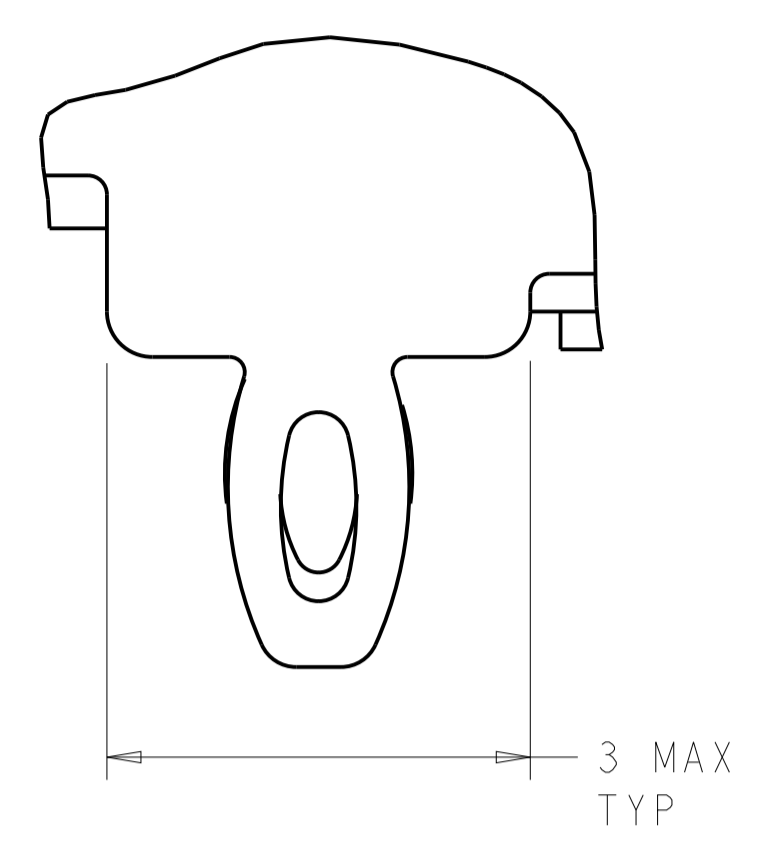


LOC	DIST	REVISIONS			
		REV	DATE	BY	CHKD
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		E	6AUG2014	RG	MC
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		F1	19JAN2021	SH	SZ

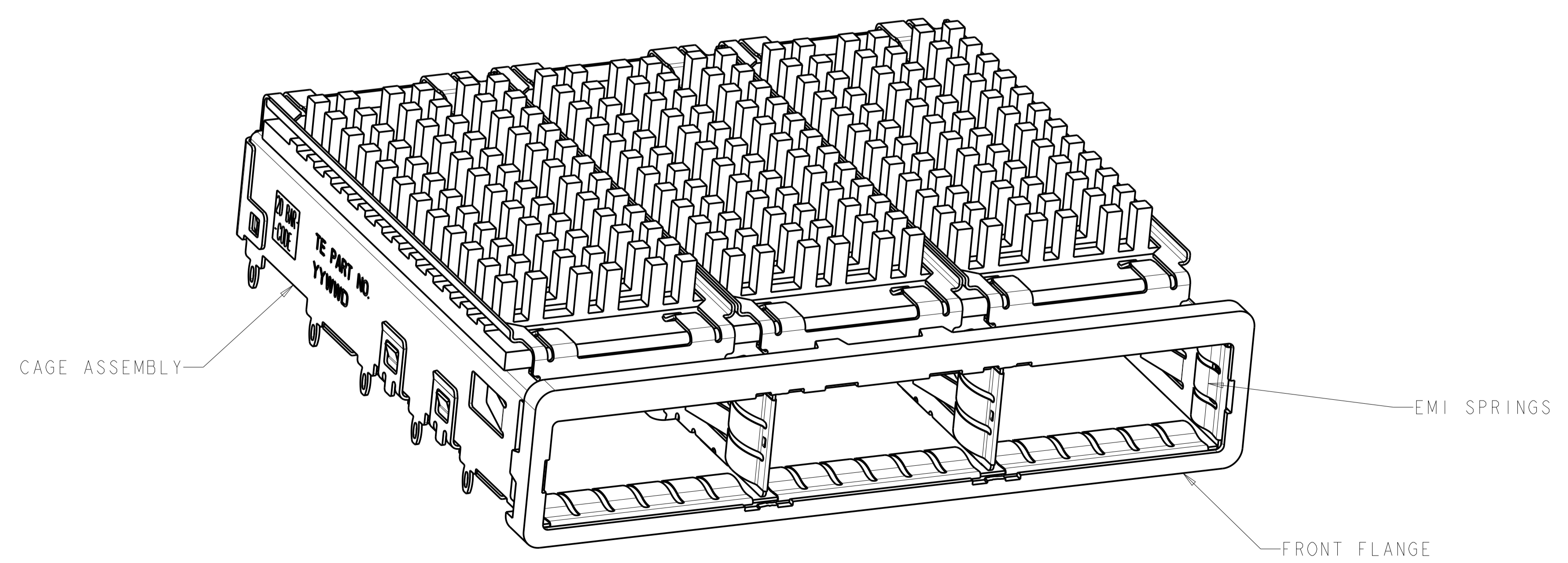
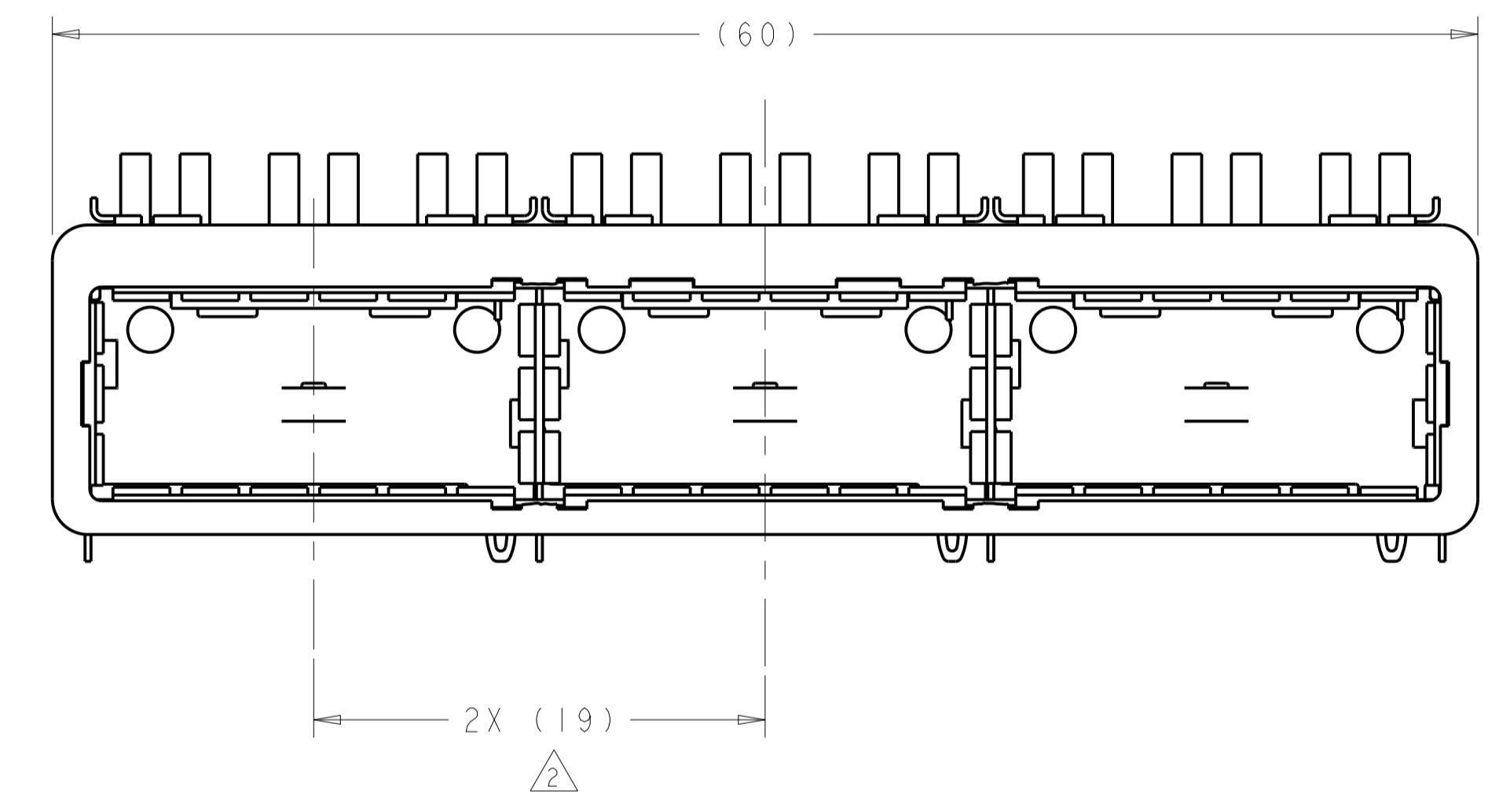
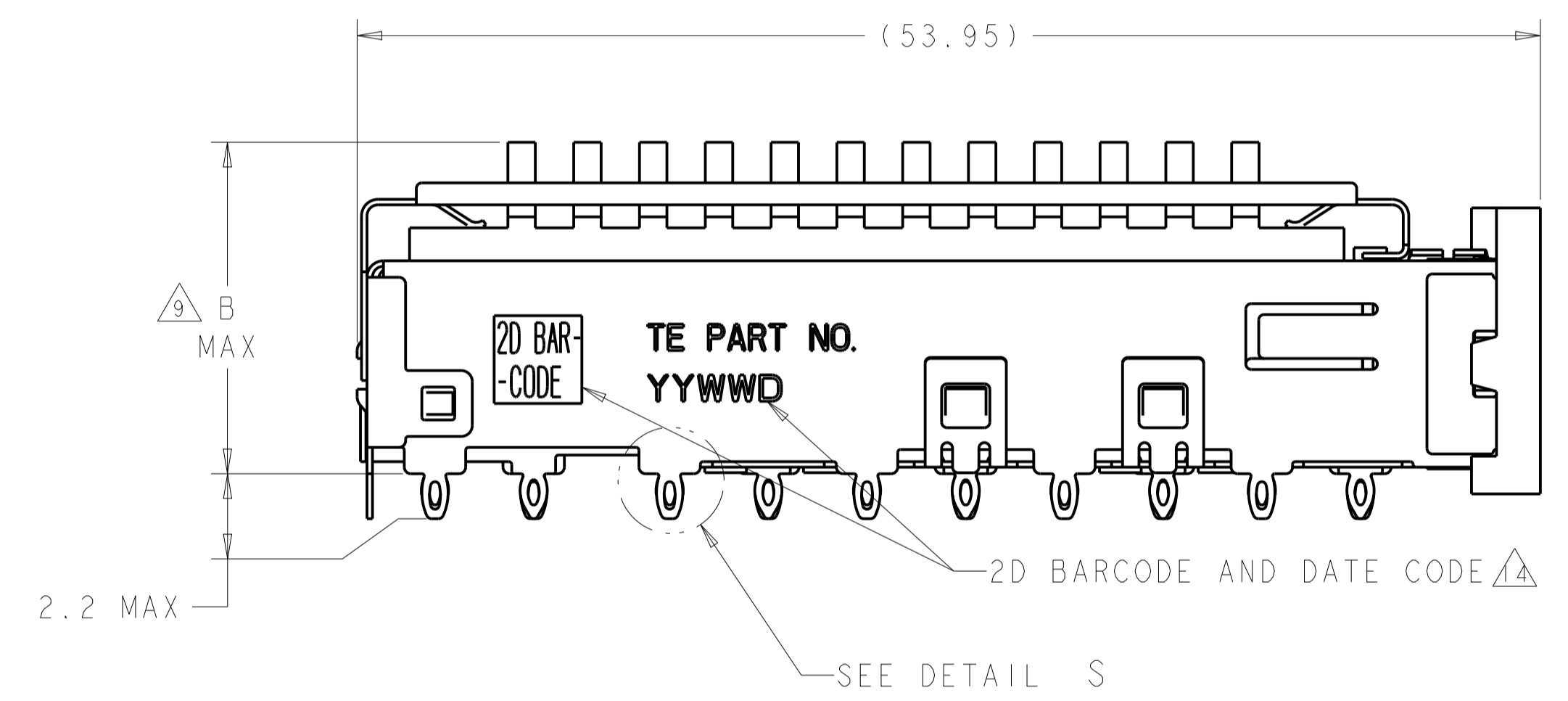


DETAIL S  $\Delta 12$   
 SCALE 20:1

- $\Delta 1$  MATERIALS:  
 CAGE ASSEMBLY: NICKEL SILVER, 0.25 THICK  
 EMI SPRINGS: COPPER ALLOY  
 FRONT FLANGE: ZINC ALLOY  
 HEAT SINK: ALUMINUM/NICKEL PLATING  
 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.

- $\Delta 3$  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 $\mu$ m MINIMUM TIN  
 FRONT FLANGE: 3 $\mu$ m MINIMUM TIN OVER 1.27 $\mu$ m MINIMUM NICKEL OVER 5.08 $\mu$ m MINIMUM COPPER
- $\Delta 7$  FINISH:  
 HEAT SINK: ANODIZED BLACK.

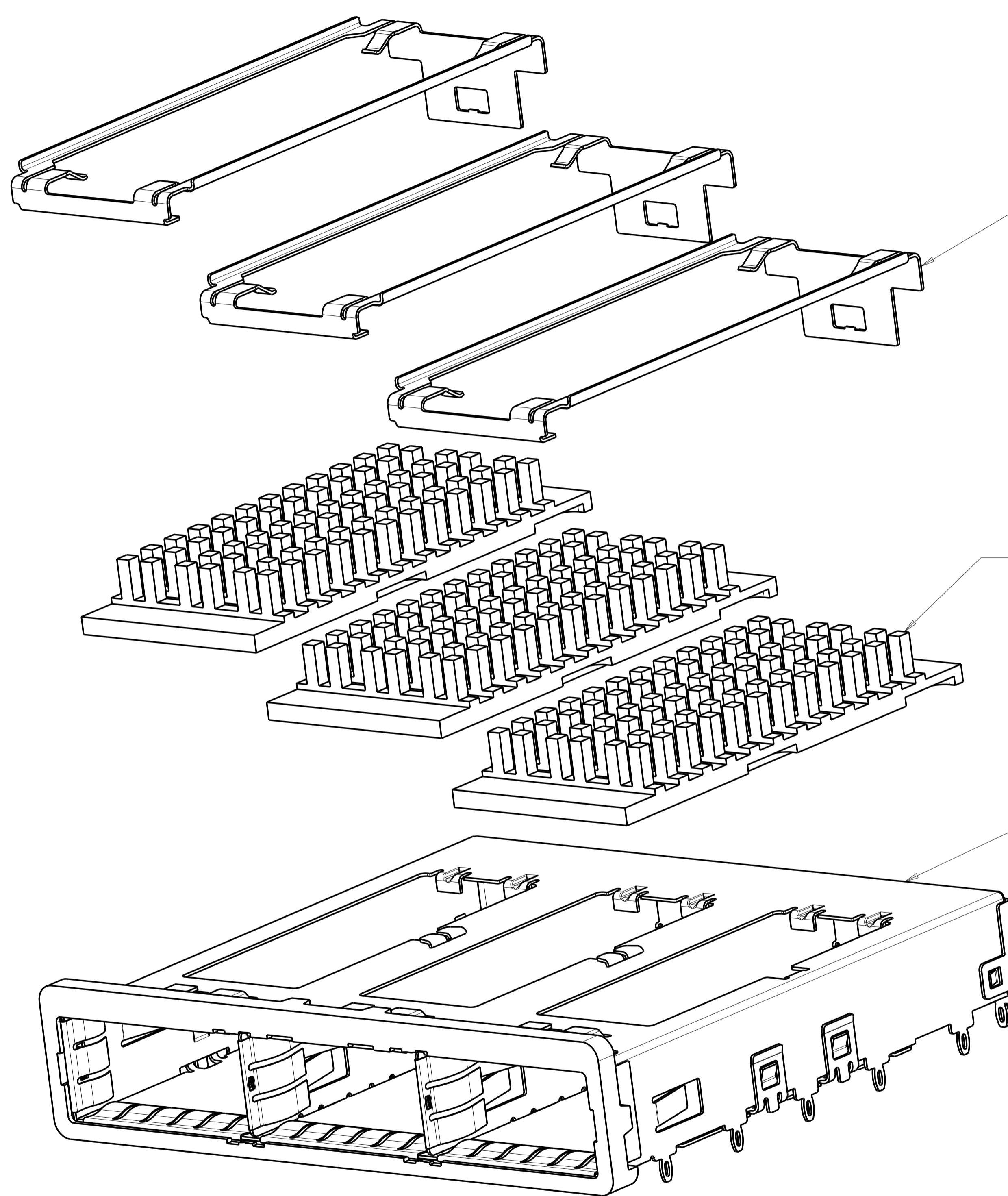
- 11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- $\Delta 12$  SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL S, CONTACT PC BOARD.



$\Delta 1$	16.8	CUSTOMERIZED	2007456-4
	23.0	NETWORKING	2007456-3
	16.0	SAN	2007456-2
	13.7	PCI	2007456-1
B		HEAT SINK PROFILE	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: C. VALENTINE 07NOV2007	TE Connectivity NAME: 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP
DIMENSIONS: mm		CHK: E. BRIGHT 07NOV2007	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPV: F. BRIGHT 07NOV2007	
0 PLC $\pm$ 1 PLC $\pm 0.1$ 2 PLC $\pm 0.1$ 3 PLC $\pm$ 4 PLC $\pm$ ANGLES $\pm$		PRODUCT SPEC: 108-2286 APPLICATION SPEC: 114-13218 WEIGHT:	
MATERIAL: $\Delta 1$	FINISH: $\Delta 6$	RESTRICTED TO: A100779C=2007456	SCALE: 4:1 SHEET 1 OF 5 REV: F1

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



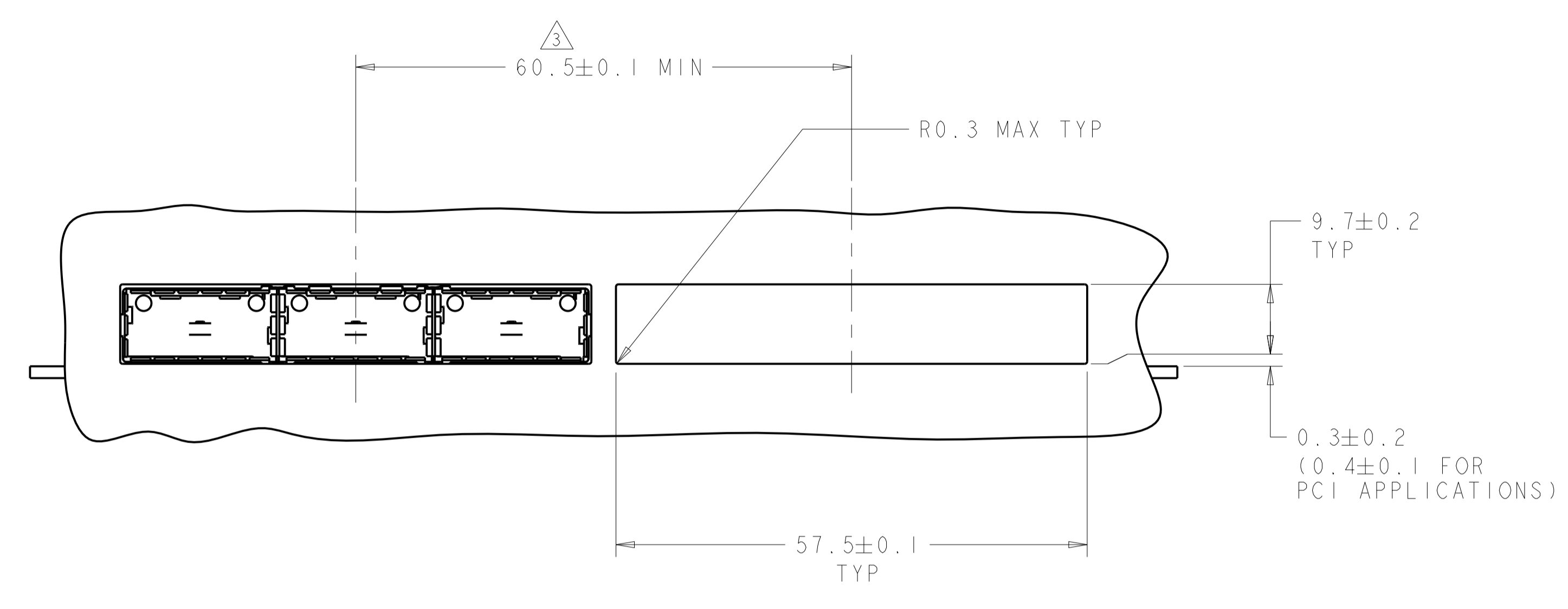
HEAT SINK CLIP  $\Delta$   
 QUANTITY: 3

72 PIN HEAT SINK  $\Delta$   
 QUANTITY: 3

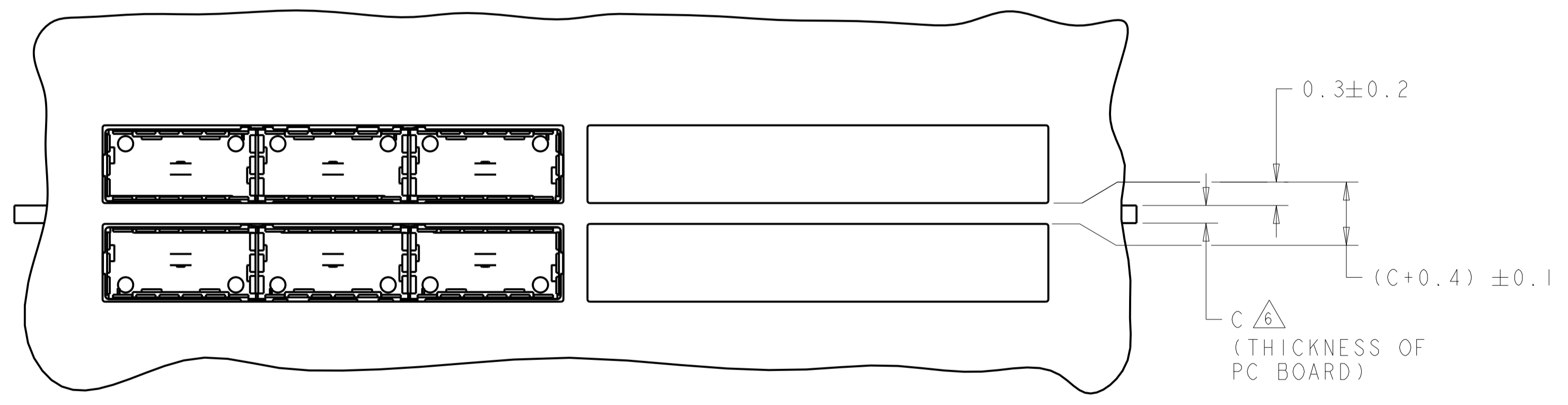
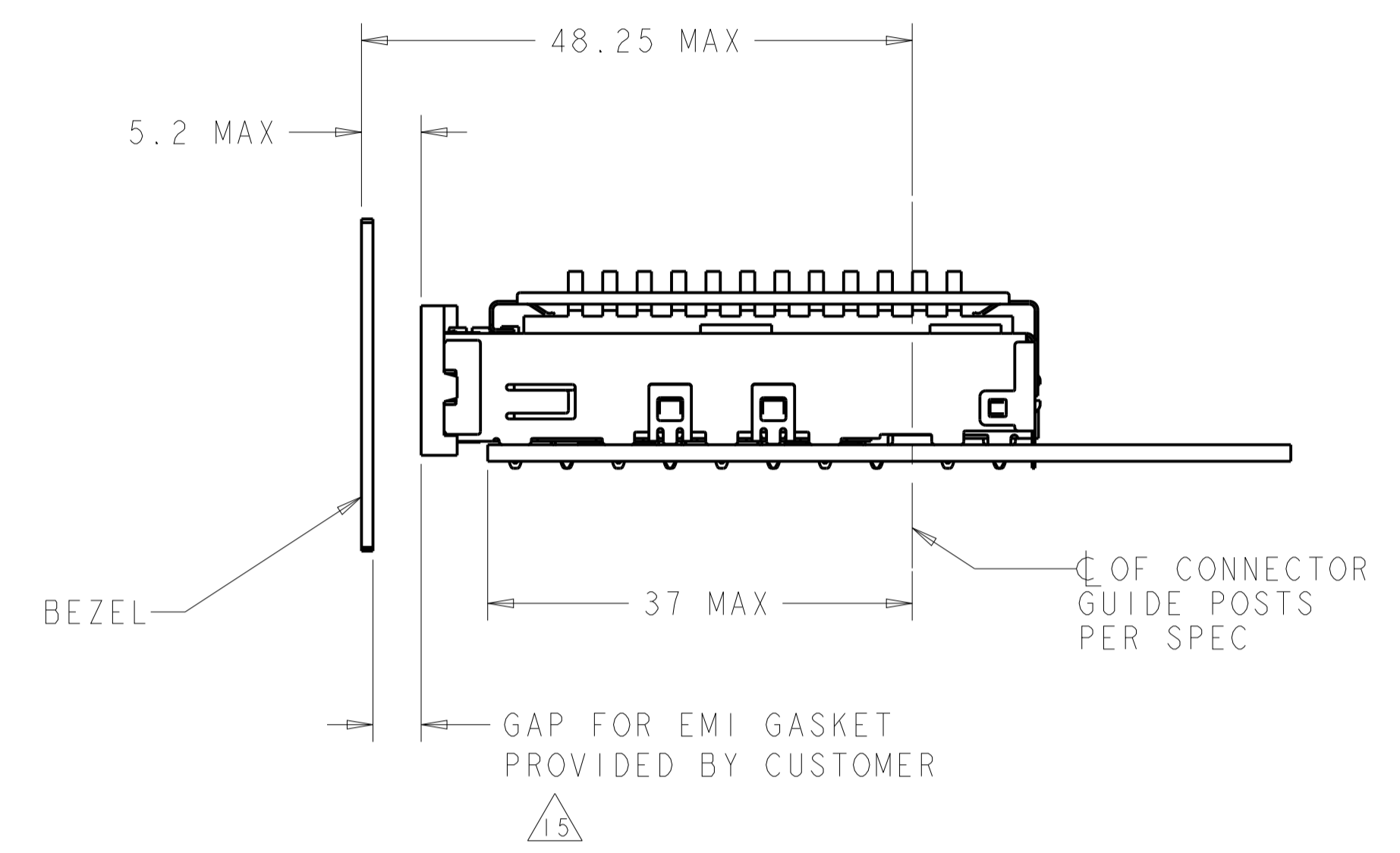
1X3 BEHIND BEZEL QSFP  
 CAGE ASSEMBLY  
 QUANTITY: 1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN C. VALENTINE 07NOV2007	TE Connectivity																		
DIMENSIONS:		CHK E. BRIGHT 07NOV2007																			
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD E. BRIGHT 07NOV2007	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP																		
<table border="1"> <tr><td>0 PLC</td><td>±</td></tr> <tr><td>1 PLC</td><td>±0.1</td></tr> <tr><td>2 PLC</td><td>±0.1</td></tr> <tr><td>3 PLC</td><td>±</td></tr> <tr><td>4 PLC</td><td>±</td></tr> <tr><td>ANGLES</td><td>±</td></tr> </table>	0 PLC	±	1 PLC	±0.1	2 PLC	±0.1	3 PLC	±	4 PLC	±	ANGLES	±	<table border="1"> <tr><td>PRODUCT SPEC</td><td>108-2286</td></tr> <tr><td>APPLICATION SPEC</td><td>114-13218</td></tr> <tr><td>WEIGHT</td><td></td></tr> </table>	PRODUCT SPEC	108-2286	APPLICATION SPEC	114-13218	WEIGHT		SIZE A1	RESTRICTED TO
0 PLC	±																				
1 PLC	±0.1																				
2 PLC	±0.1																				
3 PLC	±																				
4 PLC	±																				
ANGLES	±																				
PRODUCT SPEC	108-2286																				
APPLICATION SPEC	114-13218																				
WEIGHT																					
MATERIAL	FINISH	CUSTOMER DRAWING	SCALE 4:1 SHEET 2 OF 5 REV F1																		

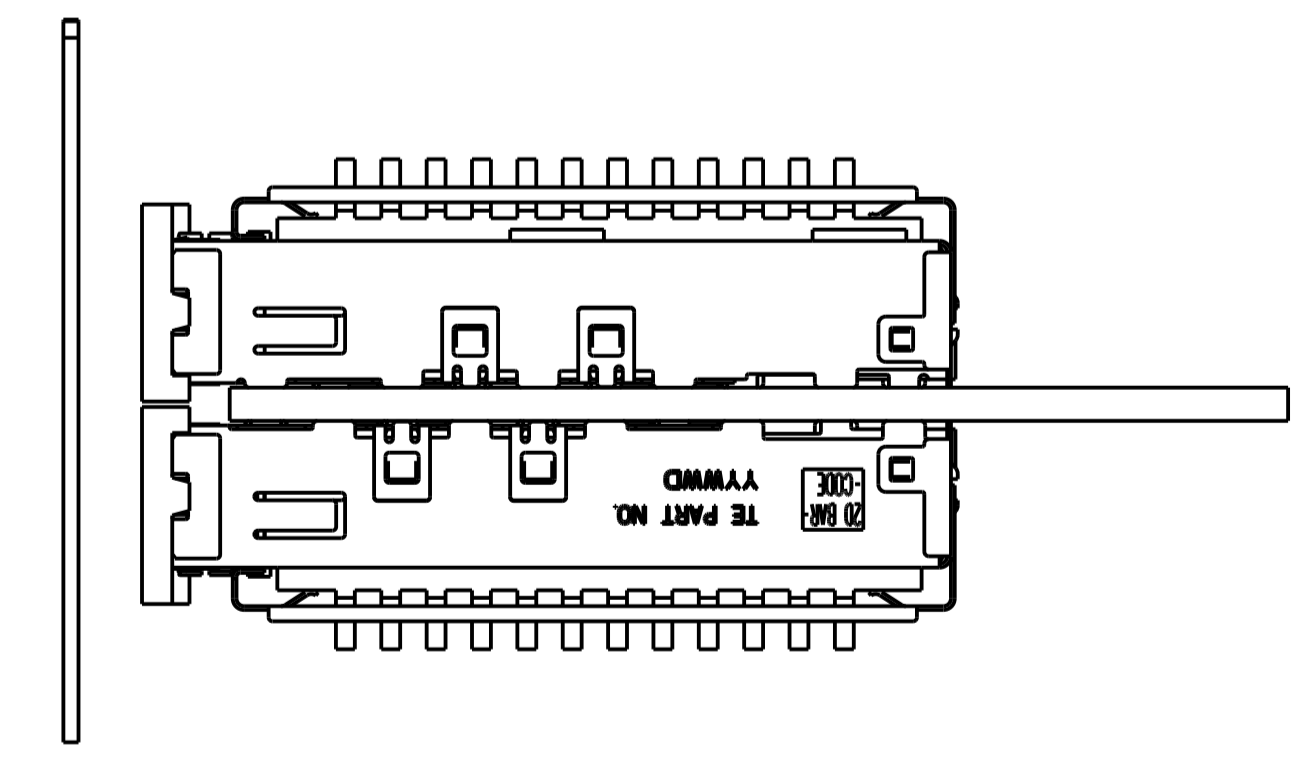
LOC	DIST	REVISIONS			
GP	00	REV	DATE	BY	APPV
-	-	SEE SHEET 1	-	-	-



ONE SIDED CONFIGURATION  
 SCALE 2:1



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

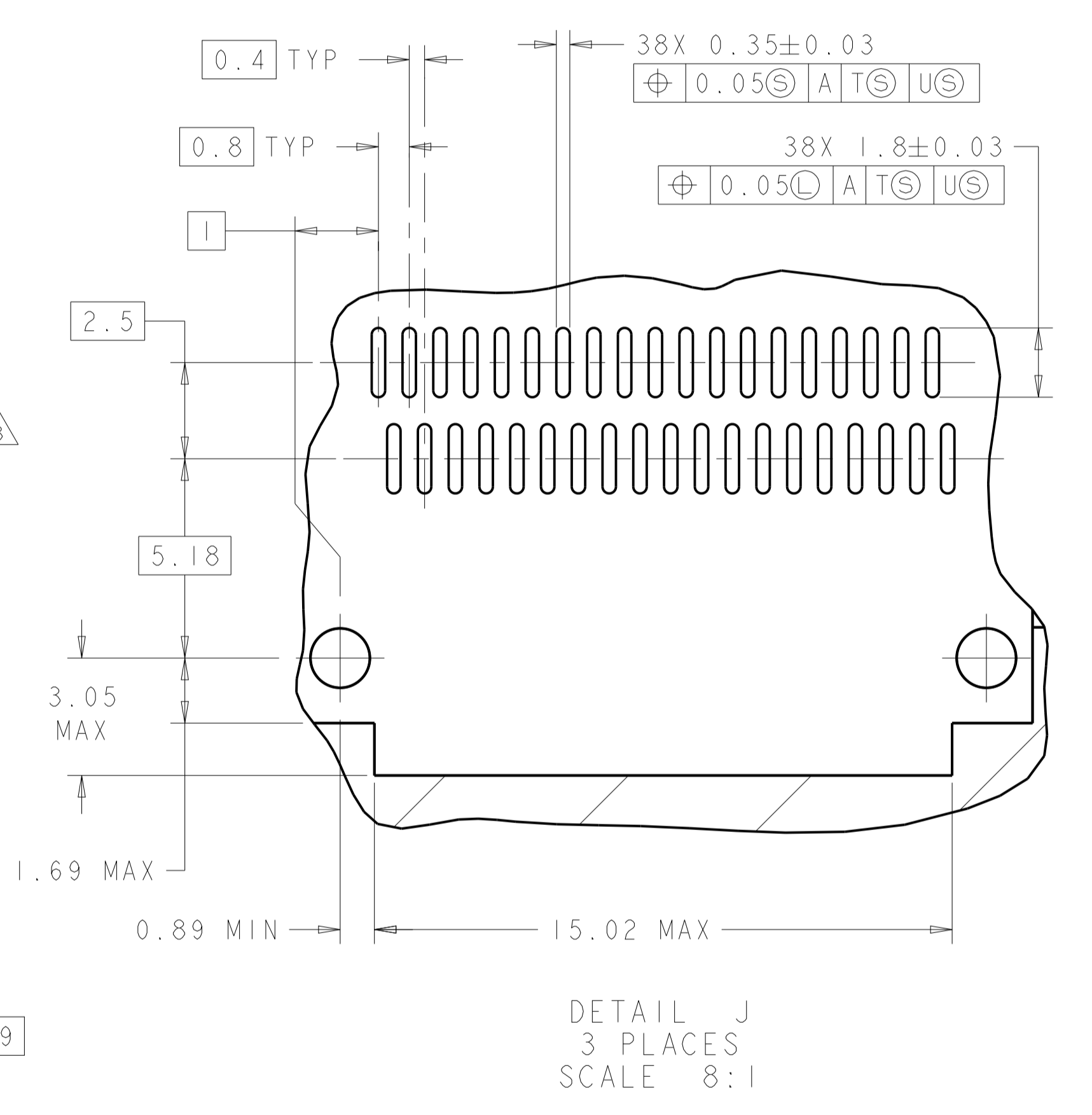
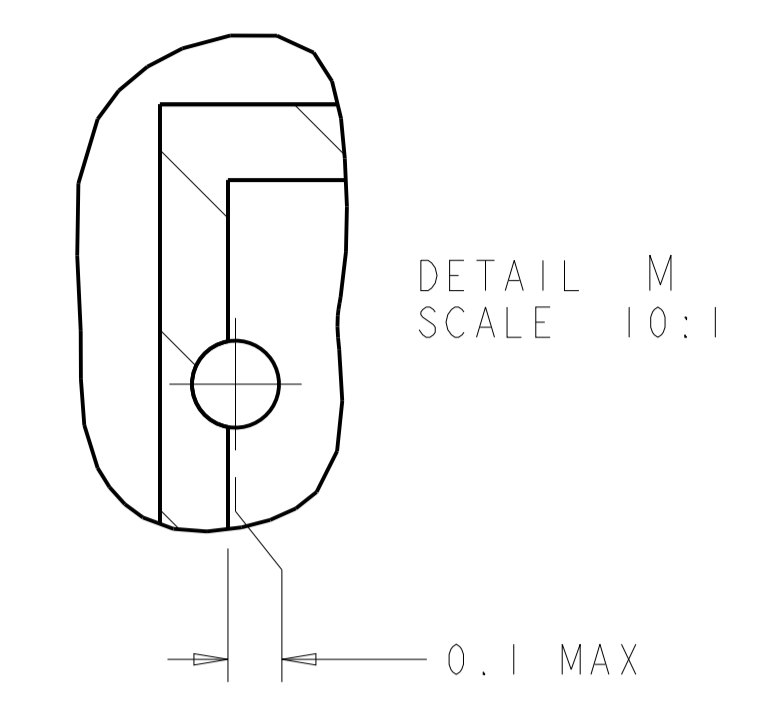
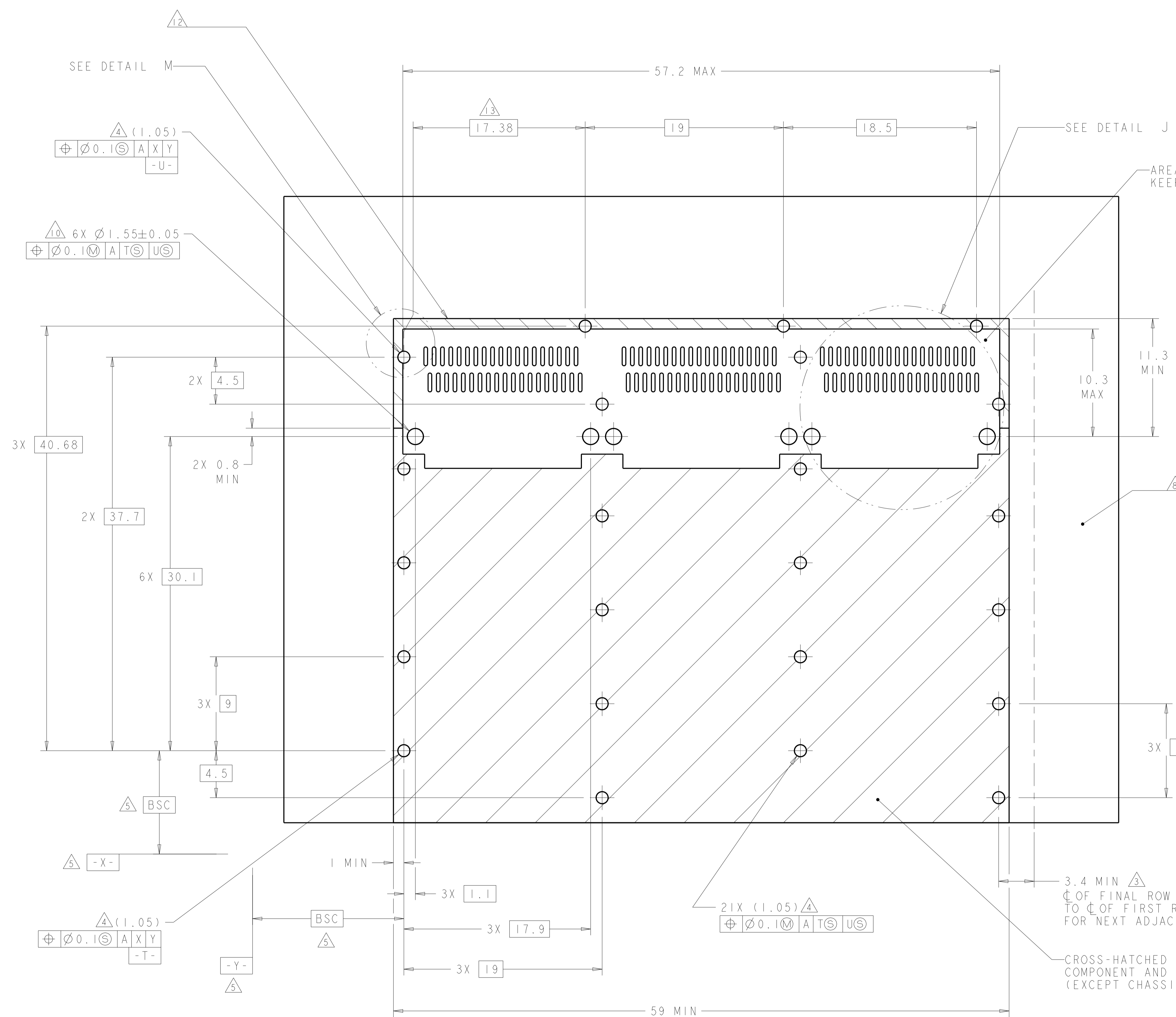


THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN C. VALENTINE 07NOV2007	TE Connectivity
DIMENSIONS: mm		CHK E. BRIGHT 07NOV2007	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD E. BRIGHT 07NOV2007	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP
0 PLC ±	1 PLC ±0.1	PRODUCT SPEC	SIZE CAGE CODE DRAWING NO
2 PLC ±0.1	3 PLC ±	108-2286	RESTRICTED TO
4 PLC ±	5 PLC ±	APPLICATION SPEC	A100779C=2007456
ANGLES ±	FINISH ±	114-13218	SCALE 4:1 SHEET 3 OF 5 REV F1
MATERIAL	FINISH	WEIGHT	CUSTOMER DRAWING

LOC	DIST	REV	DATE	BY	APPD
GP	00				

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	SEE SHEET 1		



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

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

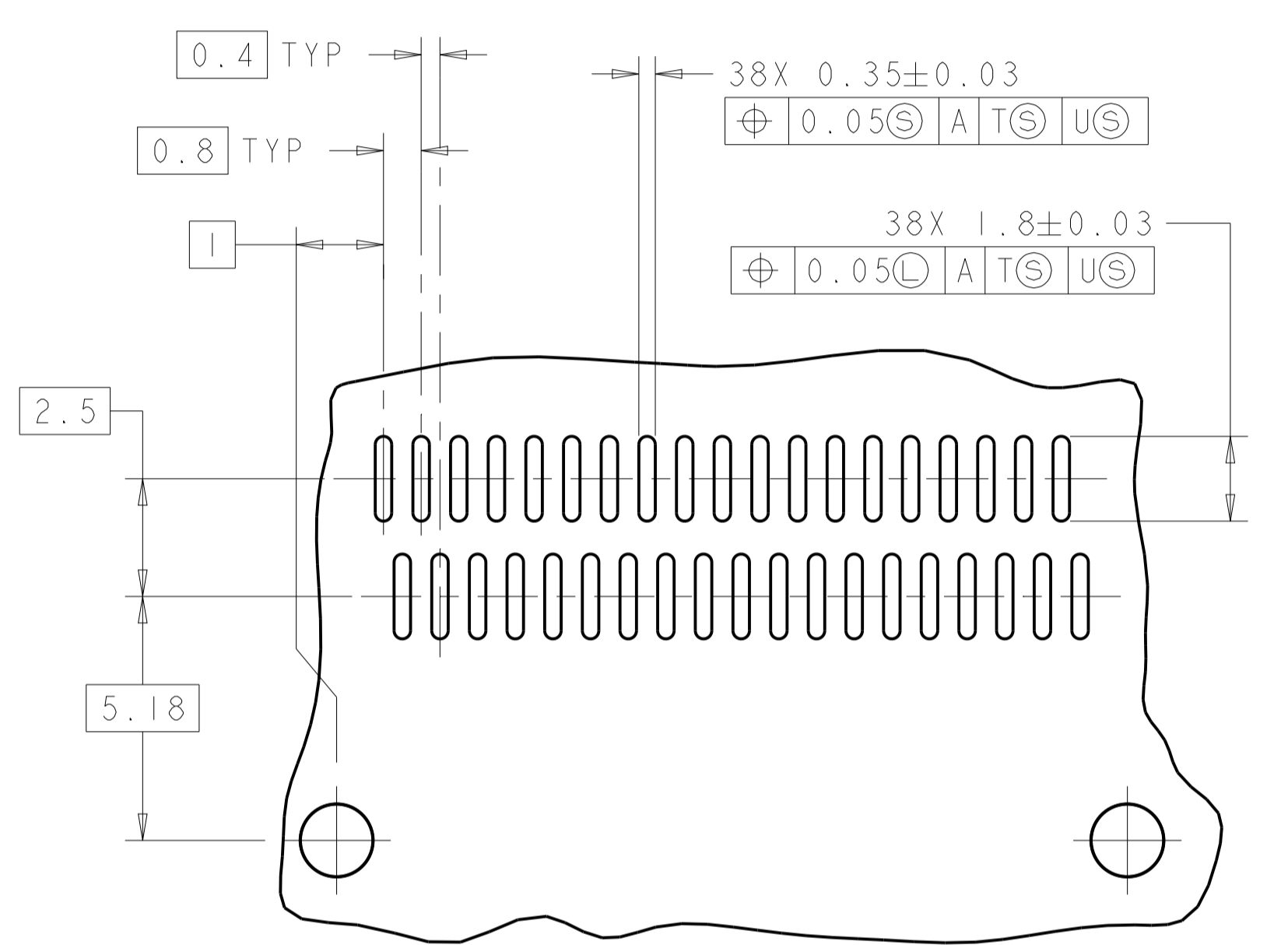
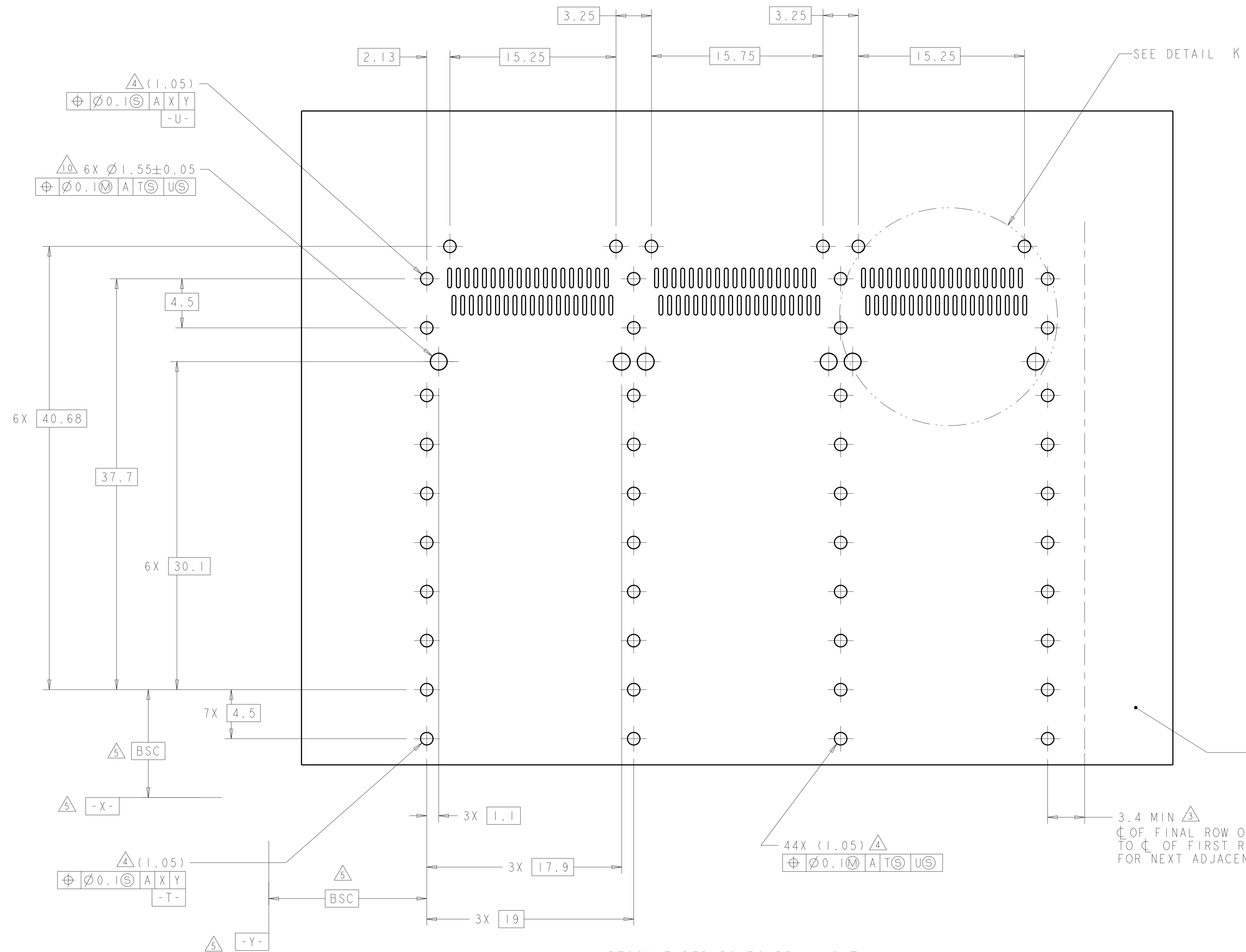
CROSS-HATCHED AREA DENOTES  
 COMPONENT AND TRACE KEEP-OUT  
 (EXCEPT CHASSIS GROUND)

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN C. VALENTINE 07NOV2007	TE Connectivity										
DIMENSIONS: mm		CHK E. BRIGHT 07NOV2007											
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD E. BRIGHT 07NOV2007	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP										
<table border="1"> <tr><td>0 PLC</td><td>±</td></tr> <tr><td>1 PLC</td><td>±0.1</td></tr> <tr><td>2 PLC</td><td>±0.1</td></tr> <tr><td>3 PLC</td><td>±</td></tr> <tr><td>4 PLC</td><td>±</td></tr> </table>		0 PLC	±	1 PLC	±0.1	2 PLC	±0.1	3 PLC	±	4 PLC	±	PRODUCT SPEC 108-2286	SIZE A100779
0 PLC	±												
1 PLC	±0.1												
2 PLC	±0.1												
3 PLC	±												
4 PLC	±												
MATERIAL		APPLICATION SPEC 114-13218	DRAWING NO C=2007456										
FINISH		WEIGHT	RESTRICTED TO										
		CUSTOMER DRAWING	SCALE 4:1 SHEET 4 OF 5 REV F1										

LOC	DIST	REV	DATE	BY	APPD
GP	00				

REVISIONS					
REV	DATE	BY	APPD	DESCRIPTION	DATE
-	-	-	-	SEE SHEET 1	-



DETAIL K  
 3 PLACES  
 SCALE 8:1

RECOMMENDED PC BOARD LAYOUT  
 BELLY TO BELLY CONFIGURATION  
 SEE SHEET 4 FOR COMPONENT  
 AND TRACE KEEP-OUTS  
 SCALE 5:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN C. VALENTINE 07NOV2007	TE Connectivity										
DIMENSIONS: mm		CHK E. BRIGHT 07NOV2007											
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD E. BRIGHT 07NOV2007	NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS, QSFP										
<table border="1"> <tr><td>0 PLC</td><td>±</td></tr> <tr><td>2 PLC</td><td>±0.1</td></tr> <tr><td>3 PLC</td><td>±0.1</td></tr> <tr><td>4 PLC</td><td>±</td></tr> <tr><td>ANGLES</td><td>±</td></tr> </table>		0 PLC	±	2 PLC	±0.1	3 PLC	±0.1	4 PLC	±	ANGLES	±	PRODUCT SPEC 108-2286	RESTRICTED TO
0 PLC	±												
2 PLC	±0.1												
3 PLC	±0.1												
4 PLC	±												
ANGLES	±												
MATERIAL		APPLICATION SPEC 114-13218	SIZE CAGE CODE DRAWING NO A100779C=2007456										
FINISH		WEIGHT	SCALE 4:1 SHEET 5 OF 5 REV F1										
		CUSTOMER DRAWING											