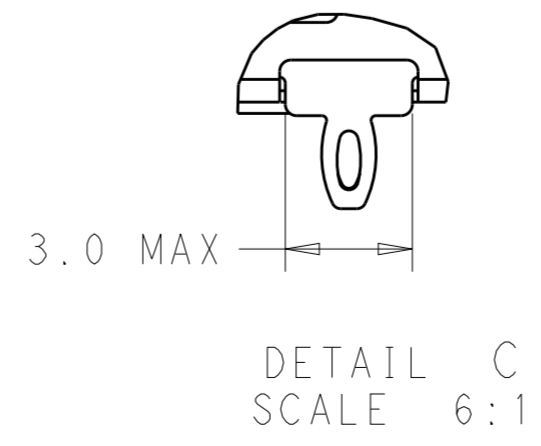
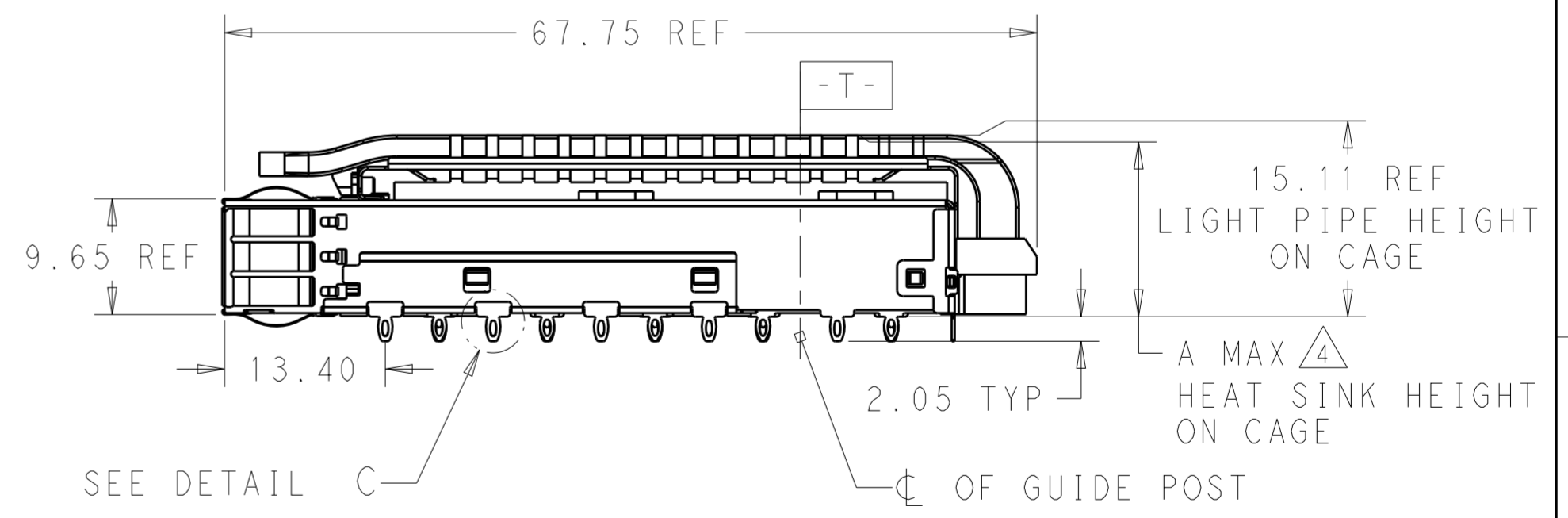
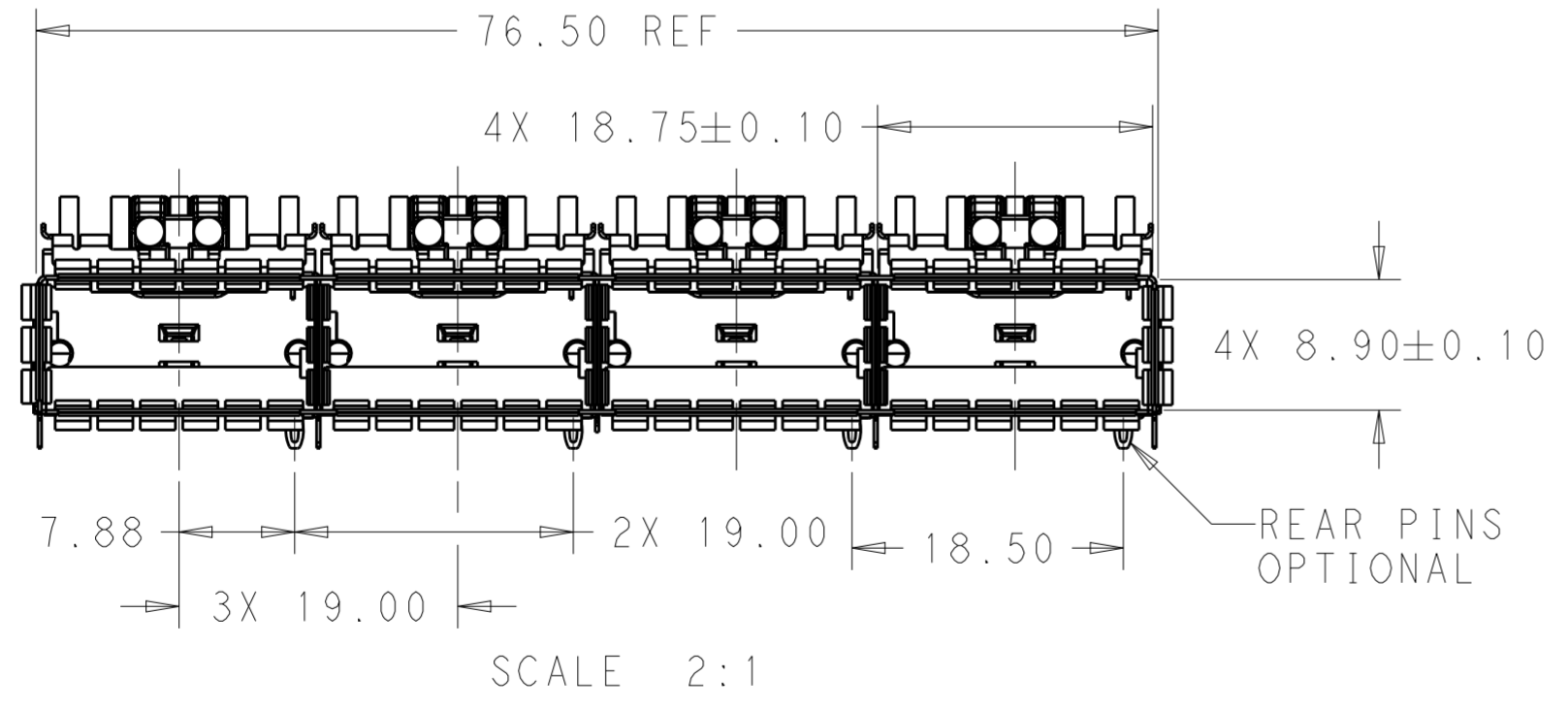
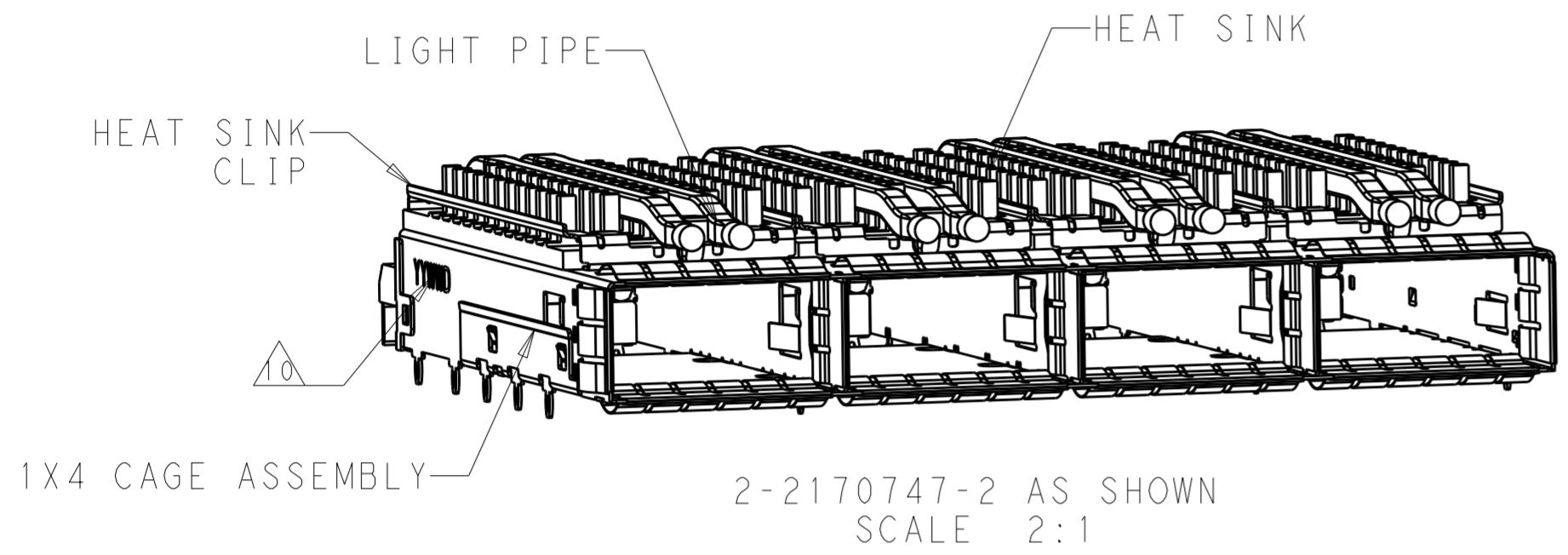


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REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
A		RELEASE	31OCT2016	JY	SH
B		REVISED PER ECO-17-009888	07JUL2017	JY	SH
C		REVISED PER ECO-18-012273	10JUL2018	JY	SH

2-2170747-2 AS SHOWN

1. COMPONENTS
 CAGE ASSEMBLY: NICKEL-SILVER ALLOY
 HEAT SINK: ALUMINUM/BLACK ANODIZE
 HEAT SINK CLIP: STAINLESS STEEL
 EMI SPRING: COPPER ALLOY/NICKEL PLATE
 LIGHT PIPE: CLEAR POLYCARBONATE
 ORGANIZER: POLYESTER WITH UL 94 V-0
2. REFERENCE APPLICATION SPECIFICATION 114-23023 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS
3. DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER
4. DIMENSION OF HEAT SINK APPLIES WITH MODULE INSERTED IN CAGE.
5. HEAT SINKS, HEAT SINK CLIPS AND LIGHT PIPES ARE SHIPPED ASSEMBLED ON CAGE
6. MINIMUM PC BOARD THICKNESS: SINGLE SIDED: 1.57 MIN
 DOUBLE SIDED: 2.20 MIN
7. DATUM -A- IS TOP SURFACE OF THE HOST BOARD.
8. THESE HOLES ARE OPTIONAL WHEN THE REAR PINS ARE REMOVED.
9. MATES WITH QSFP28 MSA COMPATIBLE TRANSCEIVER.
10. DATE CODE (YYWWD) MARKED APPROXIMATELY AS SHOWN.
11. NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLY WITH LIGHT PIPE.
12. THE CUSTOMIZED HEAT SINK HAVE NO SURFACE FINISH ONLY FOR 2170747-7/-8/-9.
13. CAGE ASSEMBLY WITH HS AND LIGHT PIPE ARE UNASSEMBLED, AND PACKAGED INDIVIDUALLY IN TRAYS. ONLY APPLICABLE TO 2170747-7.

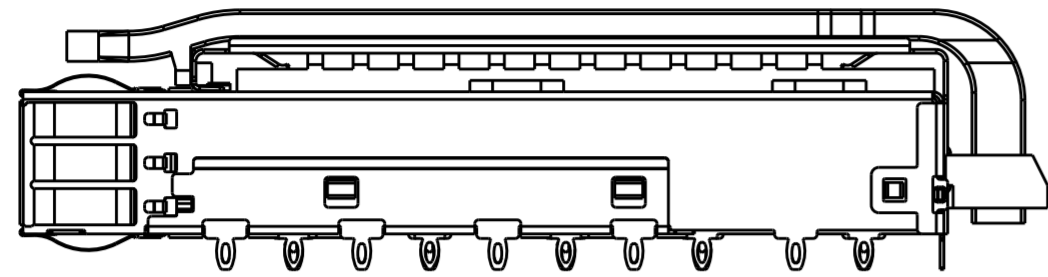


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		CHK SEAN HAN 07JUN2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ±	PRODUCT SPEC 108-19428	SIZE	
	ANGLES ±	APPLICATION SPEC 114-32023	CAGE CODE	DRAWING NO
MATERIAL	FINISH	WEIGHT	A200779	C-2170747
SEE NOTES	SEE NOTES	CUSTOMER DRAWING	SCALE 1:1	SHEET 1 OF 13

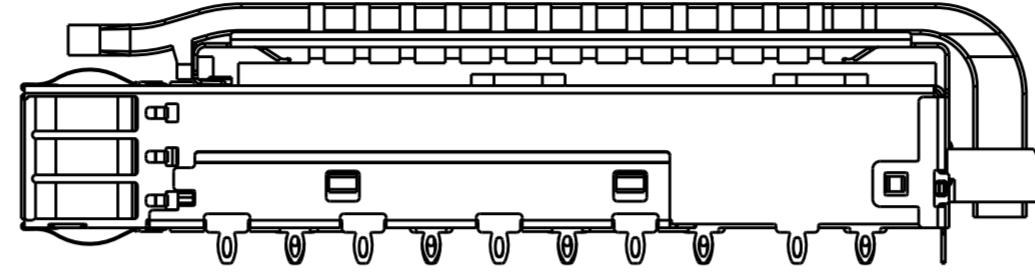
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-		SEE SHEET 1	-	-

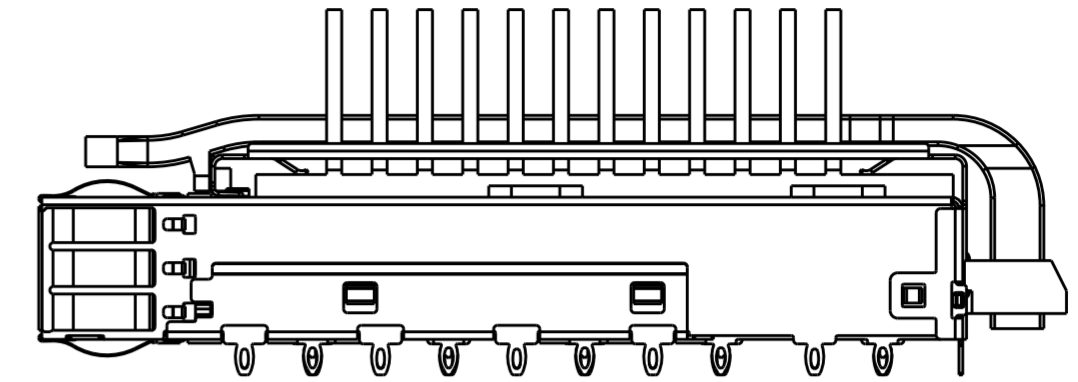
HEAT SINK OPTION



PCI HEAT SINK
SCALE 2:1

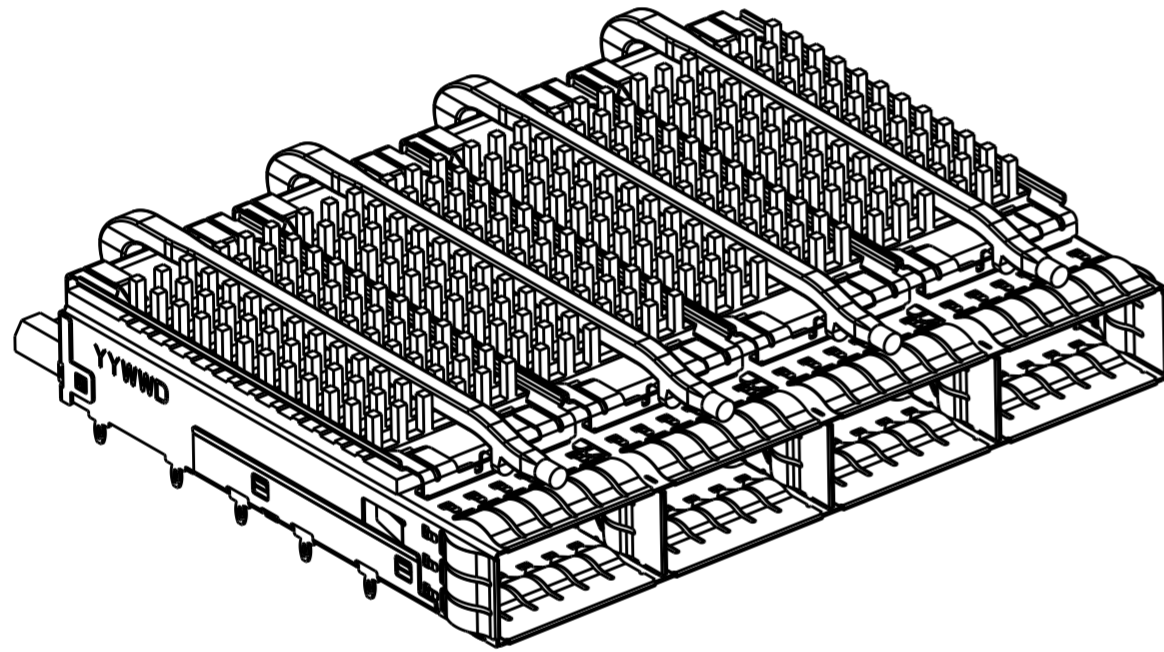


SAN HEAT SINK
SCALE 2:1

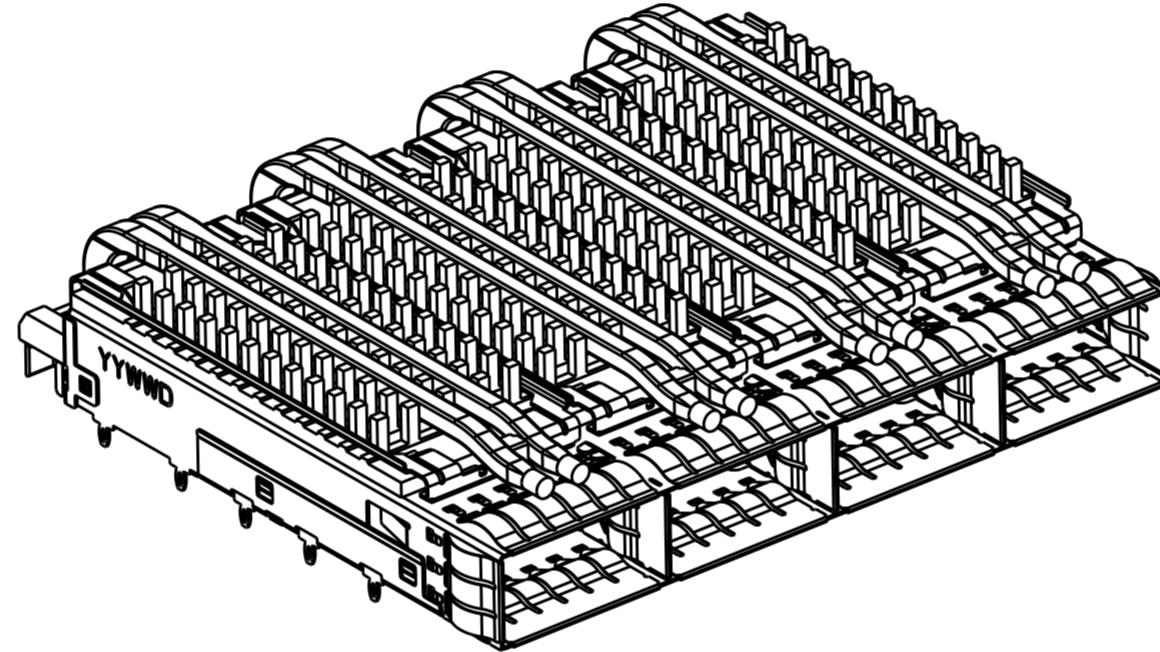


NETWORKING HEAT SINK
SCALE 2:1

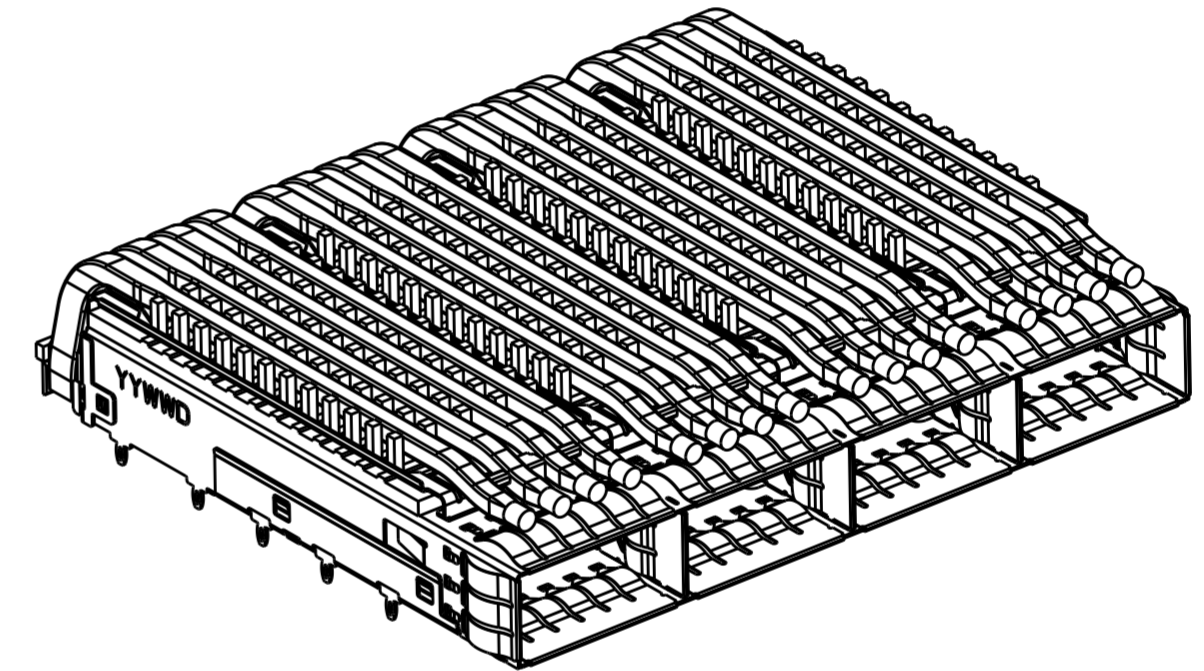
LIGHT PIPE OPTION



SINGLE LIGHT PIPE
SCALE 3:2

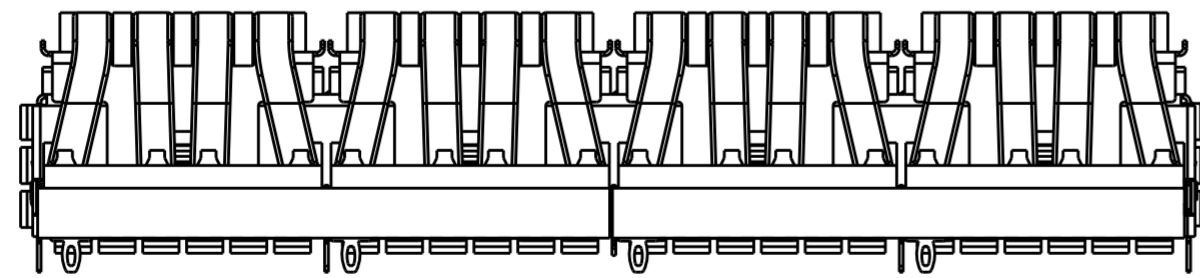


DUAL LIGHT PIPE
SCALE 3:2

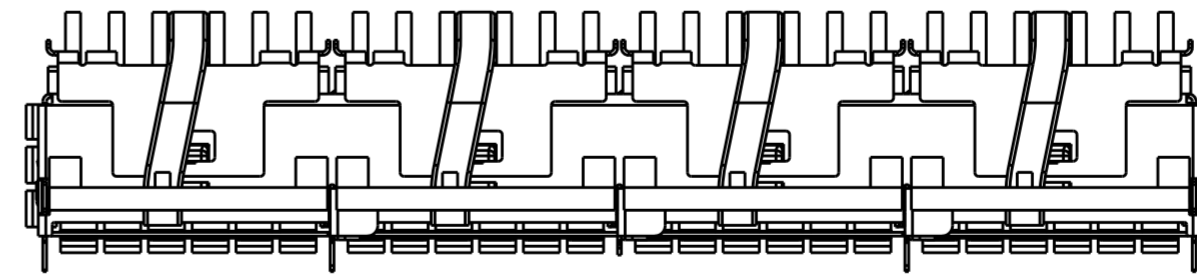


QUAD LIGHT PIPE
SCALE 3:2

OF REAR PIN OPTION



1 REAR PIN
SCALE 2:1

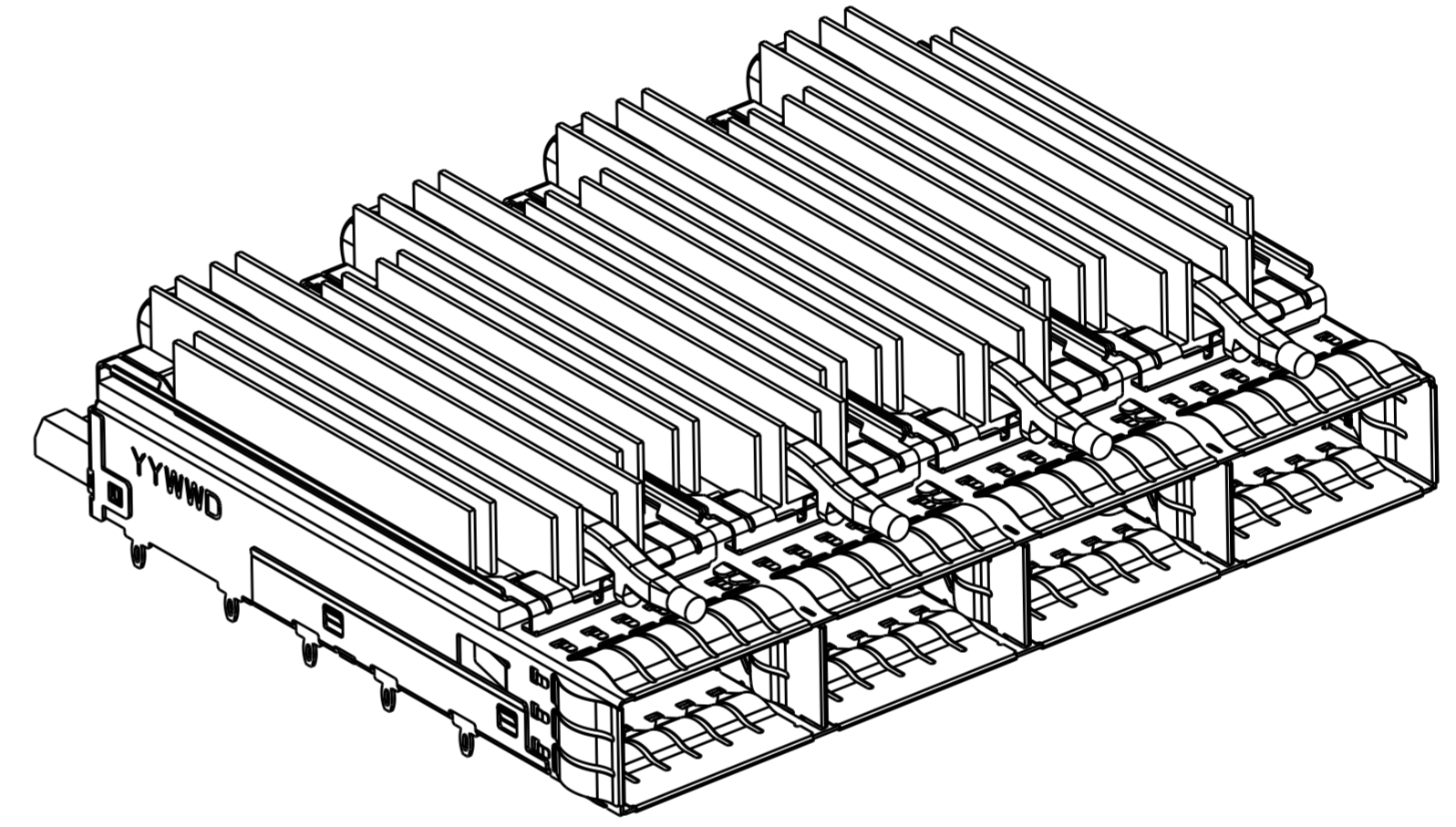
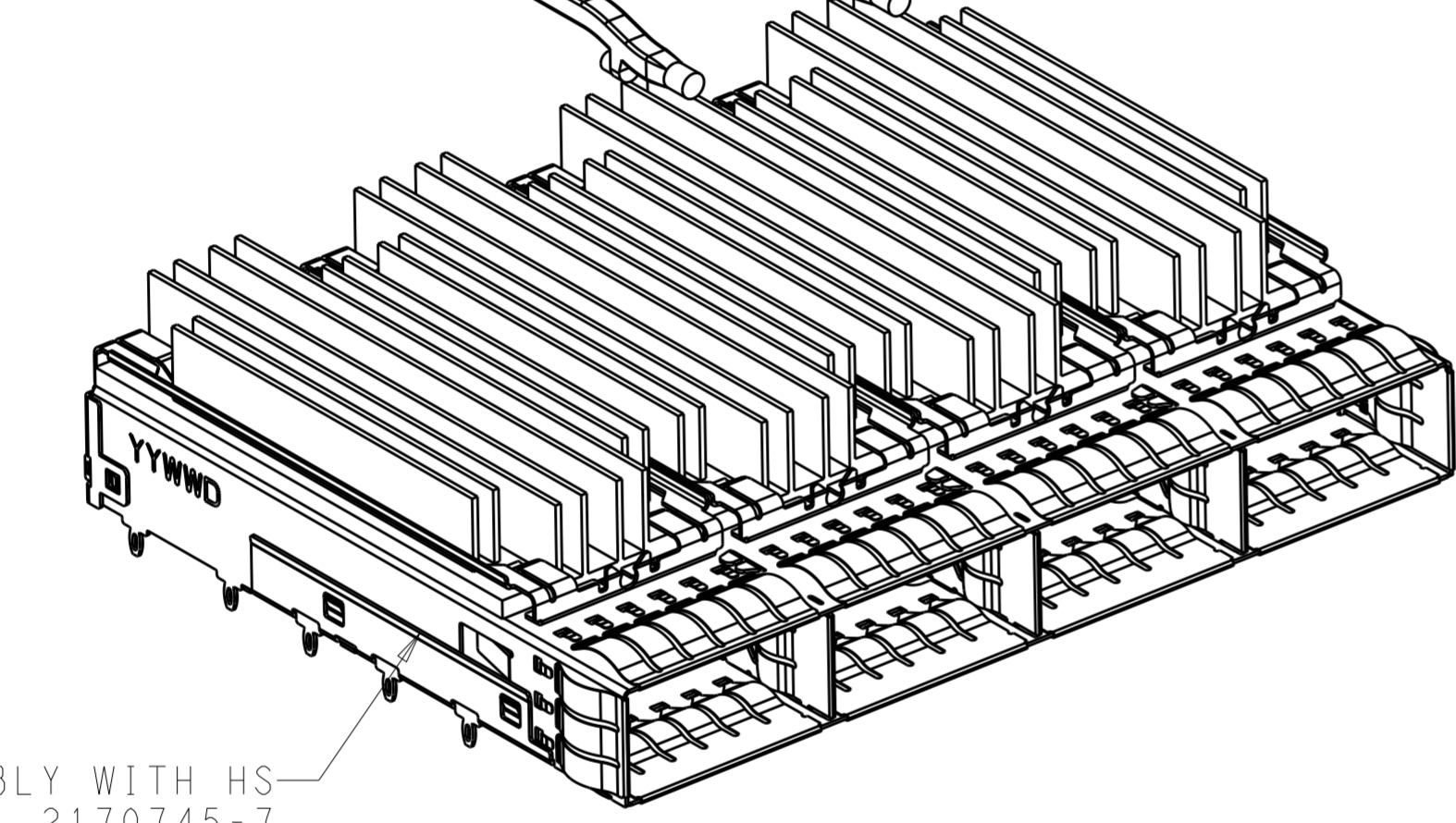
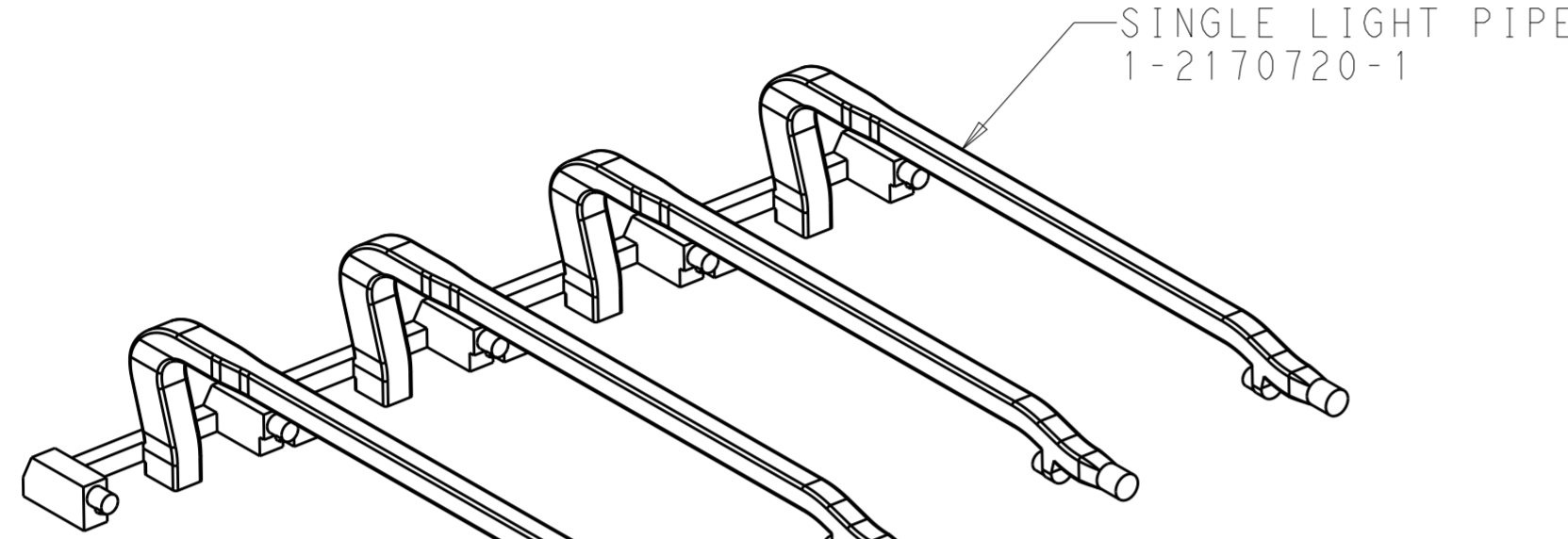


0 REAR PIN
SCALE 2:1

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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
		0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC 108-19428 APPLICATION SPEC 114-32023
MATERIAL SEE NOTES		WEIGHT -		SIZE CAGE CODE DRAWING NO A200779 C-2170747
		CUSTOMER DRAWING		RESTRICTED TO -
		SCALE 1:1		SHEET 2 OF 13 REV C

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REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



CAGE ASSEMBLY WITH HS
2170745-7

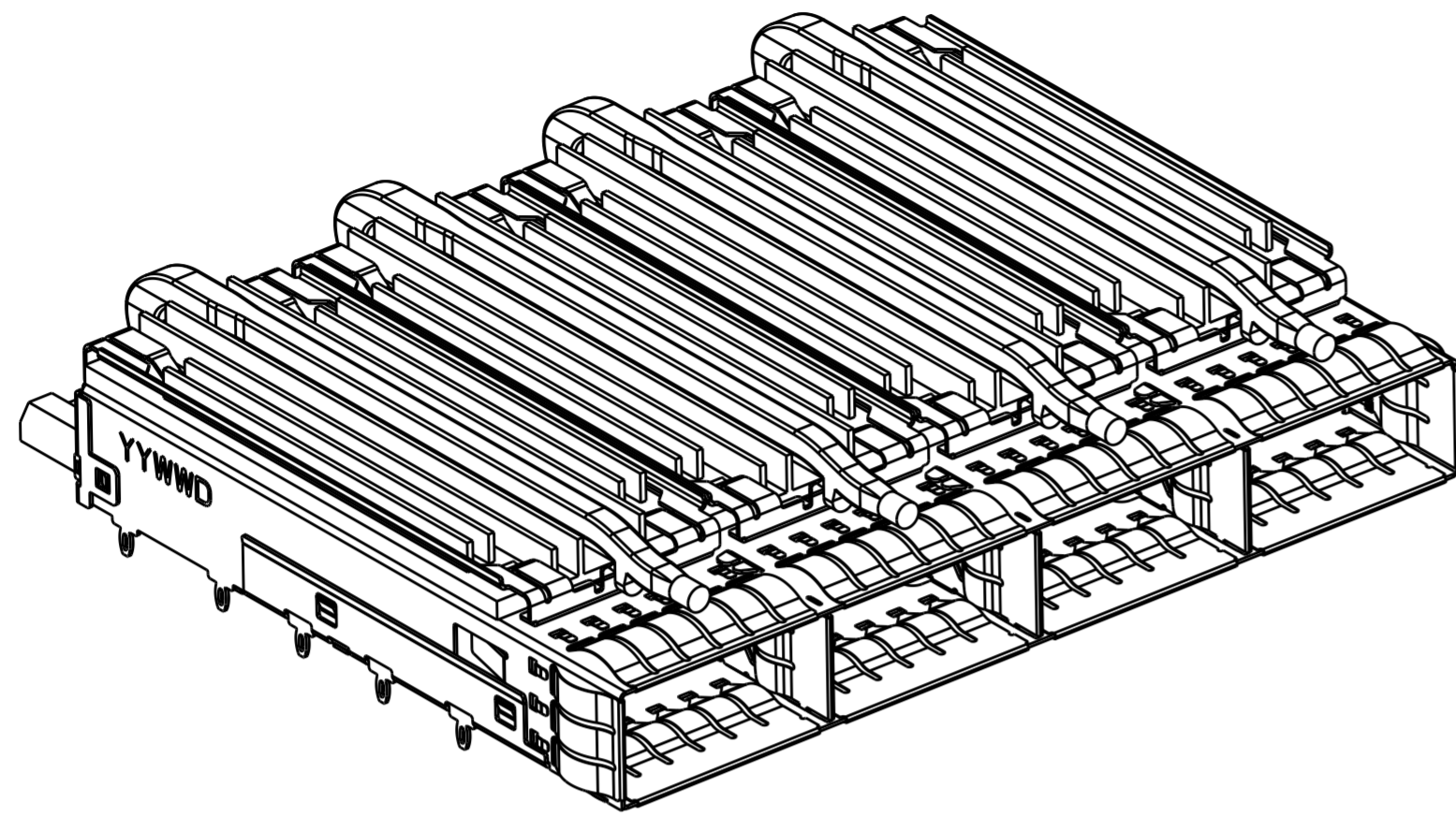
2170747-7 UNASSEMBLED ¹³
 CAGE ASSY WITH HS AND LIGHT PIPE ARE UNASSEMBLED,
 AND PACKAGED INDIVIDUALLY.
 CUSTOMIZED HEAT SINK
 SCALE 2:1

2170747-8 ASSEMBLED
 ASSEMBLED AND PAKCAGED TOGETHER, CUSTOMIZED HEAT SINK
 SCALE 2:1

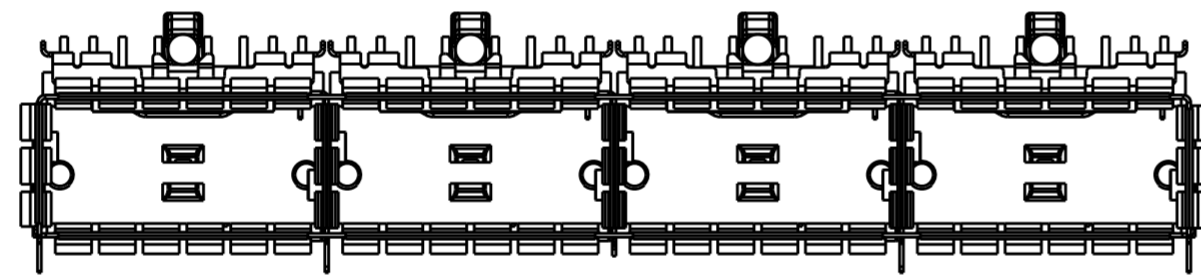
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		CHK SEAN HAN 07 JUN 2014		
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mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ±	PRODUCT SPEC 108-19428	SIZE	A200779
MATERIAL	FINISH	APPLICATION SPEC 114-32023	CAGE CODE	C-2170747
SEE NOTES	SEE NOTES	WEIGHT -	DRAWING NO	RESTRICTED TO
		CUSTOMER DRAWING	SCALE	1:1
			SHEET	3 OF 13
			REV	C

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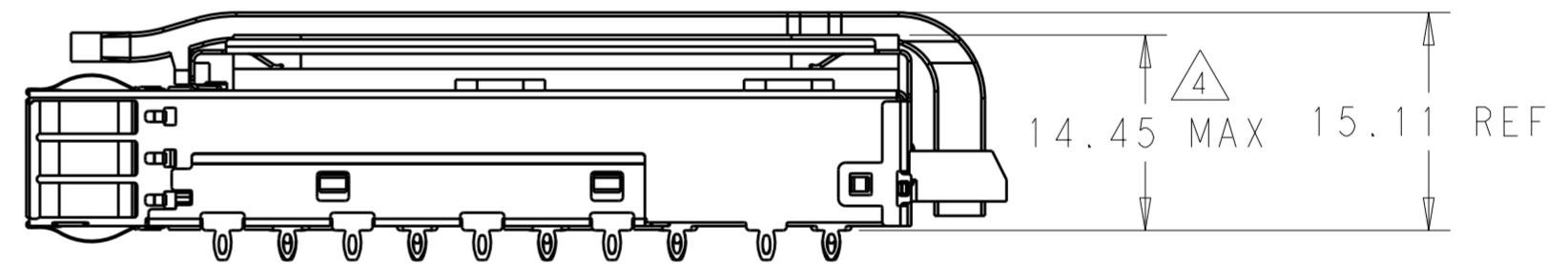
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-



2170747-9 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



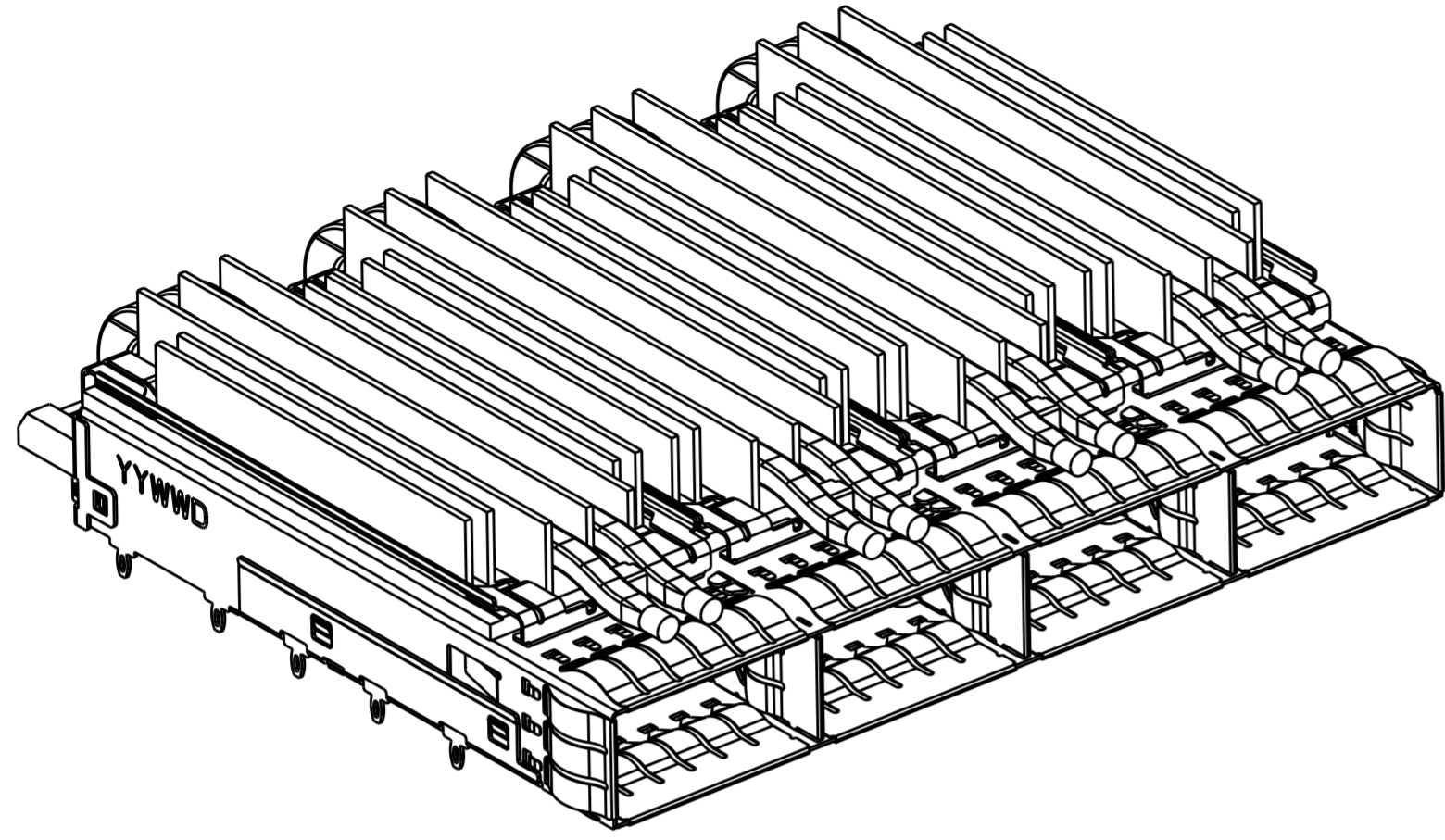
SCALE 2:1



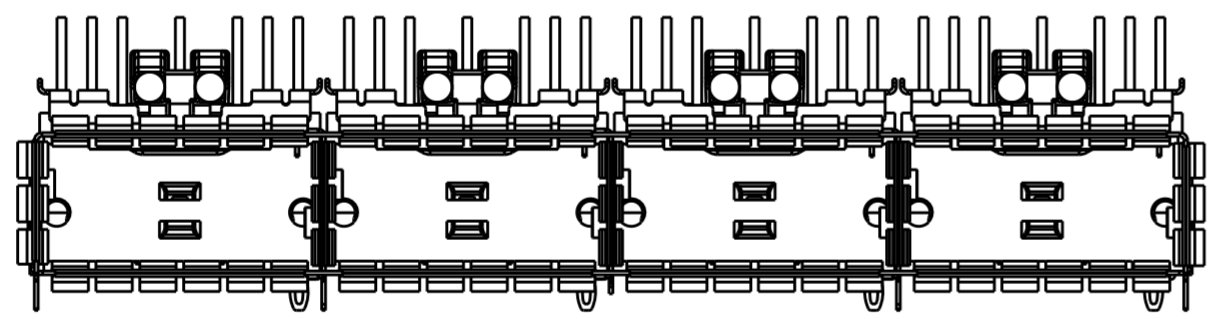
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN 04JUN2014 JASON YANG	STE TE Connectivity															
		CHK 07JUN2014 SEAN HAN																
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING														
<table border="0"> <tr> <td>0 PLC</td> <td>±</td> </tr> <tr> <td>1 PLC</td> <td>±0.25</td> </tr> <tr> <td>2 PLC</td> <td>±0.2</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> <tr> <td>FINISH</td> <td>±</td> </tr> </table>		0 PLC	±	1 PLC	±0.25	2 PLC	±0.2	3 PLC	±	4 PLC	±	ANGLES	±	FINISH	±	PRODUCT SPEC 108-19428	SIZE 114-32023	RESTRICTED TO -
0 PLC	±																	
1 PLC	±0.25																	
2 PLC	±0.2																	
3 PLC	±																	
4 PLC	±																	
ANGLES	±																	
FINISH	±																	
MATERIAL SEE NOTES		APVD -	APPLICATION SPEC 114-32023	SCALE 1:1														
		WEIGHT -	CUSTOMER DRAWING	SHEET 4 OF 13														
				REV C														

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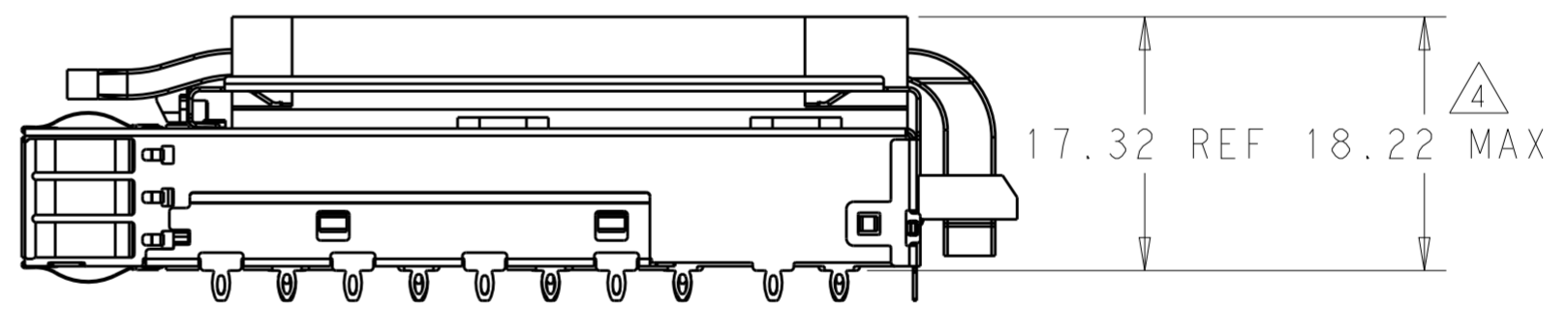
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-		SEE SHEET 1	-	-


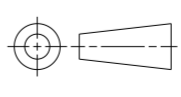


2-2170747-7 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



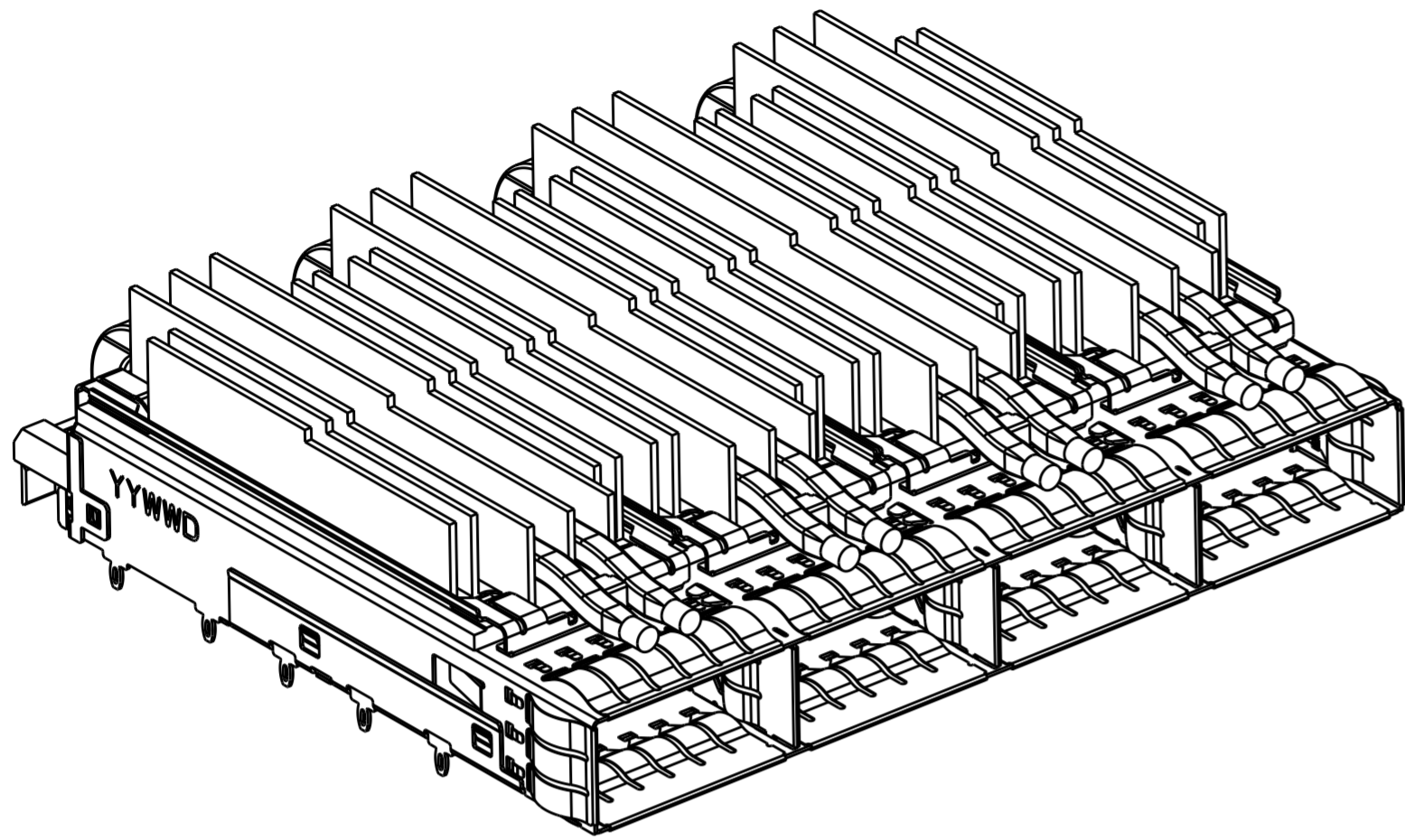
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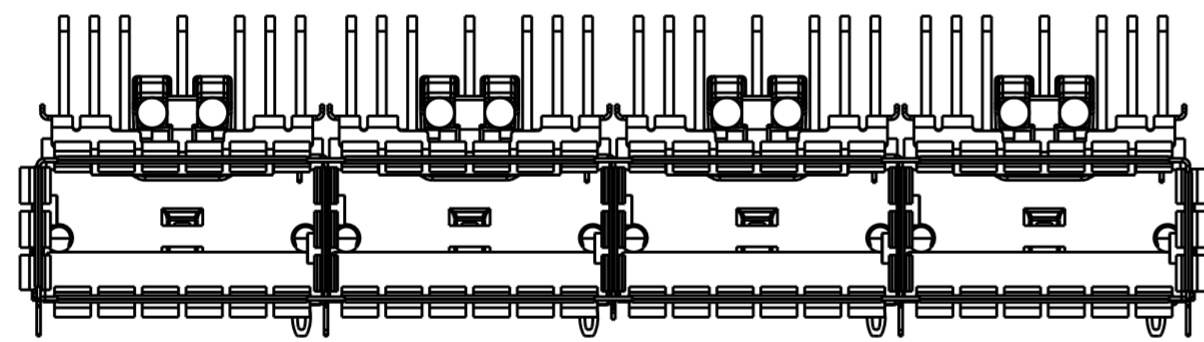
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04JUN2014	 TE Connectivity	
		CHK SEAN HAN 07JUN2014		
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
		0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC 108-19428
MATERIAL SEE NOTES		APPLICATION SPEC 114-32023		SIZE A2
		WEIGHT -		CAGE CODE 00779
		CUSTOMER DRAWING		DRAWING NO C-2170747
		SCALE 1:1		RESTRICTED TO -
		SHEET 5 OF 13		REV C

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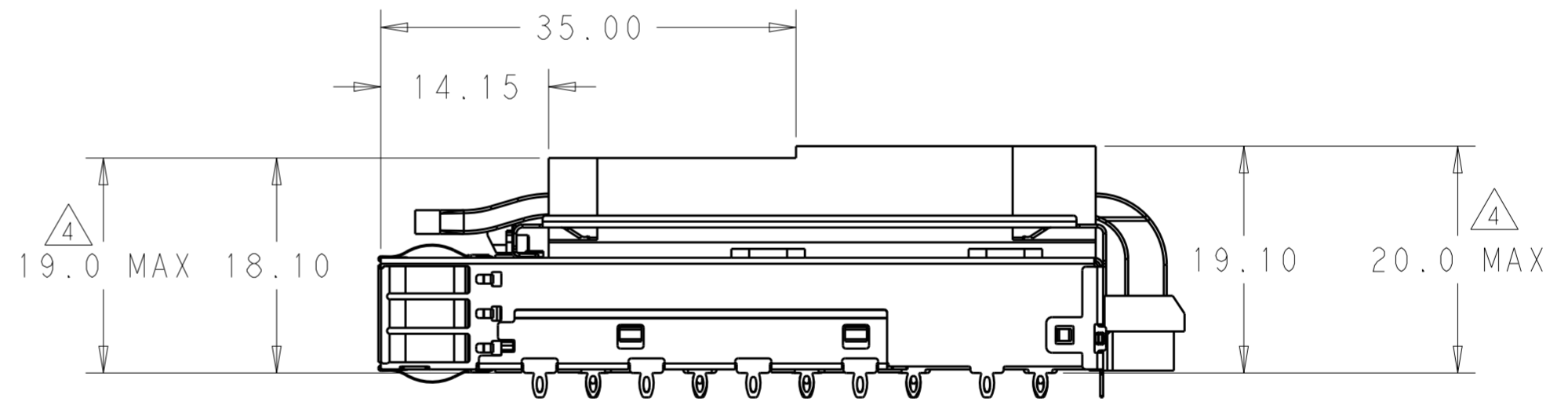
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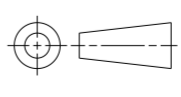


2-2170747-8 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



SCALE 2:1


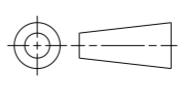


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DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
		0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC 108-19428
MATERIAL SEE NOTES		MATERIAL SEE NOTES		APPLICATION SPEC 114-32023
		WEIGHT -		SIZE A200779
		CUSTOMER DRAWING		CAGE CODE C-2170747
		SCALE 1:1		RESTRICTED TO -
		SHEET 6 OF 13		REV C

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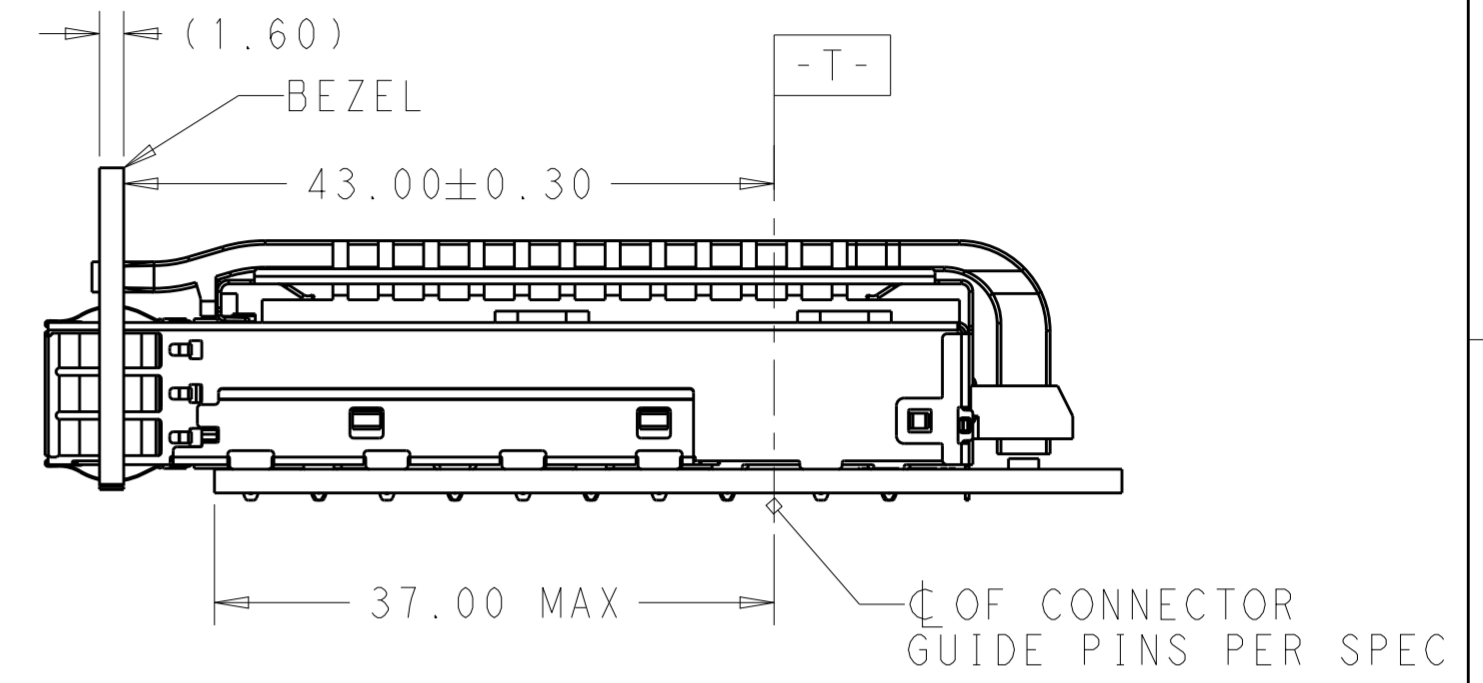
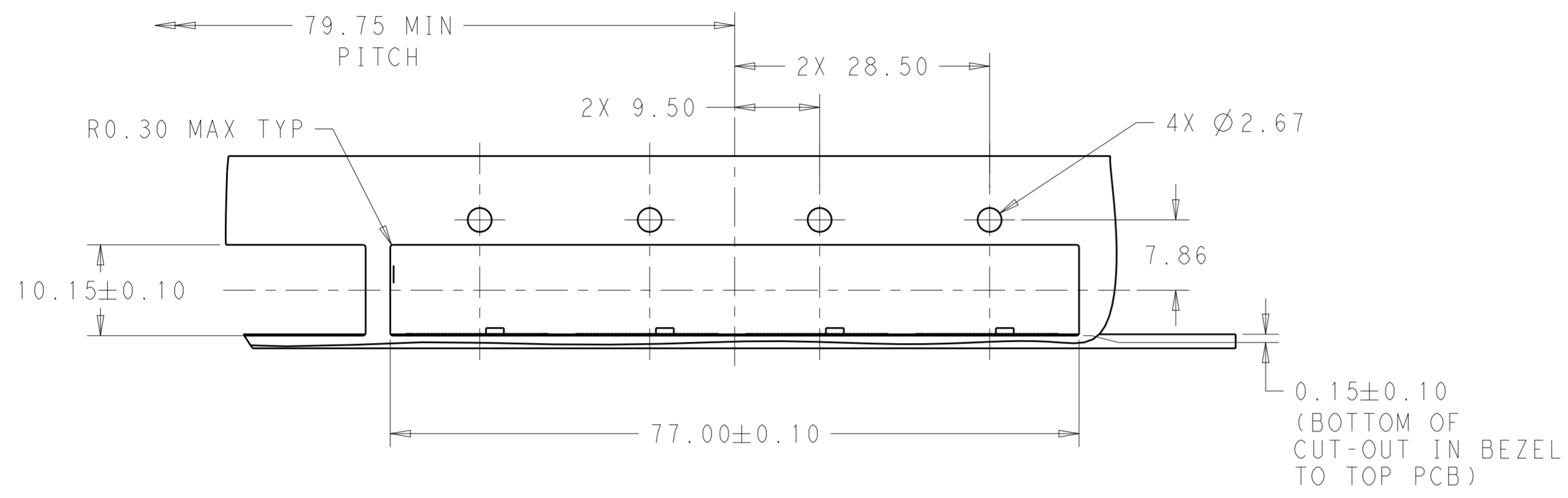
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P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-

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0	16.0	SAN	QUAD LP	4-2170747-5
0	13.7	PCI	QUAD LP	4-2170747-4
1	23.0	NETWORKING	QUAD LP	4-2170747-3
1	16.0	SAN	QUAD LP	4-2170747-2
1	13.7	PCI	QUAD LP	4-2170747-1
1	20.3	CUSTOMIZED	DUAL LP	2-2170747-8
1	18.22	CUSTOMIZED	DUAL LP	2-2170747-7
0	23.0	NETWORKING	DUAL LP	2-2170747-6
0	16.0	SAN	DUAL LP	2-2170747-5
0	13.7	PCI	DUAL LP	2-2170747-4
1	23.0	NETWORKING	DUAL LP	2-2170747-3
1	16.0	SAN	DUAL LP	2-2170747-2
1	13.7	PCI	DUAL LP	2-2170747-1
0	14.45	CUSTOMIZED	SINGLE LP	2170747-9
0	18.05	CUSTOMIZED	SINGLE LP	2170747-8
0	18.05	CUSTOMIZED	SINGLE LP	2170747-7 ¹³
0	23.0	NETWORKING	SINGLE LP	2170747-6
0	16.0	SAN	SINGLE LP	2170747-5
0	13.7	PCI	SINGLE LP	2170747-4
1	23.0	NETWORKING	SINGLE LP	2170747-3
1	16.0	SAN	SINGLE LP	2170747-2
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# OF REAR PIN	DIM A	APPLICATION	LIGHT PIPE OPTION	PART NUMBER

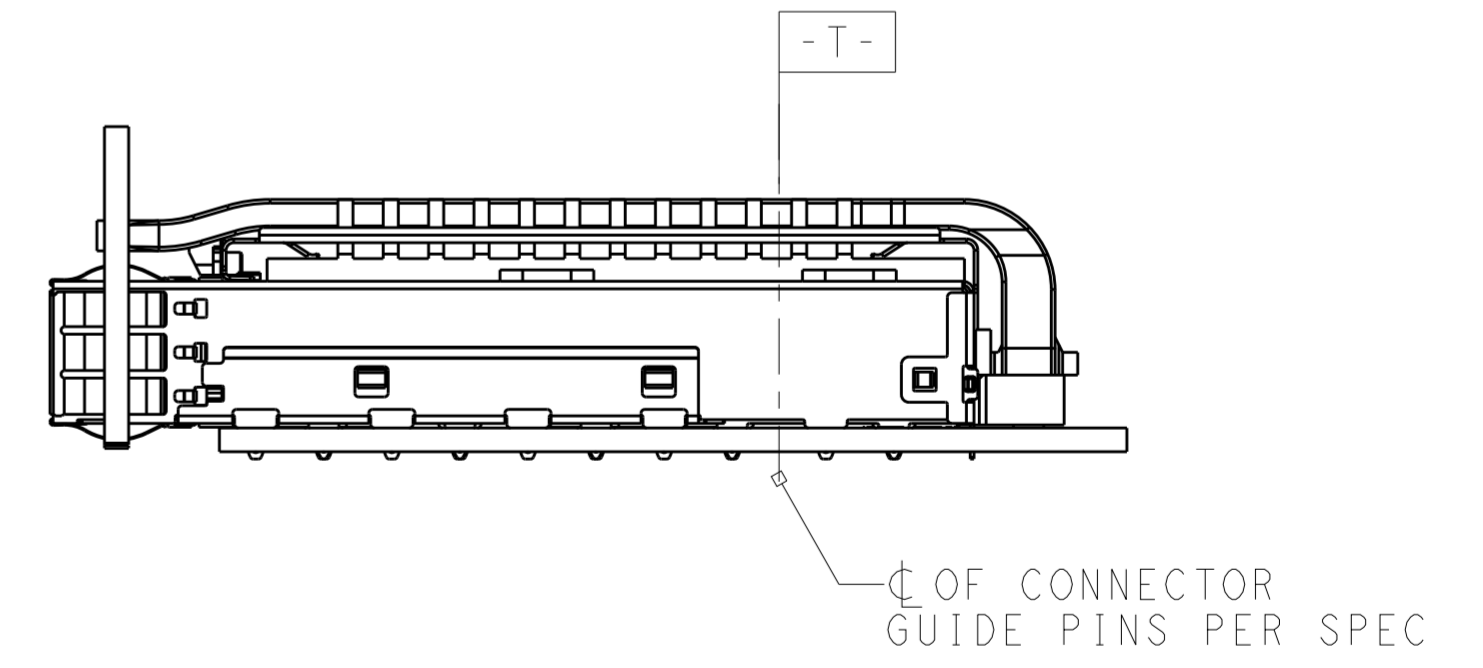
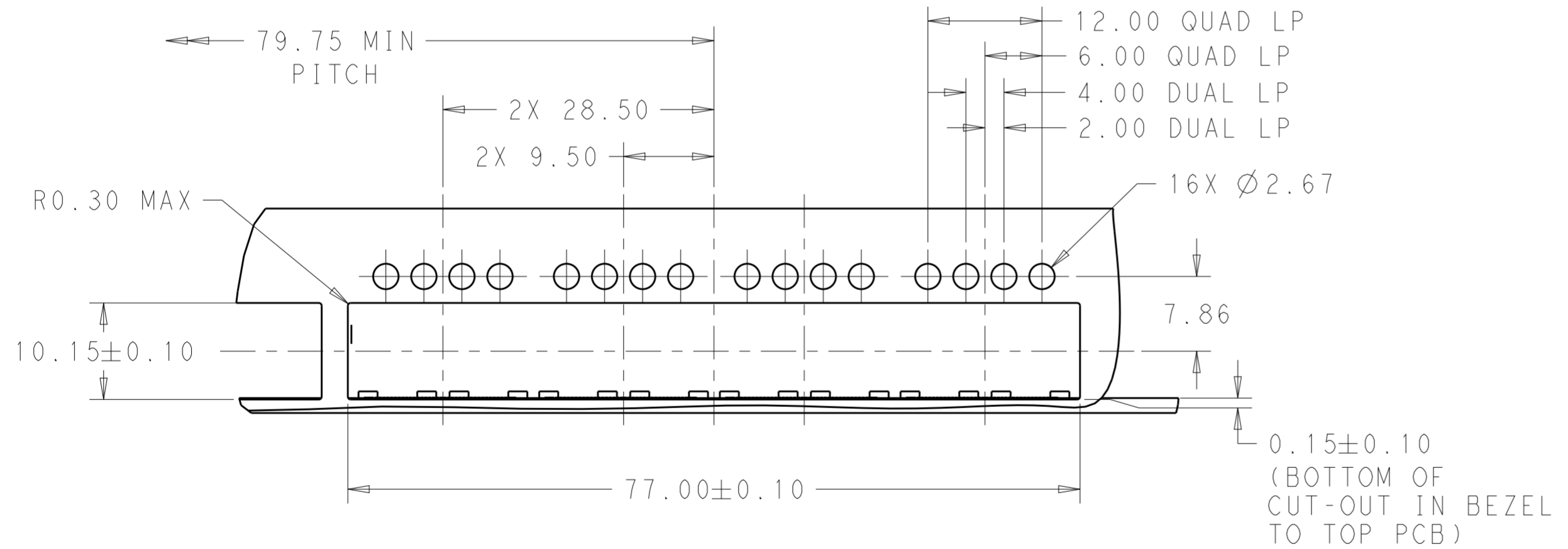
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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ±	PRODUCT SPEC 108-19428	SIZE 114-32023	RESTRICTED TO -
MATERIAL SEE NOTES	FINISH SEE NOTES	APPLICATION SPEC 114-32023	WEIGHT -	SCALE 1:1
		CUSTOMER DRAWING	SIZE A200779	DRAWING NO C-2170747
			SHEET 7 OF 13	REV C

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-	-	SEE SHEET 1	-	-



SINGLE SIDE MOUNTING
SCALE 2:1

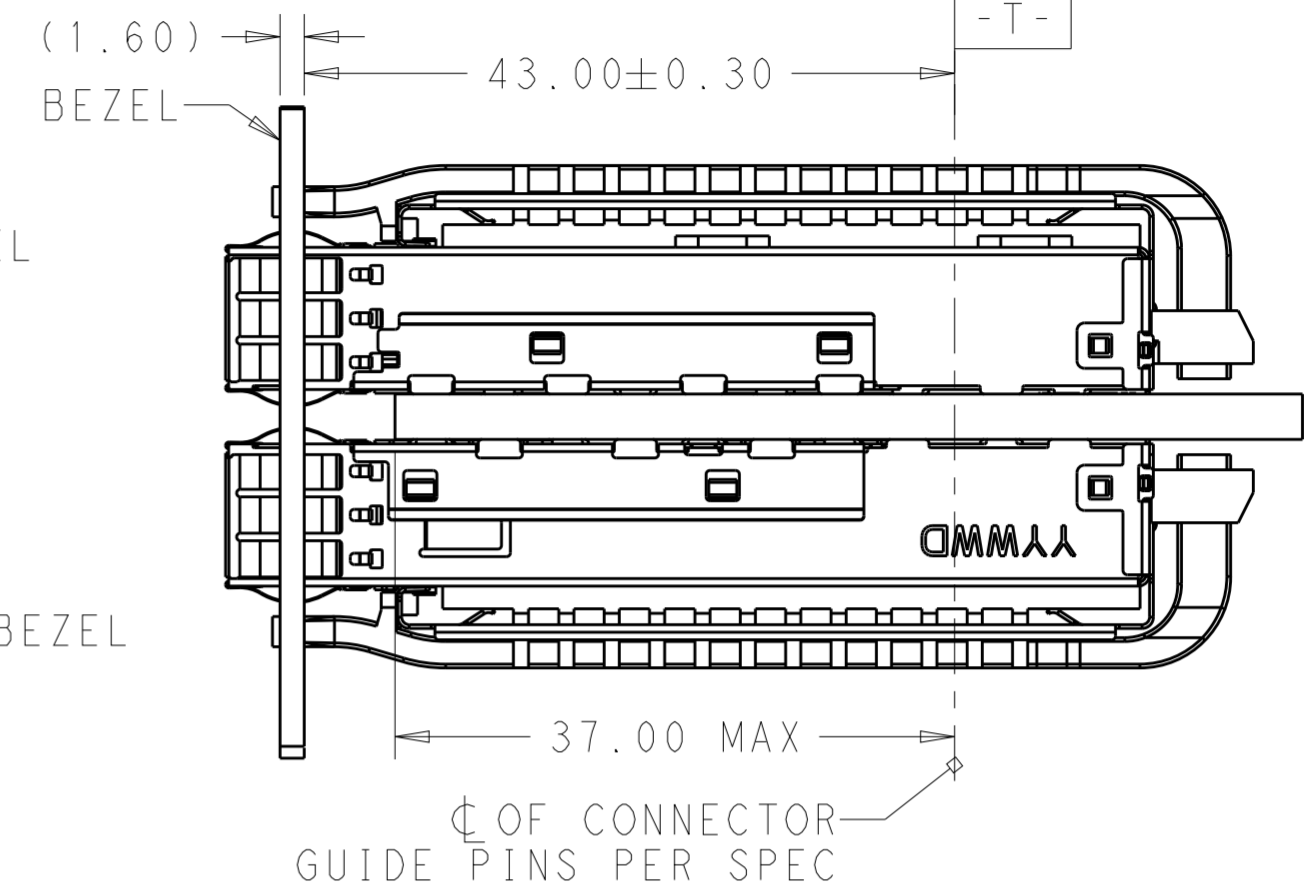
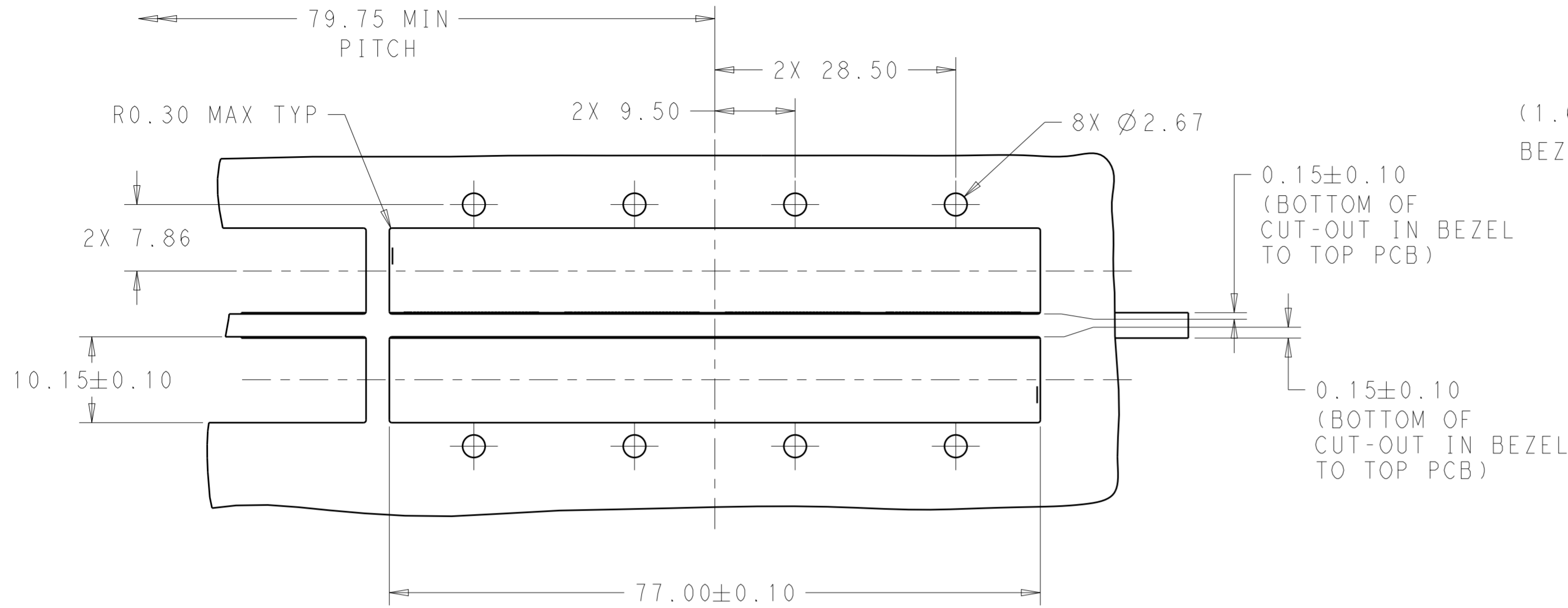


SINGLE SIDE MOUNTING
SCALE 2:1

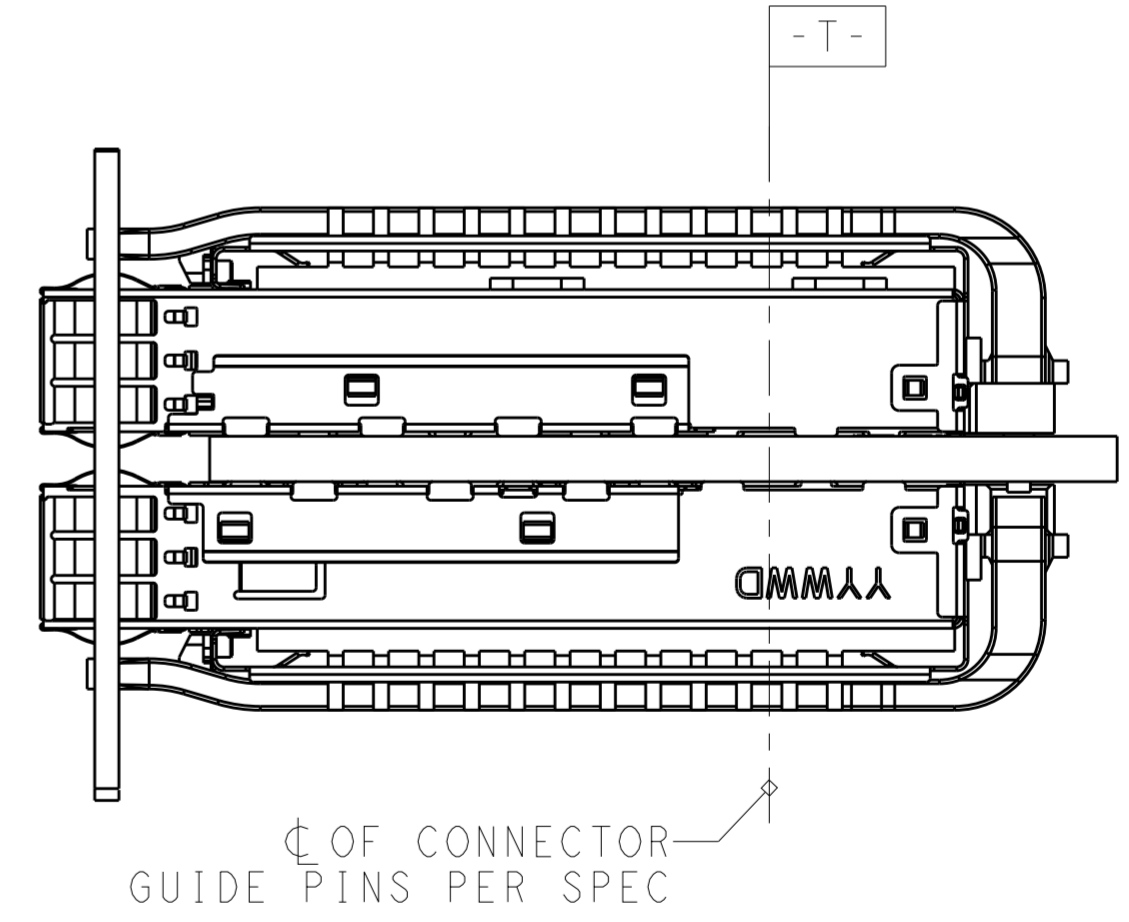
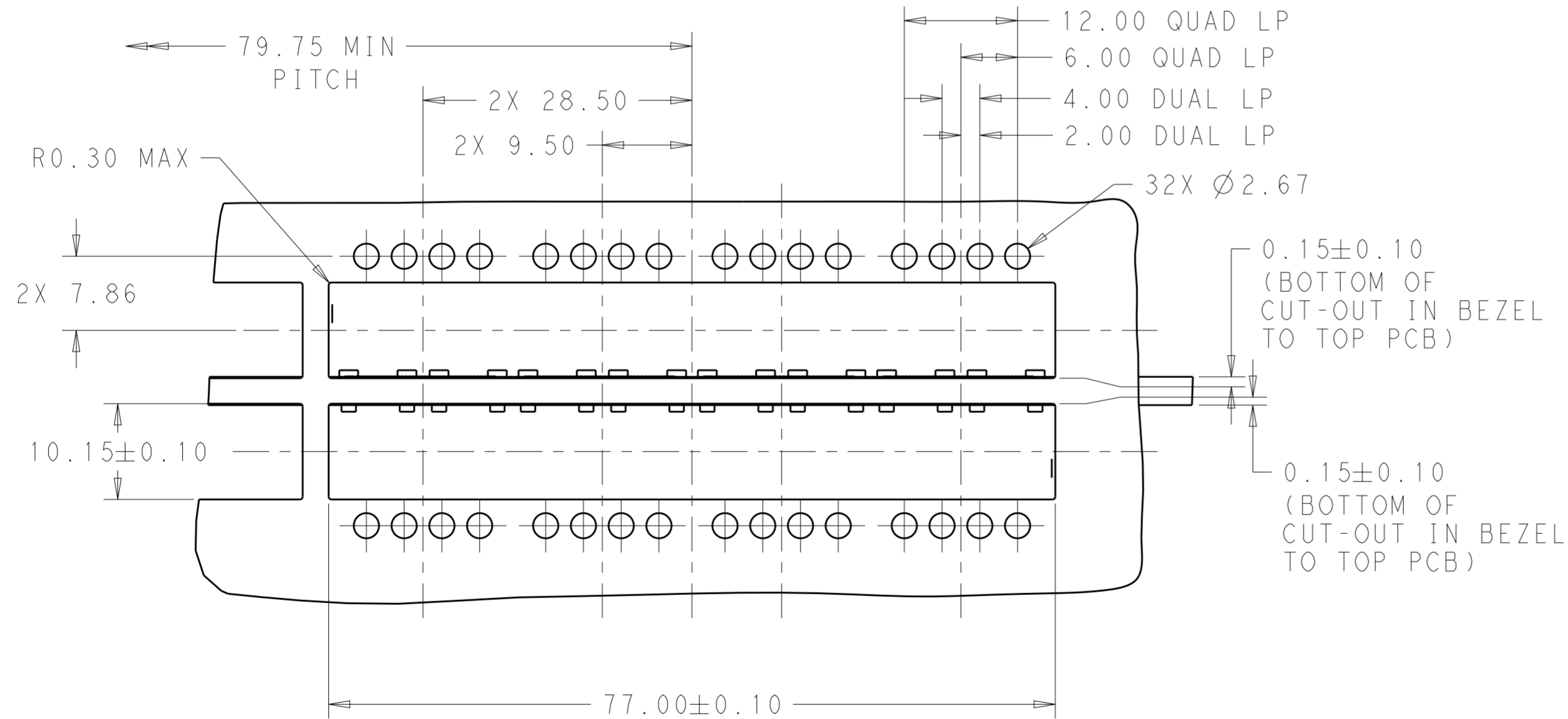
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	STE TE Connectivity	
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DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH	PRODUCT SPEC 108-19428	SIZE A200779	DRAWING NO C-2170747
MATERIAL SEE NOTES	SEE NOTES	APPLICATION SPEC 114-32023	RESTRICTED TO -	
		WEIGHT -	SCALE 1:1	SHEET 8 OF 13
		CUSTOMER DRAWING	REV C	

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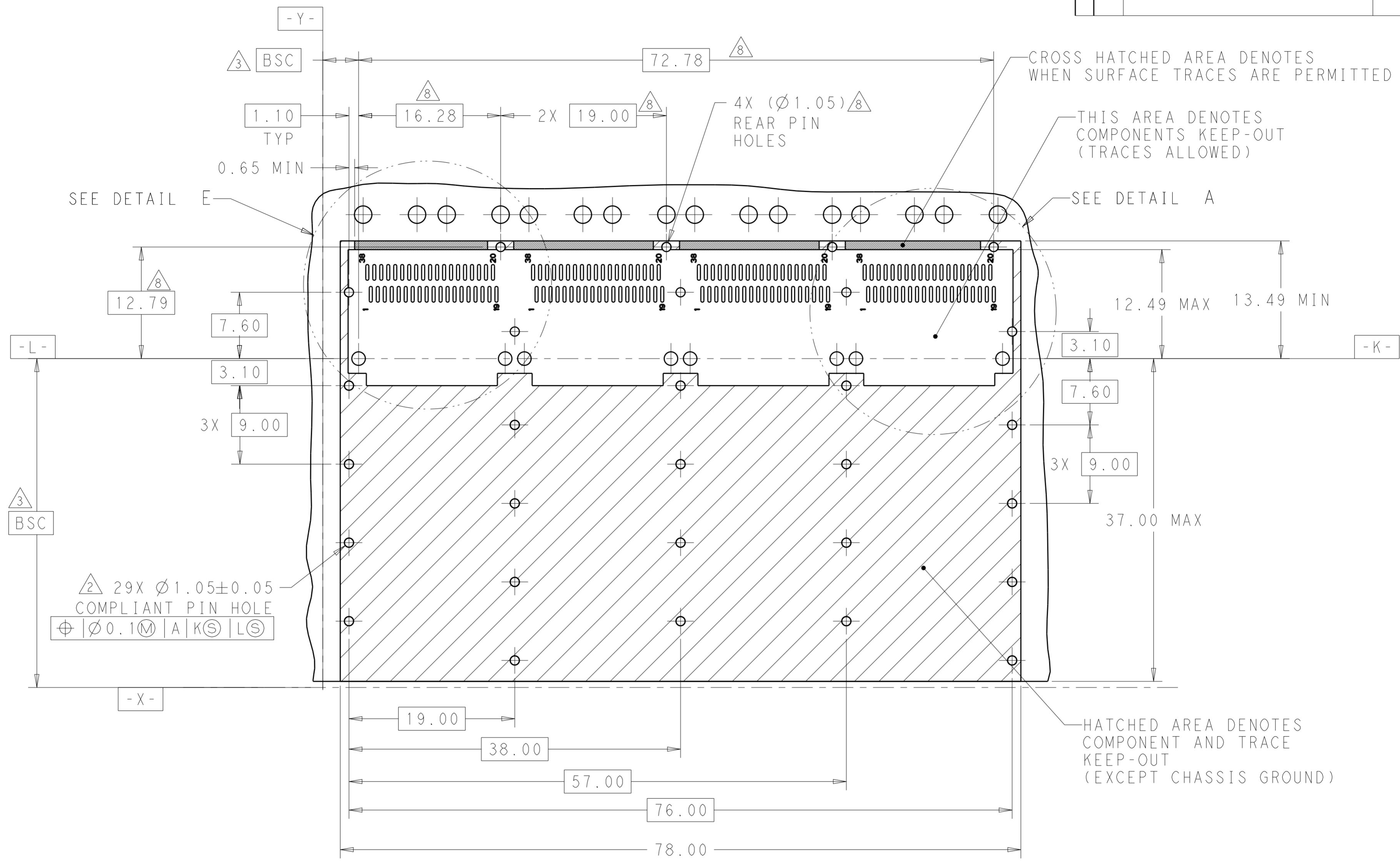
BELLY TO BELLY MOUNTING
SCALE 2:1



BELLY TO BELLY MOUNTING
SCALE 2:1

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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ±	PRODUCT SPEC	108-19428	
MATERIAL	FINISH	APPLICATION SPEC	114-32023	RESTRICTED TO
SEE NOTES	SEE NOTES	WEIGHT	-	SIZE CAGE CODE DRAWING NO
		CUSTOMER DRAWING	A200779C-2170747	SCALE 1:1 SHEET 9 OF 13 REV C

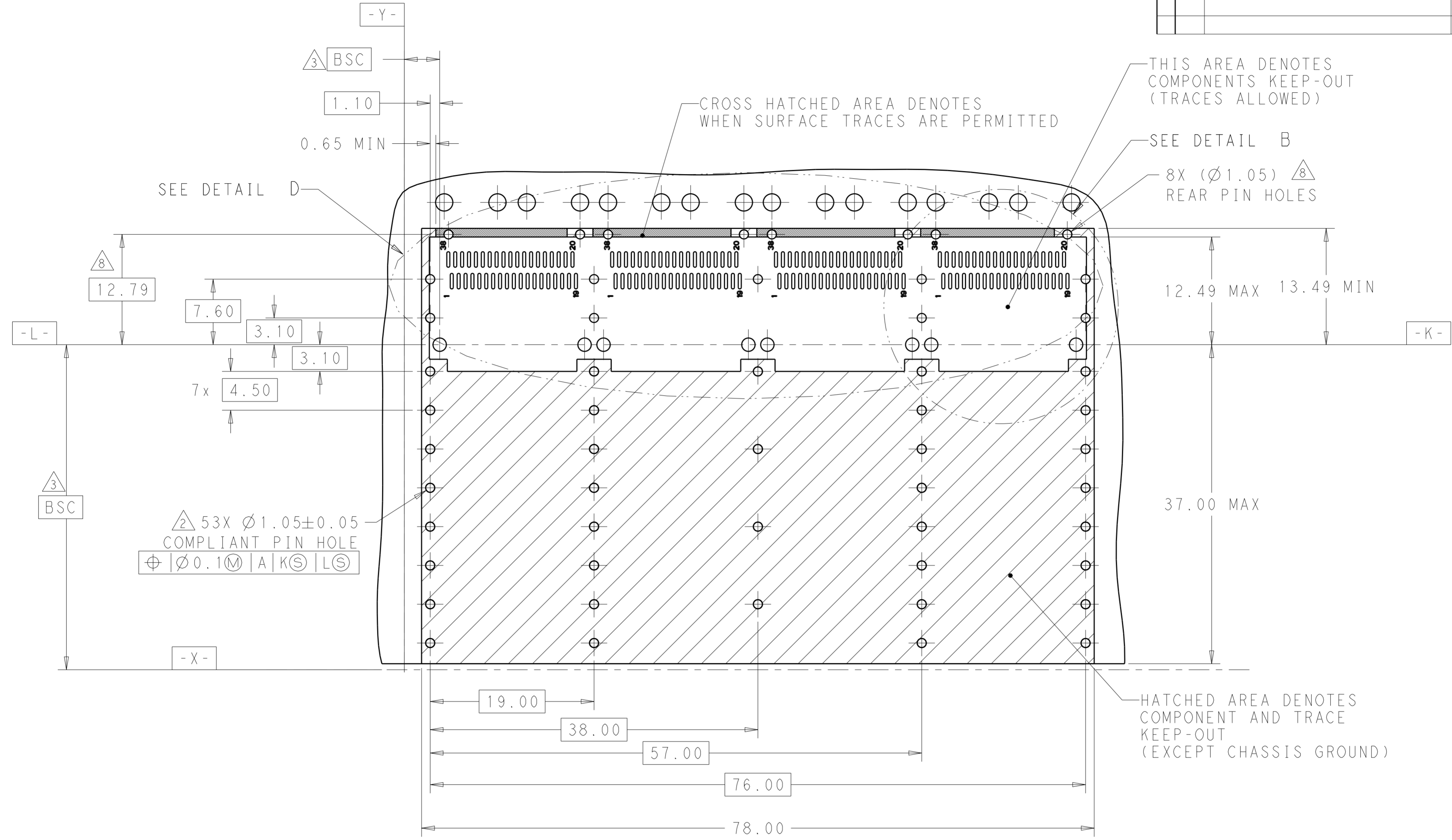
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-




RECOMMENDED PCB LAYOUT
 SINGLE TYPE
 PCB TOLERANCE: ±0.05
 SCALE 3:1

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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm 		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH SEE NOTES		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
MATERIAL SEE NOTES		PRODUCT SPEC 108-19428 APPLICATION SPEC 114-32023 WEIGHT -		SIZE A200779
		CUSTOMER DRAWING		DRAWING NO C-2170747 RESTRICTED TO -
		SCALE 1:1		SHEET 10 OF 13 REV C

REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-

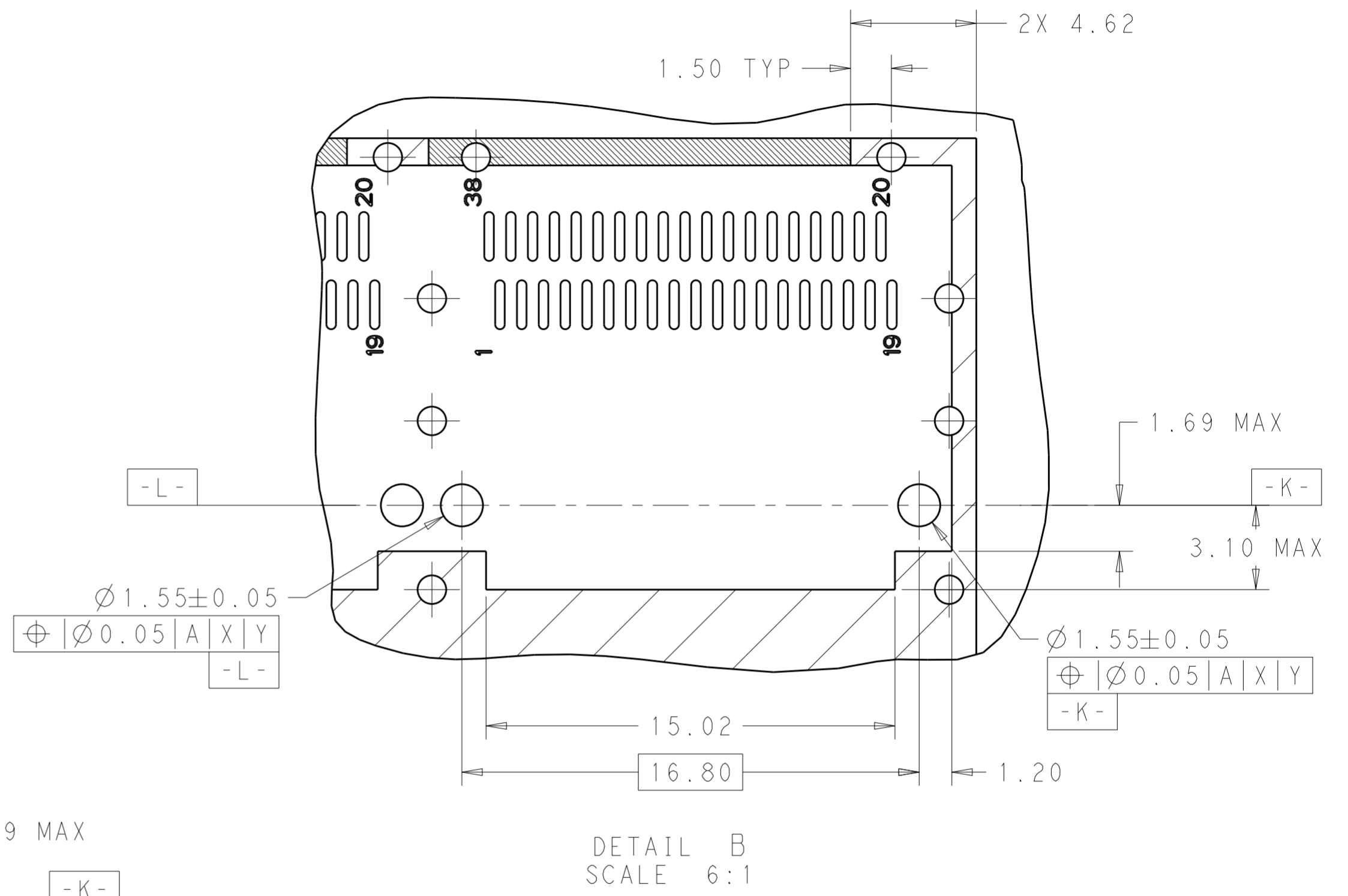
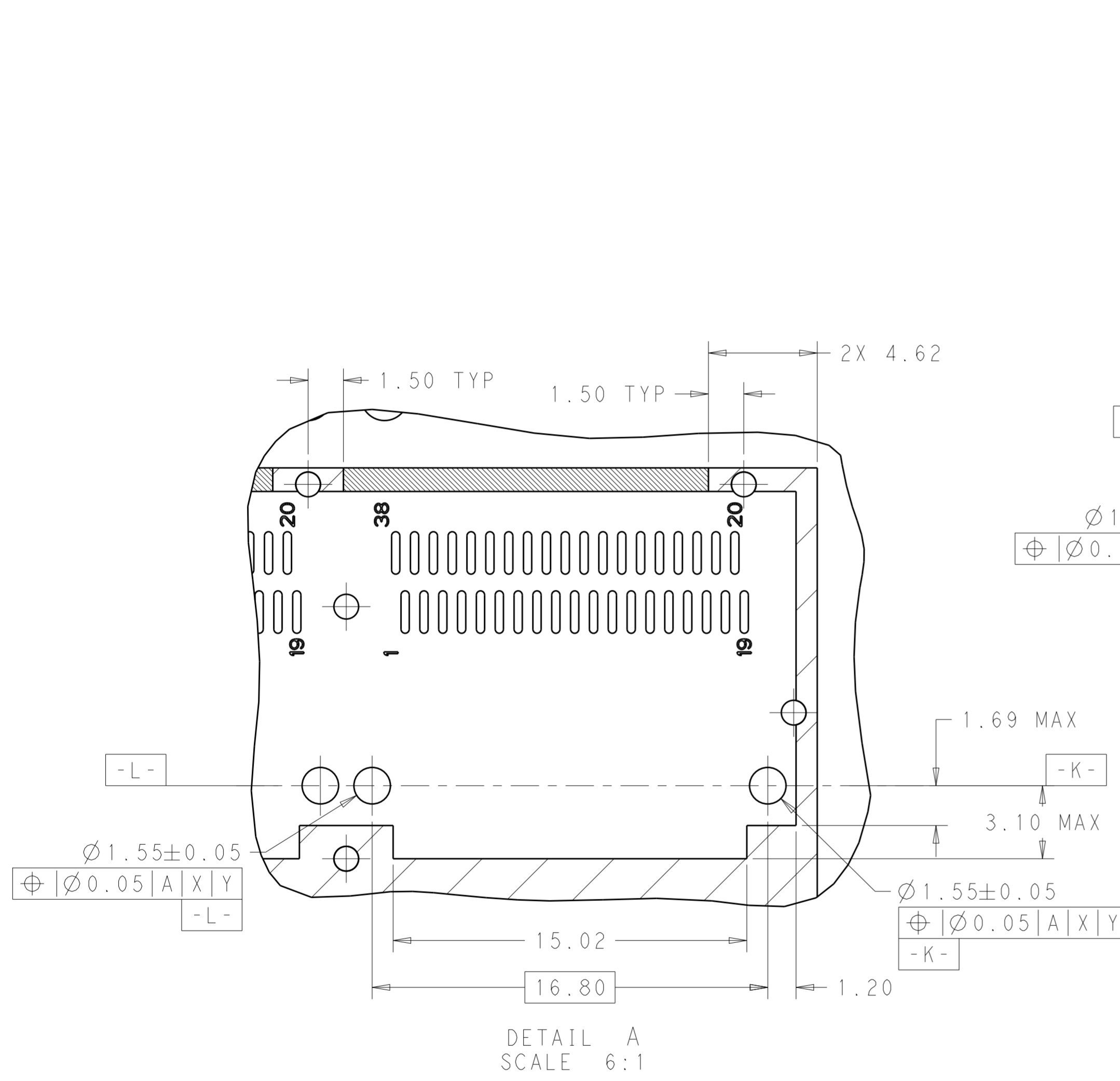


RECOMMENDED PCB LAYOUT
 BELLY TO BELLY TYPE
 PCB TOLERANCE: ±0.05
 SCALE 3:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	 TE Connectivity
		CHK SEAN HAN 07 JUN 2014	
DIMENSIONS: mm		APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH		PRODUCT SPEC 108-19428	SIZE A200779
MATERIAL SEE NOTES		APPLICATION SPEC 114-32023	DRAWING NO C-2170747
		WEIGHT -	RESTRICTED TO -
		CUSTOMER DRAWING	SCALE 1:1 SHEET 11 OF 13 REV C

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REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	TE Connectivity															
		CHK SEAN HAN 07 JUN 2014																
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING														
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		WEIGHT -	CUSTOMER DRAWING	SHEET 12 OF 13														
				REV C														