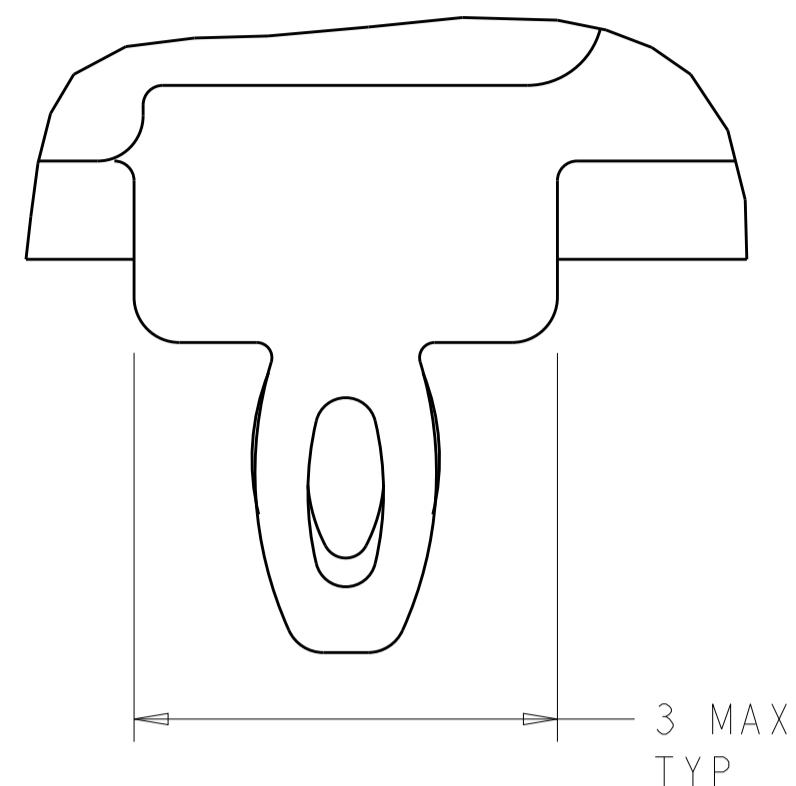


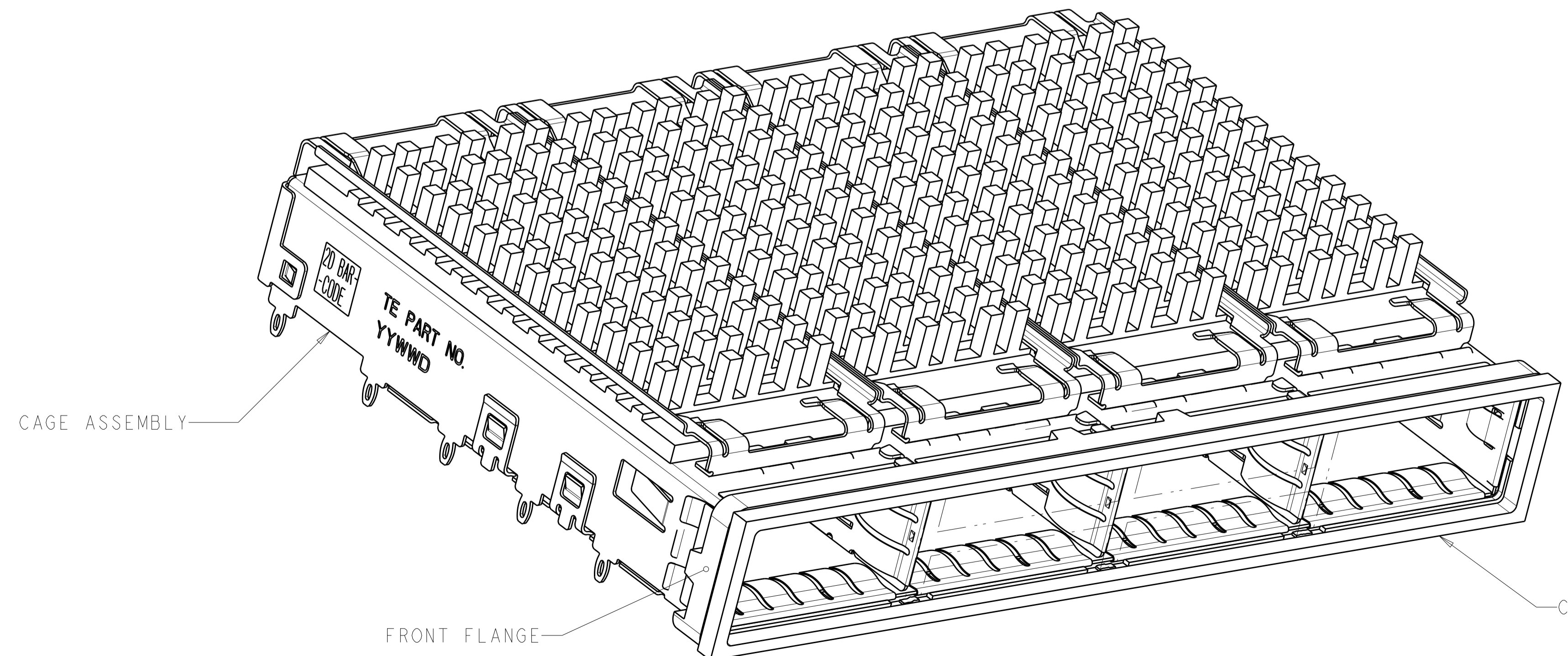
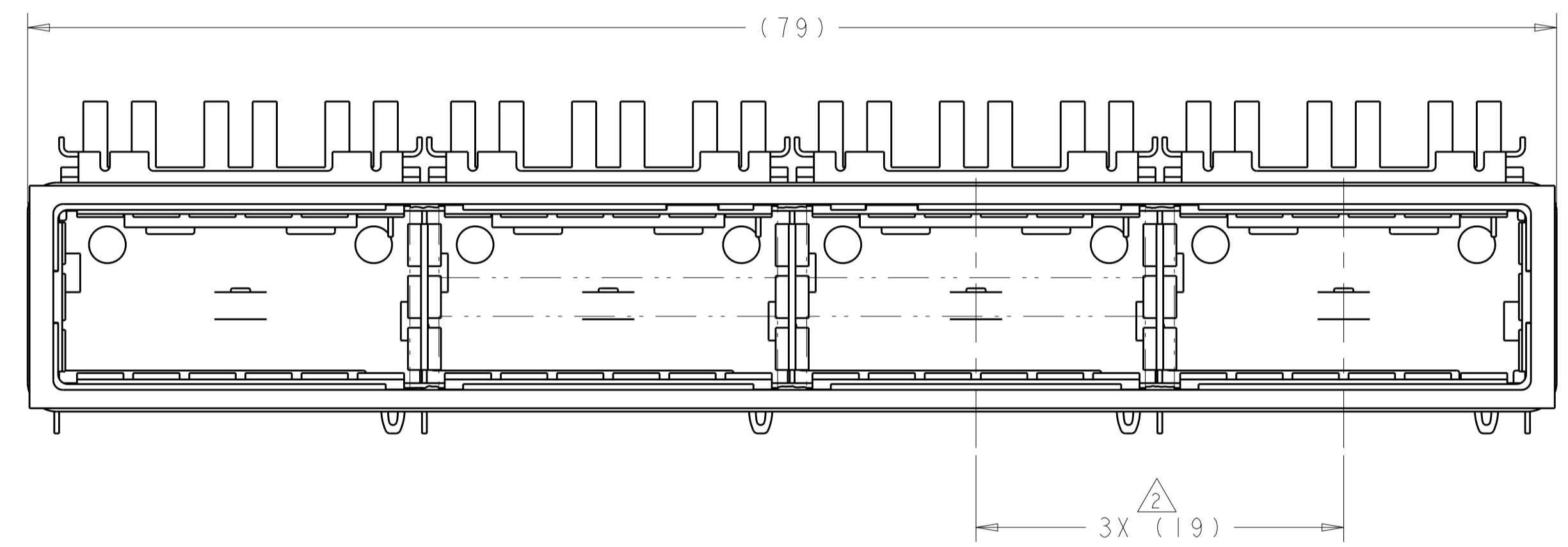
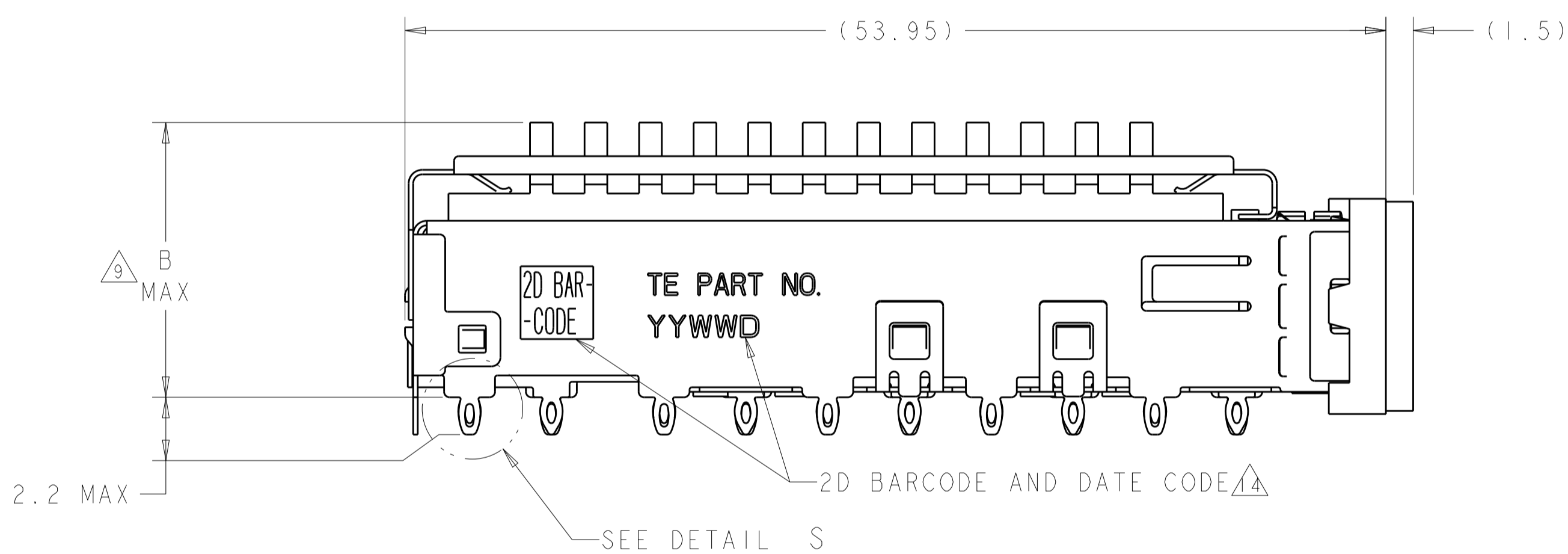
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		P	LTN	DESCRIPTION	DATE	DMN	APVD
GP	00	I		PRELIMINARY	23FEB2012	KS	AC
		A		REVISED PER ECR-12-006970	17APR2012	KS	AC
		B		REVISED PER ECO-15-005721	4AUG2015	RG	SH



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.



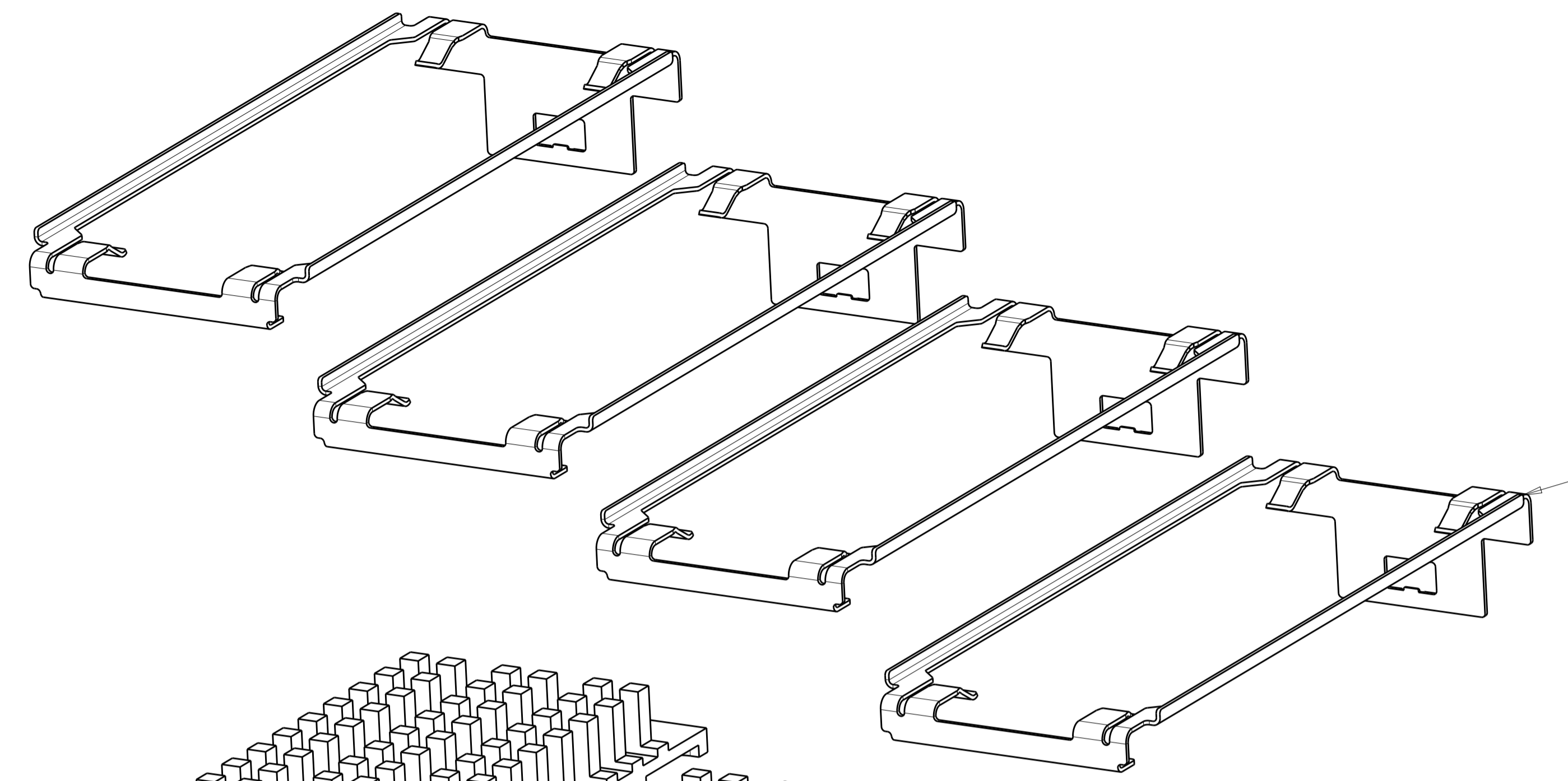
23.0	NETWORKING	2174754-3
16.0	SAN	2174754-2
13.7	PCI	2174754-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

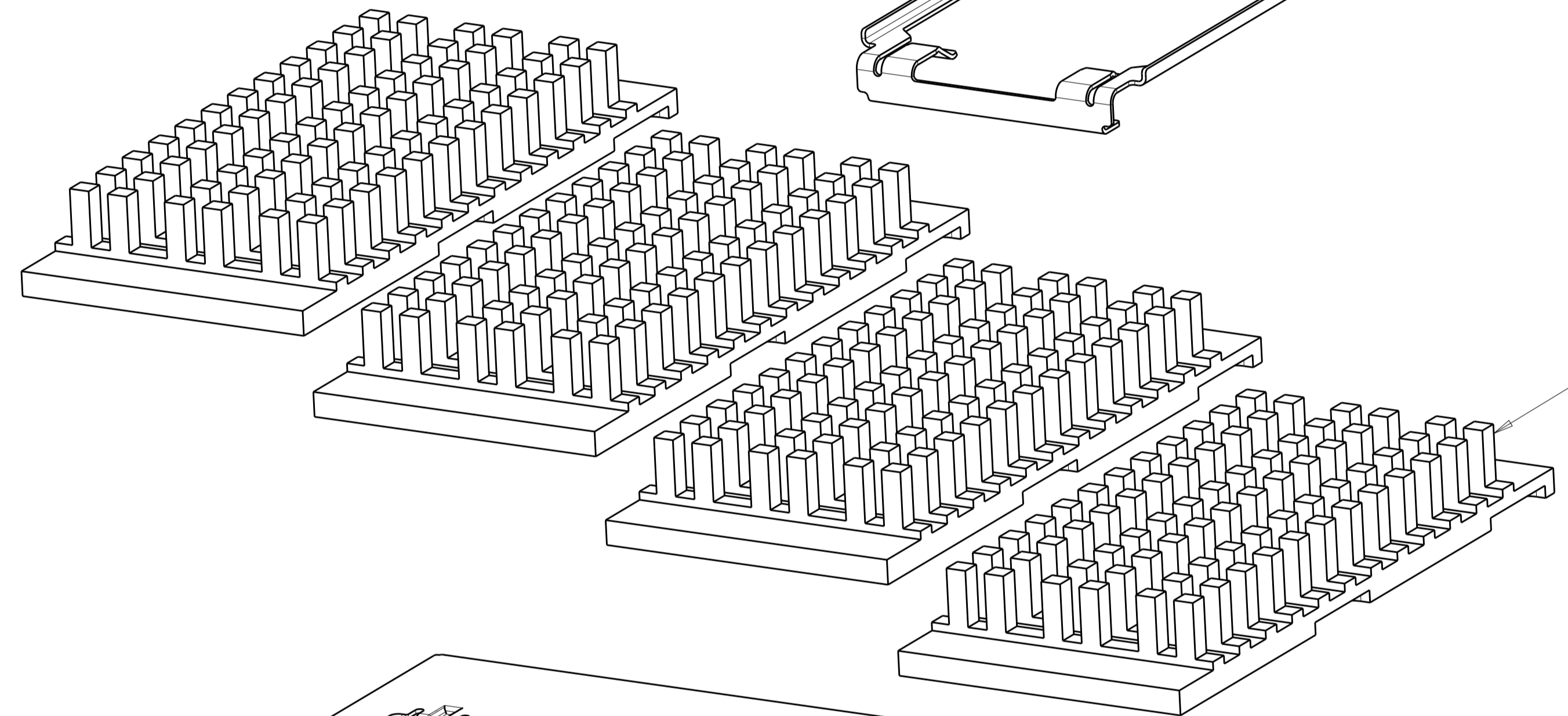
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DMN: KINSEN SUN 22FEB2012	CHK: DENNY ZHU 22FEB2012	APVD: AILEY CAI 22FEB2012
mm	0 PLC \pm .1 1 PLC \pm 0.1 2 PLC \pm 0.1 3 PLC \pm 0.013 4 PLC \pm 0.0001	PRODUCT SPEC: 108-2286	APPLICATION SPEC: 114-13218	WEIGHT: -
MATERIAL:	FINISH:	NAME: 1X4 CAGE ASSEMBLY, 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

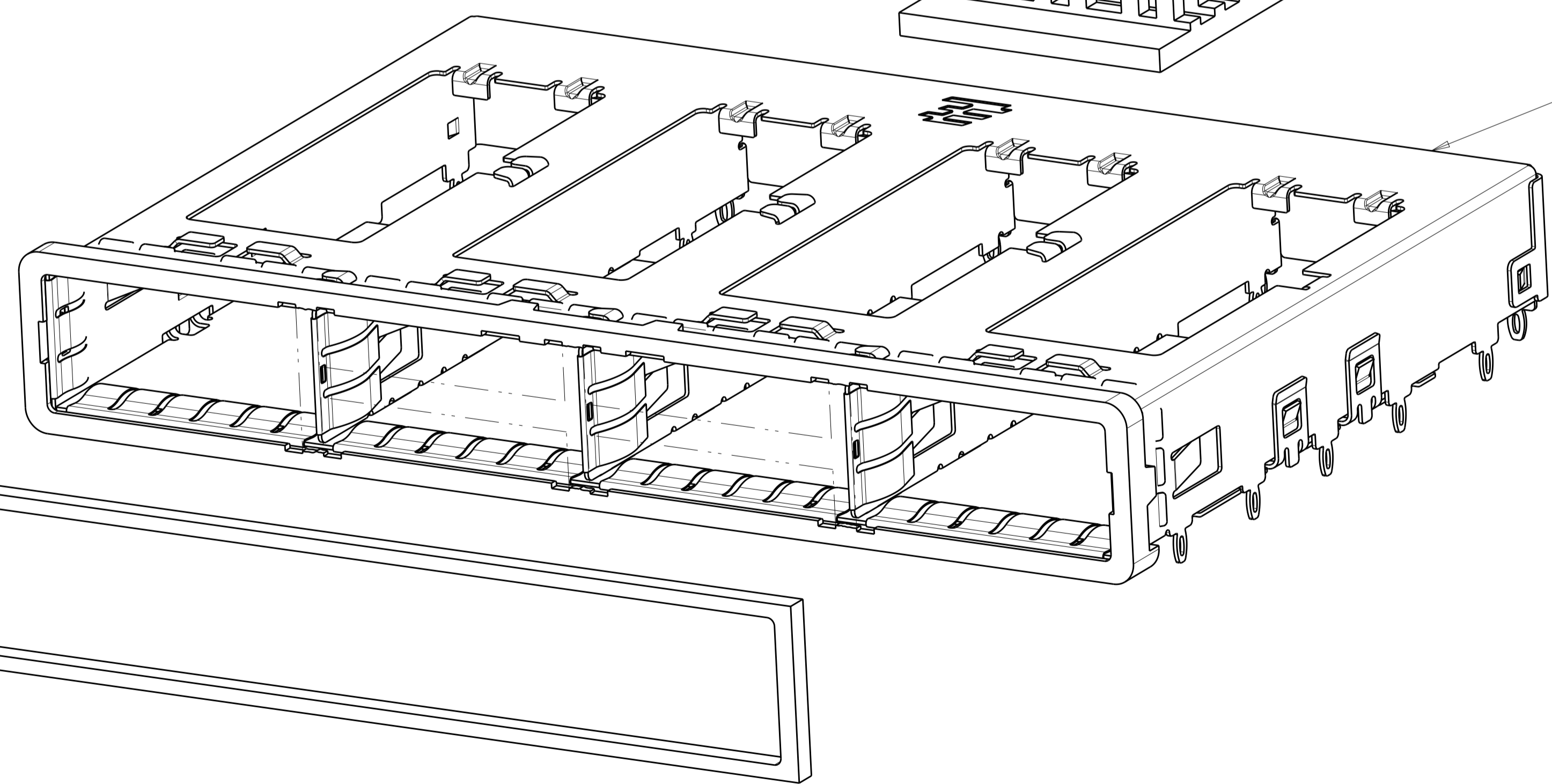
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P	LTN	DESCRIPTION	DATE	OWN	APVD
GP	00	SEE SHEET 1			



HEAT SINK CLIPS
 QUANTITY: 4

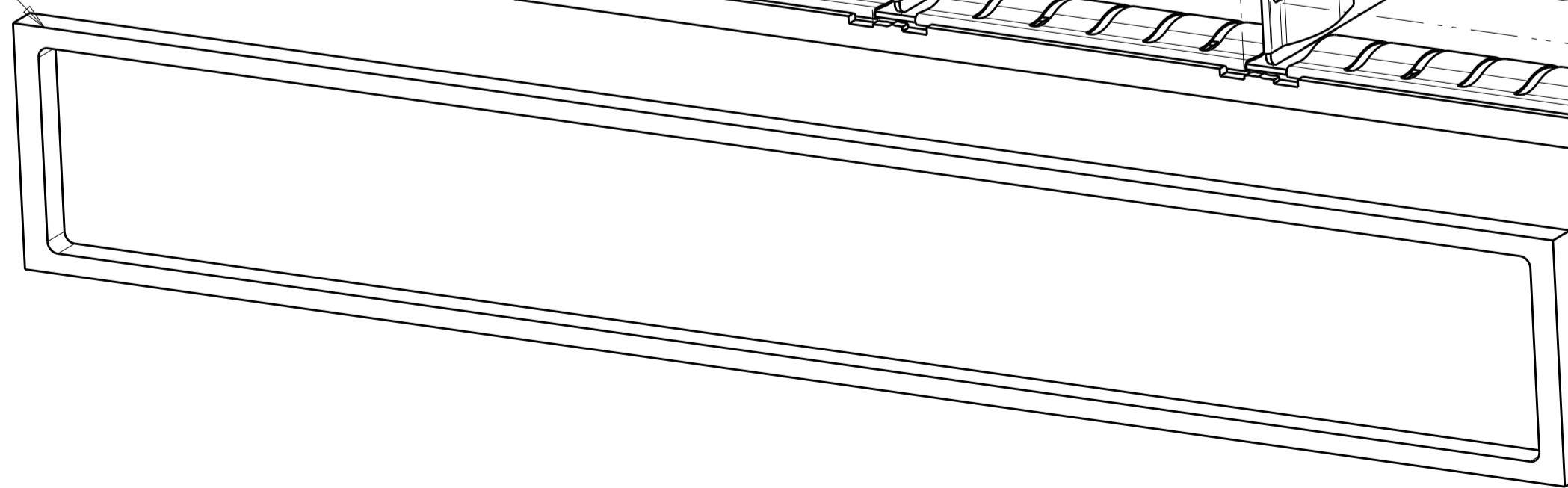


72 PIN HEAT SINKS
 QUANTITY: 4



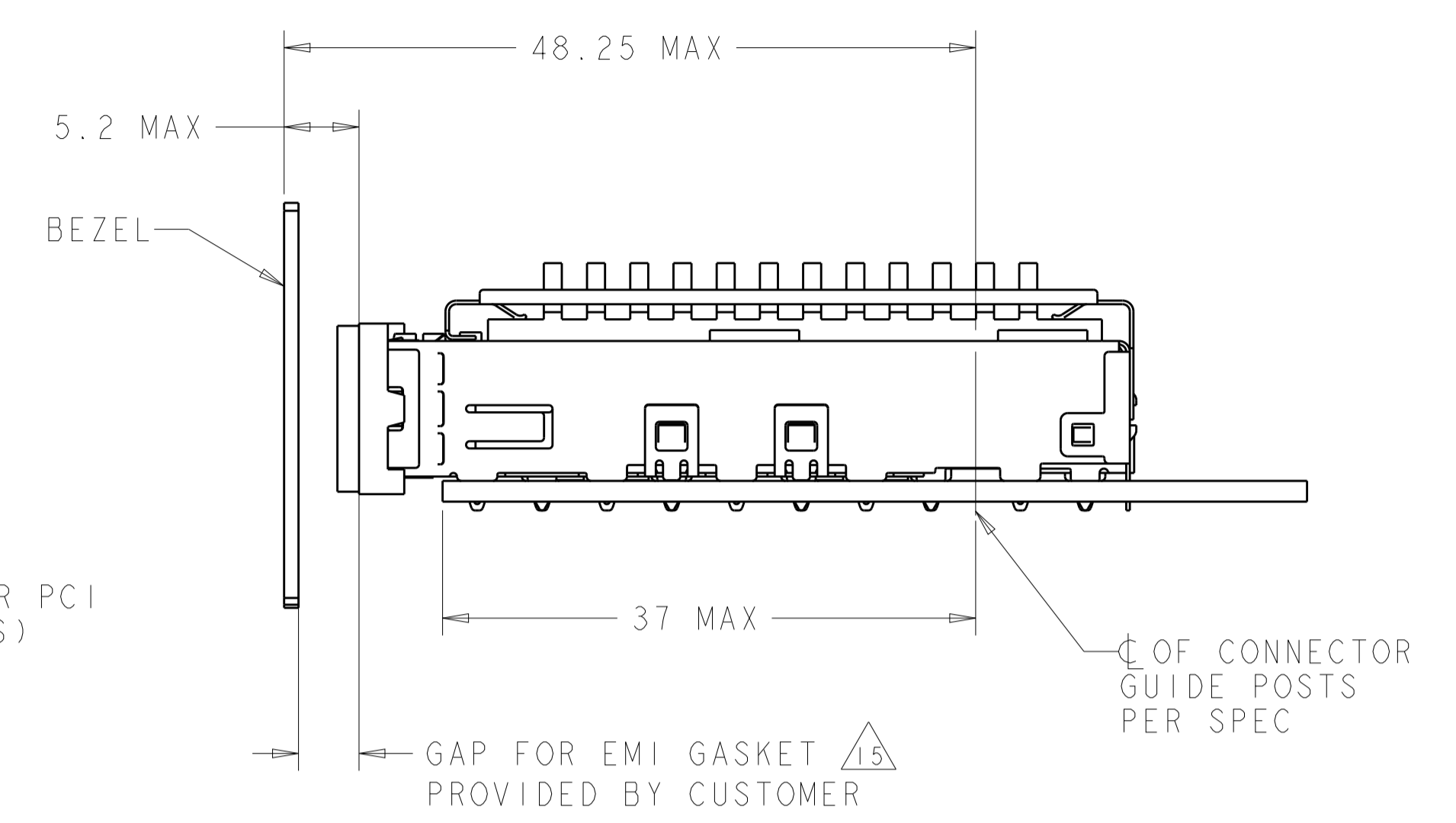
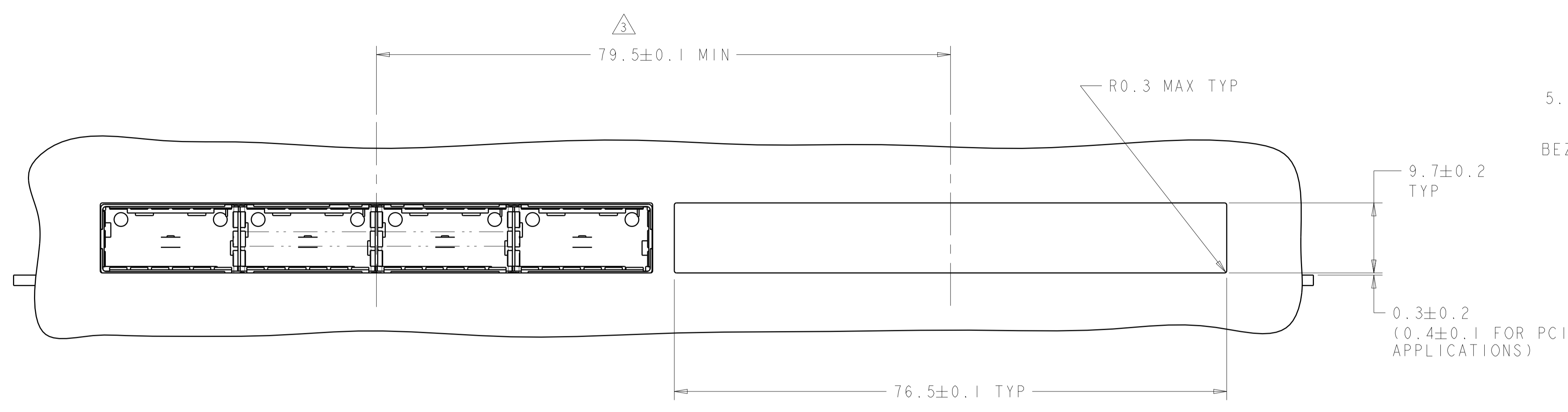
1X4 BEHIND BEZEL QSFP
 CAGE ASSEMBLY
 QUANTITY: 1

CONDUCTIVE GASKET
 QUANTITY: 1

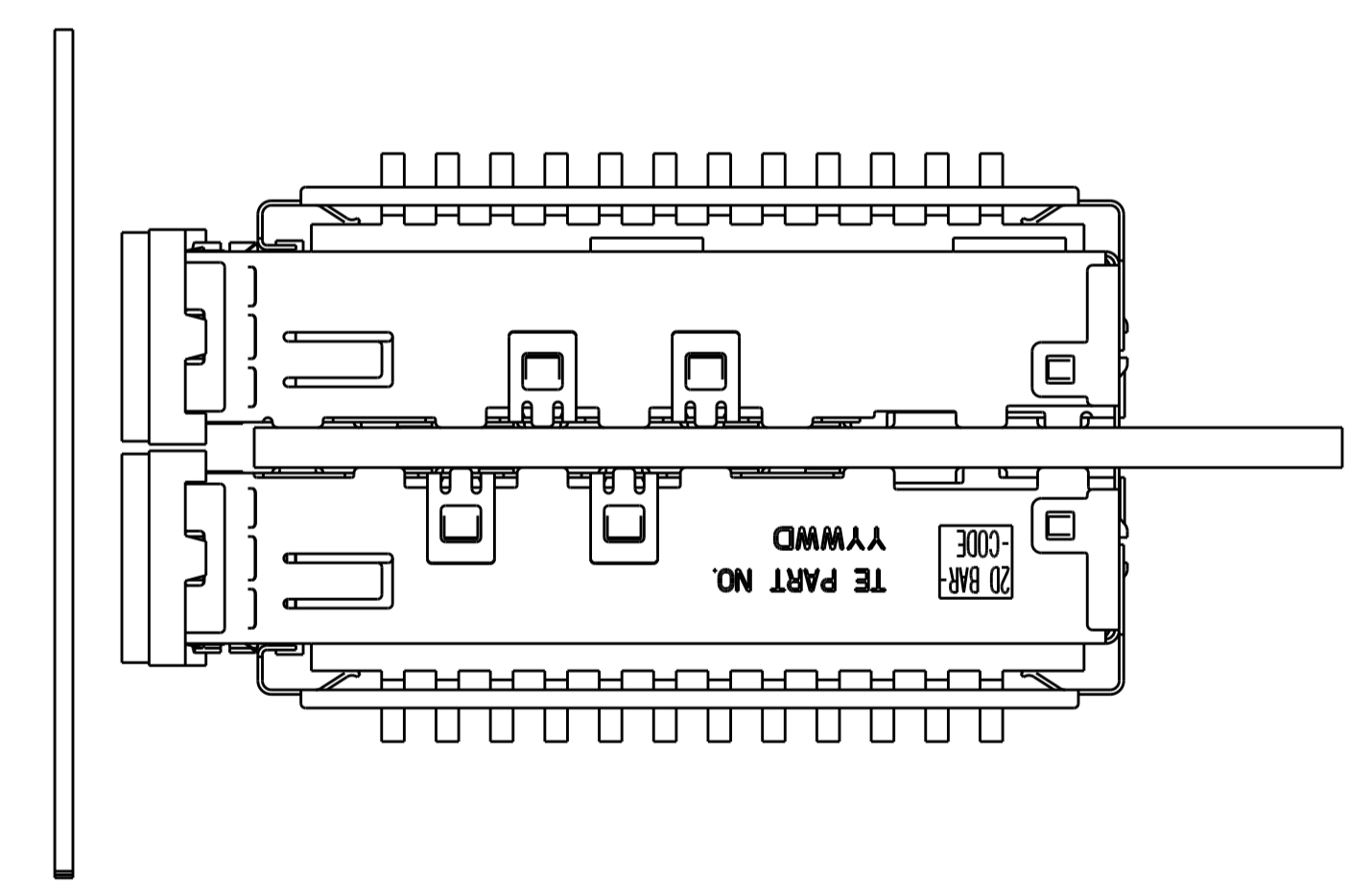
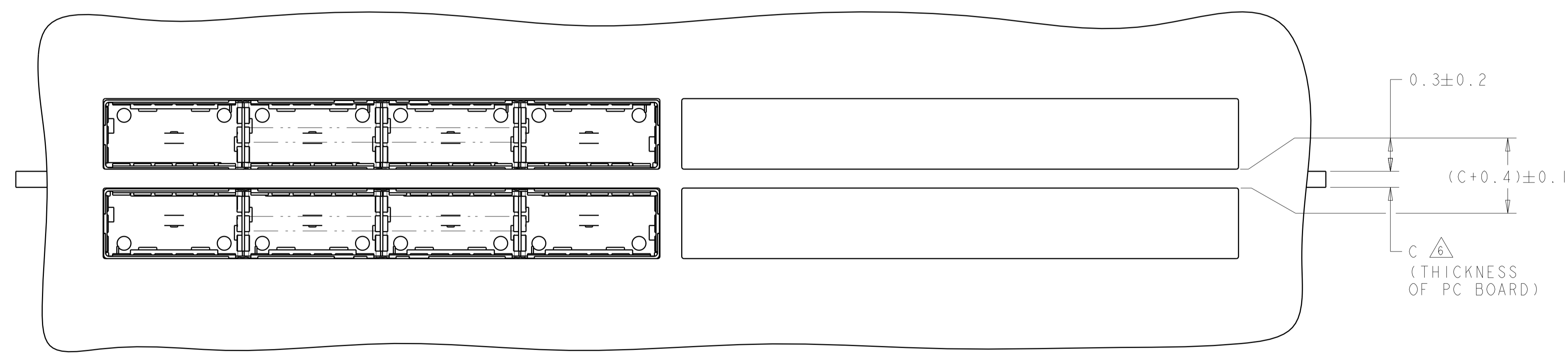


THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 22FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 22FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 22FEB2012	
0 PLC ±. 1 PLC ±0.1 2 PLC ±0.1 3 PLC ±0.013 4 PLC ±0.0001 ANGLES ±. FINISH		NAME: 1X4 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS,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

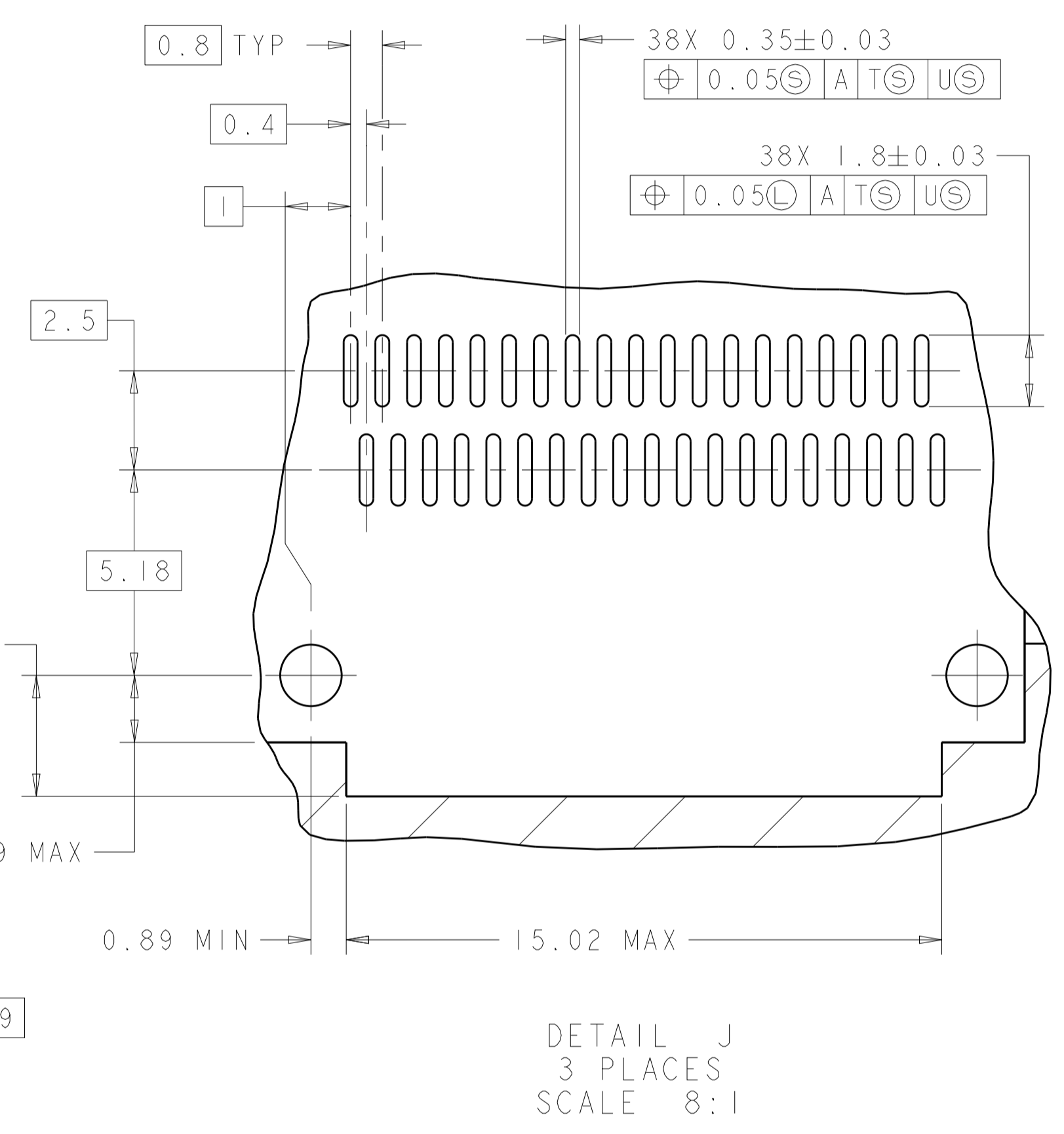
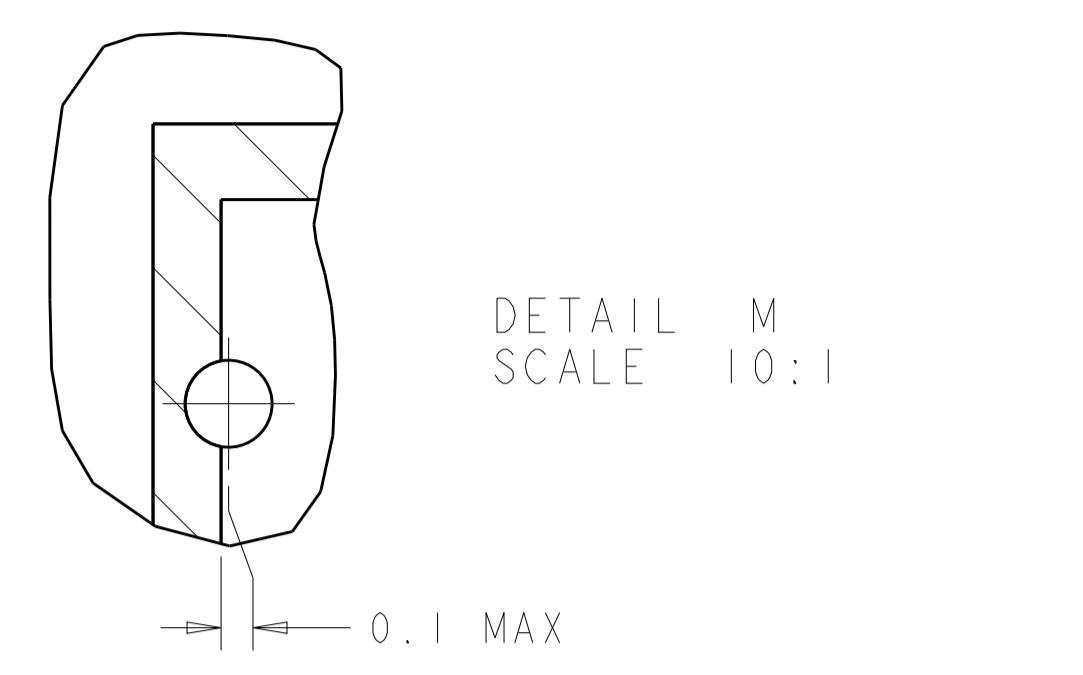
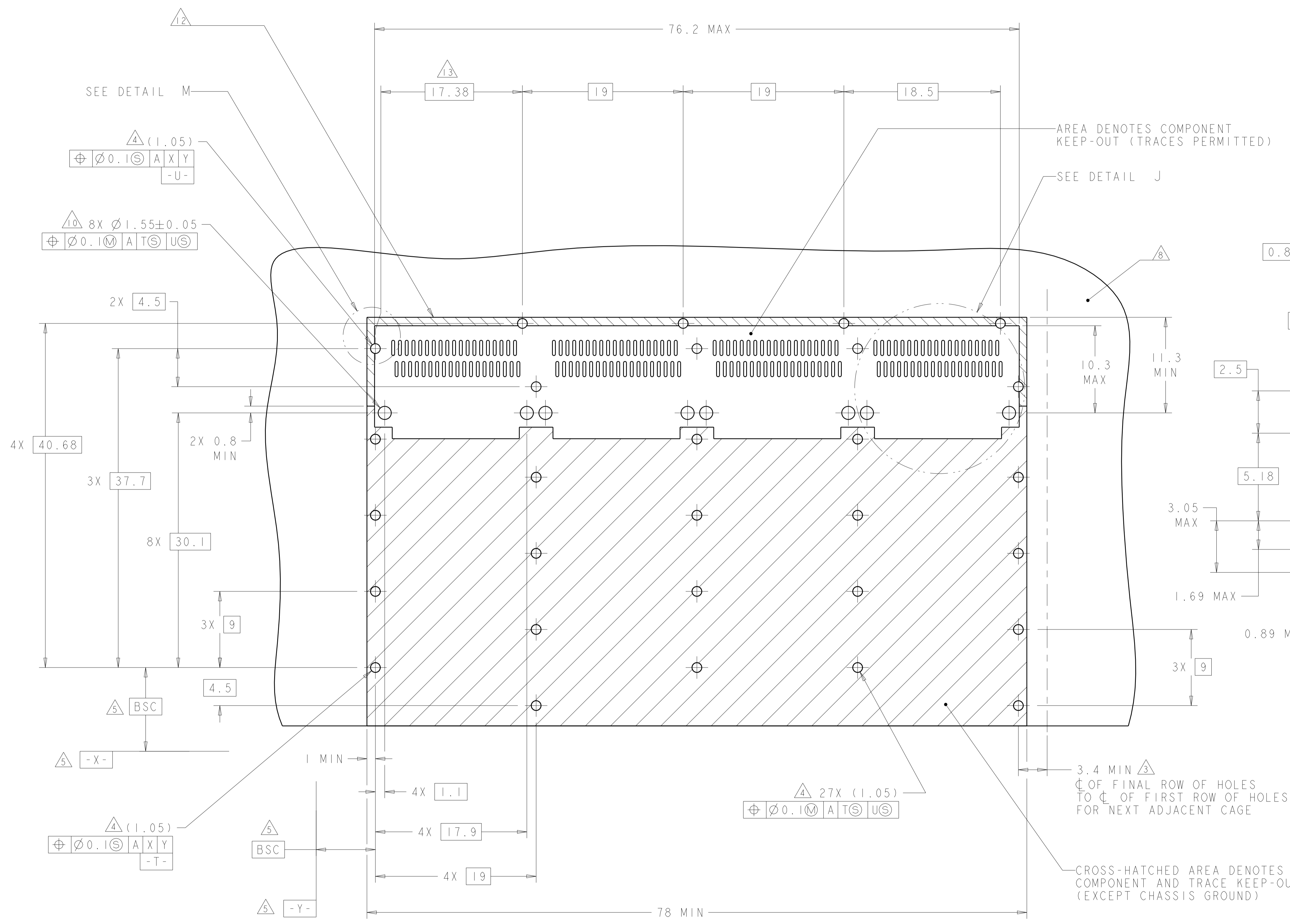


BELLY TO BELLY CONFIGURATION SIMILAR
 TO ONE SIDED EXCEPT WHERE NOTED
 SCALE 5:2

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

LOC	DIST	REV	DATE	BY	APPD
GP	00				

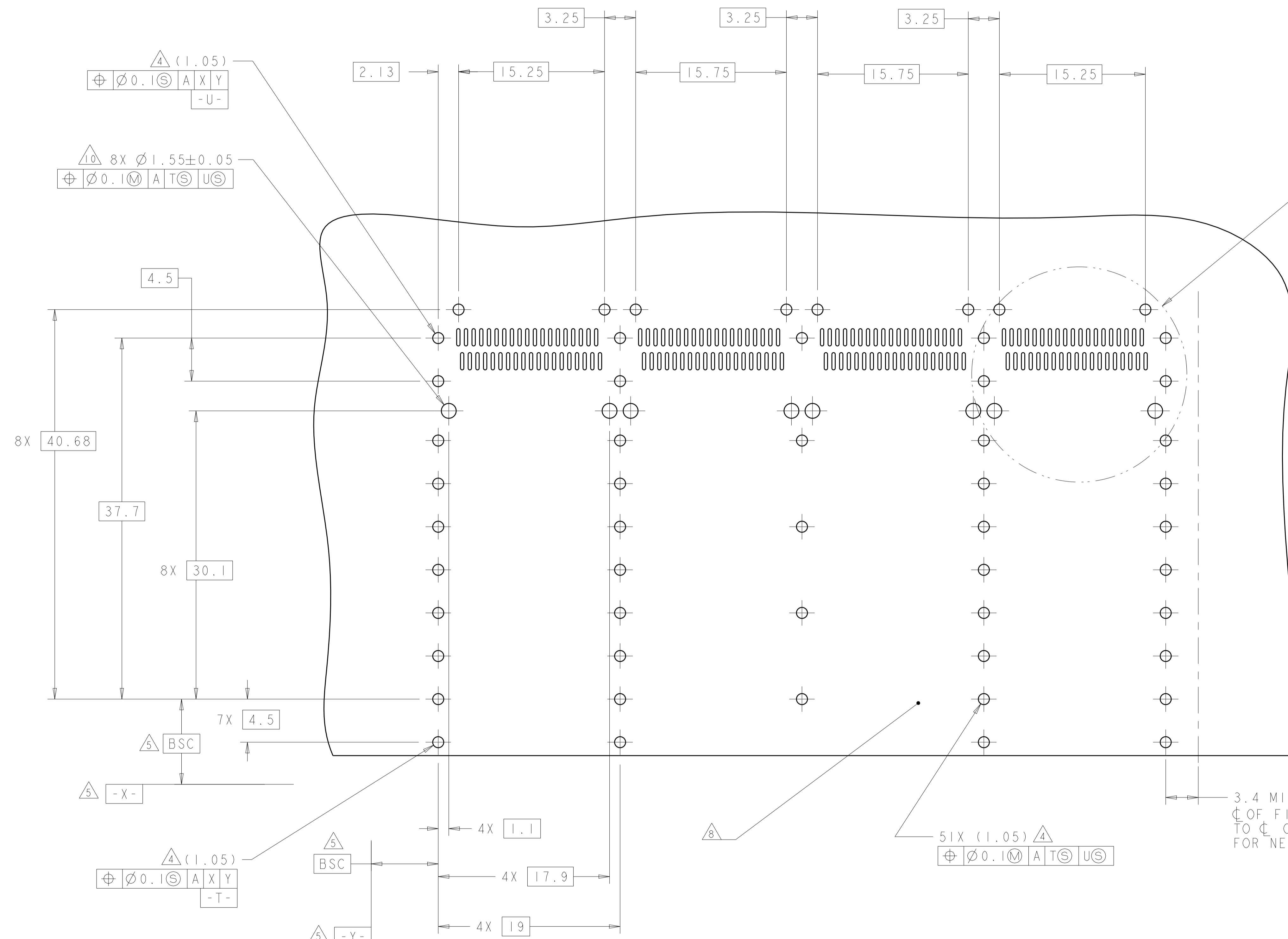
REVISIONS			
NO.	DESCRIPTION	DATE	BY
-	SEE SHEET 1	-	-



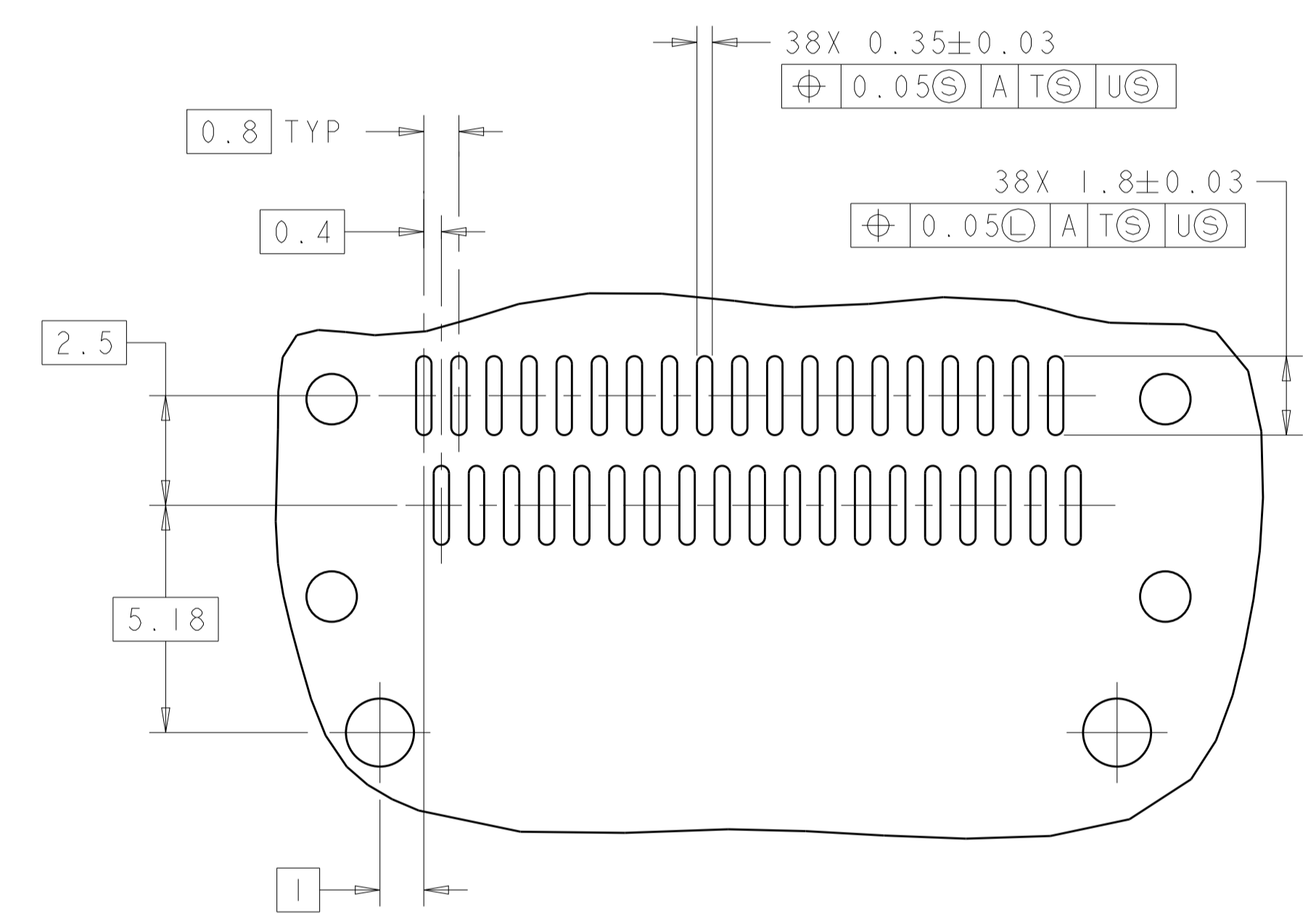
RECOMMENDED PC BOARD LAYOUT
 SINGLE SIDE MOUNT CONFIGURATION
 SCALE 4:1

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

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

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	1 PLC ± 0.1	PRODUCT SPEC: 108-2286	SIZE: 114-13218
2 PLC ± 0.1	3 PLC ± 0.013	APPLICATION SPEC: 114-13218	RESTRICTED TO: -
4 PLC ± 0.0001	ANGLES \pm	WEIGHT: -	A100779C=2174754
MATERIAL: -	FINISH: -	CUSTOMER DRAWING	SCALE: 4:1 SHEET 5 OF 5 REV B