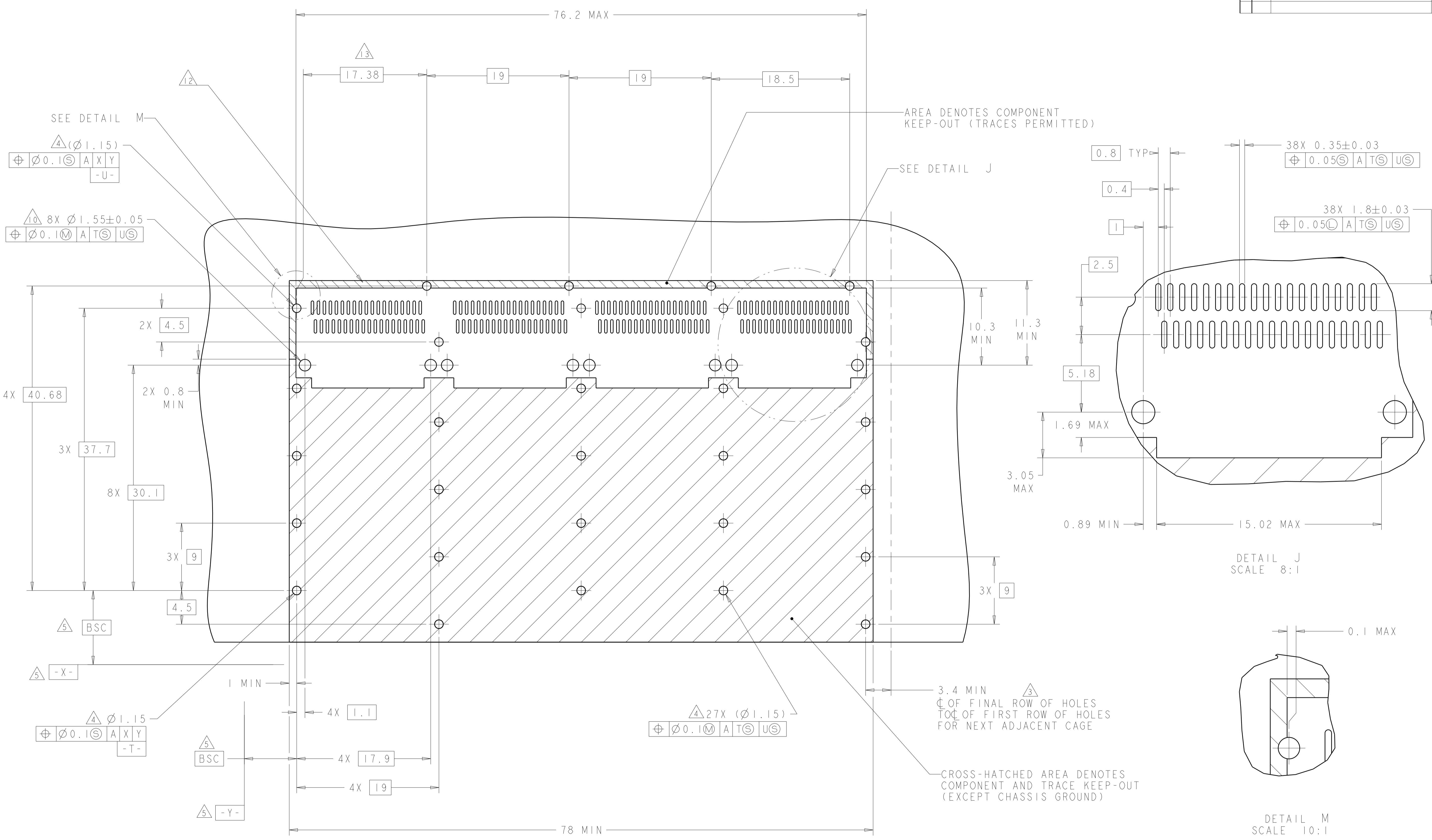
ONE SIDED CONFIGURATION  
 SCALE 5:2



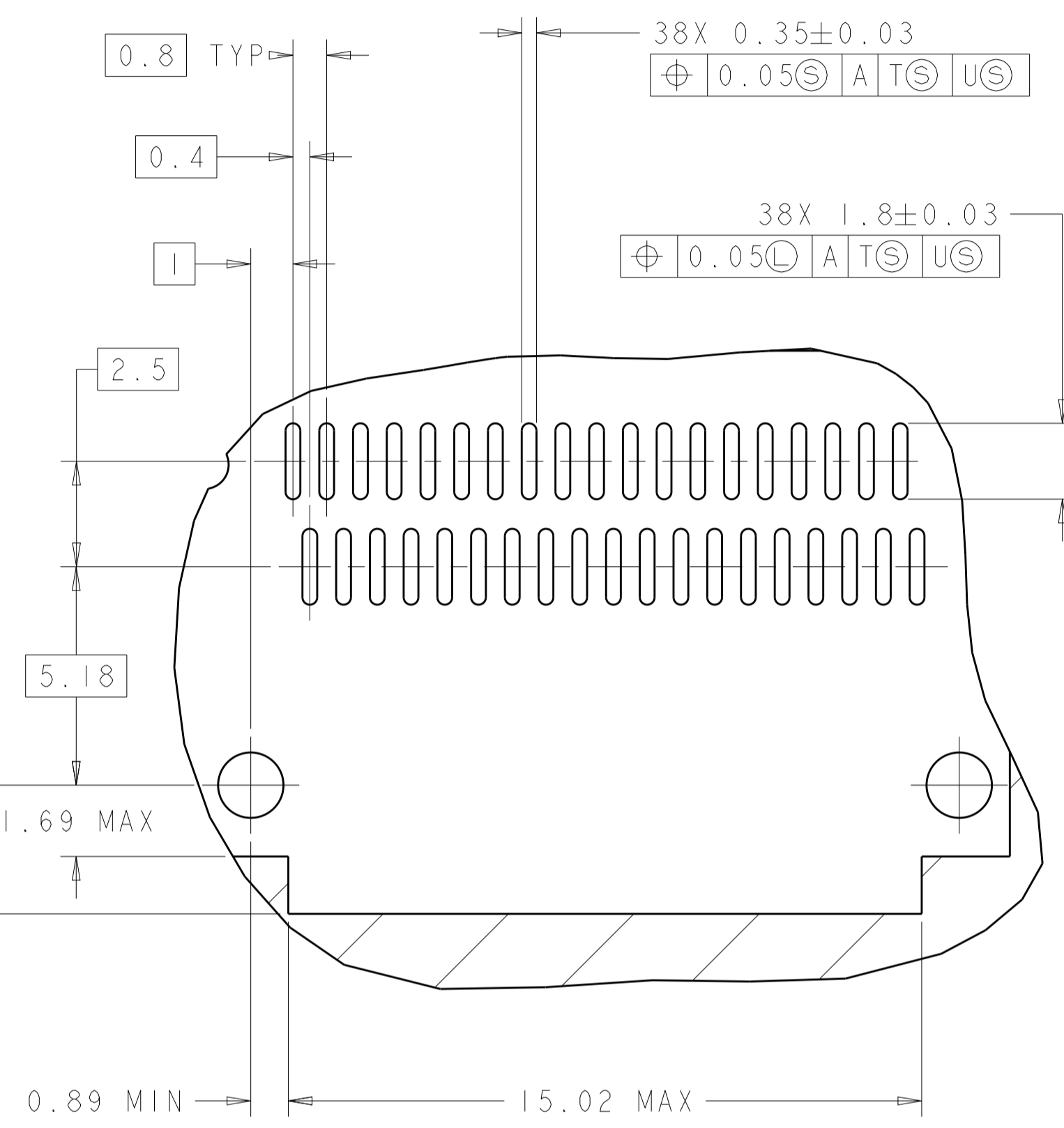
BELLY TO BELLY CONFIGURATION  
 SIMILAR TO ONE SIDED  
 EXCEPT WHERE NOTED  
 SCALE 5:2

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN: 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	RESTRICTED TO
4 PLC ±0.0001	ANGLES ±	APPLICATION SPEC	A100779C=2170290
MATERIAL	FINISH	114-13218	SCALE 4:1 SHEET 3 OF 5 REV A
CUSTOMER DRAWING		WEIGHT	

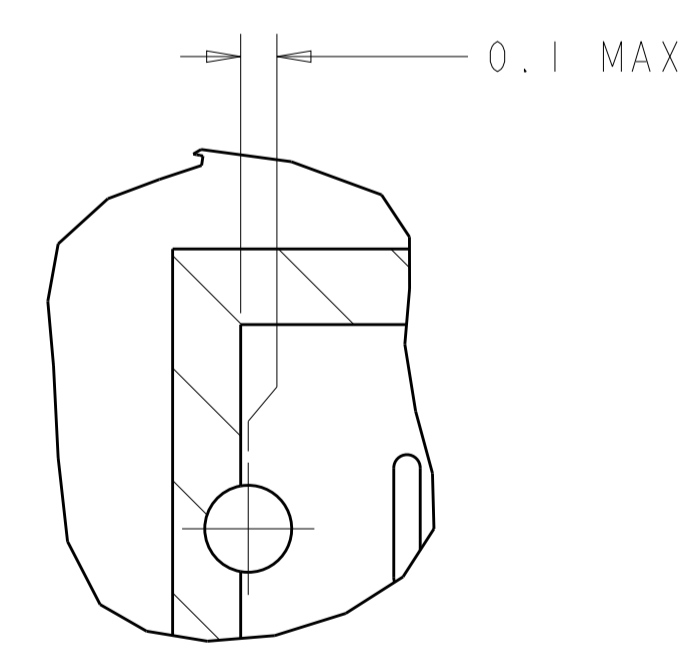
LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	DWN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



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



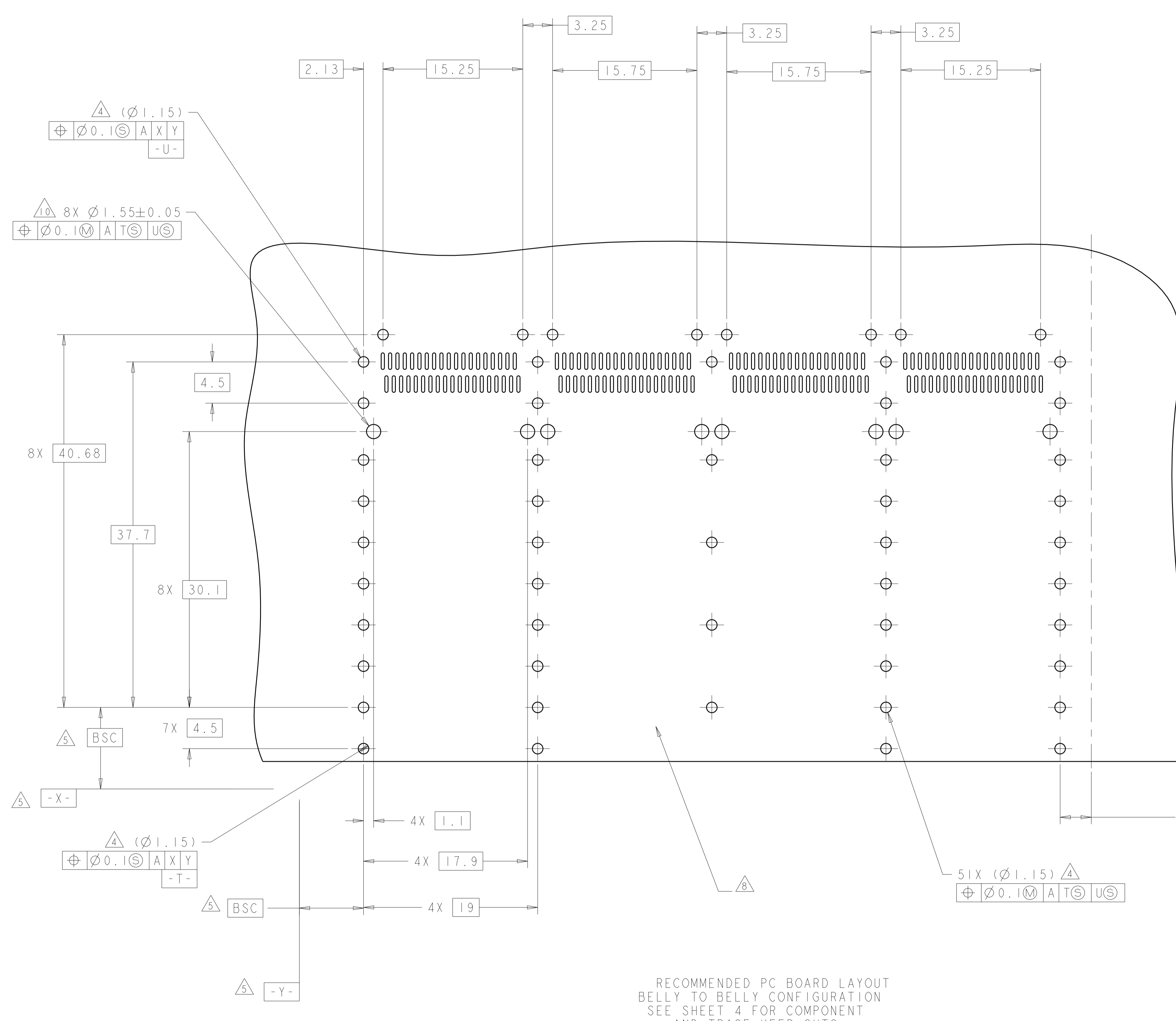
DETAIL J  
 SCALE 8:1



DETAIL M  
 SCALE 10:1

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