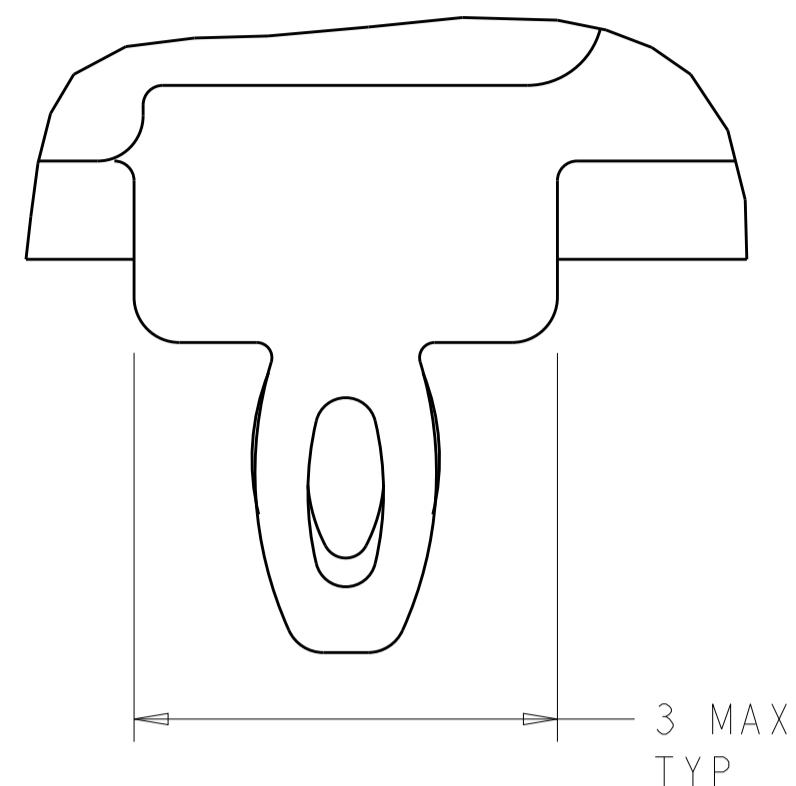


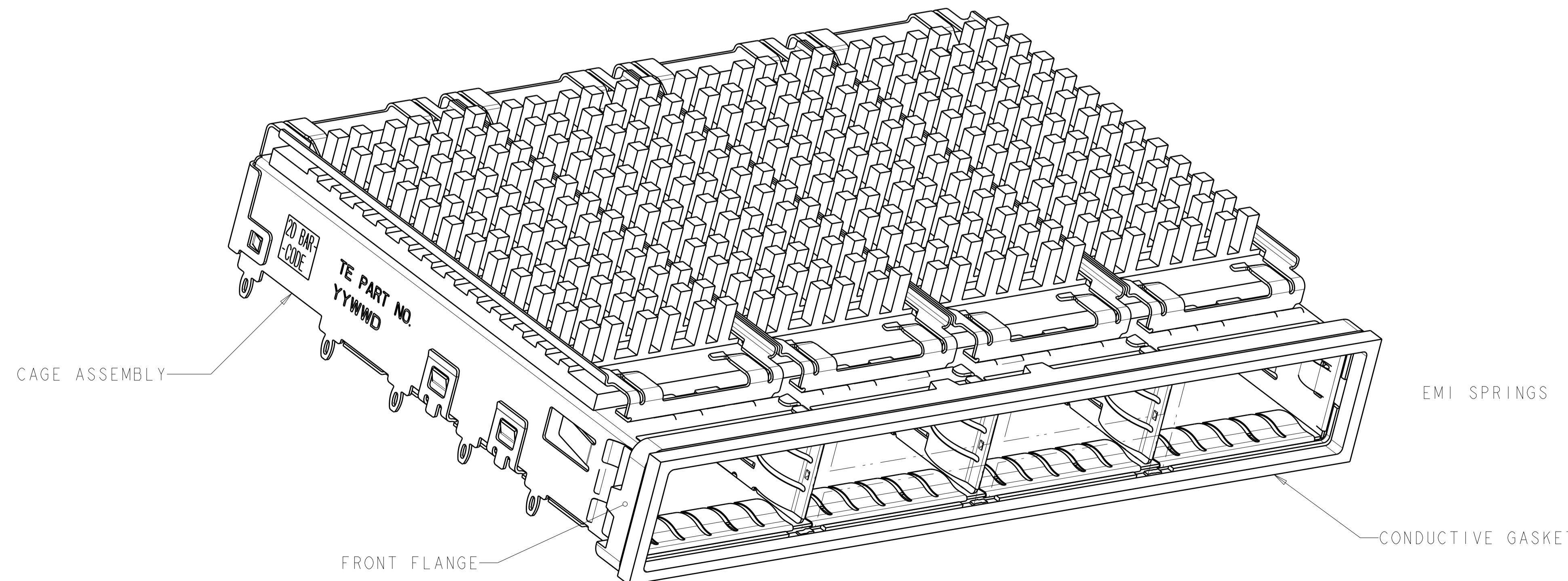
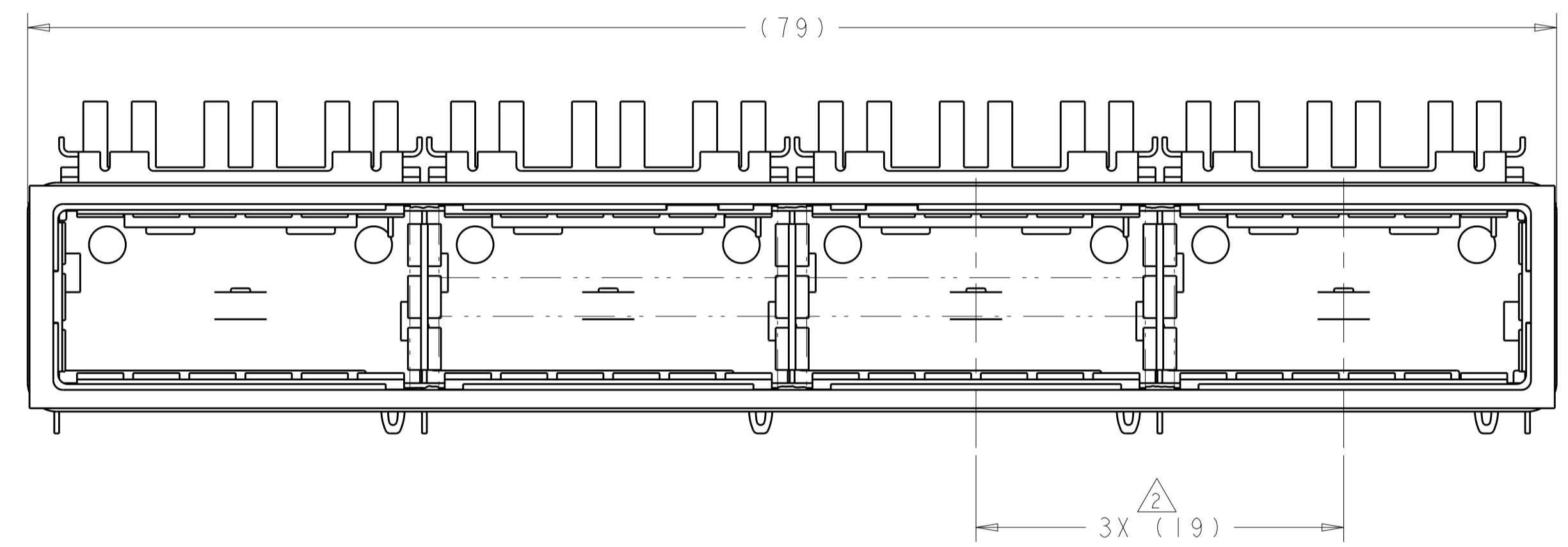
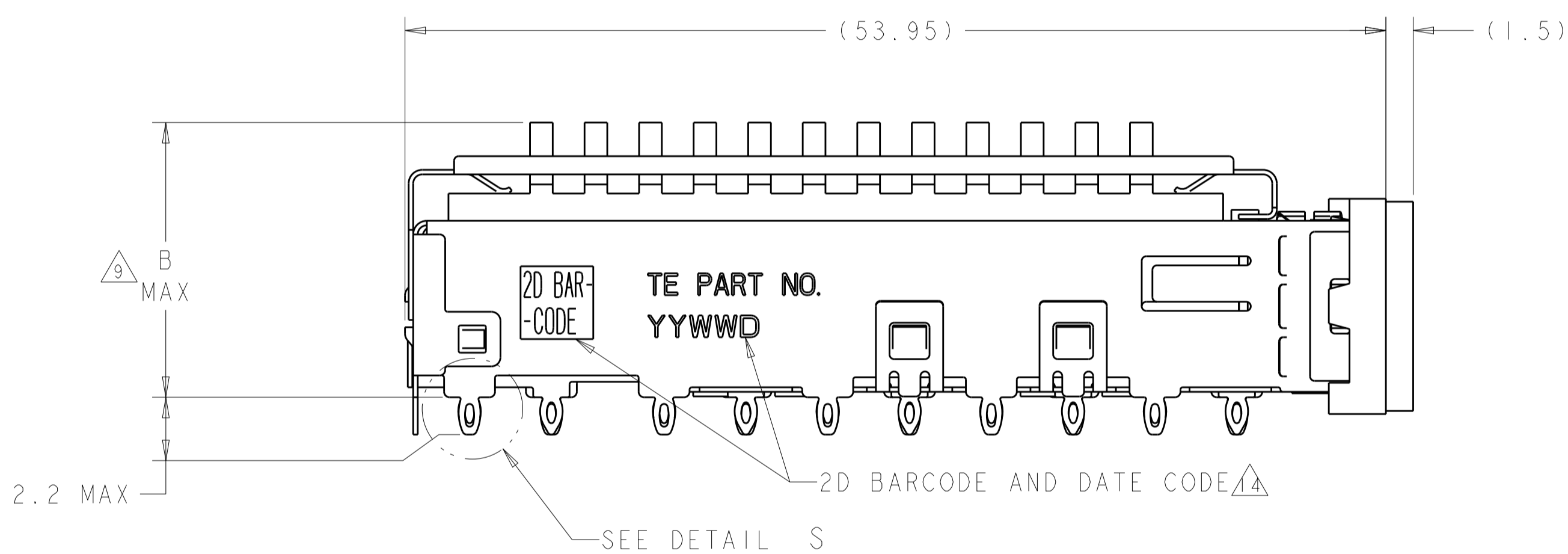
LOC	DIST	REVISIONS					
		P	LTN	DESCRIPTION	DATE	DMN	APVD
GP	00	I		PRELIMINARY	23FEB2012	KS	AC
		A		REVISED PER ECR-12-006970	17APR2012	KS	AC
		B		REVISED PER ECO-15-005721	4AUG2015	RG	SH



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 μ m MINIMUM TIN
 FRONT FLANGE FINISH: 3 μ m MINIMUM TIN OVER 1.27 μ m MINIMUM NICKEL OVER 5.08 μ m MINIMUM COPPER.
 HEAT SINK FINISH: NICKEL.



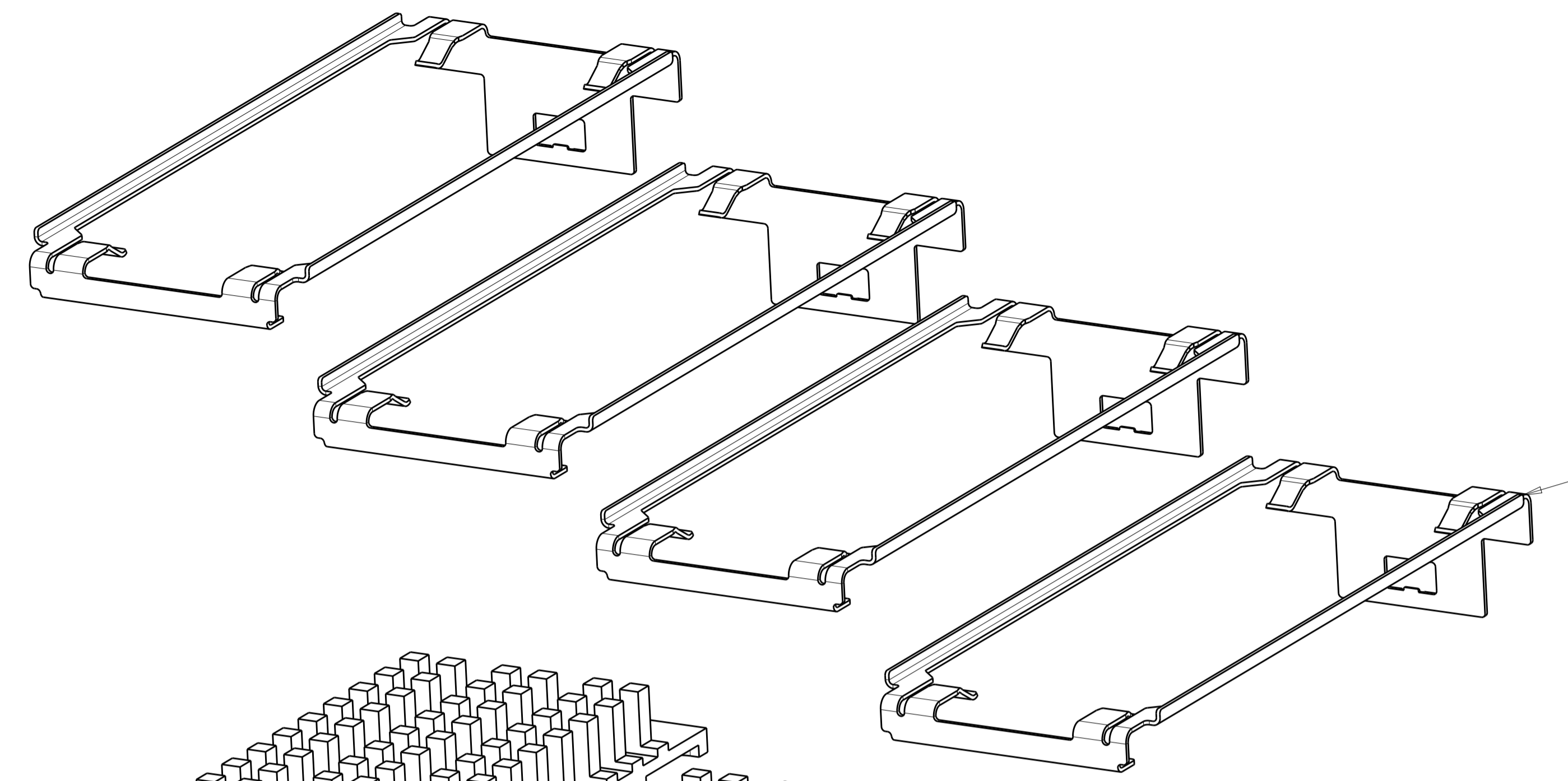
23.0	NETWORKING	2174754-3
16.0	SAN	2174754-2
13.7	PCI	2174754-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

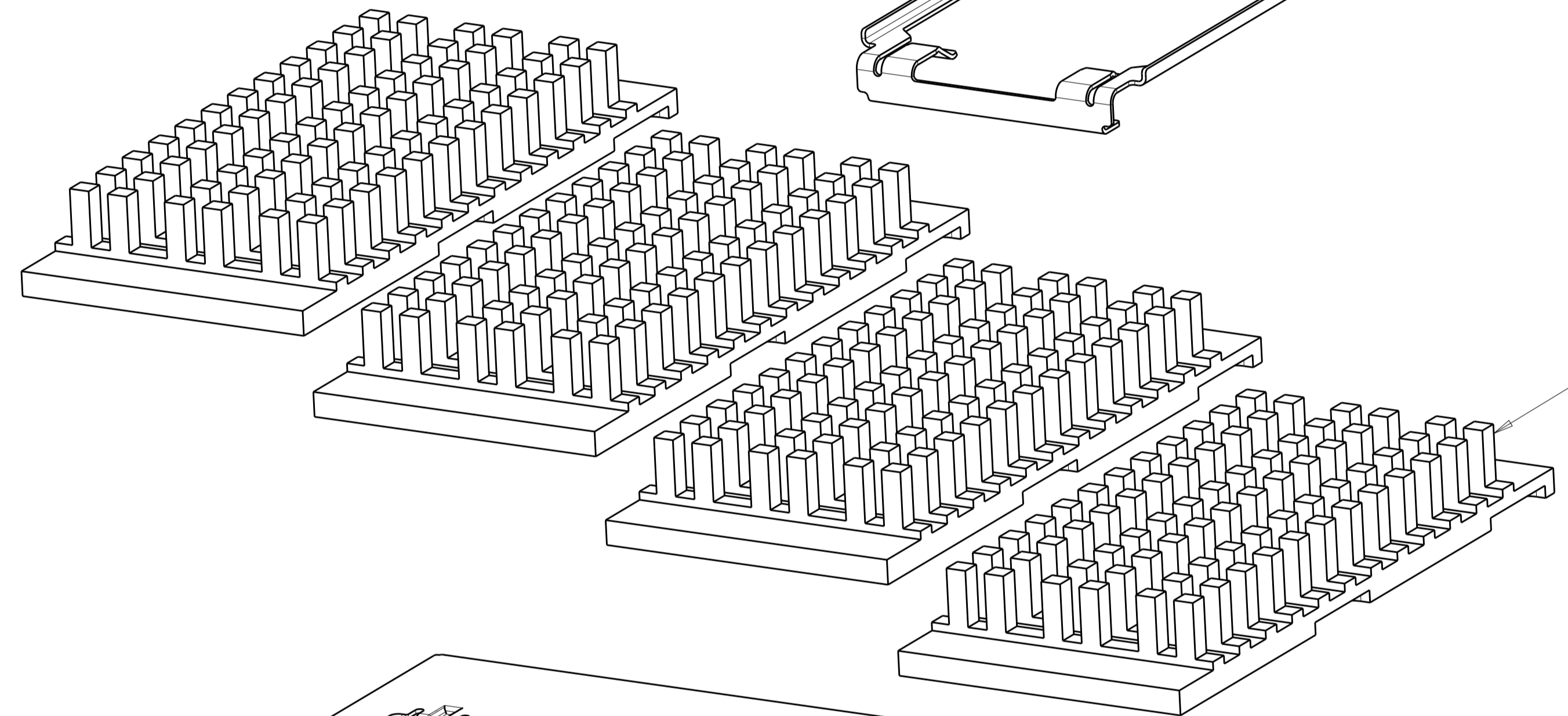
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DMN: KINSEN SUN 22FEB2012	CHK: DENNY ZHU 22FEB2012	APVD: ALEY CAI 22FEB2012
mm	0 PLC ±0.1 1 PLC ±0.1 2 PLC ±0.1 3 PLC ±0.013 4 PLC ±0.0001	PRODUCT SPEC: 108-2286	APPLICATION SPEC: 114-13218	WEIGHT: -
MATERIAL:	FINISH:	NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP		
$\Delta 1$	$\Delta 16$	SIZE: A1	CAGE CODE: 00779	DRAWING NO: C=2174754
CUSTOMER DRAWING		SCALE: 4:1	SHEET: 1	OF: 5

RESTRICTED TO REV B

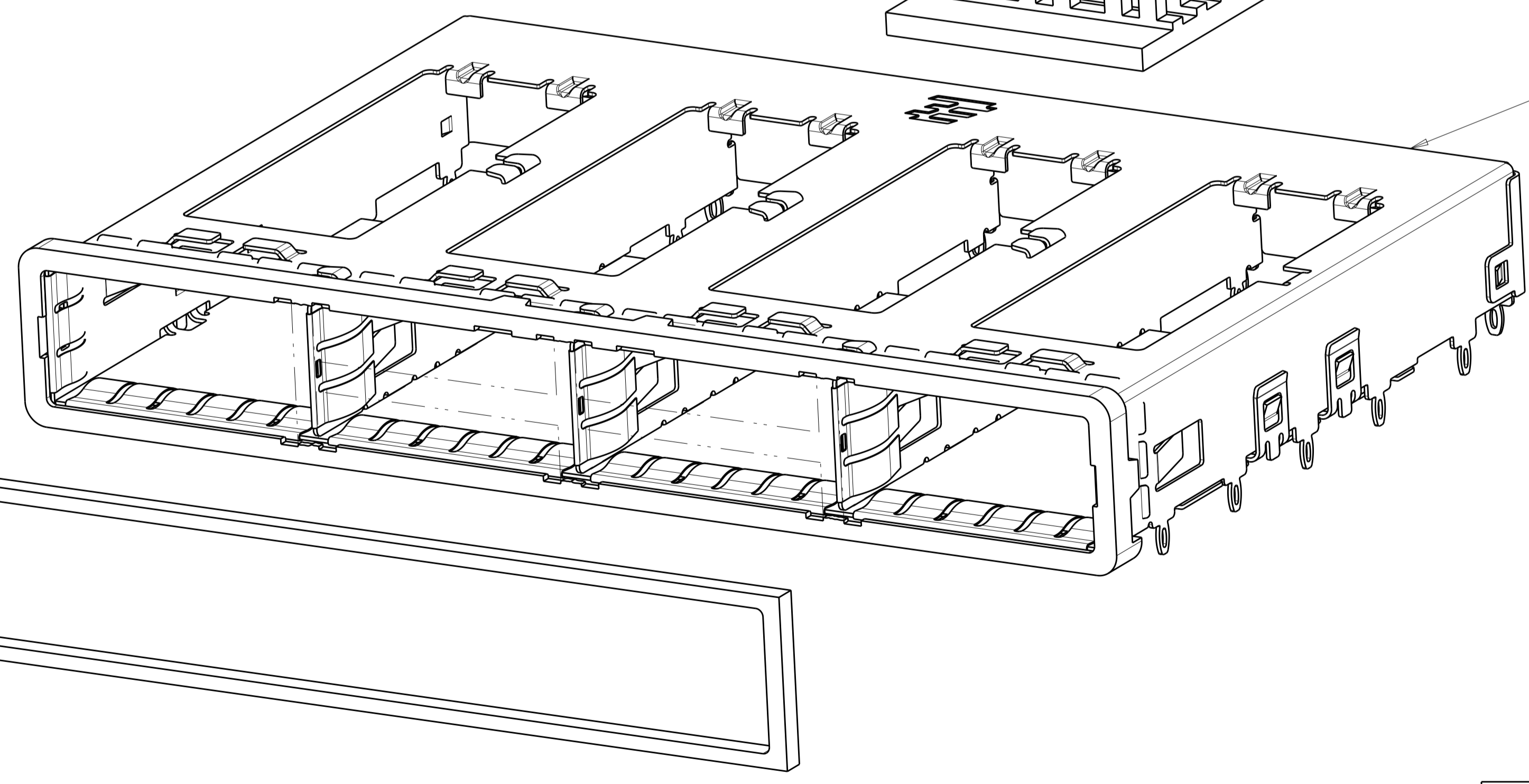
LOC	DIST	REVISIONS			
P.	LTN	DESCRIPTION	DATE	OWN	APVD
GP	00	SEE SHEET 1	-	-	-



HEAT SINK CLIPS
 QUANTITY: 4

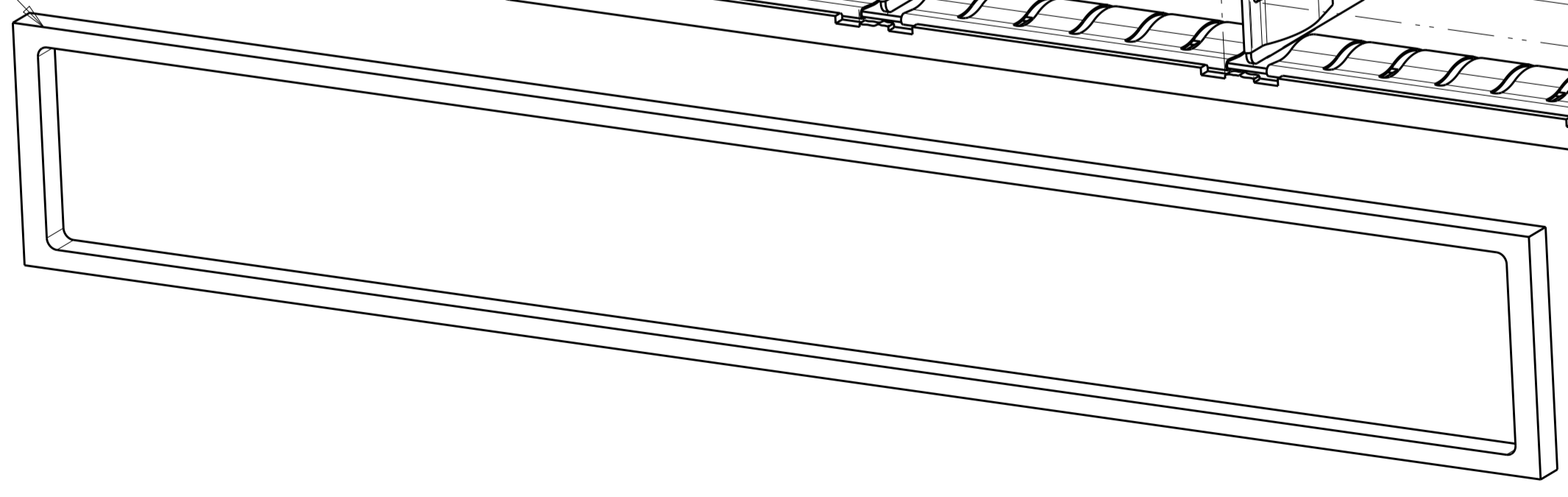


72 PIN HEAT SINKS
 QUANTITY: 4



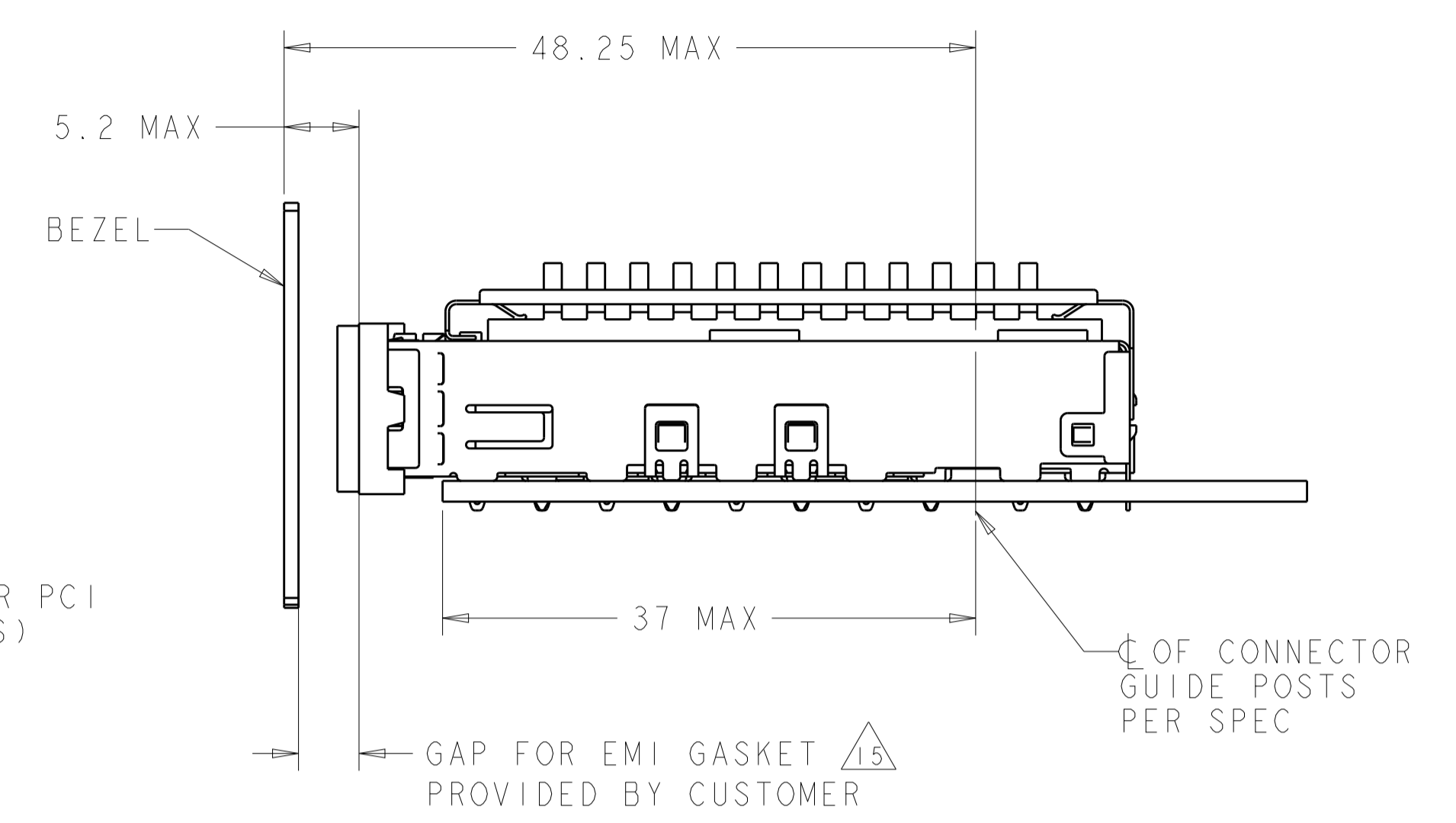
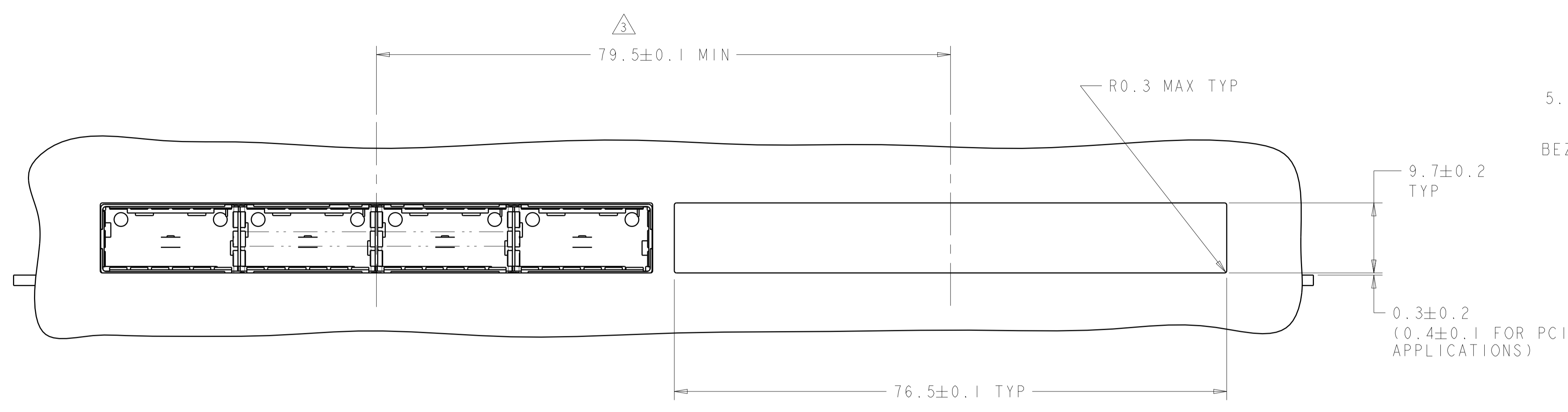
1X4 BEHIND BEZEL QSFP
 CAGE ASSEMBLY
 QUANTITY: 1

CONDUCTIVE GASKET
 QUANTITY: 1

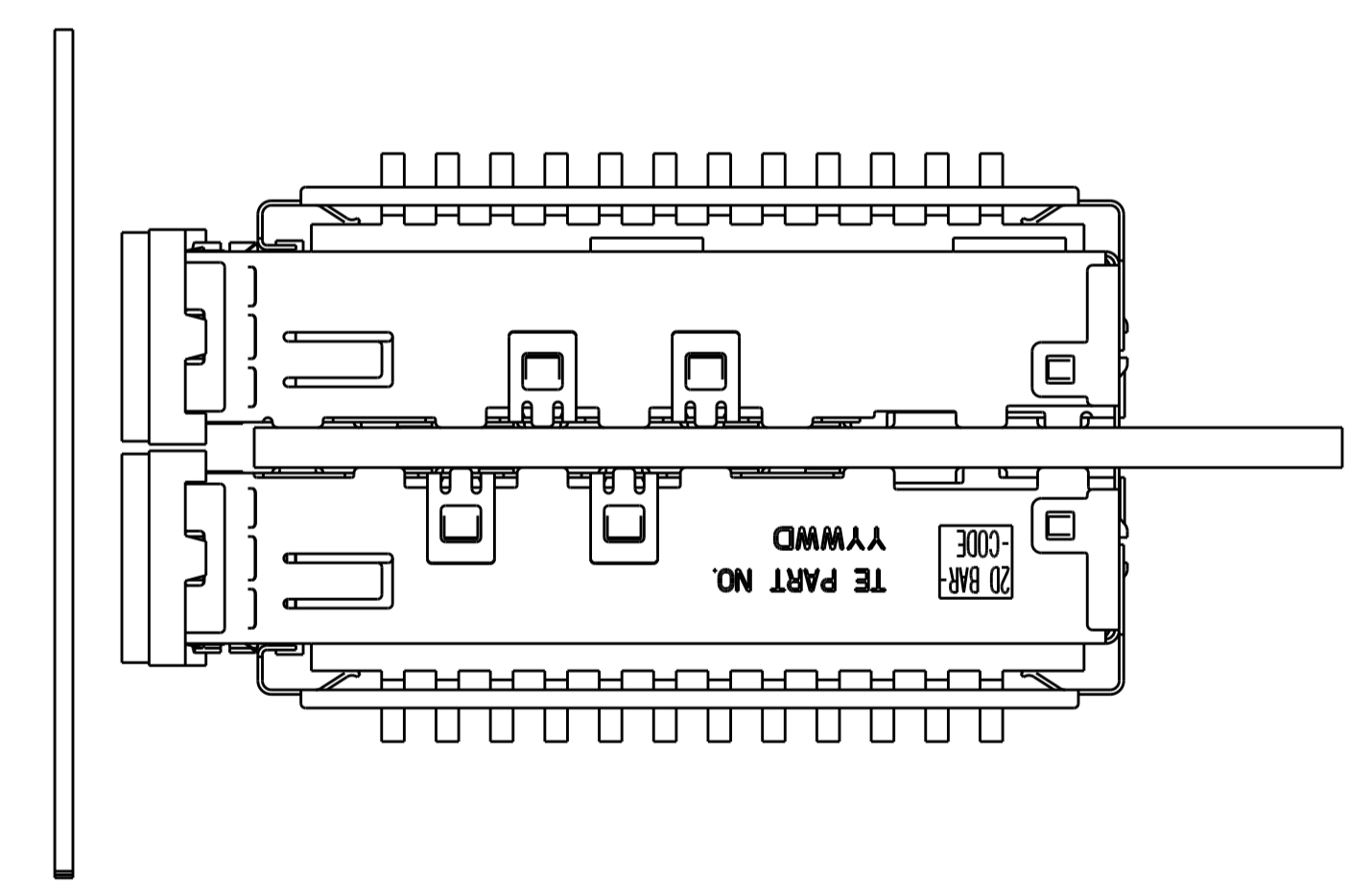
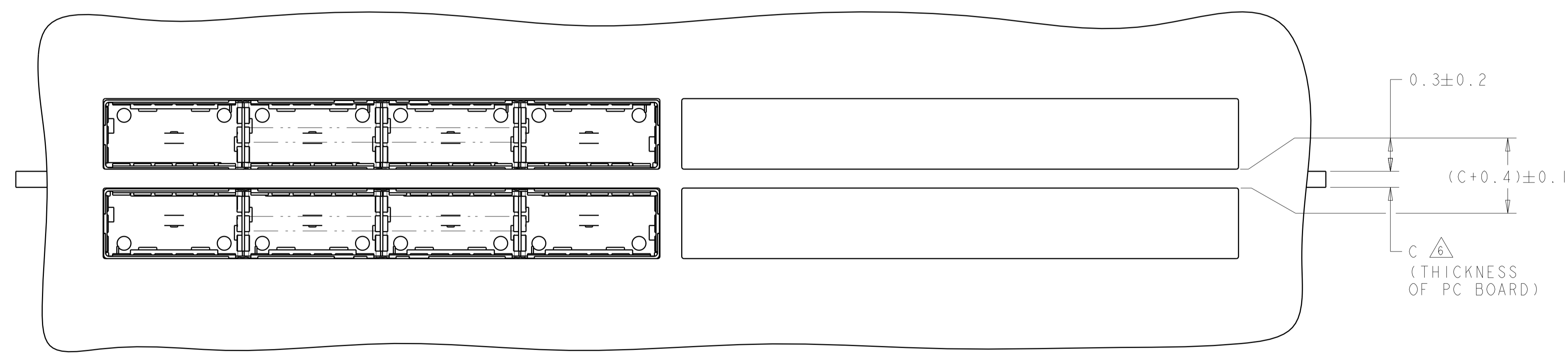


THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: RINSEN SUN 22FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 22FEB2012	
		APVD: AILEY CAI 22FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±. 1 PLC ±0.1 2 PLC ±0.1 3 PLC ±0.013 4 PLC ±0.0001 ANGLES ±. FINISH		NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP PRODUCT SPEC: 108-2286 APPLICATION SPEC: 114-13218 WEIGHT: - CUSTOMER DRAWING	
MATERIAL: -	FINISH: -	SIZE: A100779	DRAWING NO: C=2174754 RESTRICTED TO: - SCALE: 4:1 SHEET 2 OF 5 REV B

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



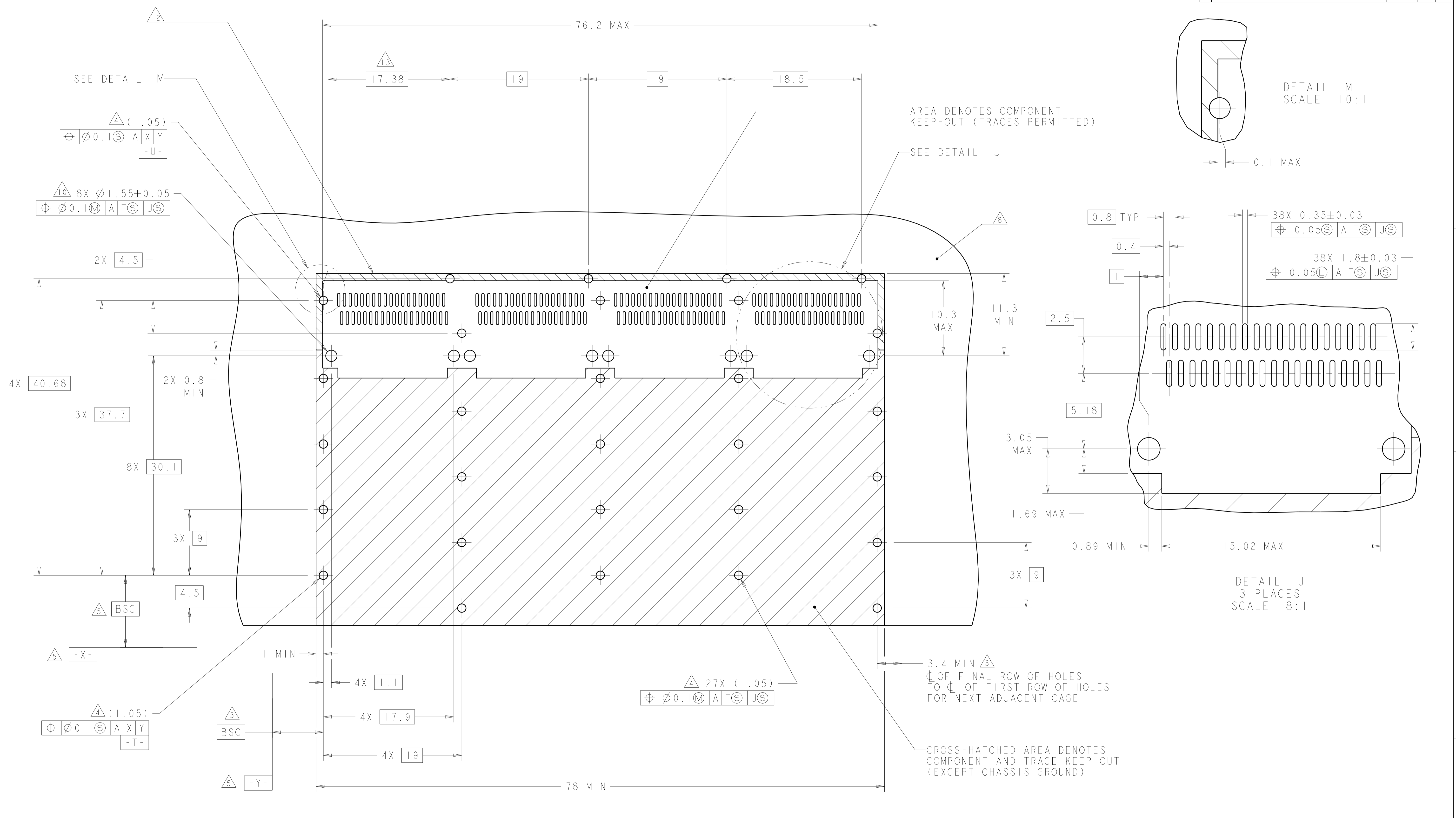
ONE SIDED CONFIGURATION
 SCALE 5:2



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 ±0.1	1 PLC ±0.1	PRODUCT SPEC: 108-2286	SIZE: CAGE CODE: DRAWING NO: A100779C=2174754	
2 PLC ±0.13	3 PLC ±0.001	APPLICATION SPEC: 114-13218	RESTRICTED TO: -	
4 PLC ±0.001	ANGLES ±0.001	WEIGHT: -	SCALE: 4:1 SHEET 3 OF 5 REV B	
MATERIAL: -	FINISH: -	CUSTOMER DRAWING		

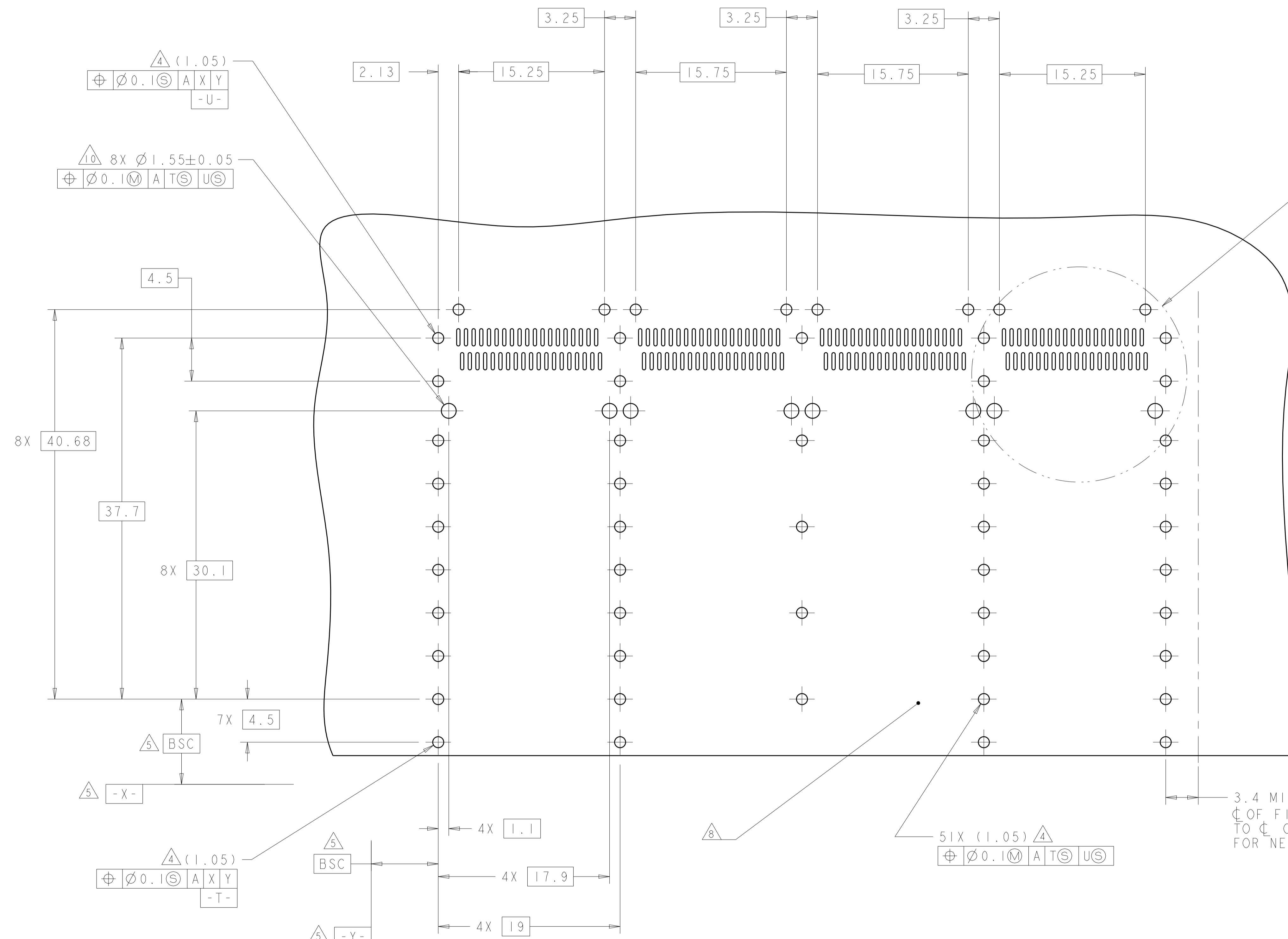
LOC	DIST	REV	DESCRIPTION	DATE	OWN	APVD
GP	00		SEE SHEET 1			



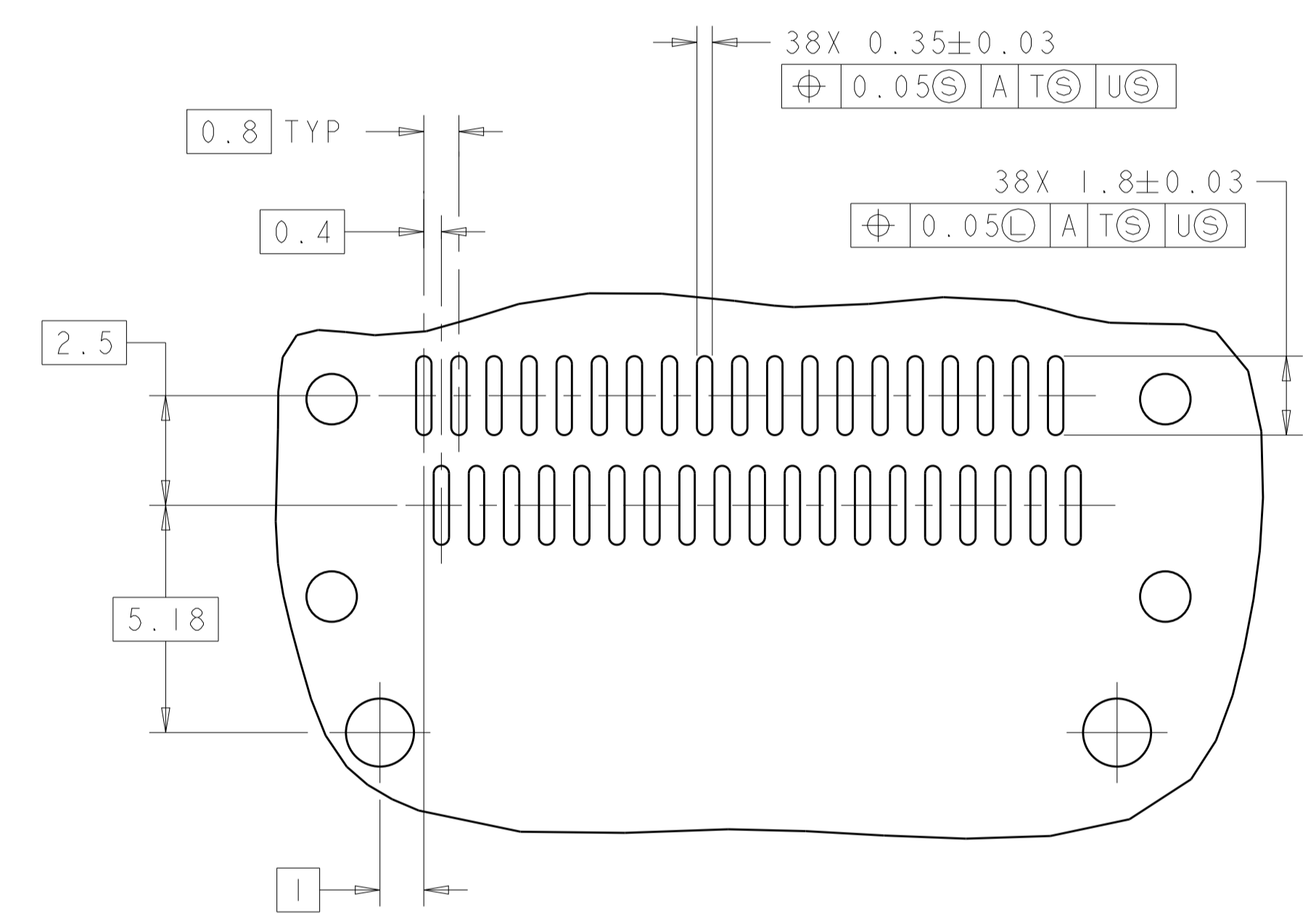
RECOMMENDED PC BOARD LAYOUT
 SINGLE SIDE MOUNT CONFIGURATION
 SCALE 4:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN 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

3.4 MIN $\Delta 3$
 ϕ OF FINAL ROW OF HOLES
 TO ϕ OF FIRST ROW OF HOLES
 FOR NEXT ADJACENT CAGE

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.		DMN: KINSEN_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 \pm 2 PLC ± 0.1 3 PLC ± 0.1 4 PLC ± 0.013 ANGLES ± 0.0001		PRODUCT SPEC: 108-2286 APPLICATION SPEC: 114-13218	
MATERIAL:	FINISH:	WEIGHT:	RESTRICTED TO:
CUSTOMER DRAWING		SCALE: 4:1	SHEET 5 OF 5 REV B