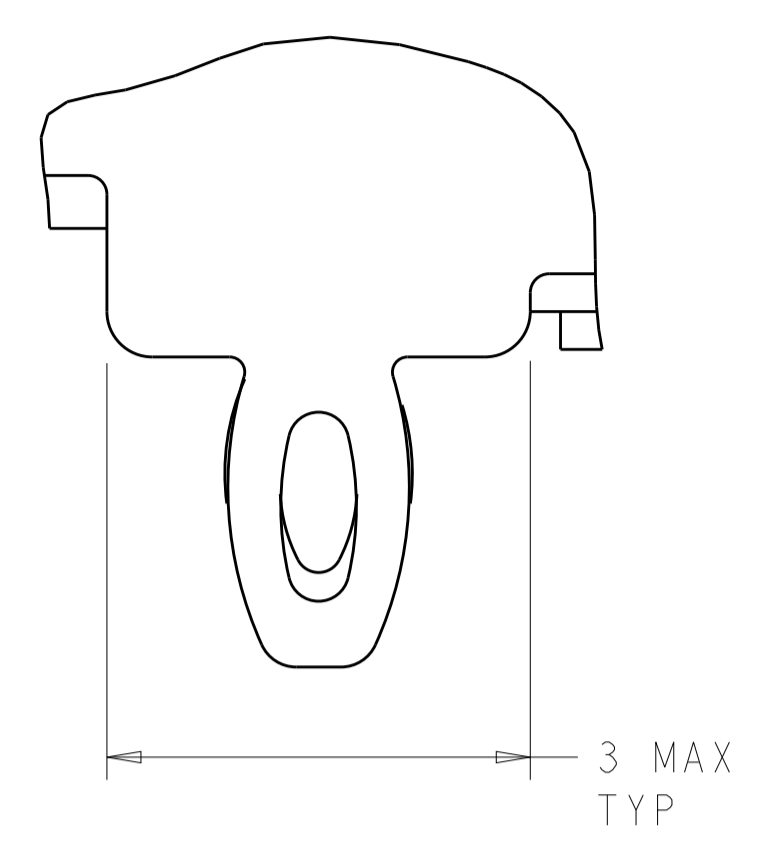


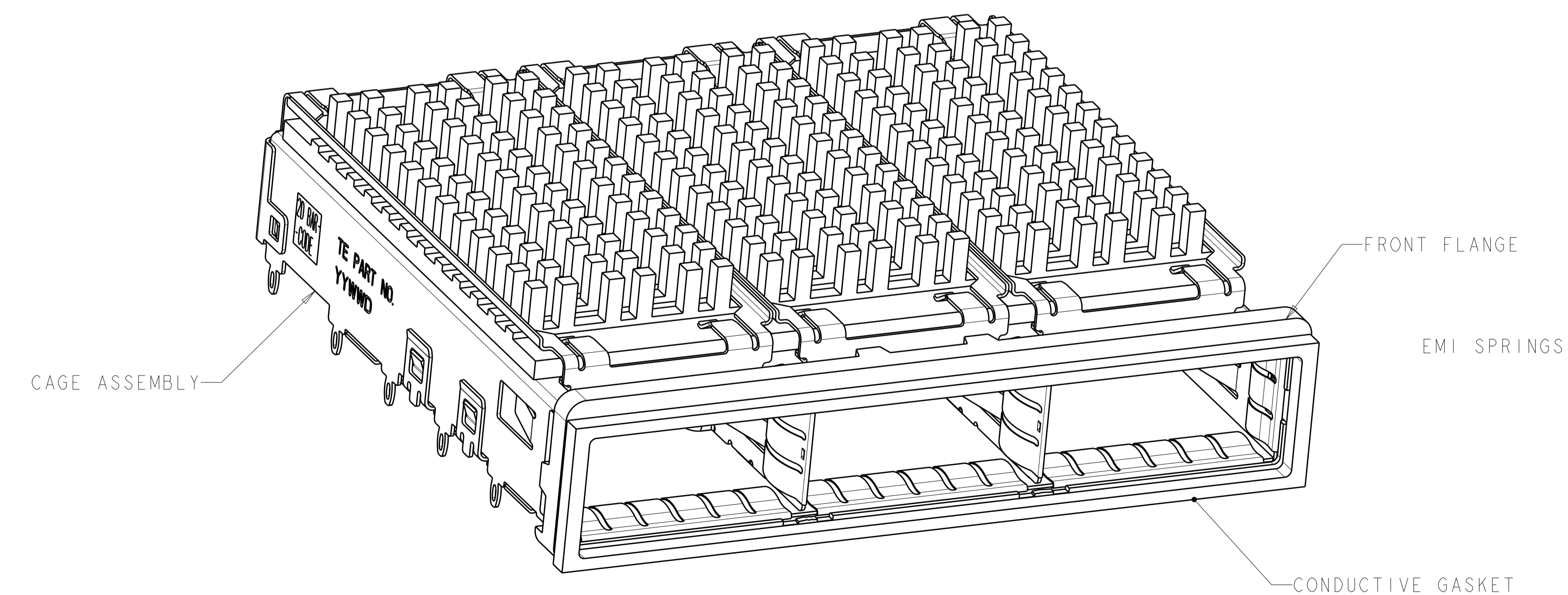
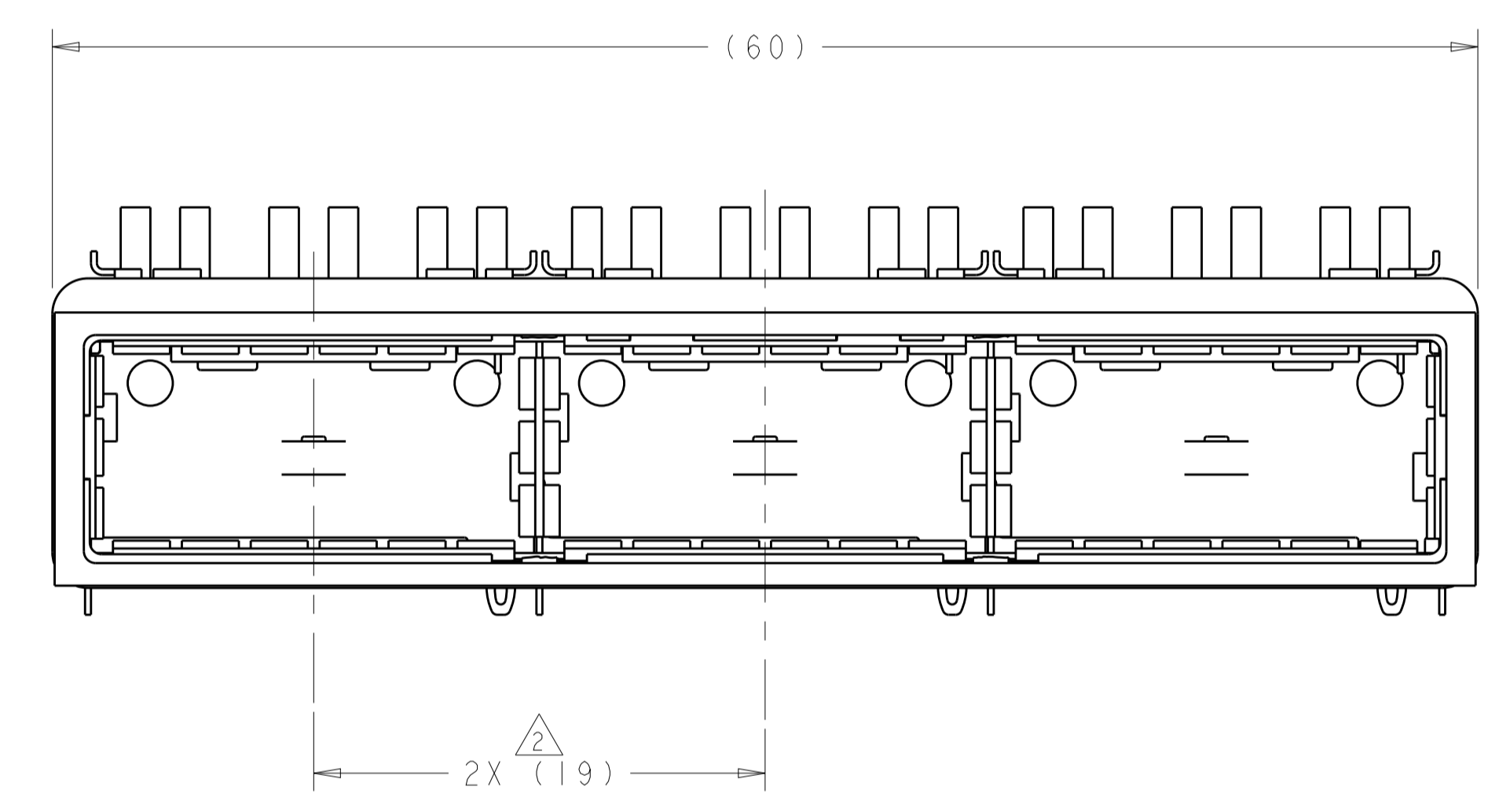
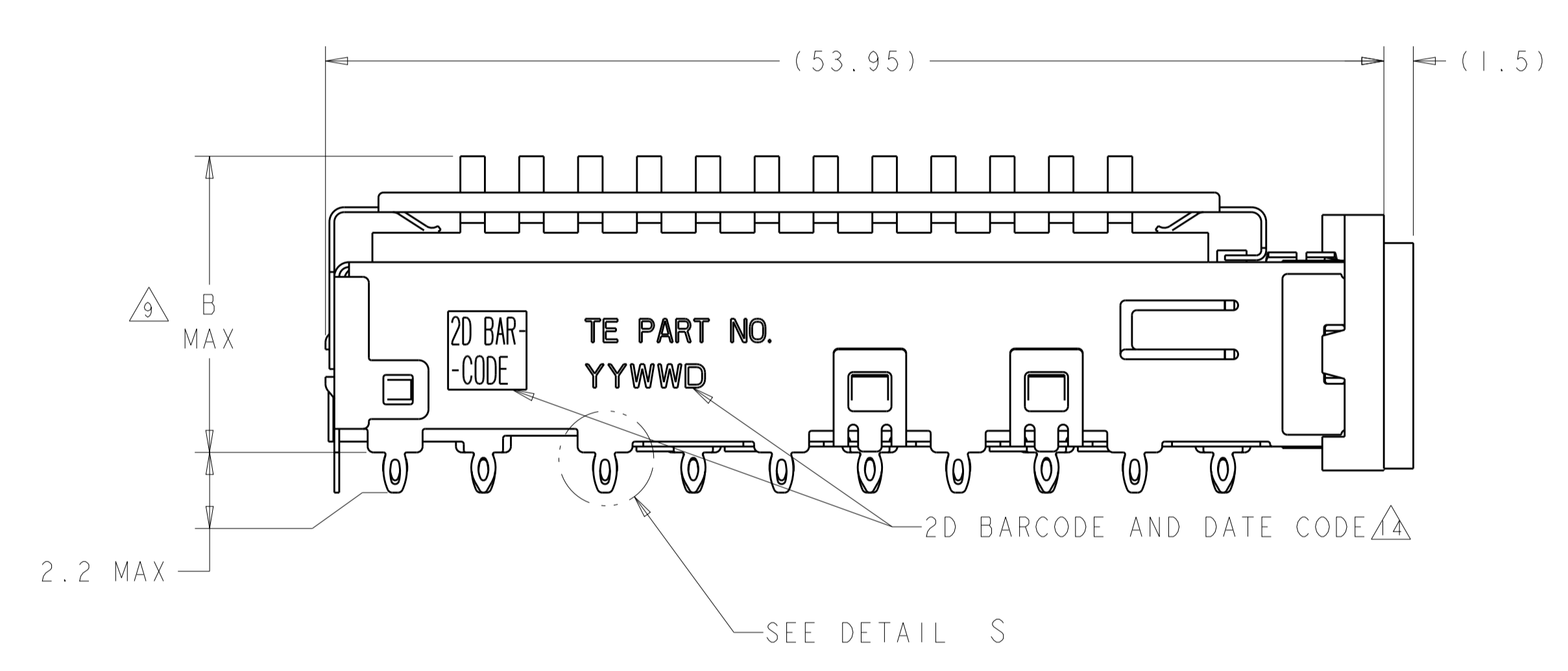
LOC	DIST	REVISIONS					
		P	LTN	DESCRIPTION	DATE	DMN	APVD
GP	00	I		PRELIMINARY	23FEB2012	KS	AC
		A		REVISED PER ECR-12-006970	17APR2012	KS	AC
		B		REVISED PER ECO-15-005721	4AUG2015	RG	SH



DETAIL S $\Delta 12$
 SCALE 20:1

- $\Delta 1$ MATERIALS:
 CAGE ASSEMBLY: NICKEL SILVER, 0.25 THICK
 EMI SPRINGS: COPPER ALLOY
 EMI GASKET: BURRER FOAM
 FRONT FLANGE: ZINC ALLOY
 HEAT SINK: ALUMINUM
 HEAT SINK CLIP: STAINLESS STEEL
- $\Delta 2$ PITCH BETWEEN PORTS OF ONE 1X3 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.
 MINIMUM SINGLE SIDED PC BOARD THICKNESS: 1.45mm
 MINIMUM DOUBLE SIDED PC BOARD 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.

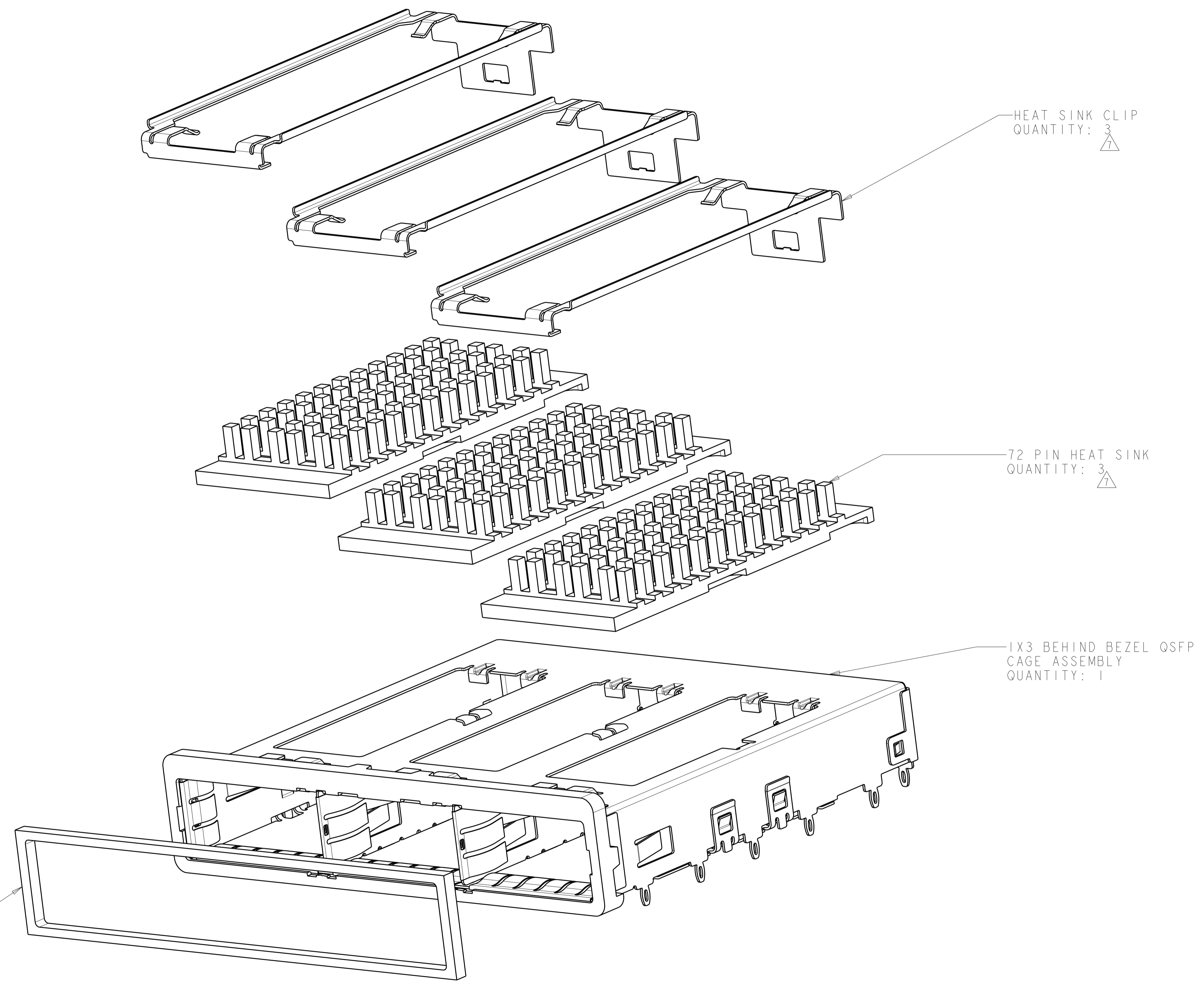
- $\Delta 3$ BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- $\Delta 4$ 2D BARCODE AND DATE CODE (YYWW) MARKED ON SIDE OF CAGE.
- $\Delta 5$ REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.
- $\Delta 6$ FINISH:
 EMI SPRINGS: 2 μ m MINIMUM TIN
 FRONT FLANGE: 3 μ m MINIMUM TIN OVER 1.27 μ m MINIMUM NICKEL OVER 5.08 μ m MINIMUM COPPER
 HEAT SINK: NICKEL.



23.0	NETWORKING	2174769-3
16.0	SAN	2174769-2
13.7	PCI	2174769-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN: KINSEN SUN 23FEB2012	TE Connectivity	
DIMENSIONS: mm		CHK: DENNY ZHU 23FEB2012		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 23FEB2012		
0 PLC	±	PRODUCT SPEC	1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP	
1 PLC	±0.1	108-2286	SIZE: CAGE CODE: DRAWING NO: RESTRICTED TO	
2 PLC	±0.13	APPLICATION SPEC	A100779C=2174769	
3 PLC	±0.001	114-13218	SCALE: 4:1 SHEET 1 OF 5 REV B	
4 PLC	±0.0001	WEIGHT		
ANGLES	±	CUSTOMER DRAWING		
FINISH: $\Delta 16$				

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



1X3 CONDUCTIVE GASKET
 QUANTITY: 1

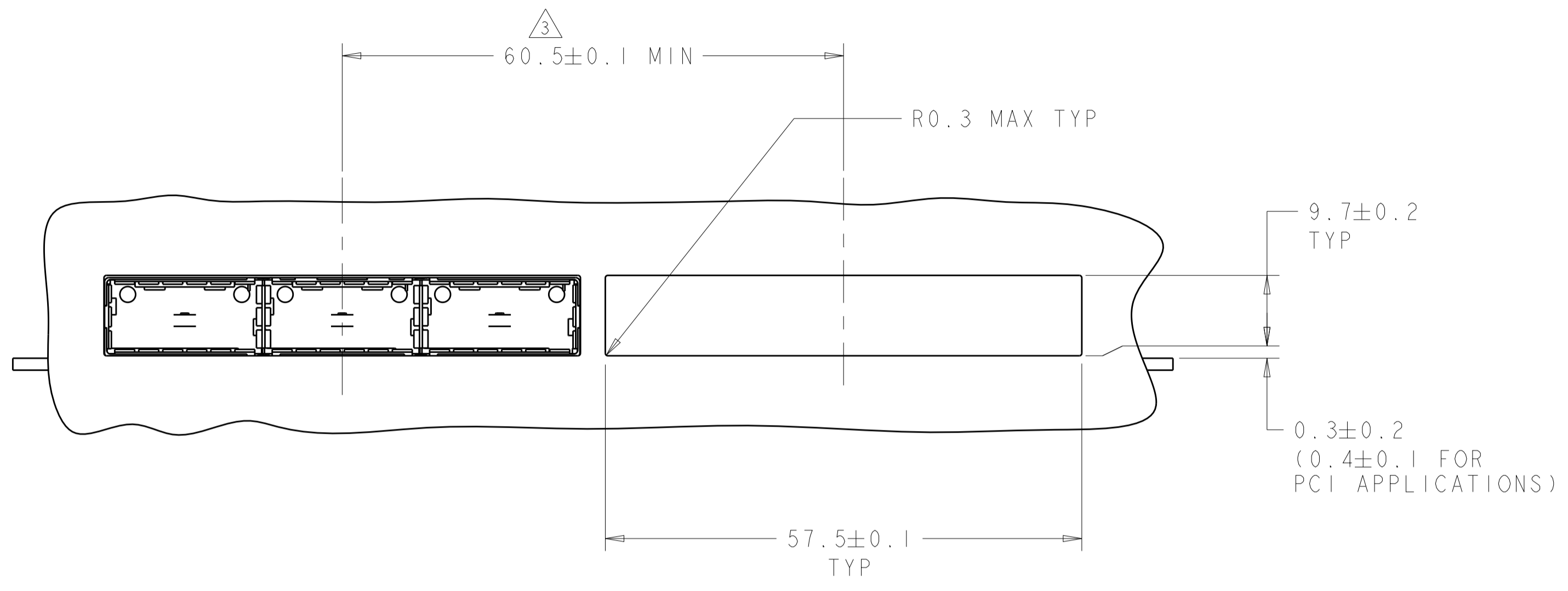
HEAT SINK CLIP
 QUANTITY: 3

72 PIN HEAT SINK
 QUANTITY: 3

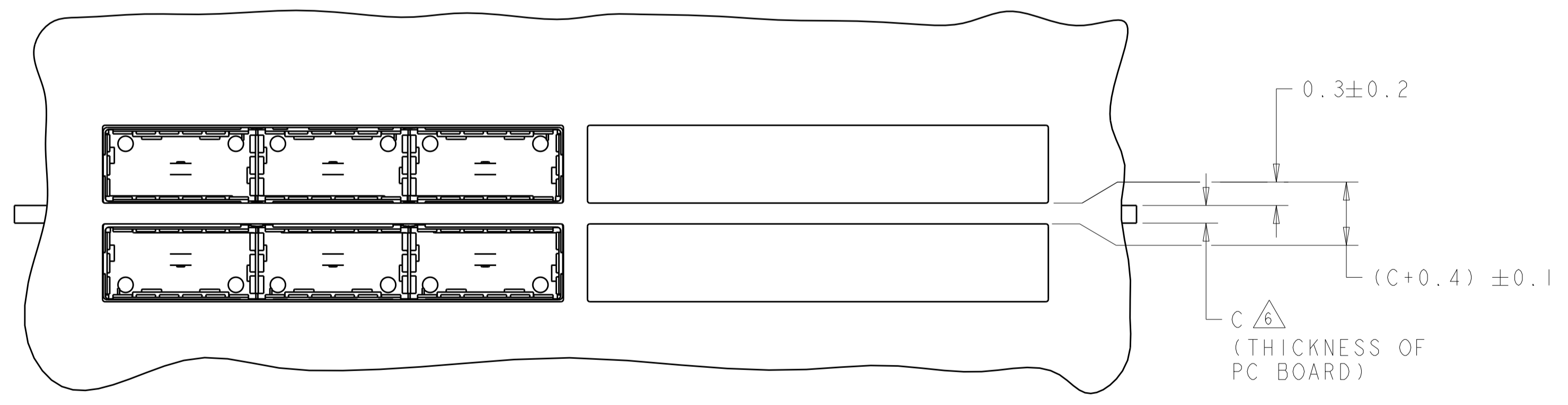
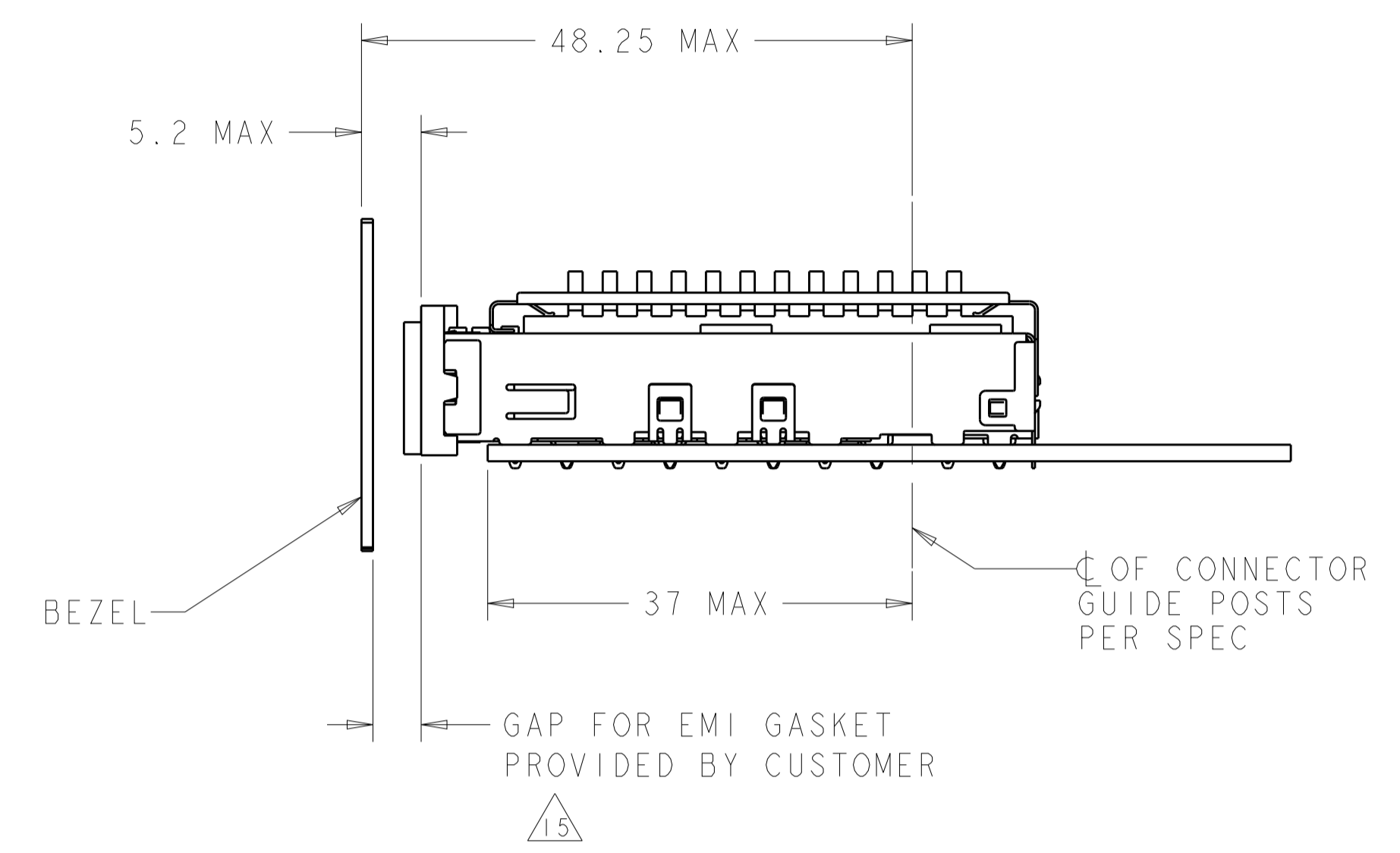
1X3 BEHIND BEZEL QSFP
 CAGE ASSEMBLY
 QUANTITY: 1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 23FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 23FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 23FEB2012	NAME: 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP
0 PLC ±. 1 PLC ±0.1 2 PLC ±0.1 3 PLC ±0.013 4 PLC ±0.0001 ANGLES ±.		PRODUCT SPEC: 108-2286	
MATERIAL: -		APPLICATION SPEC: 114-13218	RESTRICTED TO: -
FINISH: -		WEIGHT: -	SIZE: A1
CUSTOMER DRAWING		SCALE: 4:1	SHEET: 2 OF 5
			REV: B

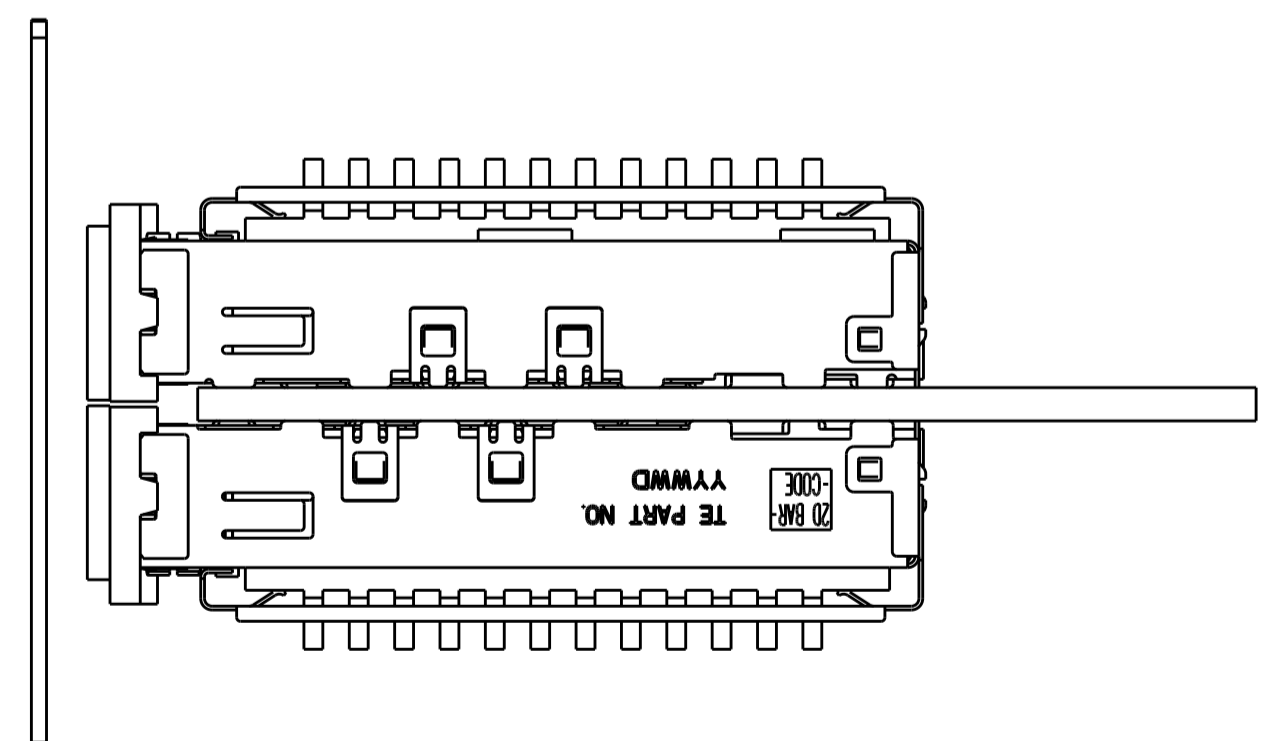
LOC	DIST	REVISIONS			
P	LTN	DESCRIPTION	DATE	OWN	APVD
-	-	SEE SHEET 1	-	-	-



ONE SIDED CONFIGURATION
SCALE 2:1



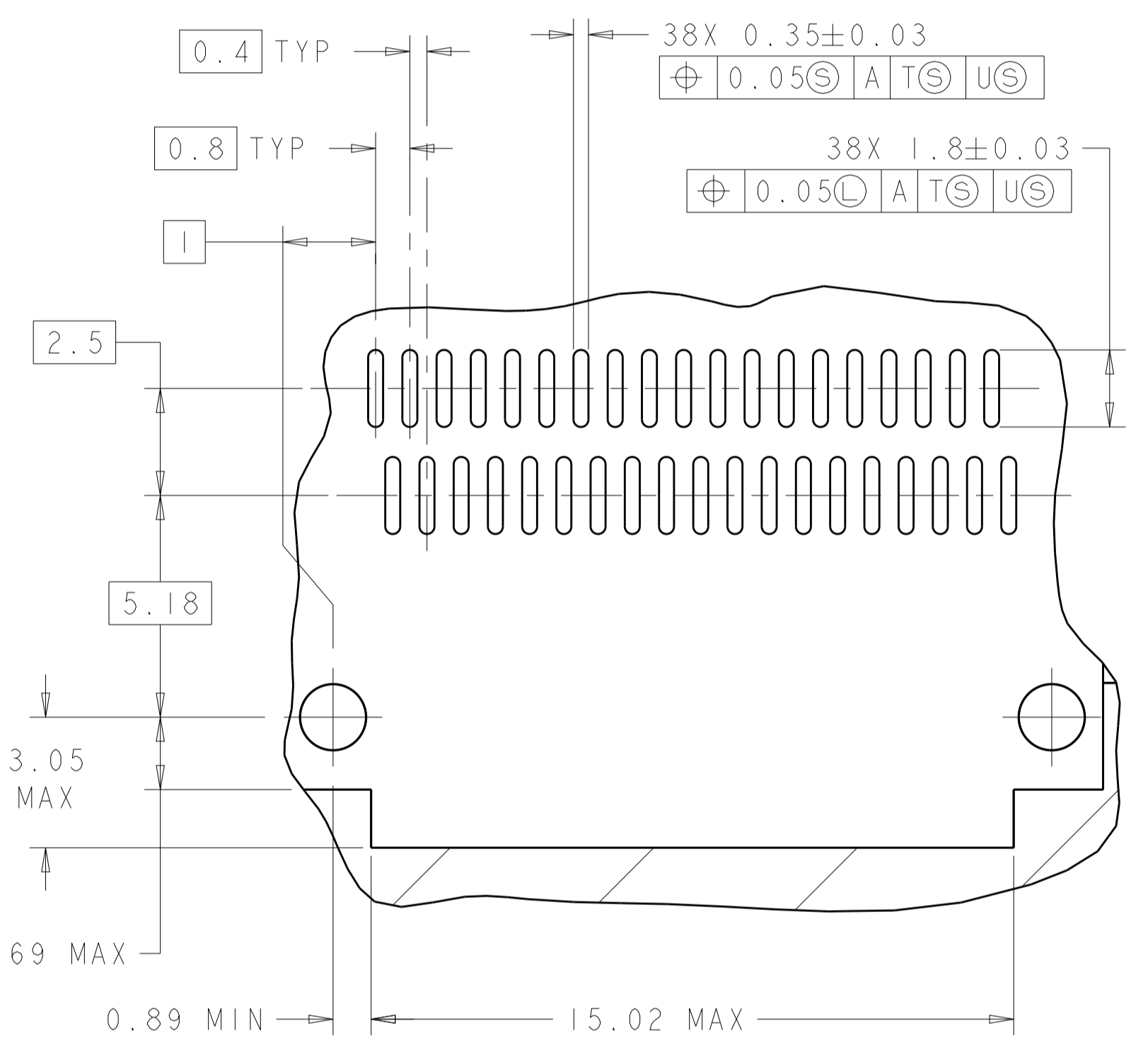
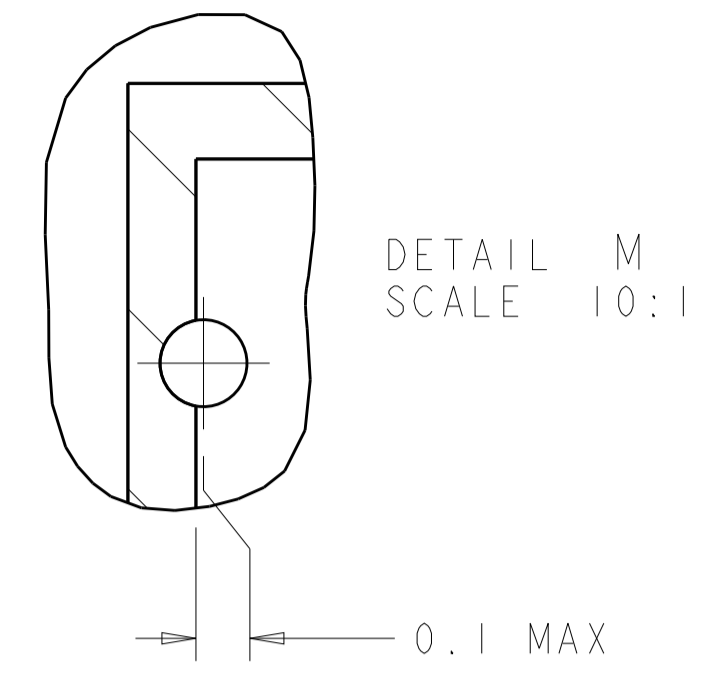
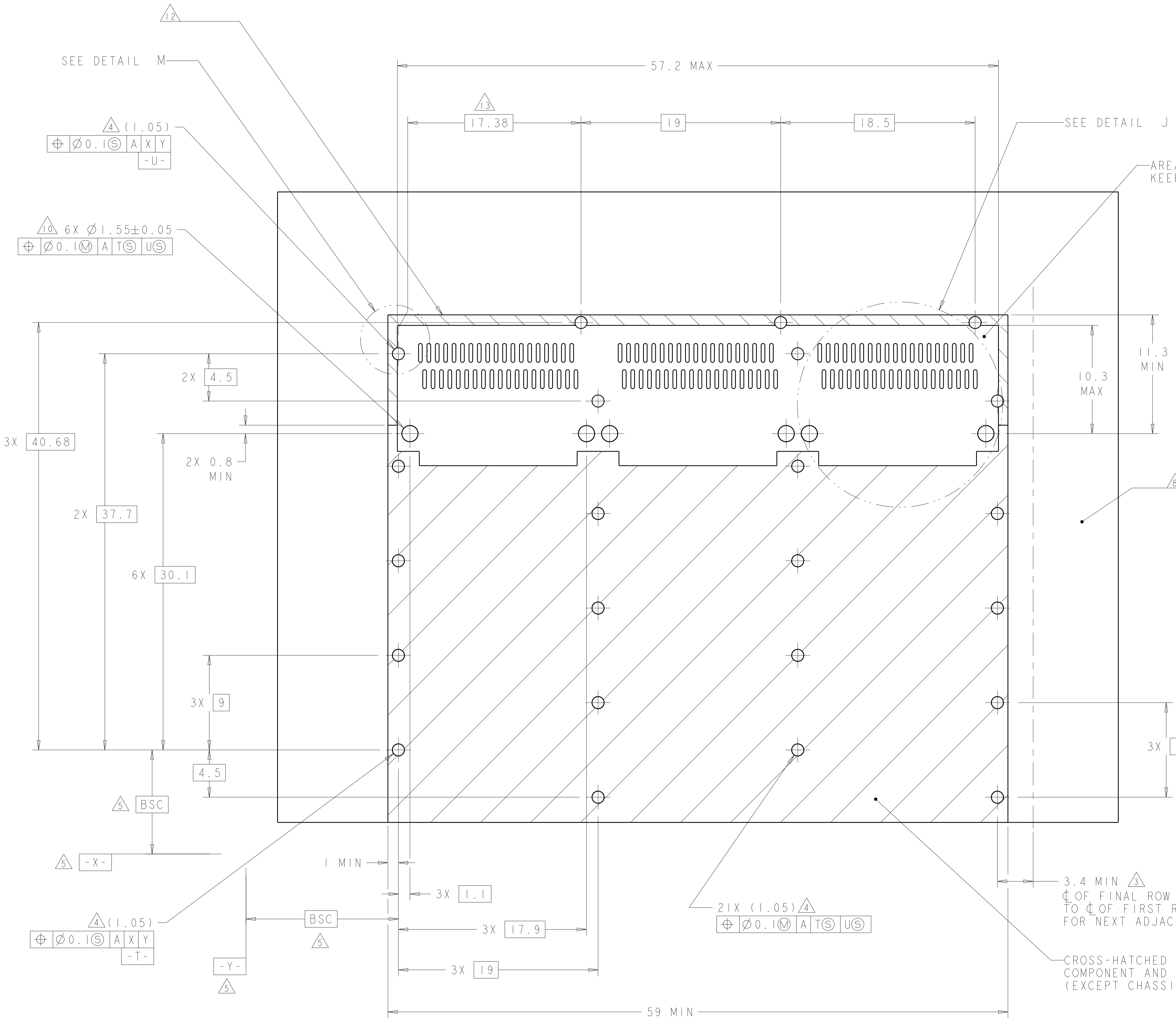
BELLY TO BELLY CONFIGURATION SIMILAR
TO ONE SIDED EXCEPT WHERE NOTED
SCALE 2:1



THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: RINSEN SUN 23FEB2012	
DIMENSIONS: mm		CHK: DENNY ZHU 23FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 23FEB2012	NAME: 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP
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=2174769
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		DATE	BY	APPV
-	SEE SHEET 1	-	-	-



RECOMMENDED PC BOARD LAYOUT
 SINGLE SIDE MOUNT CONFIGURATION
 SCALE 5:1

3.4 MIN Δ
 ϕ OF FINAL ROW OF HOLES
 TO ϕ OF FIRST ROW OF HOLES
 FOR NEXT ADJACENT CAGE

CROSS-HATCHED AREA DENOTES
 COMPONENT AND TRACE KEEP-OUT
 (EXCEPT CHASSIS GROUND)

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUH 23FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 23FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 23FEB2012	NAME: 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, CONDUCTIVE GASKET, QSFP
0 PLC ±0.1	1 PLC ±0.1	PRODUCT SPEC: 108-2286	APPLICATION SPEC: 114-13218
2 PLC ±0.013	3 PLC ±0.001	WEIGHT: -	SIZE: CAGE CODE: DRAWING NO: A100779C=2174769
4 PLC ±0.001	ANGLES ±0.001	CUSTOMER DRAWING	SCALE: 4:1 SHEET 4 OF 5 REV B