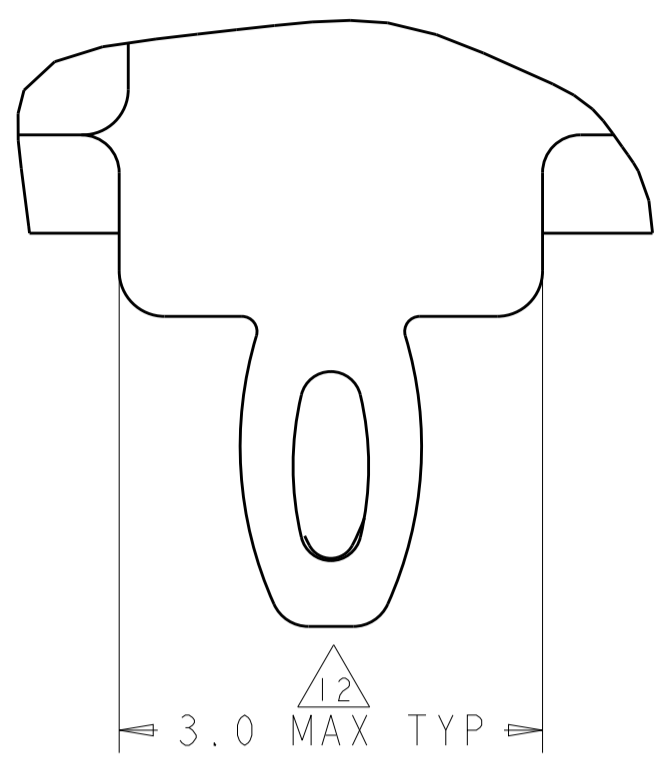


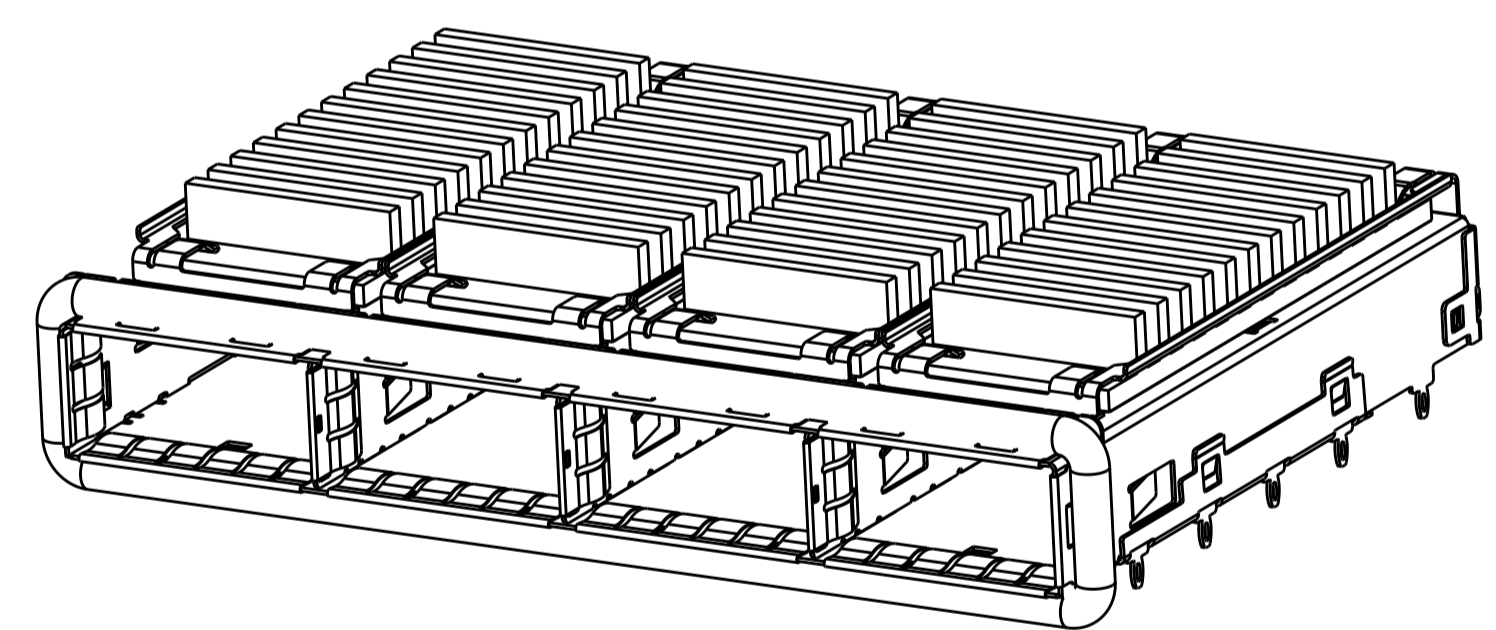
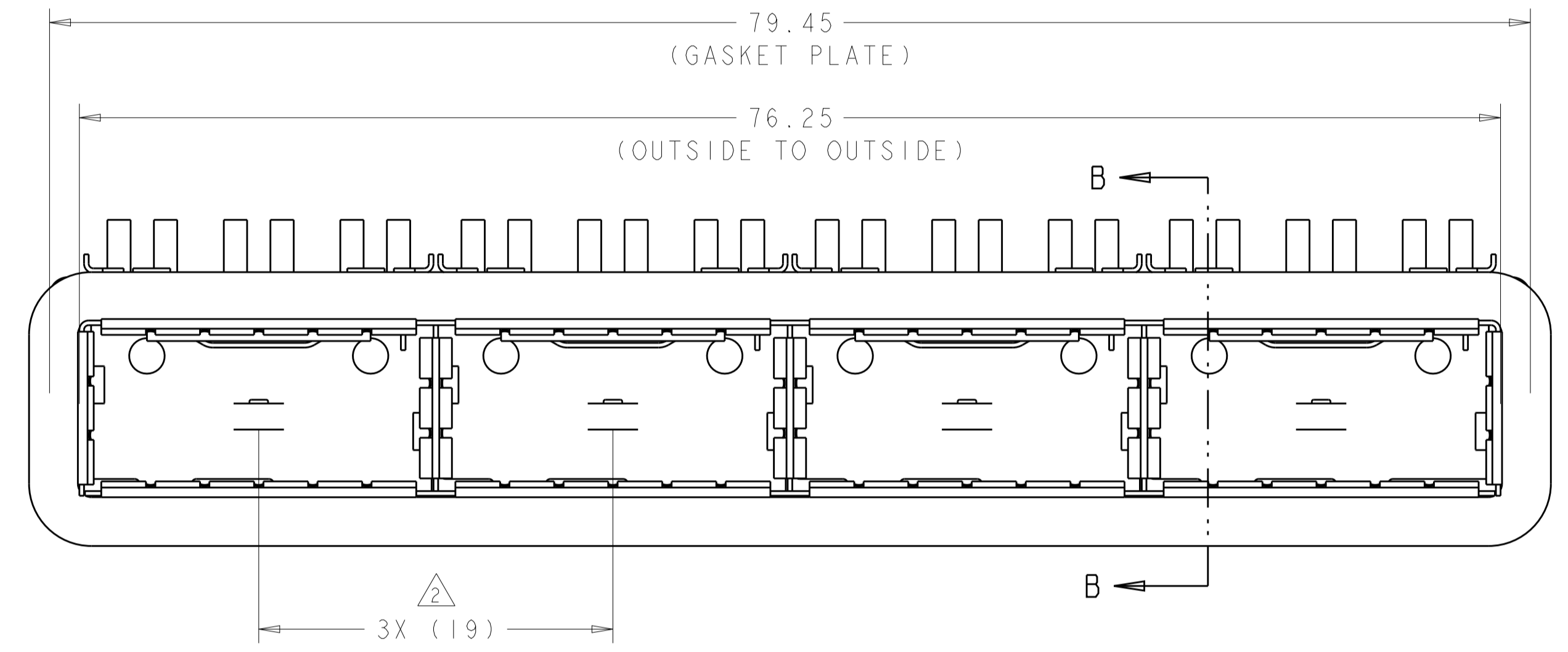
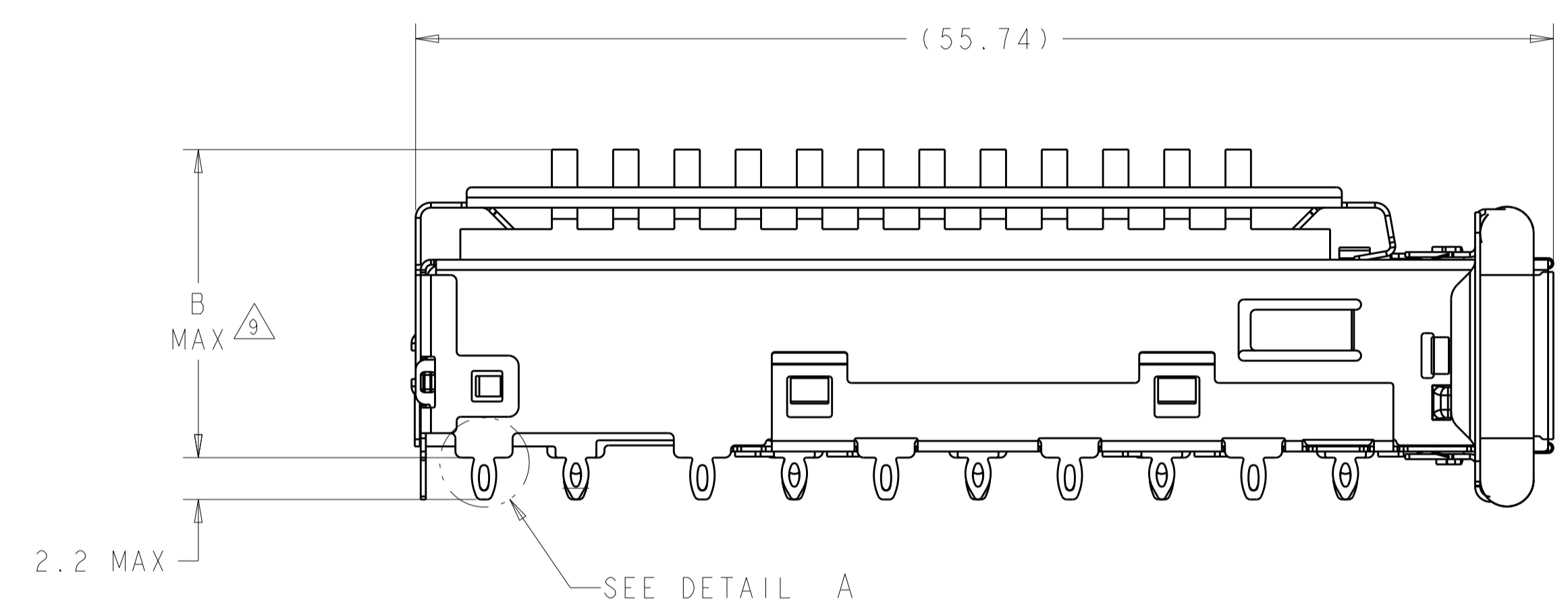
LOC	DIST	REV	DATE	BY	CHK	APPV
GP	00	A	RELEASE PER ECO-16-002978	3MAR2016	RG	SH

- 1. CAGE ASSEMBLY MATERIAL: NICKEL SILVER, 0.25 THICK
 HEAT SINK MATERIAL: ALUMINUM
 HEAT SINK CLIP MATERIAL: STAINLESS STEEL
 EMI SPRING MATERIAL: COPPER ALLOY
 EMI GASKET MATERIAL: CONDUCTIVE RUBBER, UL 94V-0 RATED
 EMI GASKET PLATE MATERIAL: STAINLESS STEEL
- 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 114-13217 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 = 5.0mm PER CUSTOM.
- 7. HEAT SINKS, LIGHT PIPES, 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.

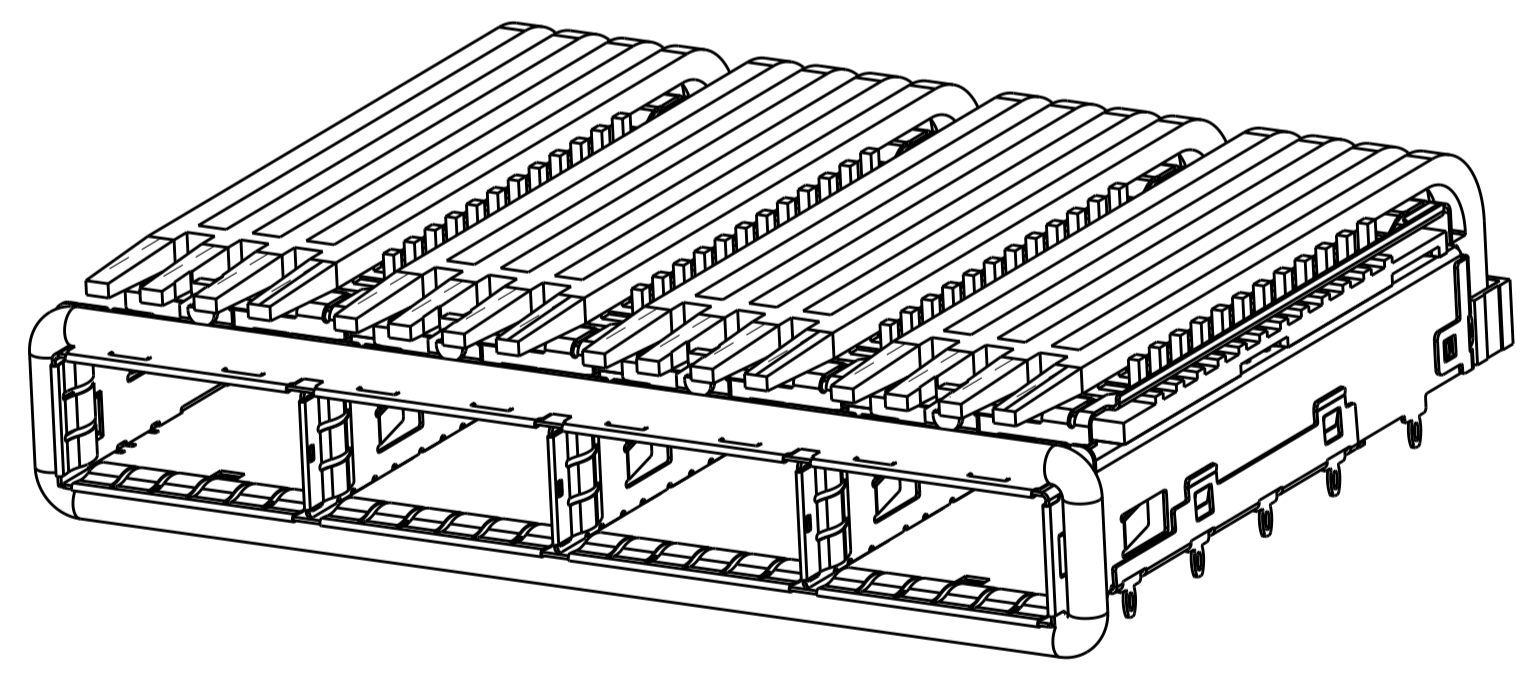
- 11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- 12. SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL A, CONTACT PC BOARD.
- 13. BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- 14. DATE CODE (YYWW) MARKED ON TOP OF CAGE AND CONCEALED BY HEAT SINKS APPLIES TO CAGE ASSEMBLY ONLY.
- 15. REFERENCE APP SPEC 114-13217 FOR GASKET THICKNESS CALCULATION.
- 16. EMI SPRING FINISH: TIN PLATING OVER NICKEL
 HEAT SINK FINISH: ANODIZED OR NICKEL PLATING.



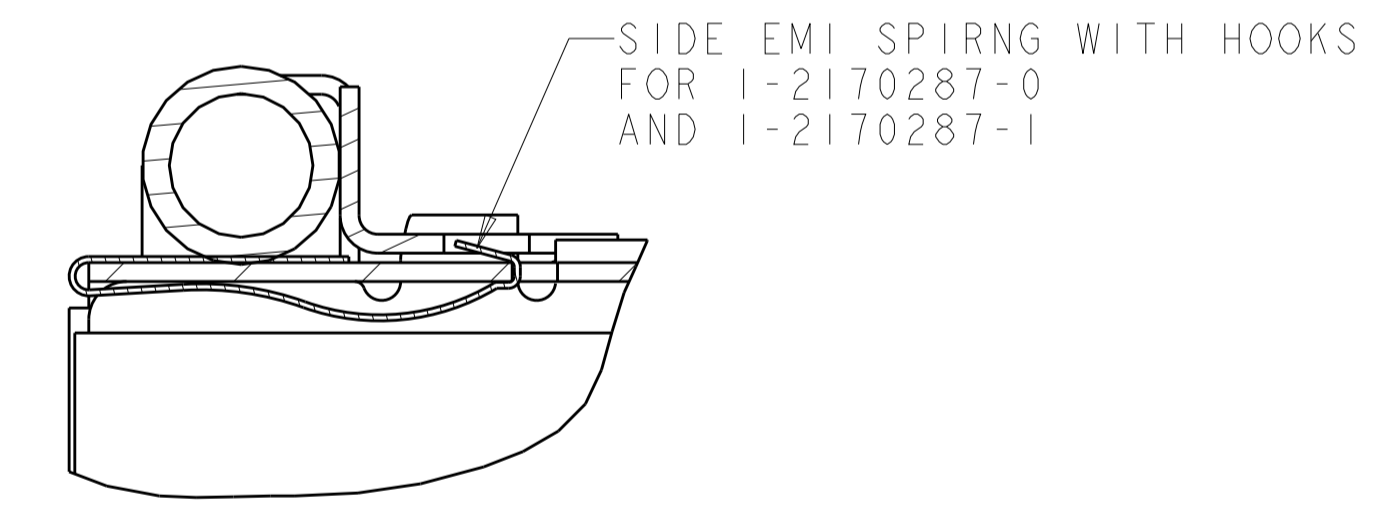
DETAIL A
 SCALE 20:1



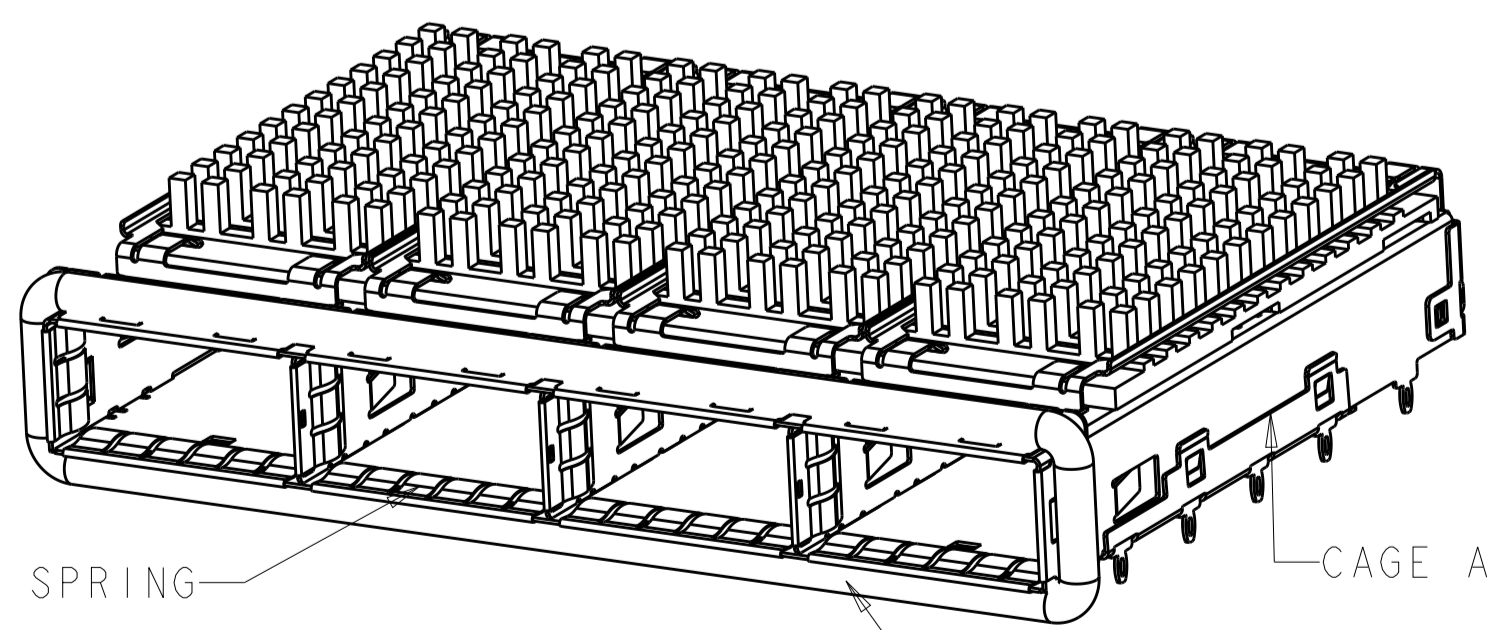
2170287-4, 2170287-5, 2170287-6
 SCALE 2:1



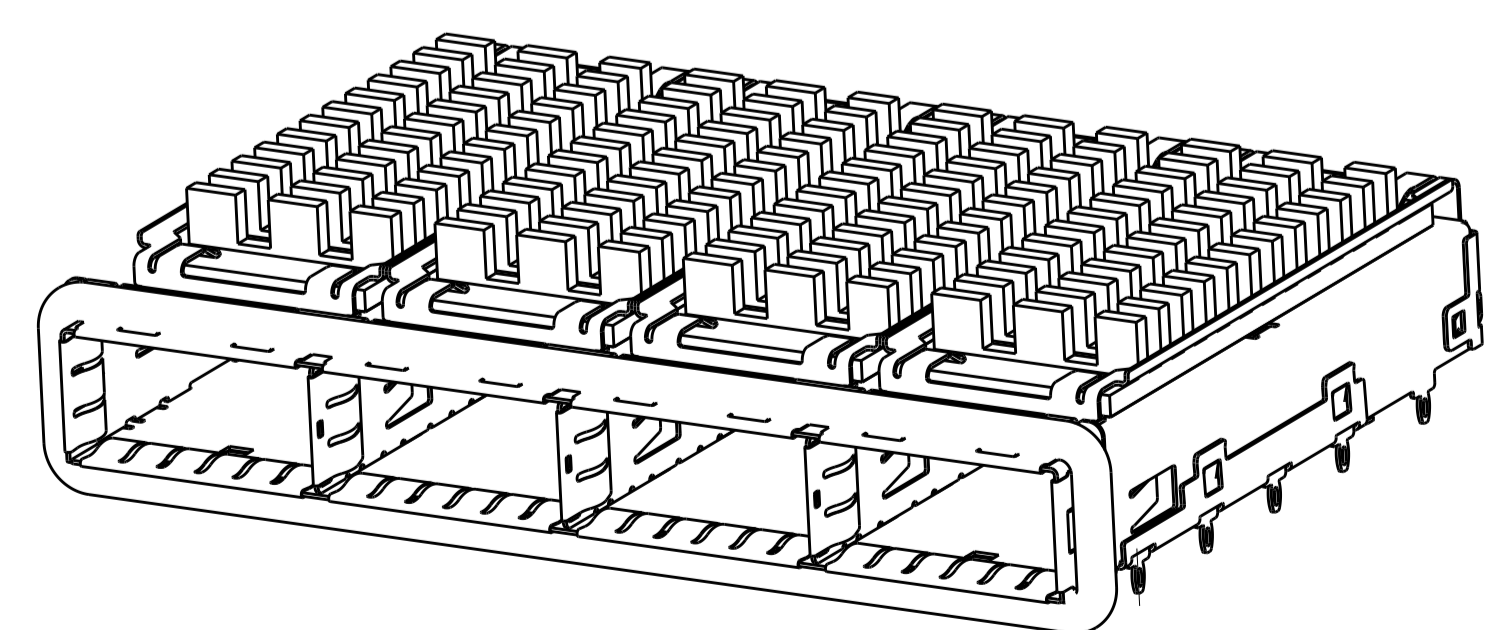
1-2170287-0
 SCALE 2:1



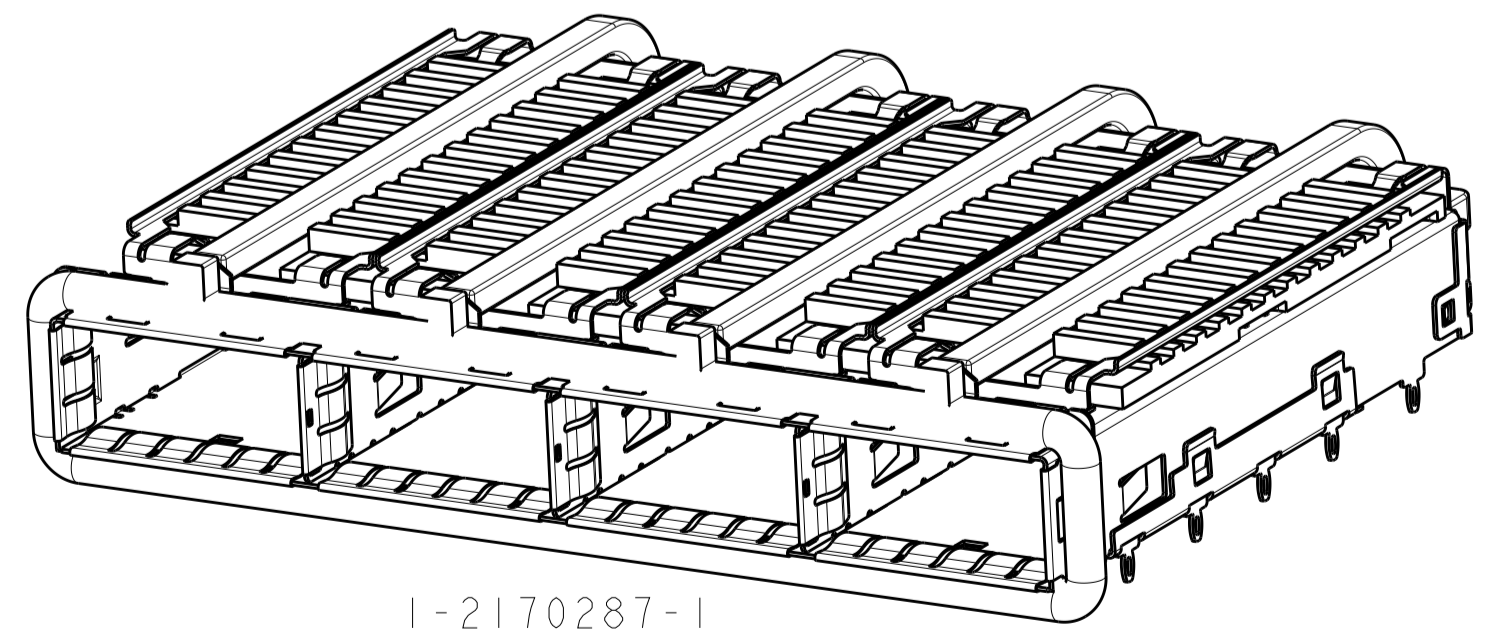
SECTION B-B
 SCALE 10:1



2170287-1, 2170287-2, 2170287-3
 SCALE 2:1



2170287-7, 2170287-8, 2170287-9
 SCALE 2:1



1-2170287-1
 SCALE 2:1

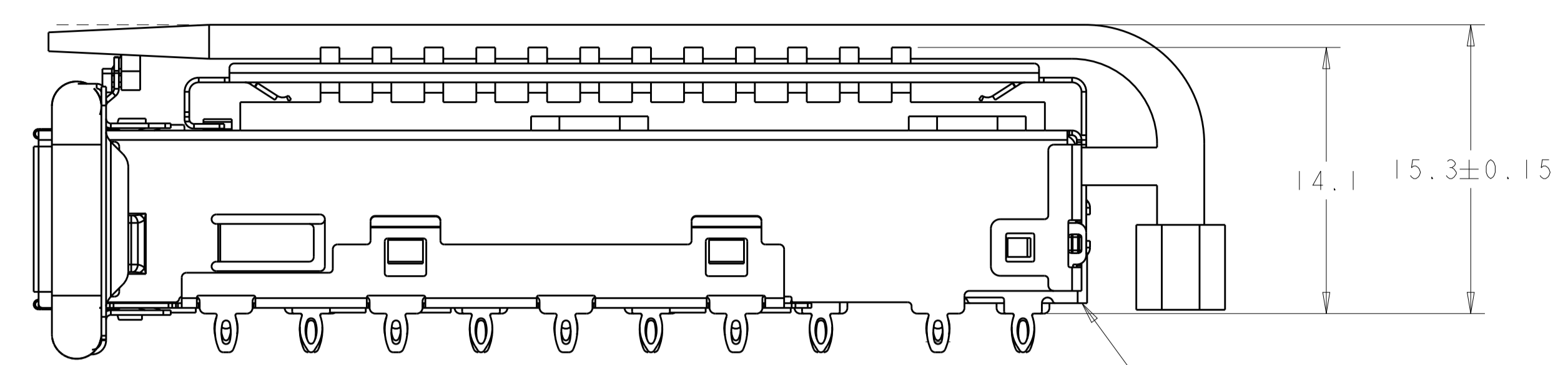
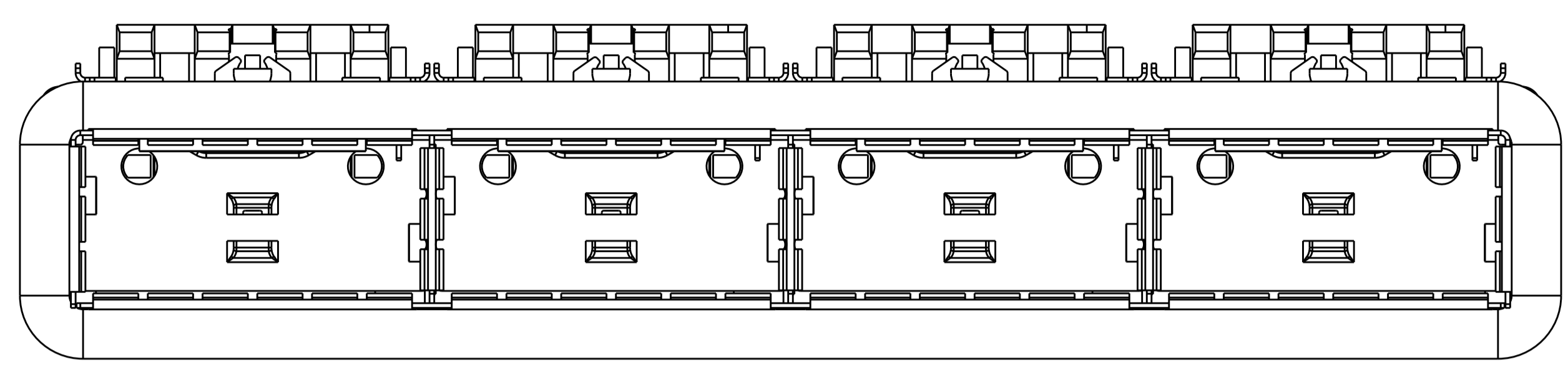
13.7	PCI(FIN TYPE)	1-2170287-1
15.0	CUSTOMIZED HEAT SINK	1-2170287-0
23.0	NETWORKING(FIN TYPE)	2170287-9
16.0	SAN(FIN TYPE)	2170287-8
13.7	PCI(FIN TYPE)	2170287-7
23.0	NETWORKING(FIN TYPE)	2170287-6
16.0	SAN(FIN TYPE)	2170287-5
13.7	PCI(FIN TYPE)	2170287-4
23.0	NETWORKING(PIN TYPE)	2170287-3
16.0	SAN(PIN TYPE)	2170287-2
13.7	PCI(PIN TYPE)	2170287-1
B	HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

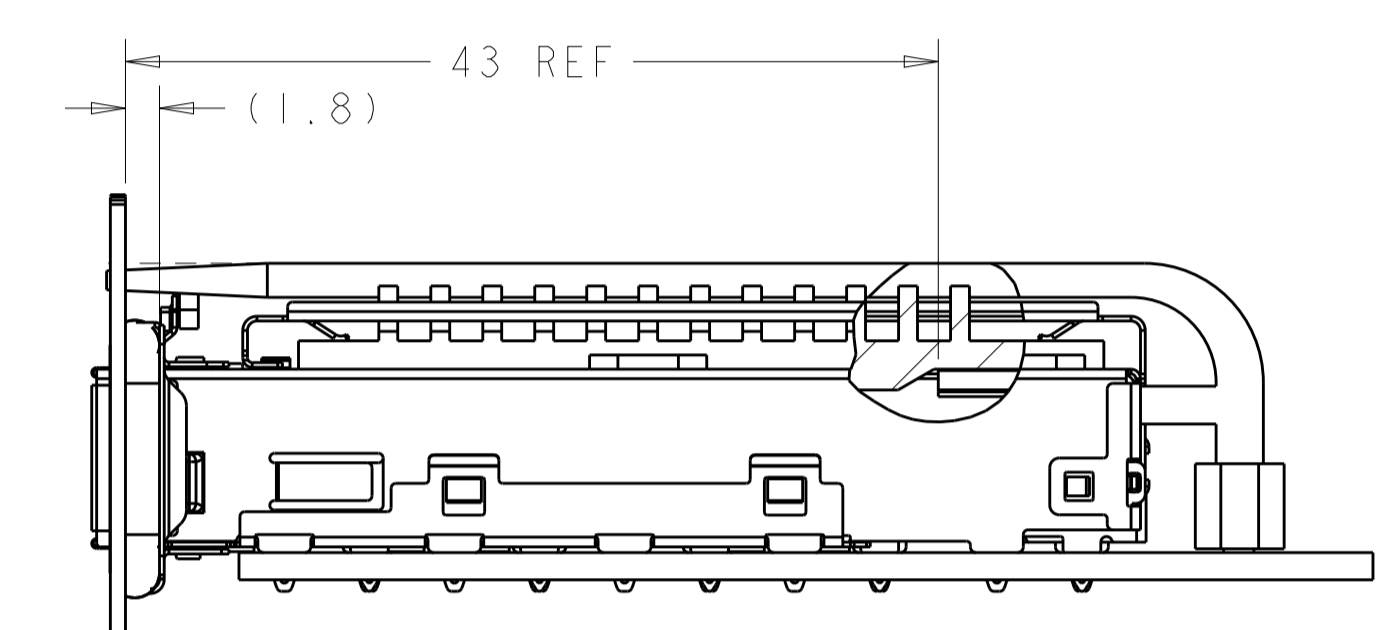
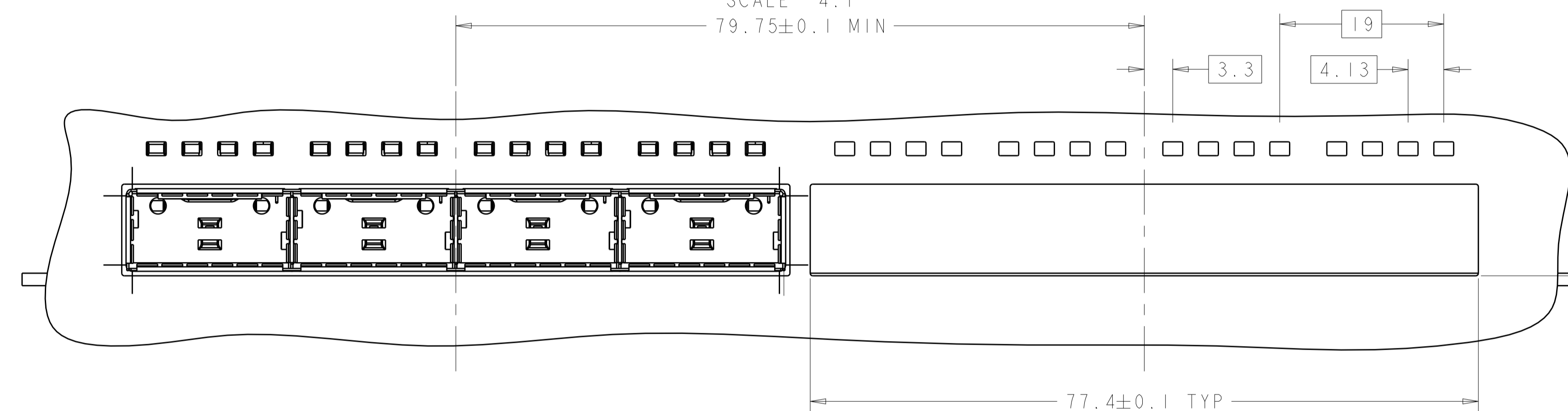
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	OWN: RINSEN SUN 29FEB2012	CHK: DENNY ZHU 29FEB2012	APPV: ALEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
mm	0 PLC ±0.35 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±0.25	PRODUCT SPEC: 108-2286	APPLICATION SPEC: 114-13217	WEIGHT: -	SIZE: CAGE CODE DRAWING NO: A100779C=2170287
MATERIAL: 1	FINISH: 16	CUSTOMER DRAWING			SCALE: 4:1 SHEET 1 OF 8 REV A

TE TE Connectivity

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

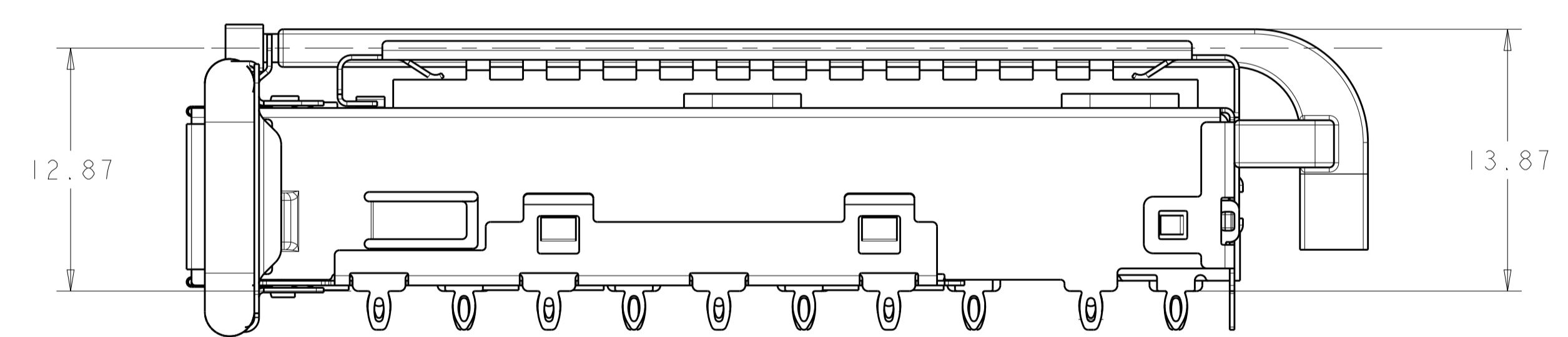
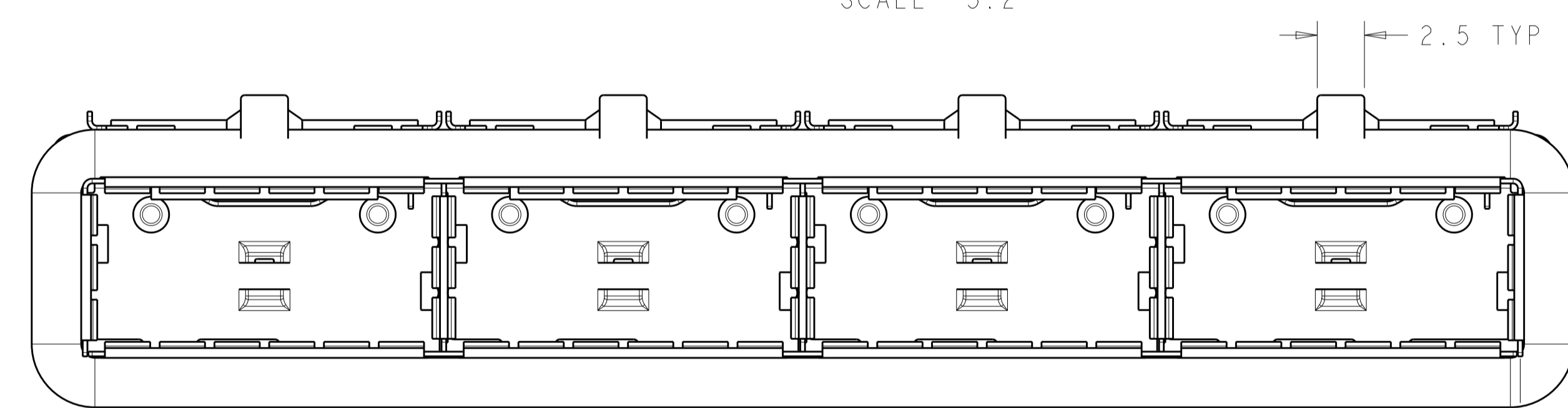


1-2170287-0 shown
SCALE 4:1

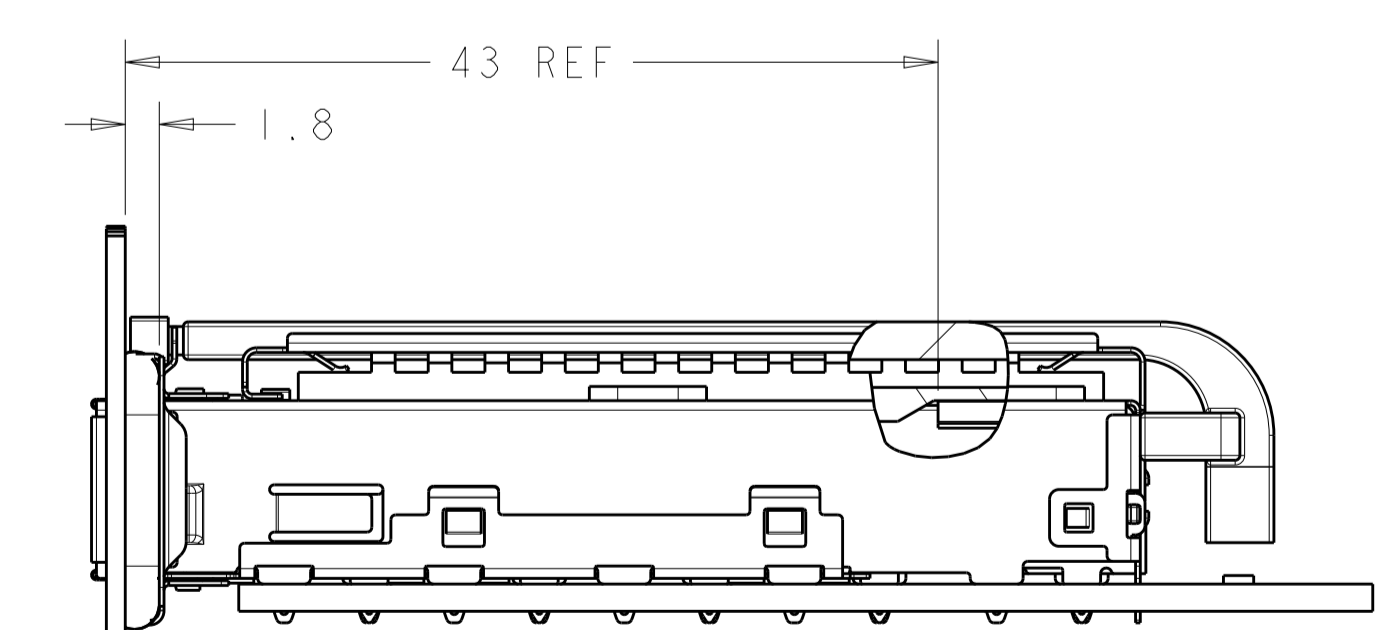
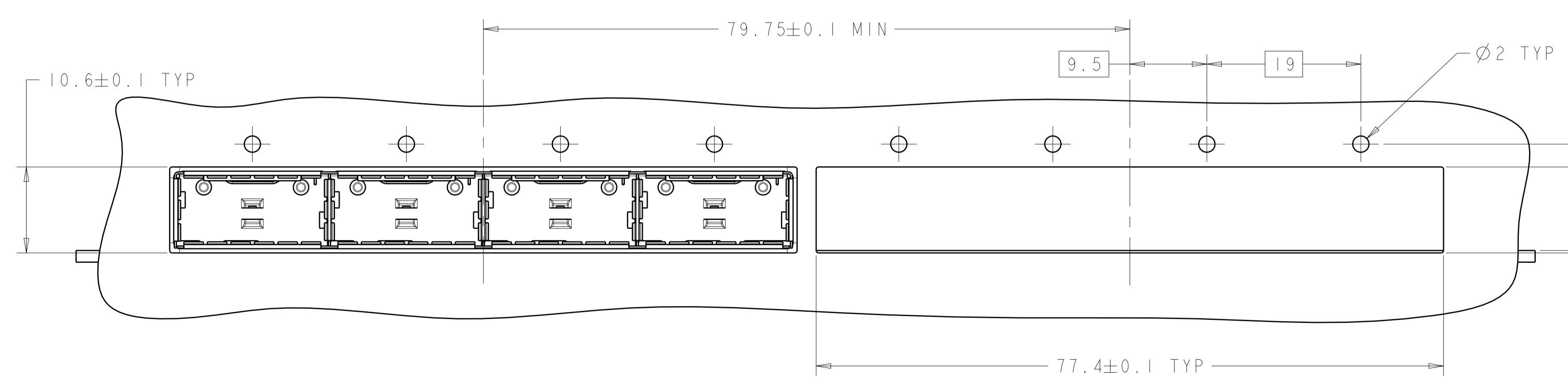


SECTION B-B

1-2170287-0
ONE SIDED CONFIGURATION
SCALE 5:2



1-2170287-1 SHOWN
SCALE 4:1



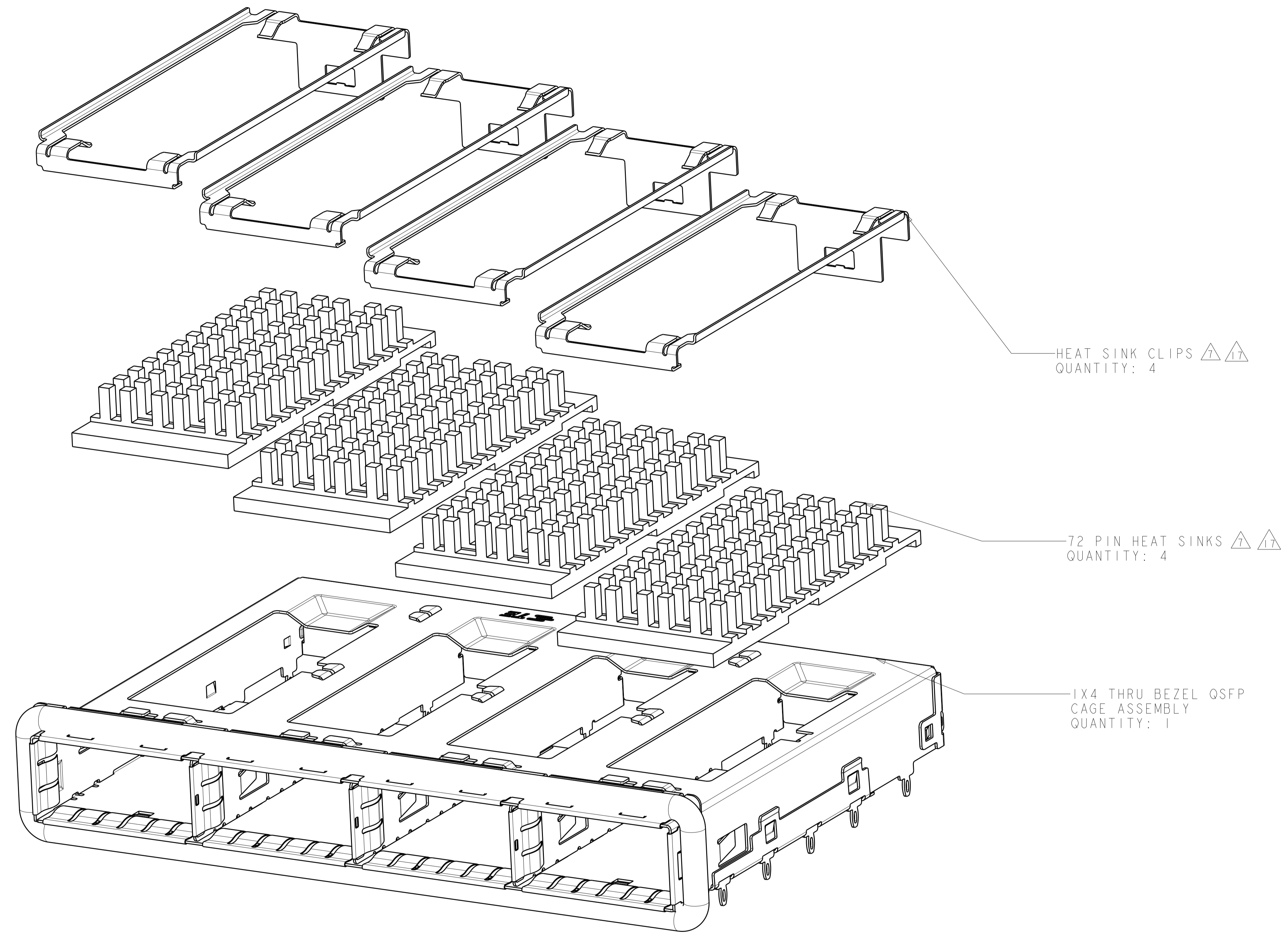
SECTION B-B



1-2170287-1
ONE SIDED CONFIGURATION
SCALE 5:2

0.3
BEZEL OPEING
BELOW PCB SURFACE

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN: RINSEN SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
0 PLC ±	1 PLC ±0.35	PRODUCT SPEC: 108-2286	SIZE: A1
2 PLC ±0.25	3 PLC ±	APPLICATION SPEC: 114-13217	CAGE CODE: 2170287
4 PLC ±	ANGLES ±	WEIGHT: -	RESTRICTED TO: -
MATERIAL: -	FINISH: -	CUSTOMER DRAWING	SCALE: 1:1 SHEET 2 OF 8 REV A


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



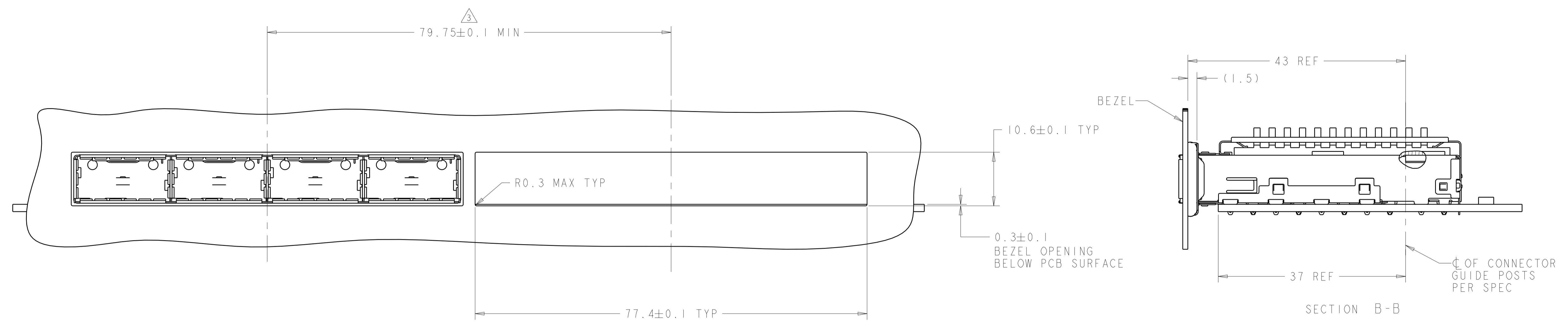
HEAT SINK CLIPS  
 QUANTITY: 4

72 PIN HEAT SINKS  
 QUANTITY: 4

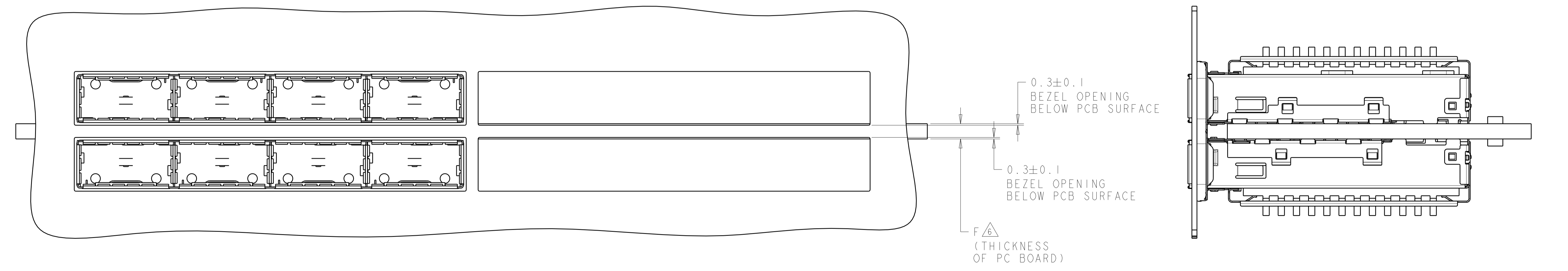
1X4 THRU BEZEL QSFP
 CAGE ASSEMBLY
 QUANTITY: 1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 29FEB2012	
		CHK: DENNY ZHU 29FEB2012	
DIMENSIONS:		APVD: AILEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
mm	0 PLC ±	PRODUCT SPEC: 108-2286	SIZE: A100779C=2170287
	1 PLC ±0.35	APPLICATION SPEC: 114-13217	RESTRICTED TO: -
	2 PLC ±0.25	WEIGHT: -	SCALE: 1:1
	3 PLC ±	CUSTOMER DRAWING	SHEET 3 OF 8
	4 PLC ±		REV A
	ANGLES ±		
	FINISH ±		

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



ONE SIDED CONFIGURATION
 SCALE 5:2

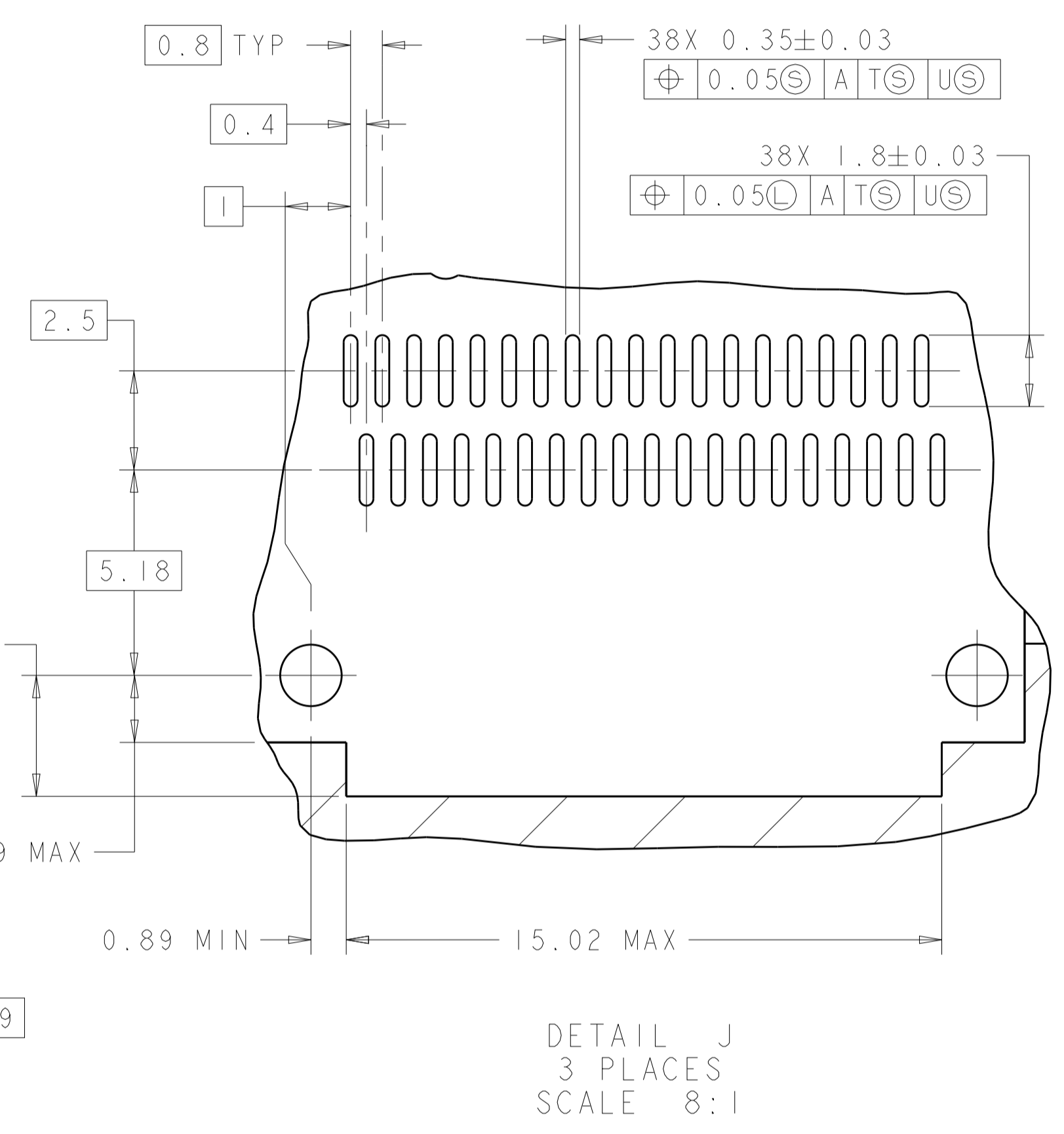
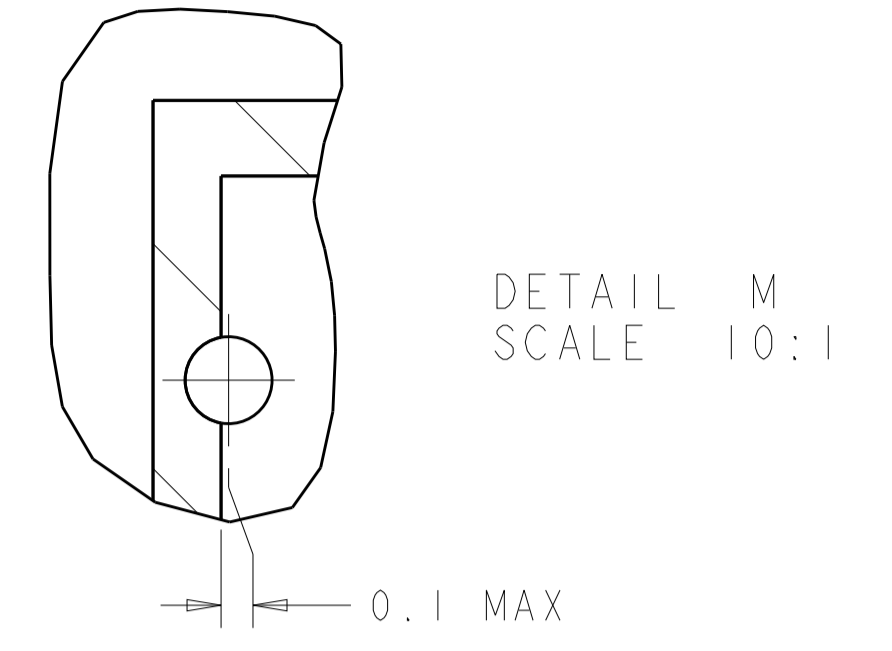
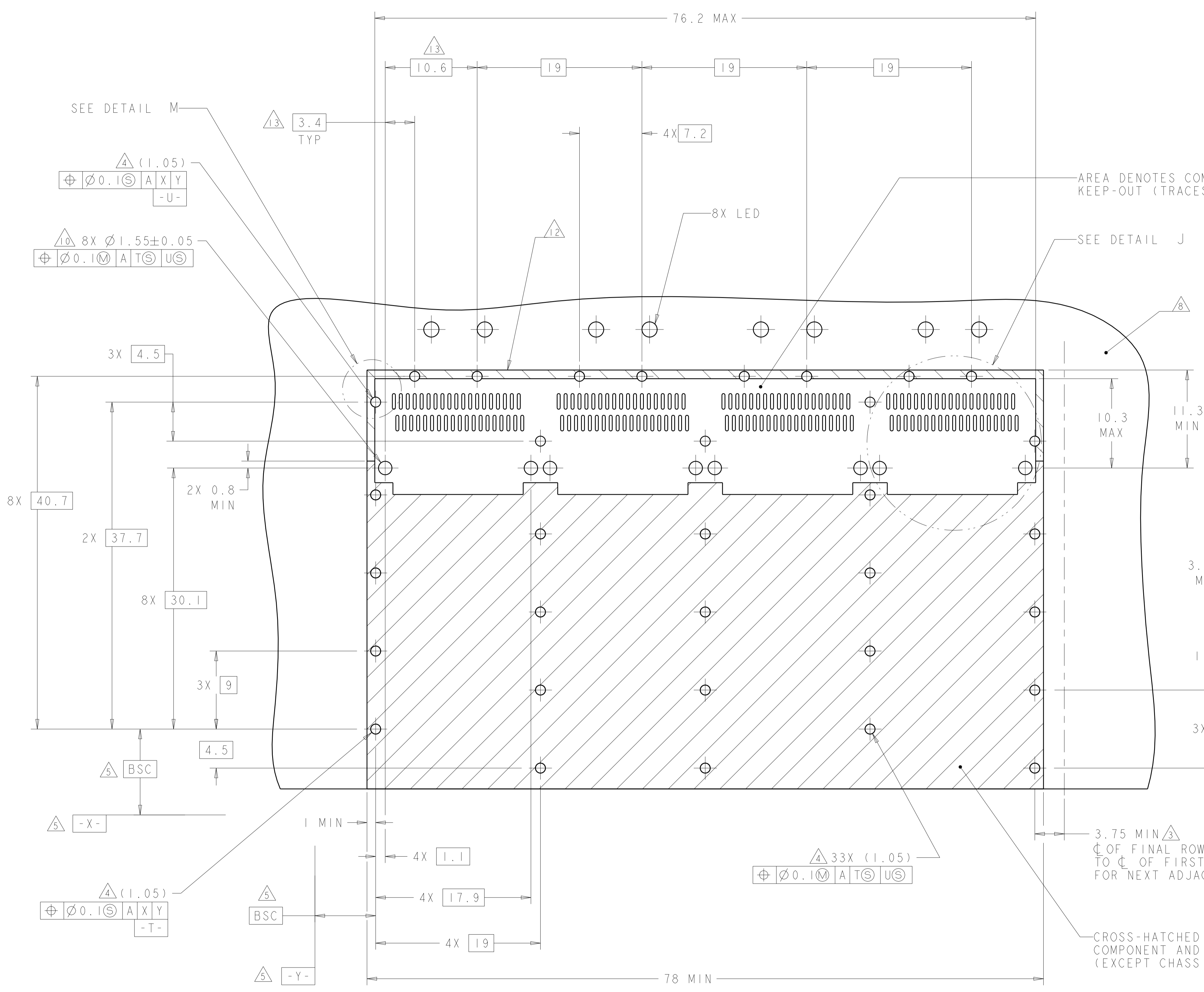


BELLY TO BELLY CONFIGURATION
 SIMILAR TO ONE SIDED
 EXCEPT WHERE NOTED
 SCALE 5:2

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN RINSEN SUH 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD ALEX CAI 29FEB2012	NAME 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
0 PLC ±	1 PLC ±0.35	PRODUCT SPEC	SIZE 108-2286
2 PLC ±0.25	3 PLC ±	APPLICATION SPEC	RESTRICTED TO
4 PLC ±	ANGLES ±	114-13217	SCALE A100779C=2170287
MATERIAL	FINISH	WEIGHT	SHEET 4 OF 8 REV A
CUSTOMER DRAWING		SCALE 1:1	

LOC	DIST	REV	DATE	BY	APPV
GP	00				

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	SEE SHEET 1		



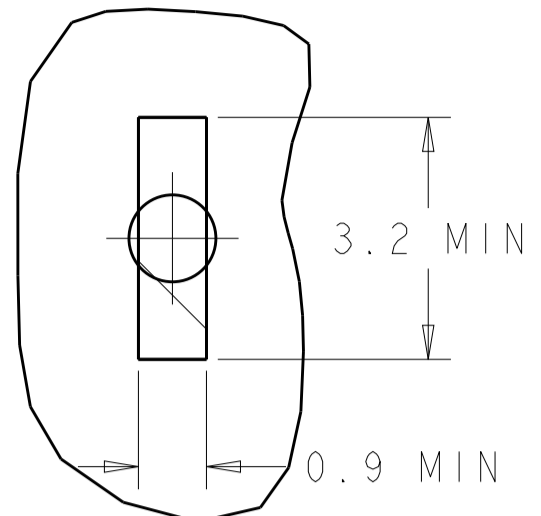
RECOMMENDED PC BOARD LAYOUT
 SINGLE SIDE MOUNT CONFIGURATION
 SCALE 4:1

3.75 MIN Δ 3
 C OF FINAL ROW OF HOLES
 TO C OF FIRST ROW OF HOLES
 FOR NEXT ADJACENT CAGE

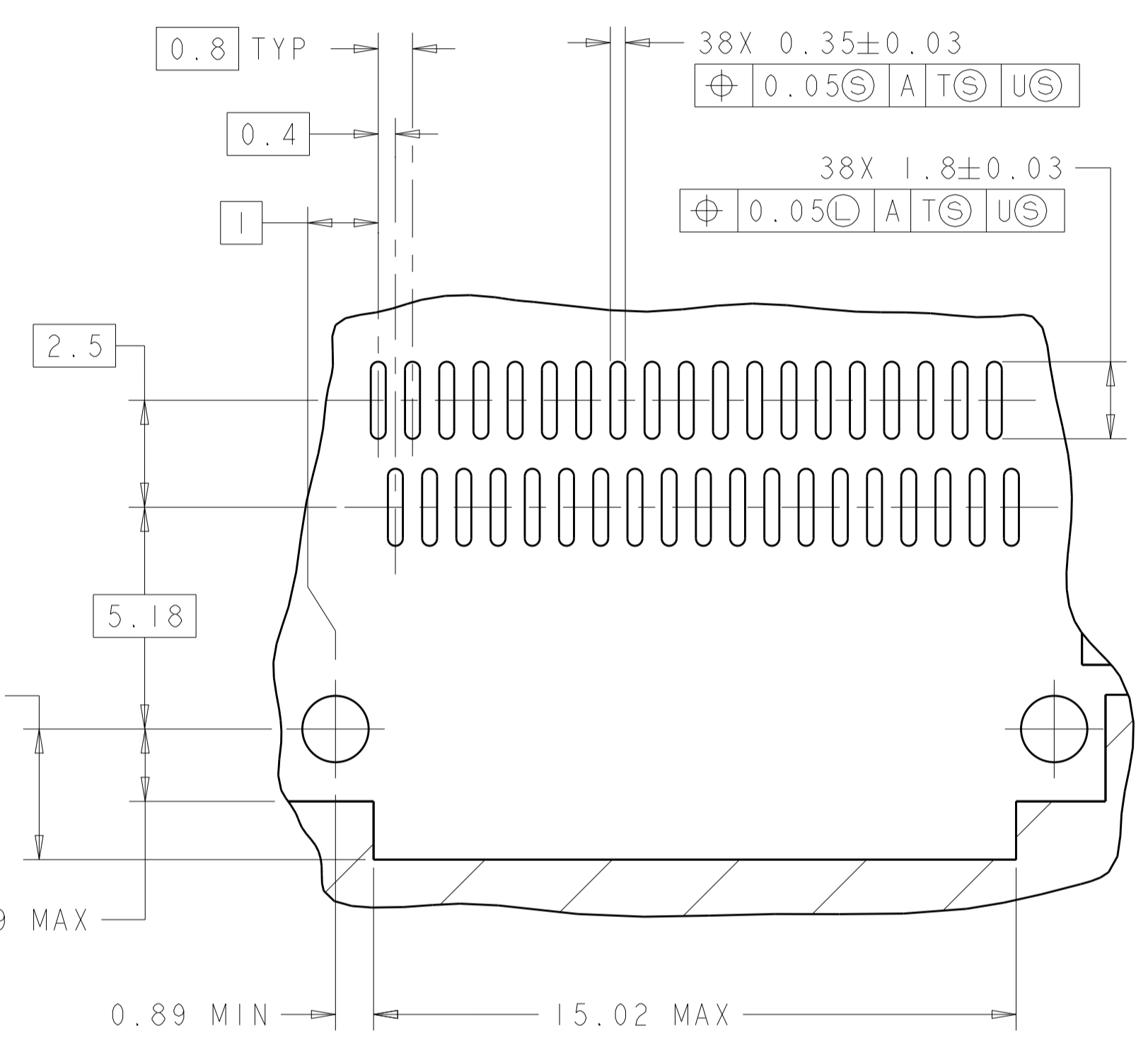
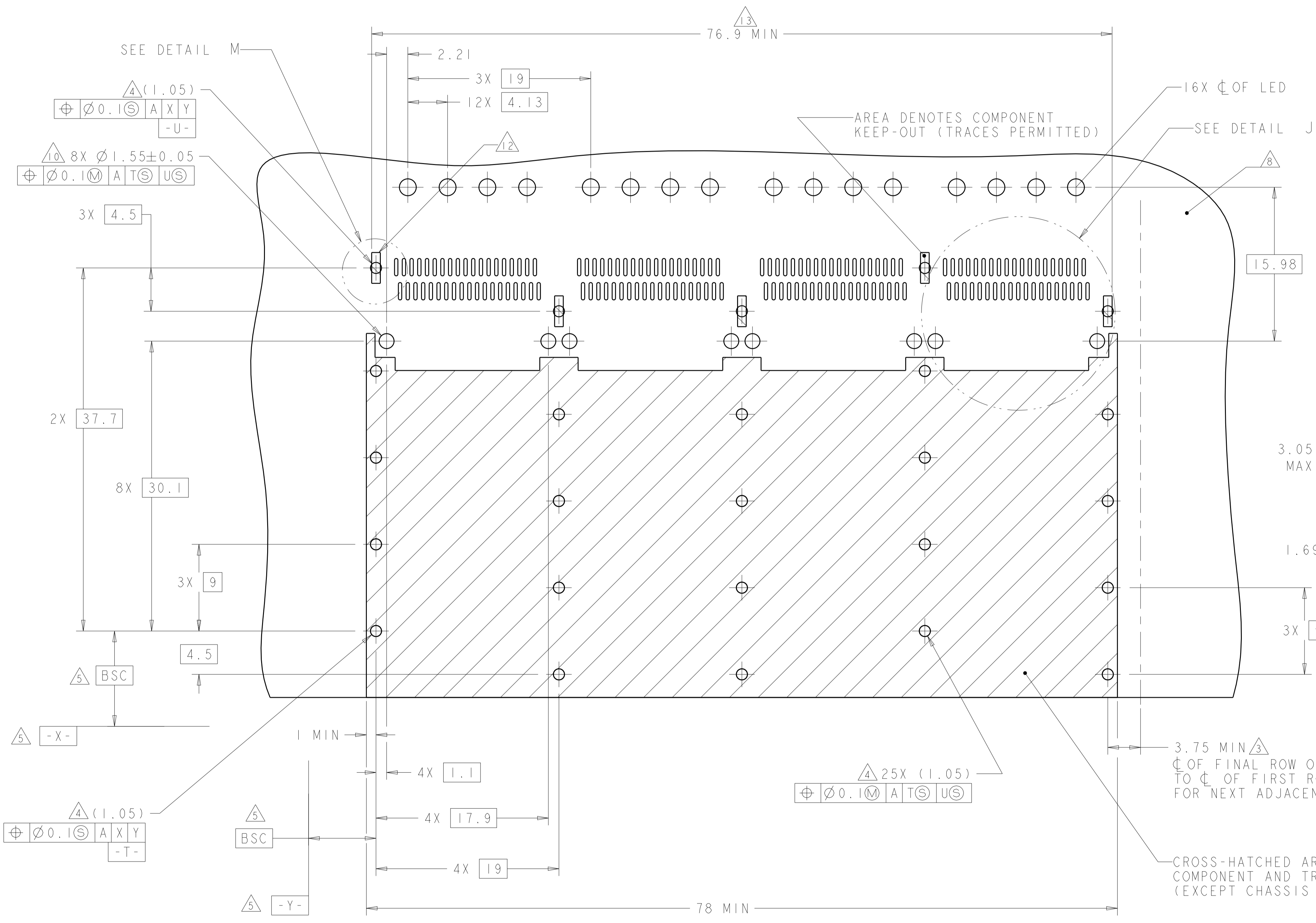
CROSS-HATCHED AREA DENOTES
 COMPONENT AND TRACE KEEP-OUT
 (EXCEPT CHASSIS GROUND)

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: RINSEN SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
0 PLC	±	PRODUCT SPEC	108-2286
1 PLC	±0.35	APPLICATION SPEC	114-13217
2 PLC	±0.25	WEIGHT	A100779C=2170287
3 PLC	±	CUSTOMER DRAWING	SCALE 1:1 SHEET 5 OF 8 REV A
4 PLC	±		
ANGLES	±		
MATERIAL	FINISH		

LOC	DIST	REV	DATE	BY	APPV
GP	00				



DETAIL M
SCALE 10:1



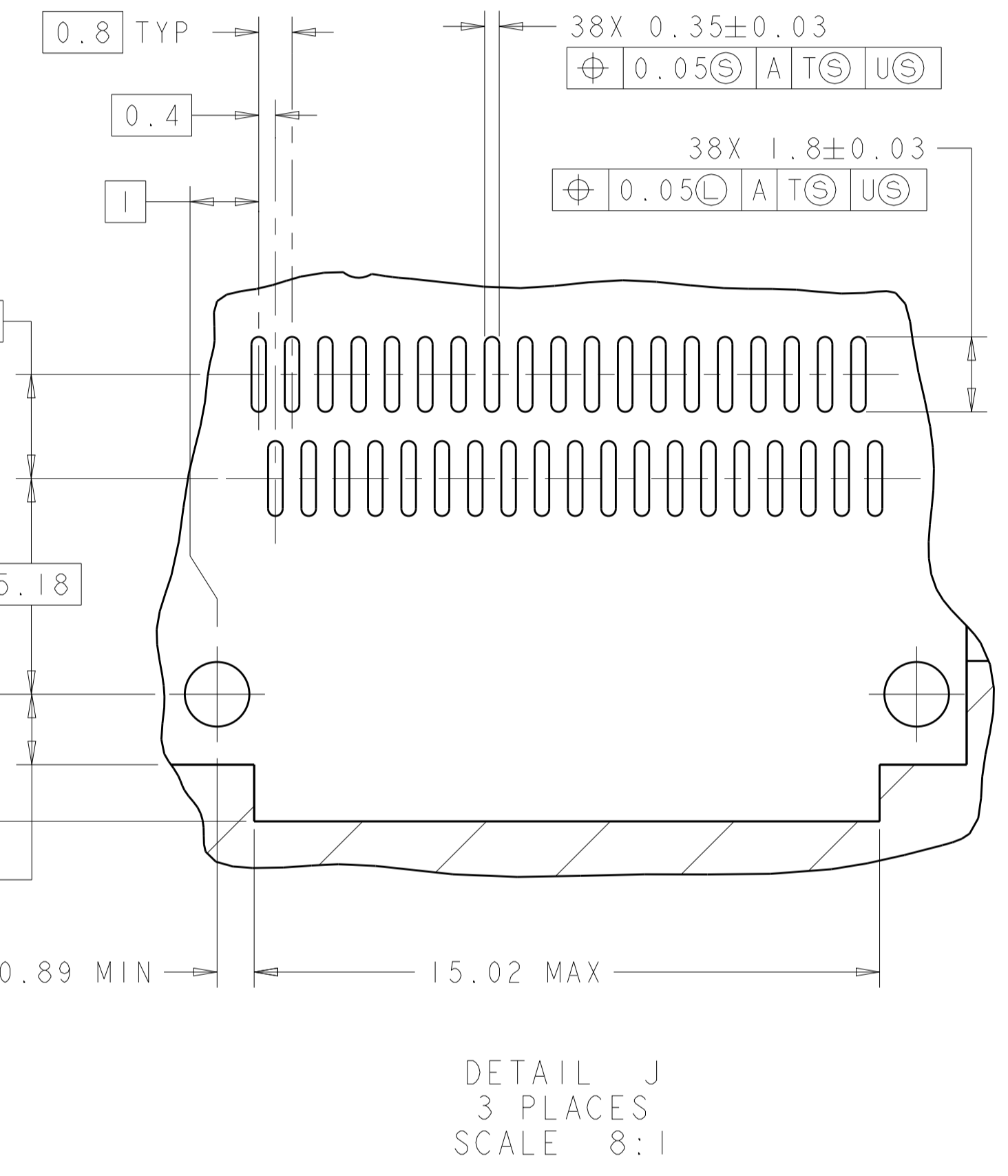
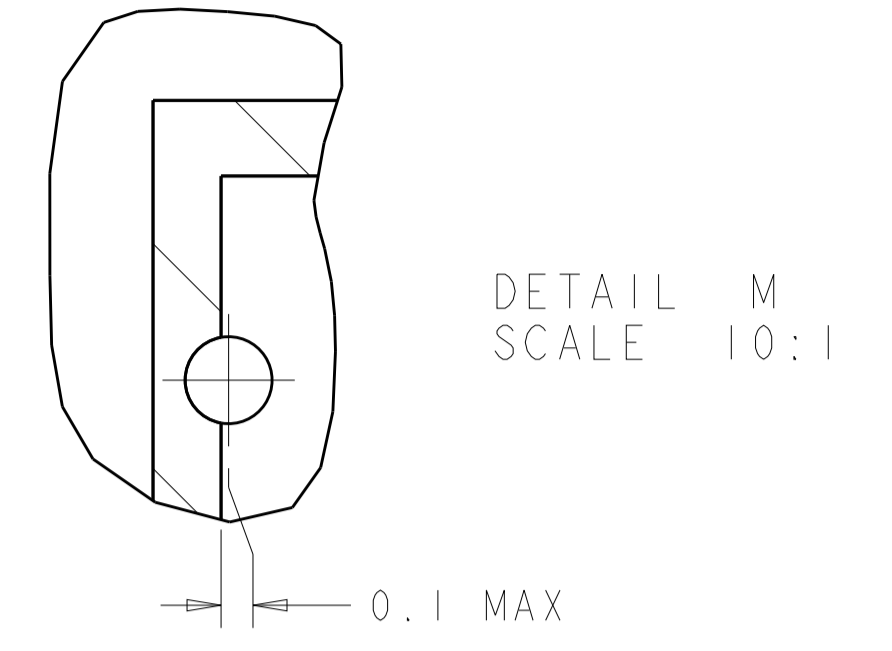
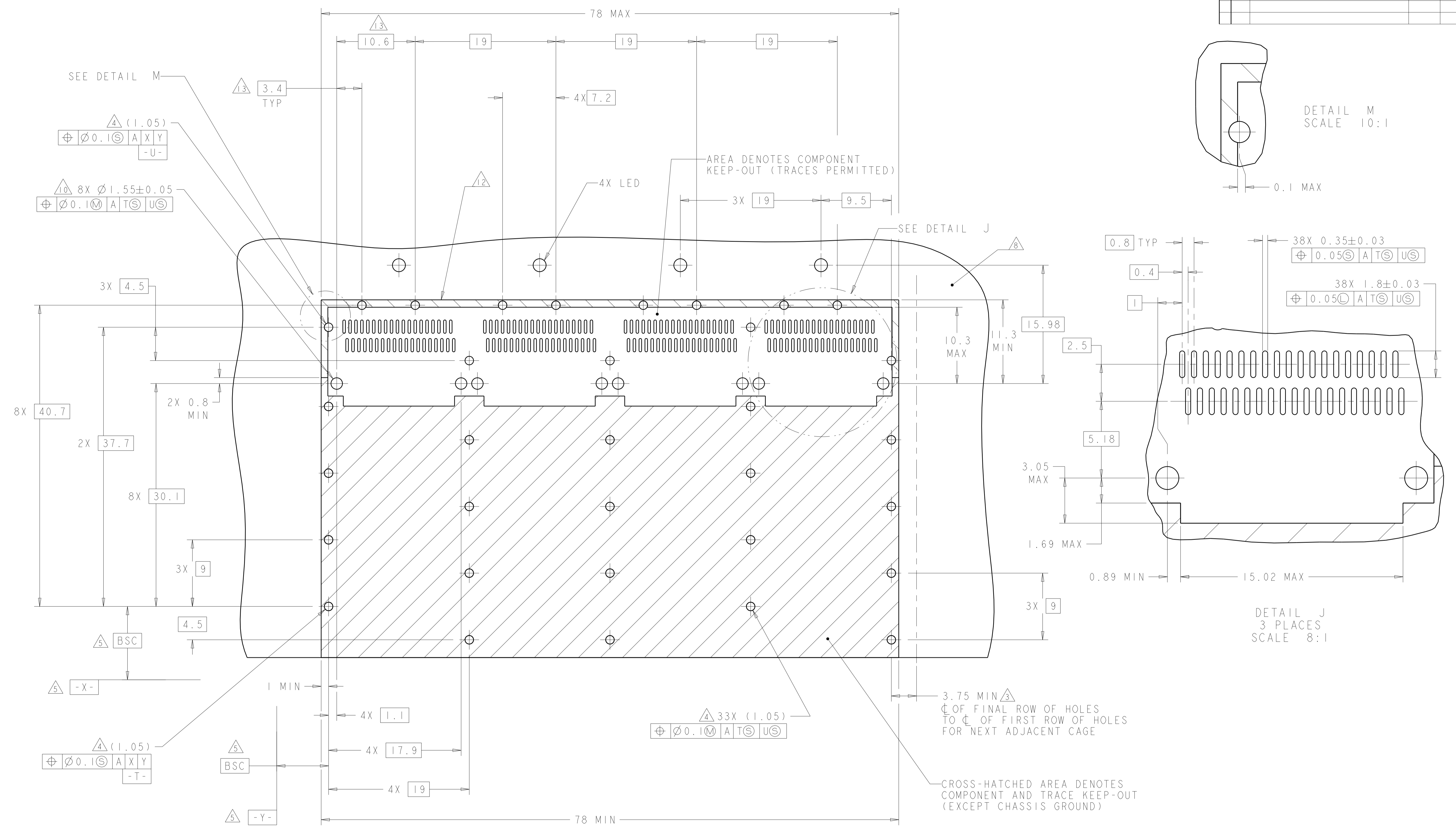
DETAIL J
3 PLACES
SCALE 8:1

RECOMMENDED PC BOARD LAYOUT FOR 1-2170287-0
 SINGLE SIDE MOUNT CONFIGURATION
 SCALE 4:1

THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: AILEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
0 PLC	±	PRODUCT SPEC	SIZE: CAGE CODE DRAWING NO
1 PLC	±0.35	108-2286	RESTRICTED TO
2 PLC	±0.25	APPLICATION SPEC	A100779C=2170287
3 PLC	±	114-13217	SCALE 1:1 SHEET 6 OF 8 REV A
4 PLC	±	WEIGHT	
ANGLES	±	CUSTOMER DRAWING	
MATERIAL			
FINISH			

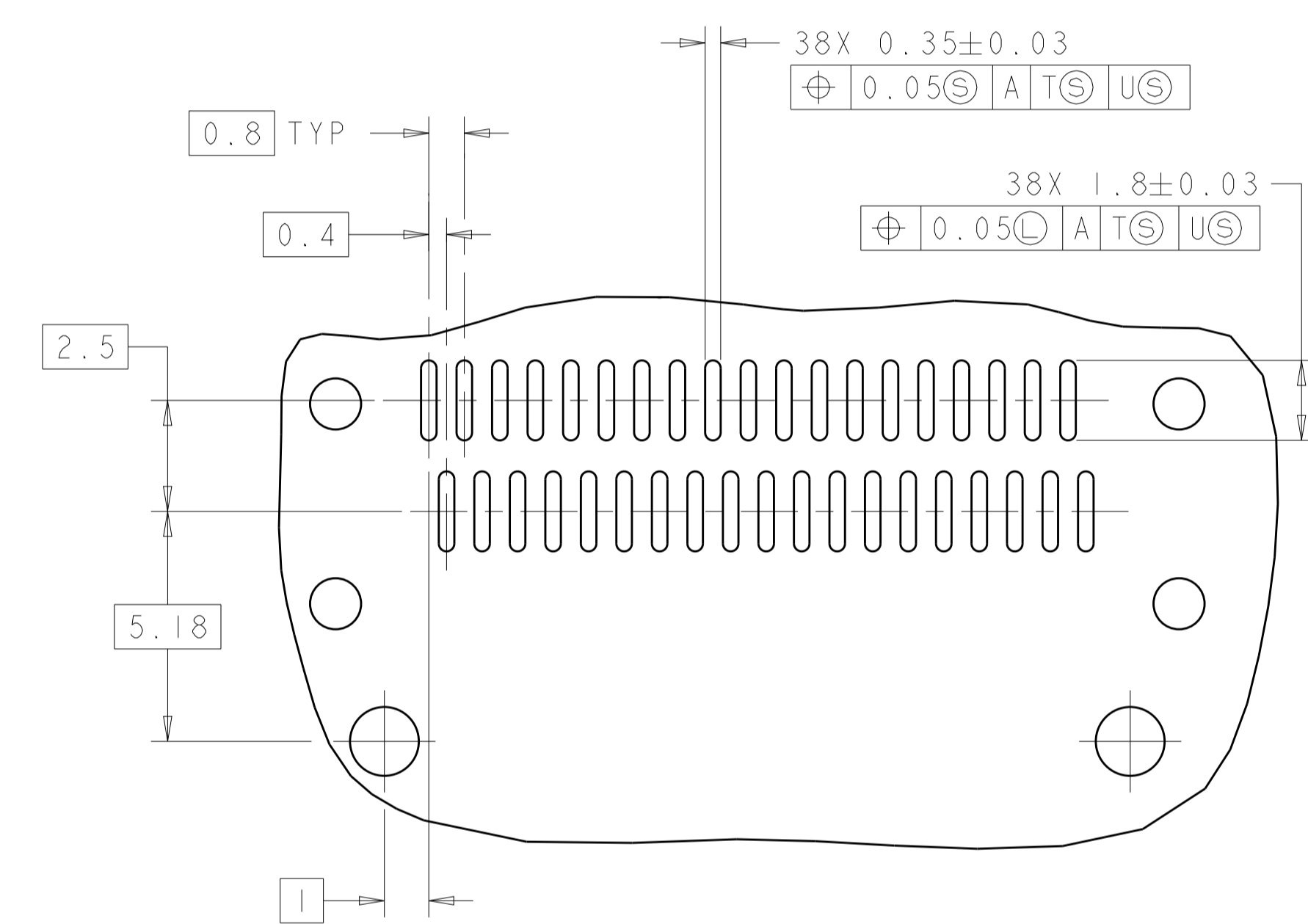
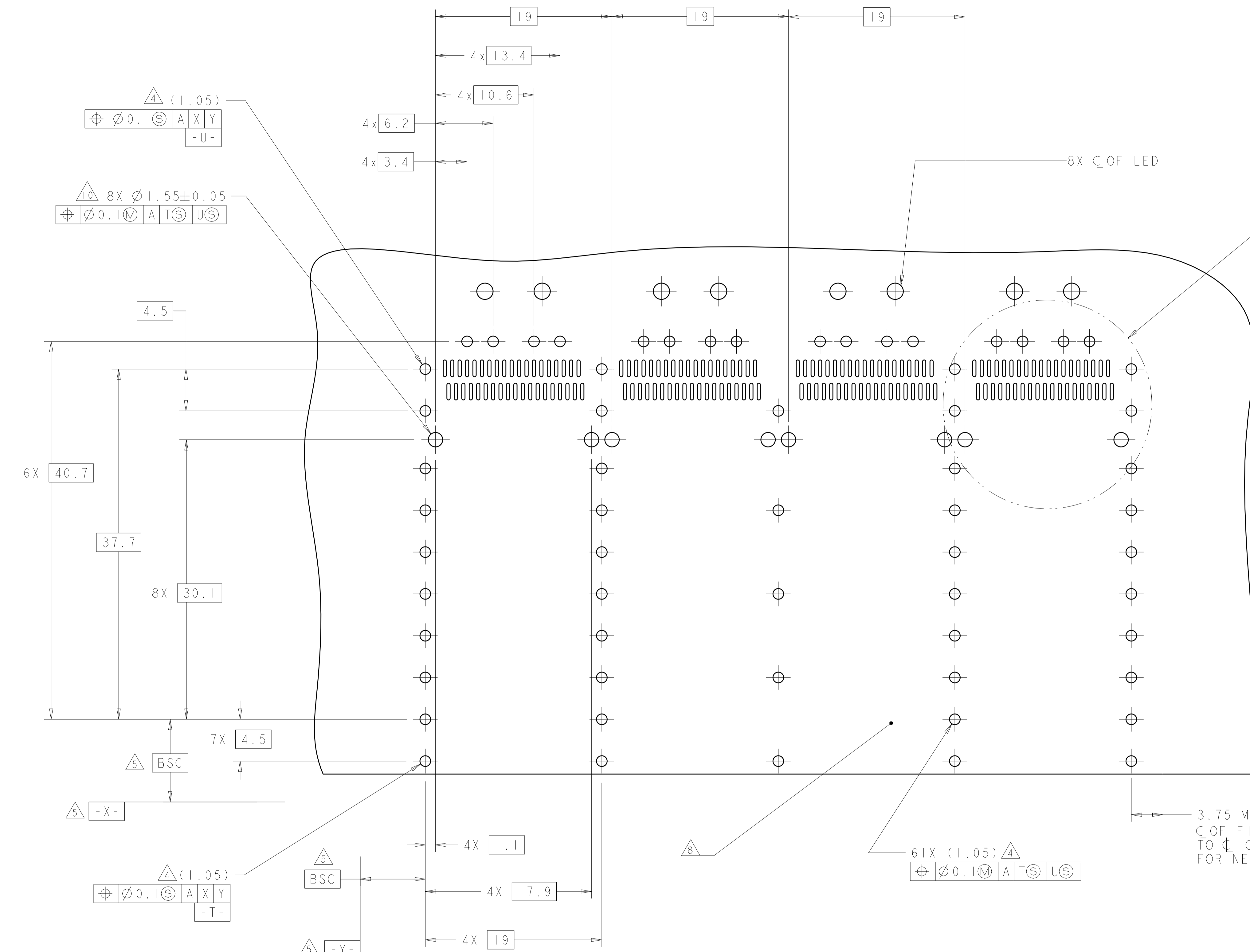
LOC	DIST	REV	DESCRIPTION	DATE	OWN	APVD
GP	00		SEE SHEET 1			



RECOMMENDED PC BOARD LAYOUT
 SINGLE SIDE MOUNT CONFIGURATION FOR 1-2170287-1
 SCALE 4:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: RINSEN SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
0 PLC	±	PRODUCT SPEC	SIZE: CAGE CODE DRAWING NO
1 PLC	±0.35	108-2286	RESTRICTED TO
2 PLC	±0.25	APPLICATION SPEC	A100779C=2170287
3 PLC	±	114-13217	SCALE: 1:1 SHEET 7 OF 8 REV A
4 PLC	±	WEIGHT	
ANGLES	±	CUSTOMER DRAWING	
MATERIAL			
FINISH			

LOC	DIST	REVISIONS			
GP	00	REV	DATE	BY	APPV
-	-	SEE SHEET 1	-	-	-



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

THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: KINSEN SUN 29FEB2012	TE Connectivity
DIMENSIONS: mm		CHK: DENNY ZHU 29FEB2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEY CAI 29FEB2012	NAME: 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP
0 PLC ±	1 PLC ±0.35	PRODUCT SPEC: 108-2286	SIZE: CAGE CODE: DRAWING NO: A100779C=2170287
2 PLC ±0.25	3 PLC ±	APPLICATION SPEC: 114-13217	RESTRICTED TO: -
4 PLC ±	ANGLES ±	WEIGHT: -	SCALE: 1:1 SHEET 8 OF 8 REV A
MATERIAL: -	FINISH: -	CUSTOMER DRAWING	