



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

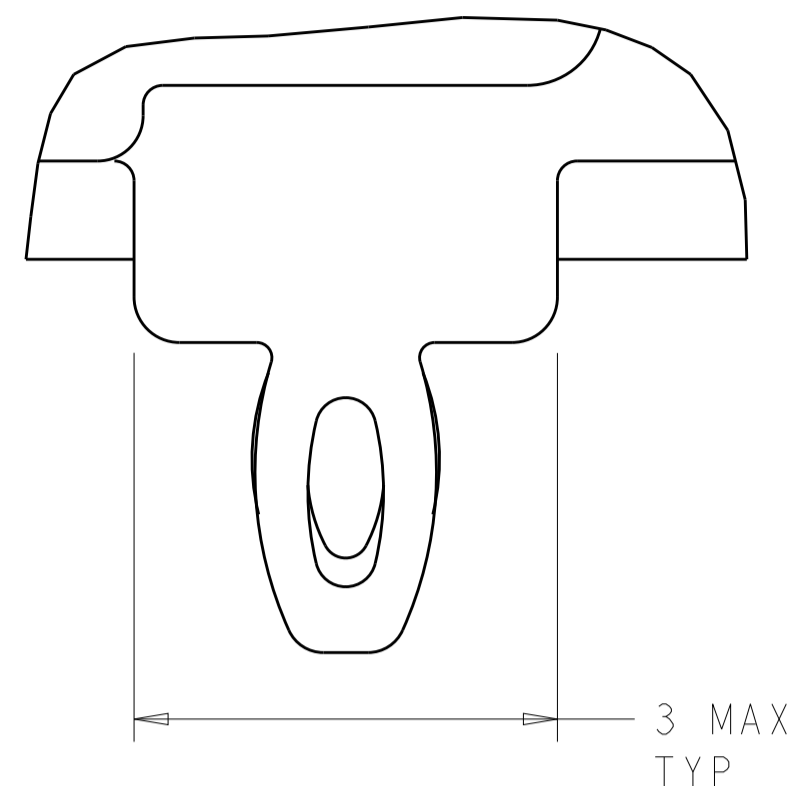
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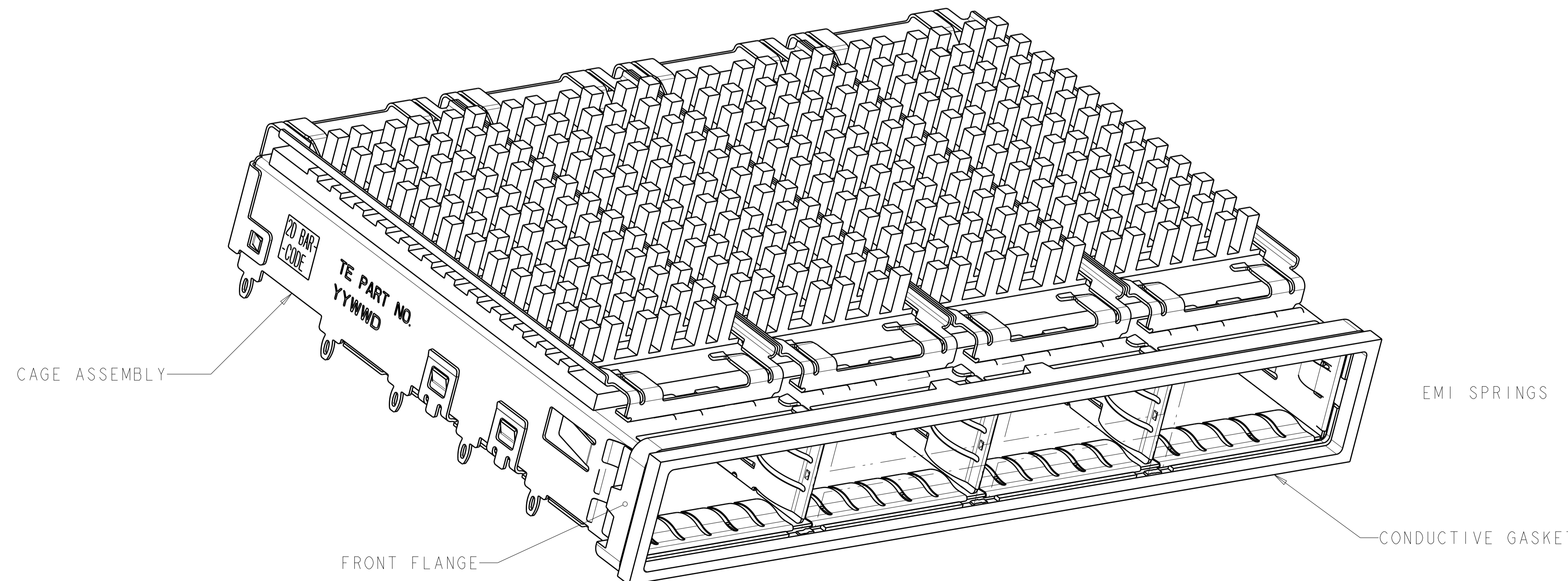
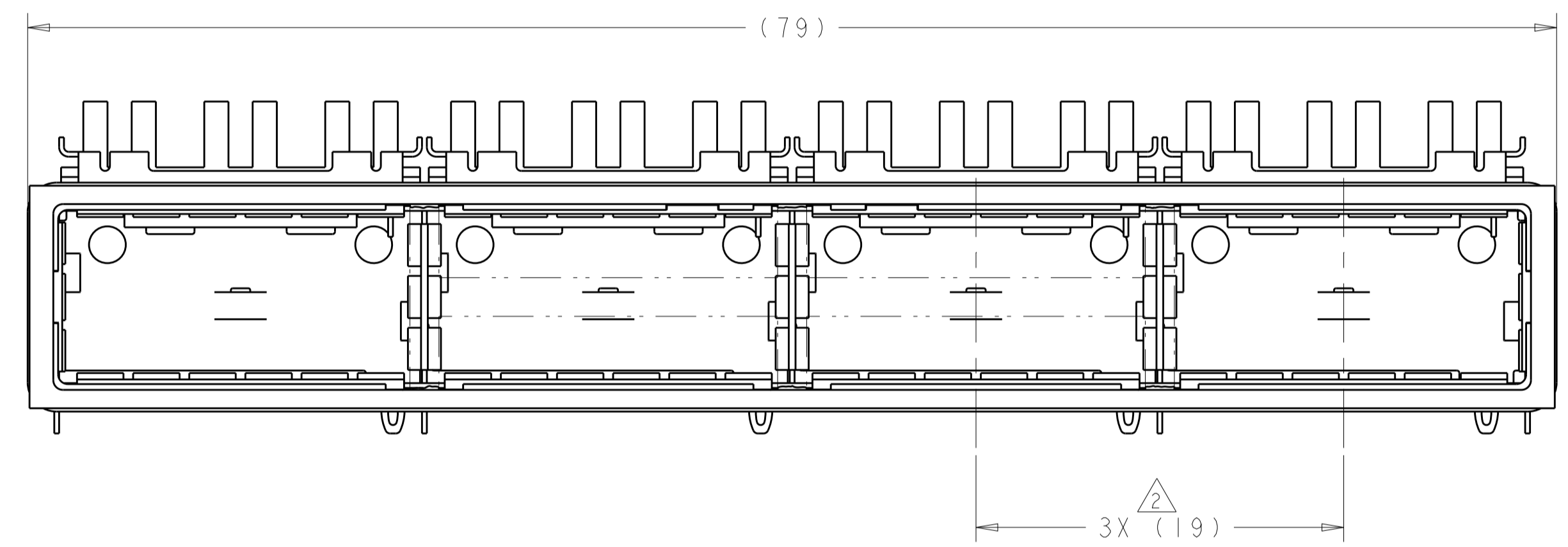
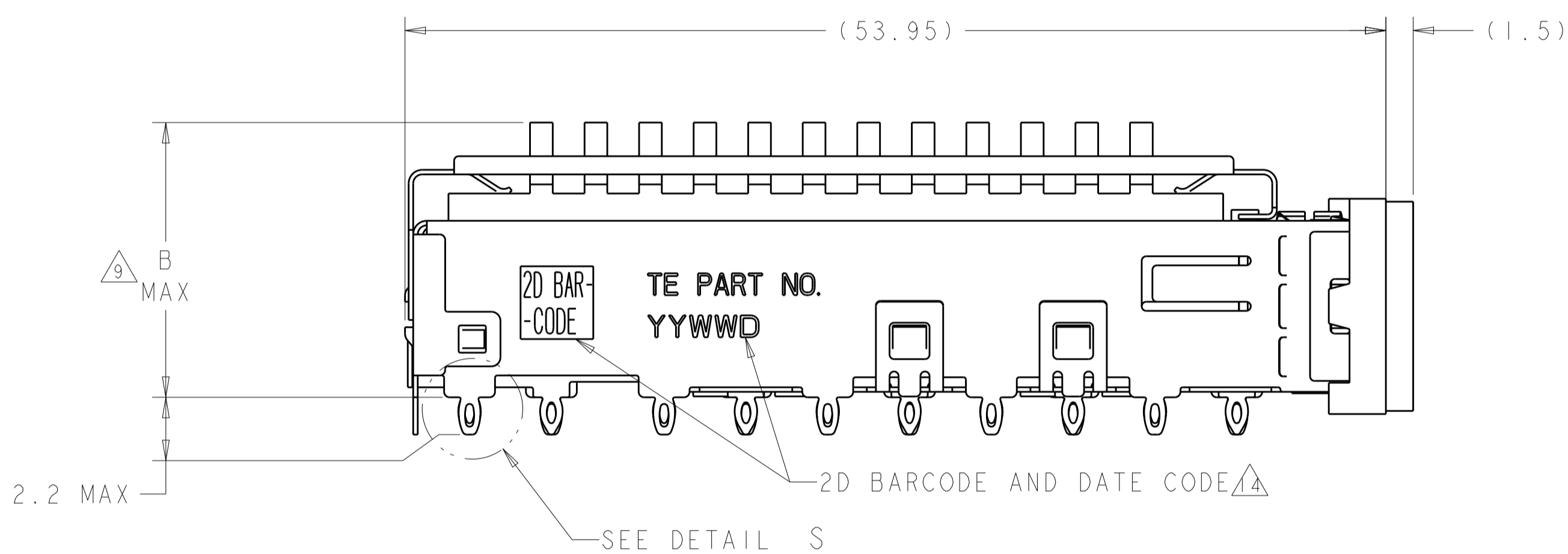
LOC	DIST	REVISIONS					
		P	LTN	DESCRIPTION	DATE	DMN	APVD
GP	00	I		PRELIMINARY	23FEB2012	KS	AC
		A		REVISED PER ECR-12-006970	17APR2012	KS	AC
		B		REVISED PER ECO-15-005721	4AUG2015	RG	SH



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  
 CONDUCTIVE GASKET MATERIAL: RUBBER FOAM
  - $\Delta 2$  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 -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	2174754-3
16.0	SAN	2174754-2
13.7	PCI	2174754-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DMN: KINSEN SUN 22FEB2012	CHK: DENNY ZHU 22FEB2012	APVD: AILEY CAI 22FEB2012
mm	0 PLC $\pm$ .1	PRODUCT SPEC	108-2286	APPLICATION SPEC
	1 PLC $\pm$ 0.1	114-13218		
	2 PLC $\pm$ 0.13			
	3 PLC $\pm$ 0.001			
	4 PLC $\pm$ 0.001			
	ANGLES $\pm$ .1			
MATERIAL	FINISH	WEIGHT		
$\Delta 1$	$\Delta 16$			

CUSTOMER DRAWING

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

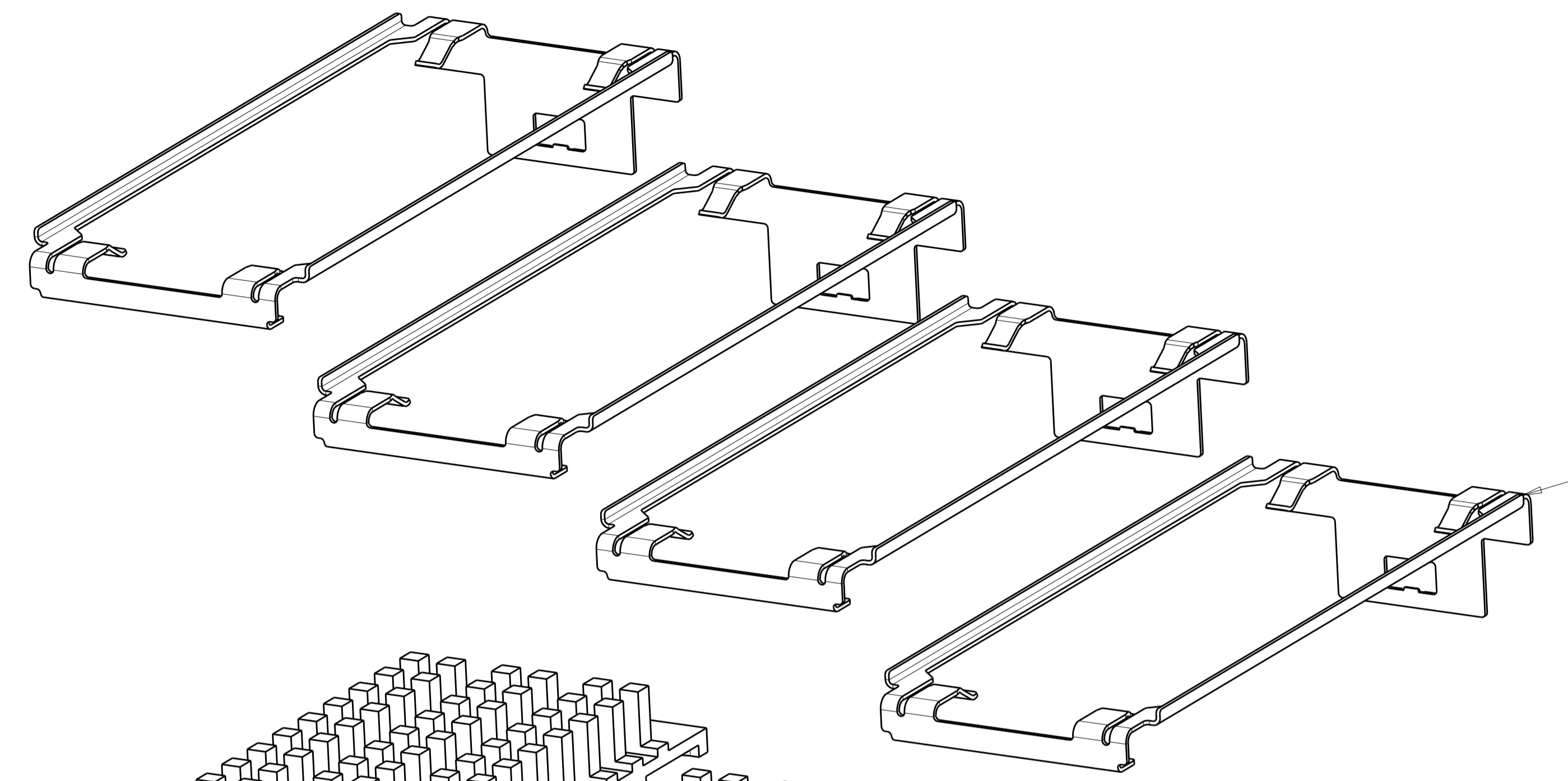
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RESTRICTED TO: -

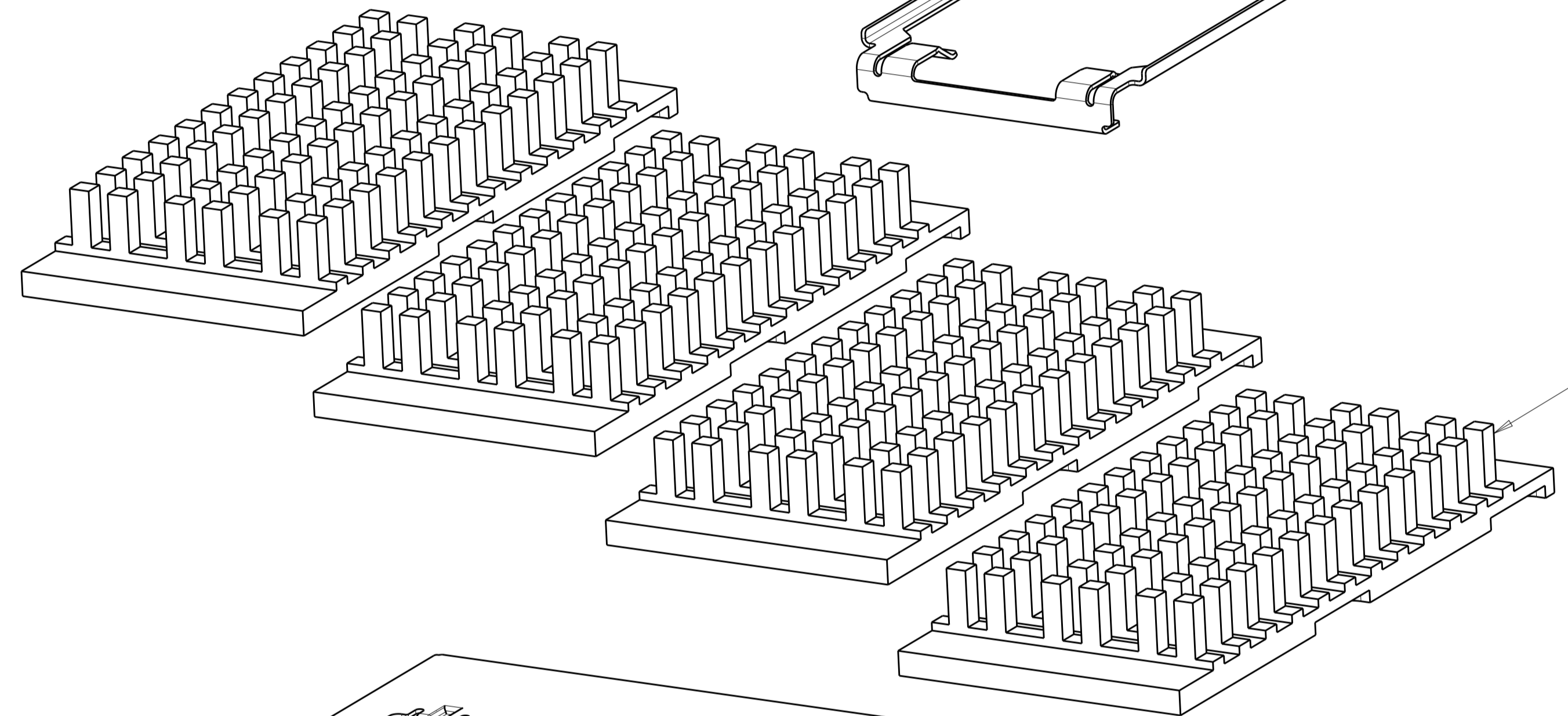
SCALE: 4:1 SHEET 1 OF 5 REV B



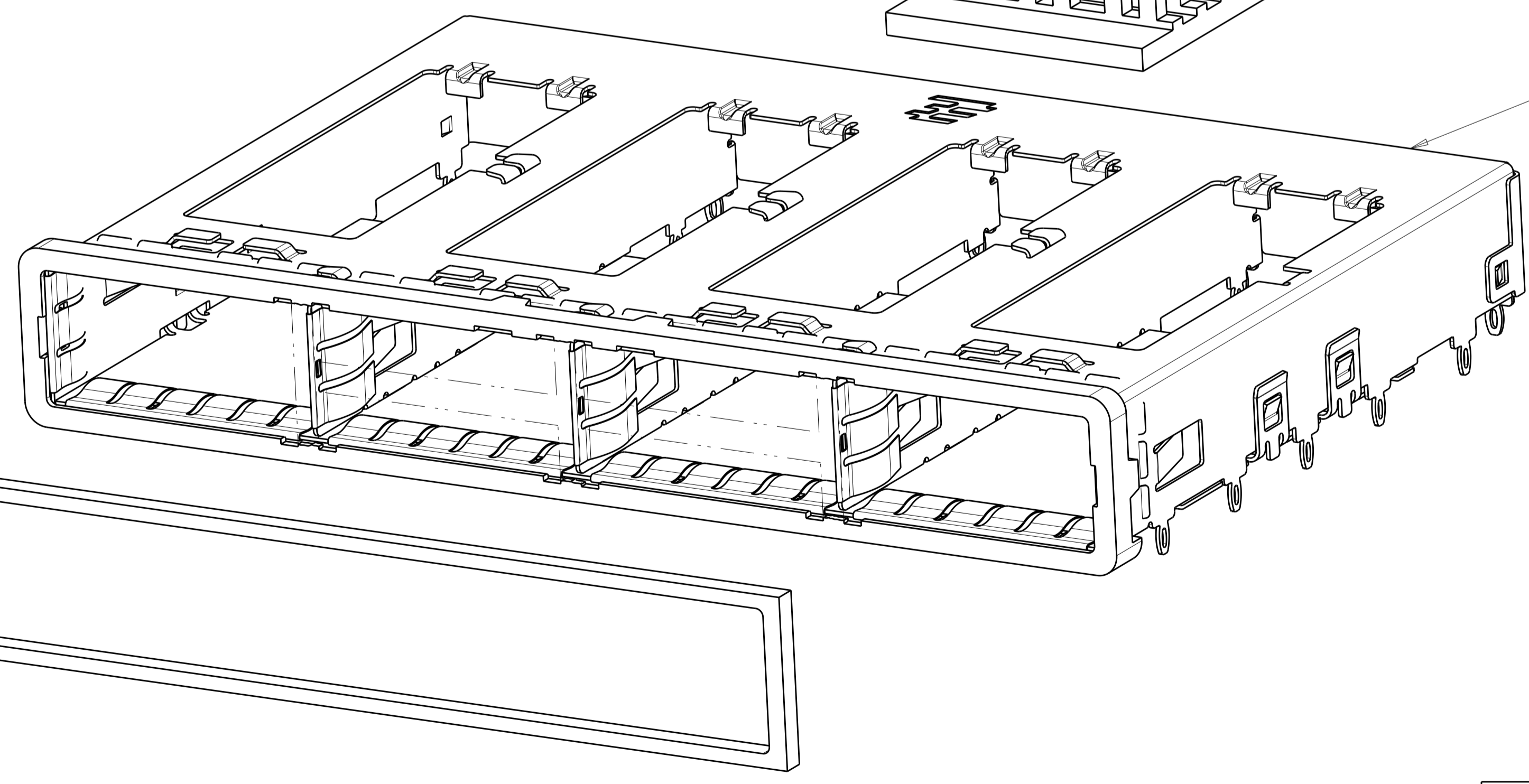
LOC		DIST		REVISIONS			
GP	00	P	LTN	DESCRIPTION	DATE	DMN	APVD
		-		SEE SHEET 1			



HEAT SINK CLIPS  
 QUANTITY: 4

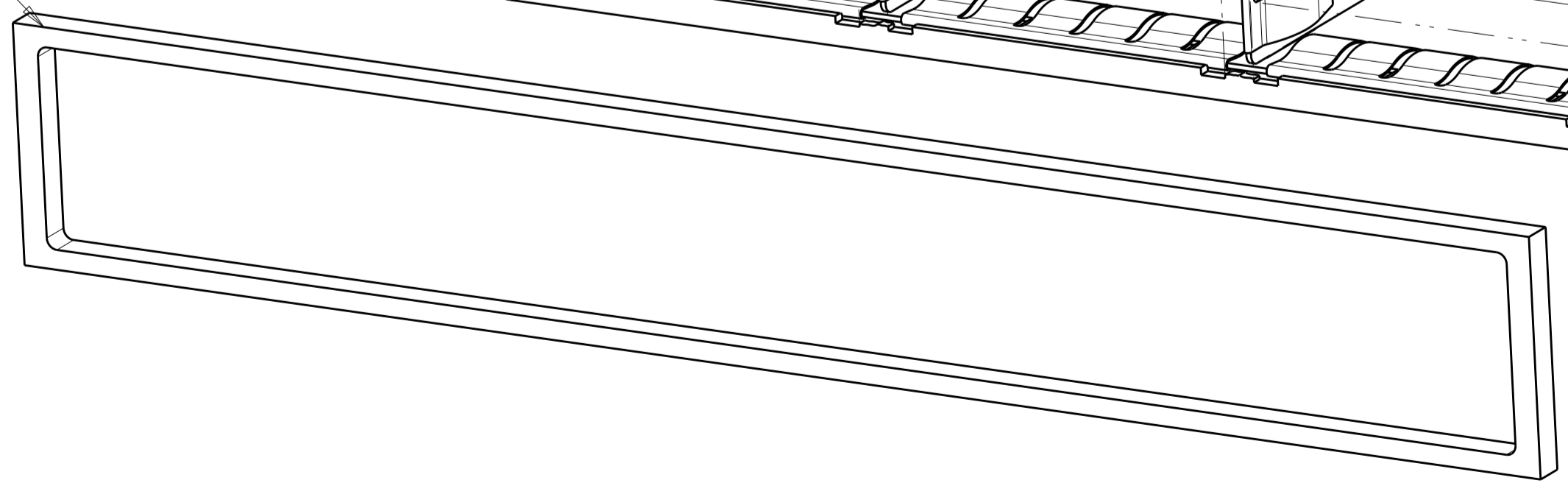


72 PIN HEAT SINKS  
 QUANTITY: 4



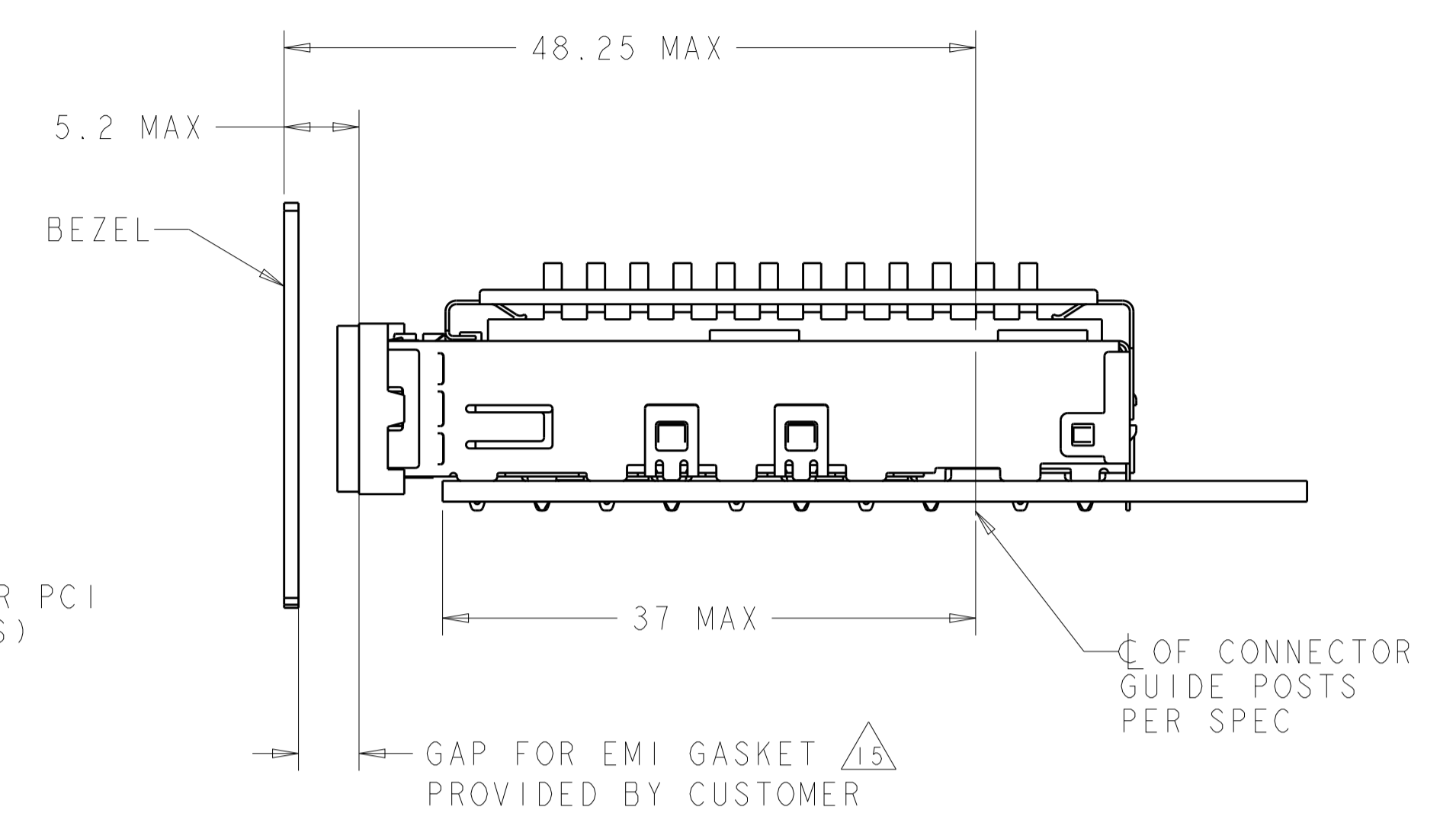
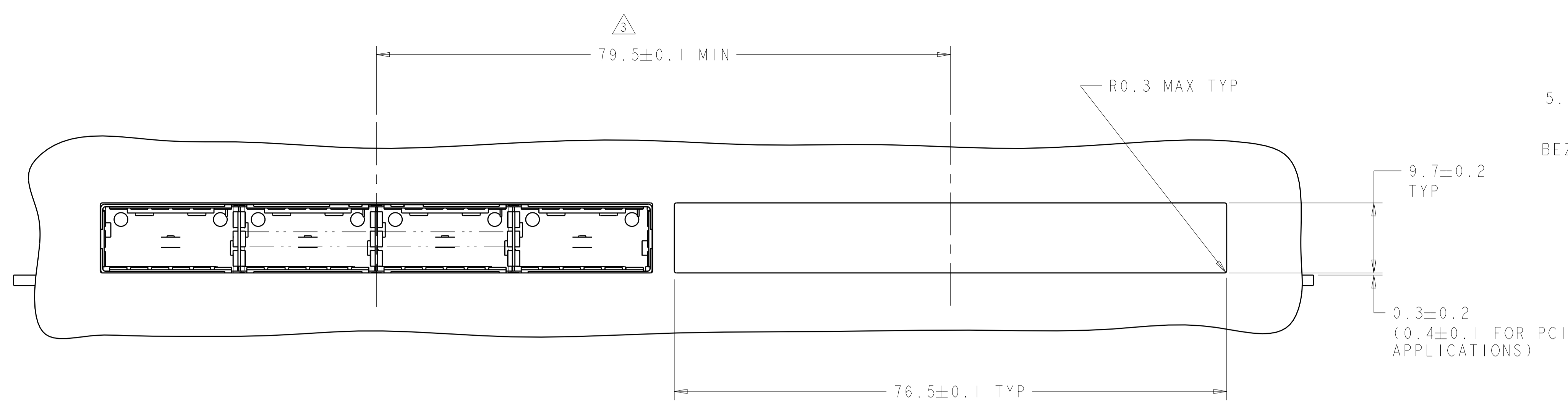
1X4 BEHIND BEZEL QSFP  
 CAGE ASSEMBLY  
 QUANTITY: 1

CONDUCTIVE GASKET  
 QUANTITY: 1

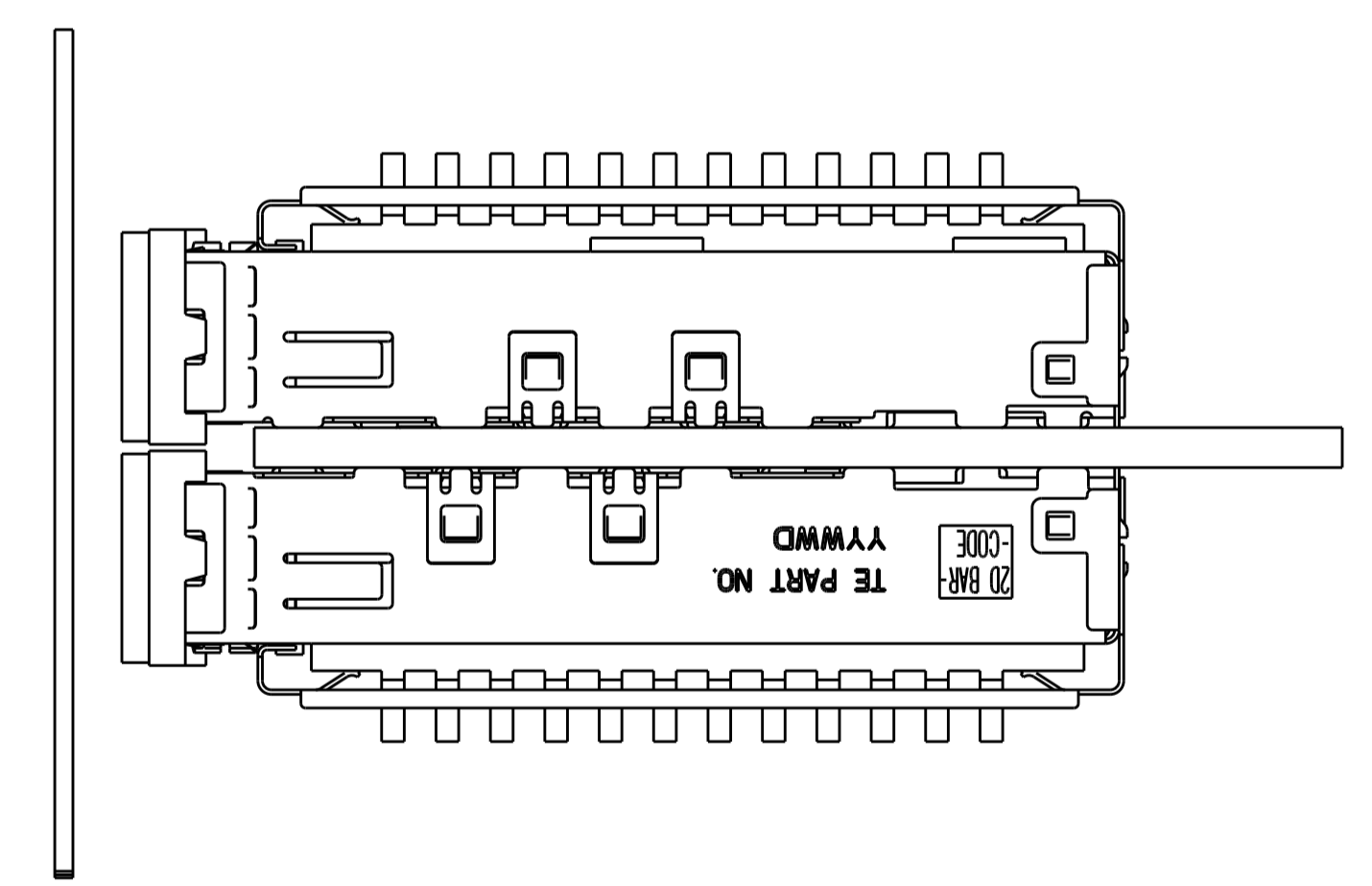
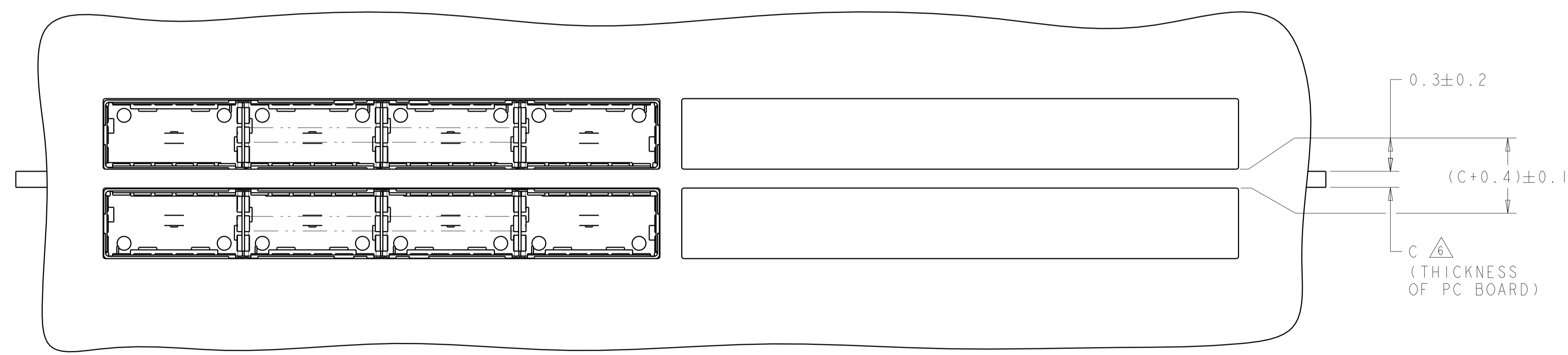


THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN KINSEN SUN	22FEB2012		TE Connectivity
DIMENSIONS:		CHK DENNY ZHU	22FEB2012		
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD ALEX CAI	22FEB2012	NAME 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP	
0 PLC	±	PRODUCT SPEC	108-2286	SIZE   CAGE CODE   DRAWING NO	
1 PLC	±0.1	APPLICATION SPEC	114-13218	RESTRICTED TO	
2 PLC	±0.1	WEIGHT		A100779C=2174754	
3 PLC	±0.013	MATERIAL		SCALE 4:1 SHEET 2 OF 5 REV B	
4 PLC	±0.0001	FINISH		CUSTOMER DRAWING	
ANGLES	±				

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



ONE SIDED CONFIGURATION  
 SCALE 5:2



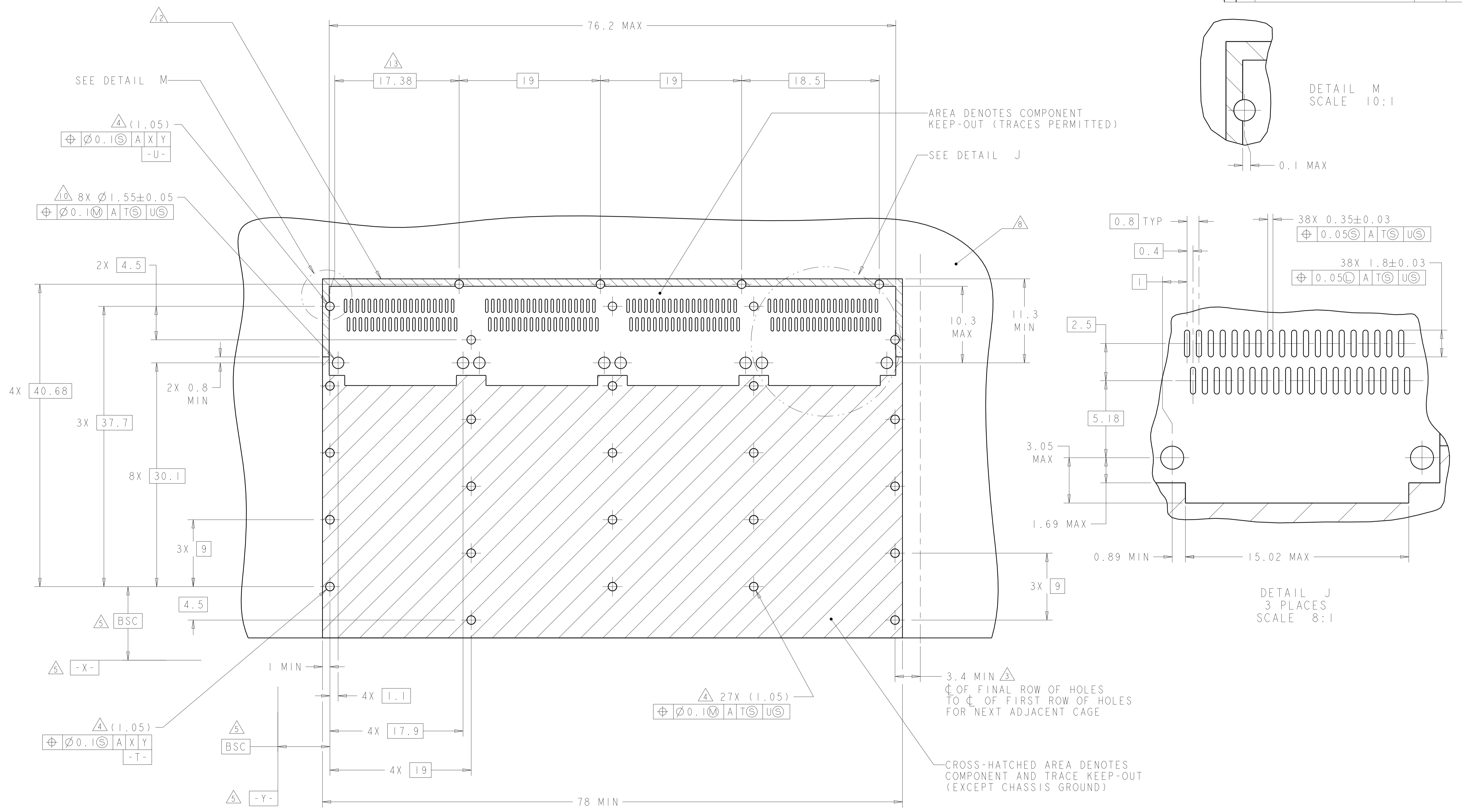
BELLY TO BELLY CONFIGURATION SIMILAR  
 TO ONE SIDED EXCEPT WHERE NOTED  
 SCALE 5:2

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: KINSEN SUN 22FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 22FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 22FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP
0 PLC ± .1	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 ± .1	APPLICATION SPEC	A100779C=2174754
MATERIAL: -	FINISH: -	114-13218	SCALE: 4:1 SHEET 3 OF 5 REV B
CUSTOMER DRAWING		WEIGHT: -	

LOC	DIST	REV	DATE	BY	APPV
GP	00				

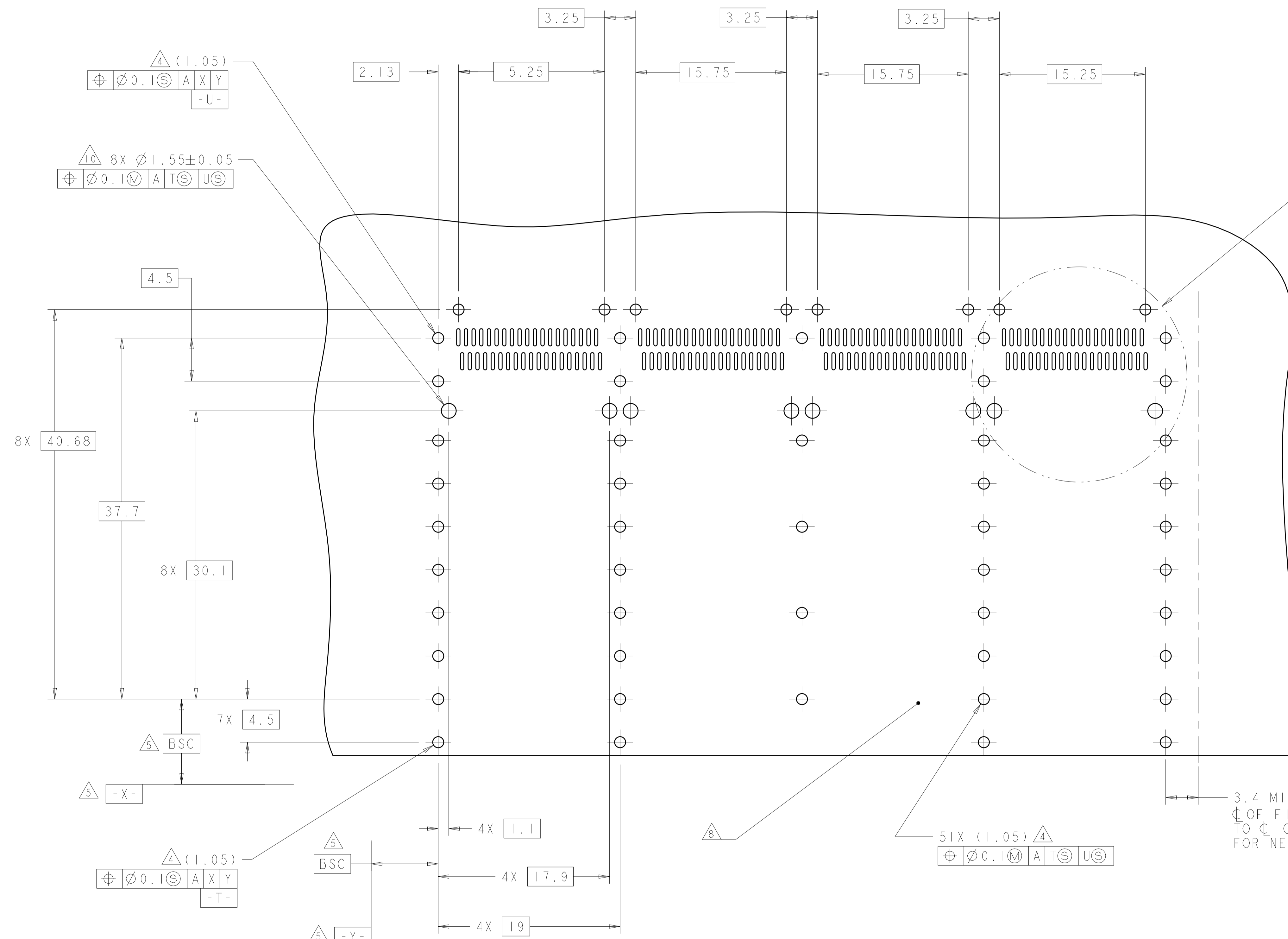
REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	SEE SHEET 1		



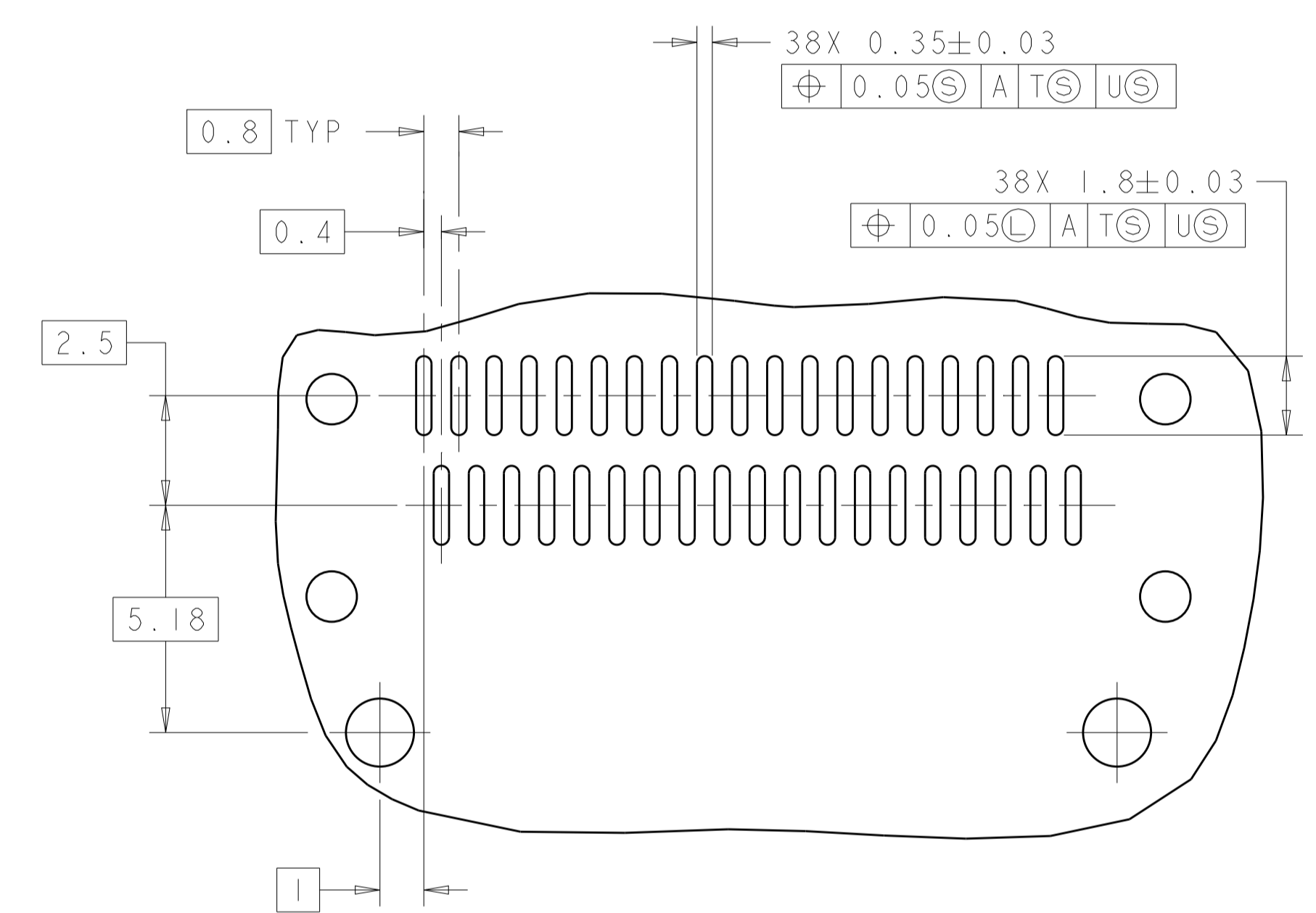
RECOMMENDED PC BOARD LAYOUT  
 SINGLE SIDE MOUNT CONFIGURATION  
 SCALE 4:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: RINSEN SUN 22FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 22FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 22FEB2012	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, 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=2174754
3 PLC	±0.013	114-13218	SCALE 4:1 SHEET 4 OF 5 REV B
4 PLC	±0.0001	WEIGHT	
ANGLES	±	CUSTOMER DRAWING	
MATERIAL	FINISH		

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



SEE DETAIL K



DETAIL K  
SCALE 8:1

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

3.4 MIN  $\Delta$   
 $\phi$  OF FINAL ROW OF HOLES  
 TO  $\phi$  OF FIRST ROW OF HOLES  
 FOR NEXT ADJACENT CAGE

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN KINSEN SUN 22FEB2012	TE Connectivity
DIMENSIONS:		CHK DENNY ZHU 22FEB2012	
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD ALEXY CAI 22FEB2012	NAME 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP
	0 PLC ± 2 PLC ±0.1 3 PLC ±0.13 4 PLC ±0.001 ANGLES ±	PRODUCT SPEC 108-2286	SIZE 114-13218
MATERIAL	FINISH	APPLICATION SPEC 114-13218	RESTRICTED TO
		WEIGHT	A100779C=2174754
		CUSTOMER DRAWING	SCALE 4:1 SHEET 5 OF 5 REV B