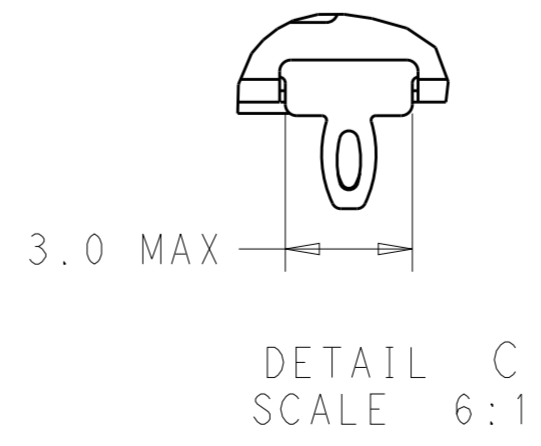
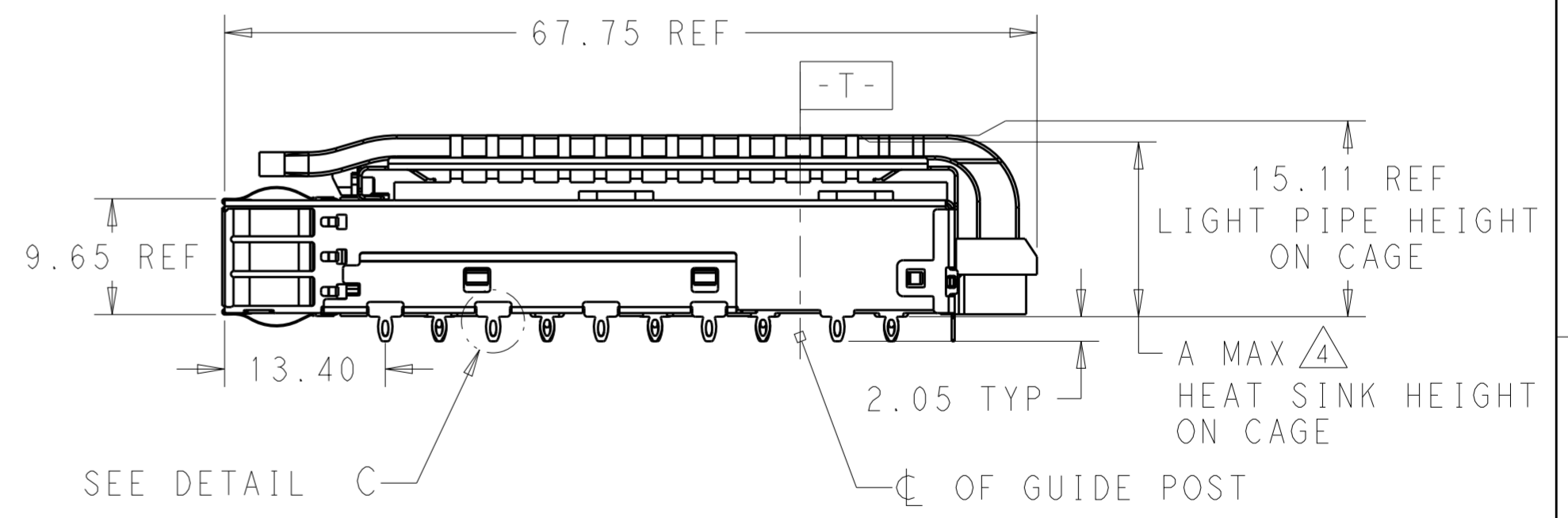
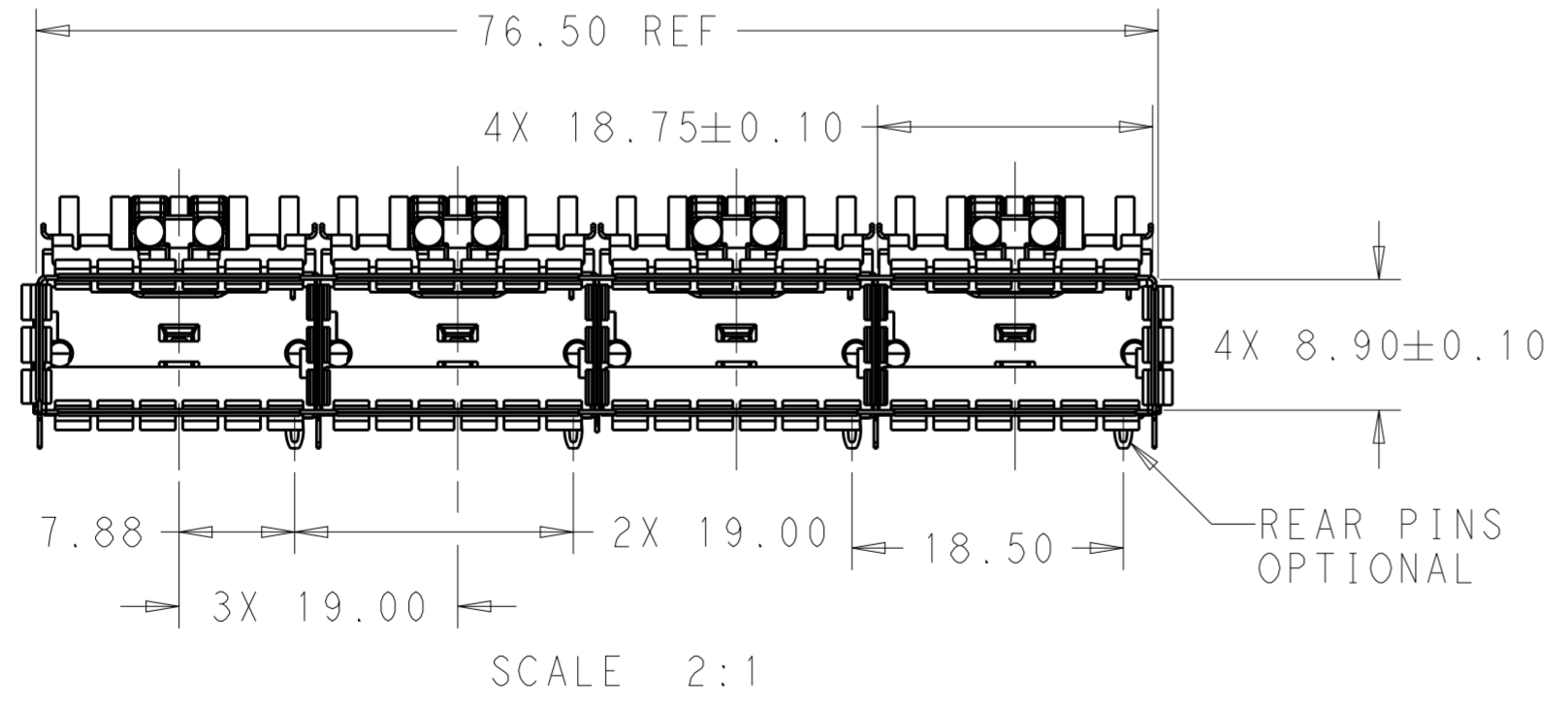
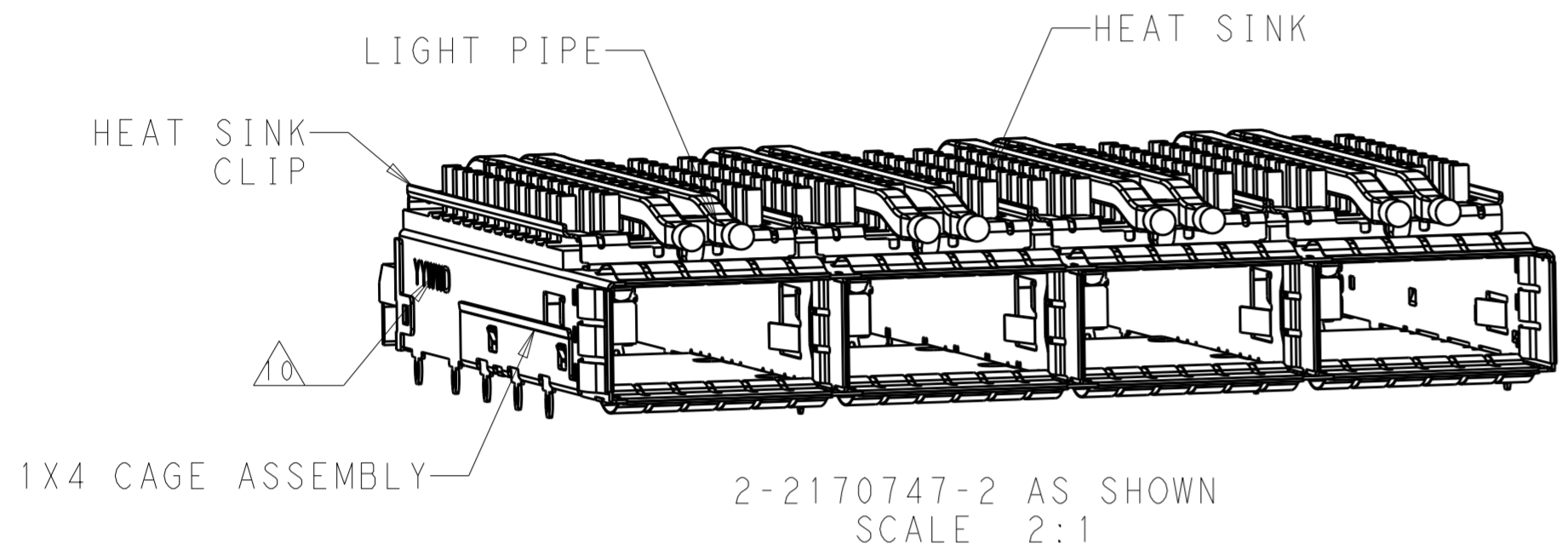


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REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
A		RELEASE	31OCT2016	JY	SH
B		REVISED PER ECO-17-009888	07JUL2017	JY	SH
C		REVISED PER ECO-18-012273	10JUL2018	JY	SH

# 2-2170747-2 AS SHOWN

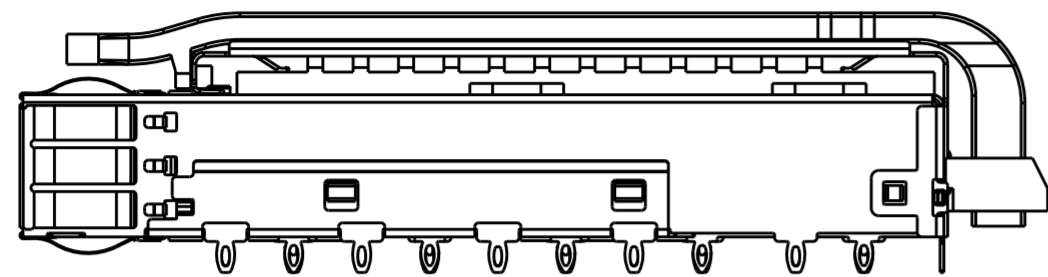
1. COMPONENTS  
 CAGE ASSEMBLY: NICKEL-SILVER ALLOY  
 HEAT SINK: ALUMINUM/BLACK ANODIZE  
 HEAT SINK CLIP: STAINLESS STEEL  
 EMI SPRING: COPPER ALLOY/NICKEL PLATE  
 LIGHT PIPE: CLEAR POLYCARBONATE  
 ORGANIZER: POLYESTER WITH UL 94 V-0
2. REFERENCE APPLICATION SPECIFICATION 114-23023 FOR RECOMMENDED 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.



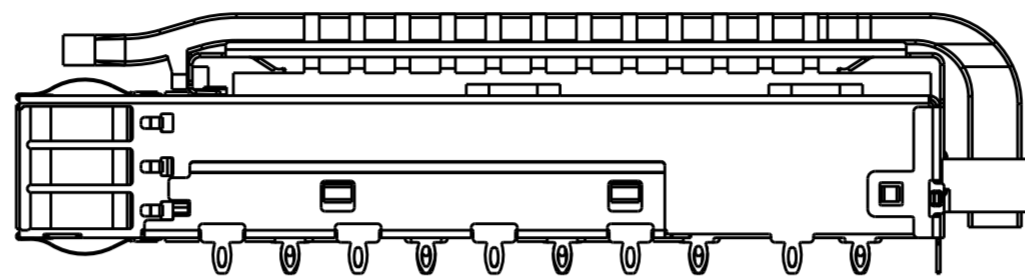
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04JUN2014	TE Connectivity	
		CHK SEAN HAN 07JUN2014		
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	RESTRICTED TO
0 PLC ±	1 PLC ±0.25	PRODUCT SPEC 108-19428	SIZE A200779	CAGE CODE C-2170747
2 PLC ±0.2	3 PLC ±	APPLICATION SPEC 114-32023	DRAWING NO	
4 PLC ±	ANGLES ±	WEIGHT -	SCALE 1:1	SHEET 1 OF 13
MATERIAL SEE NOTES	FINISH SEE NOTES	CUSTOMER DRAWING	REV C	

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

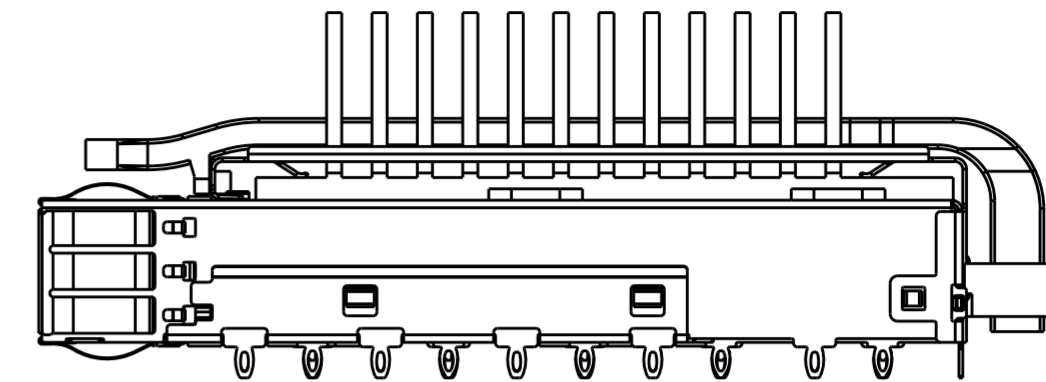
# HEAT SINK OPTION



PCI HEAT SINK  
SCALE 2:1

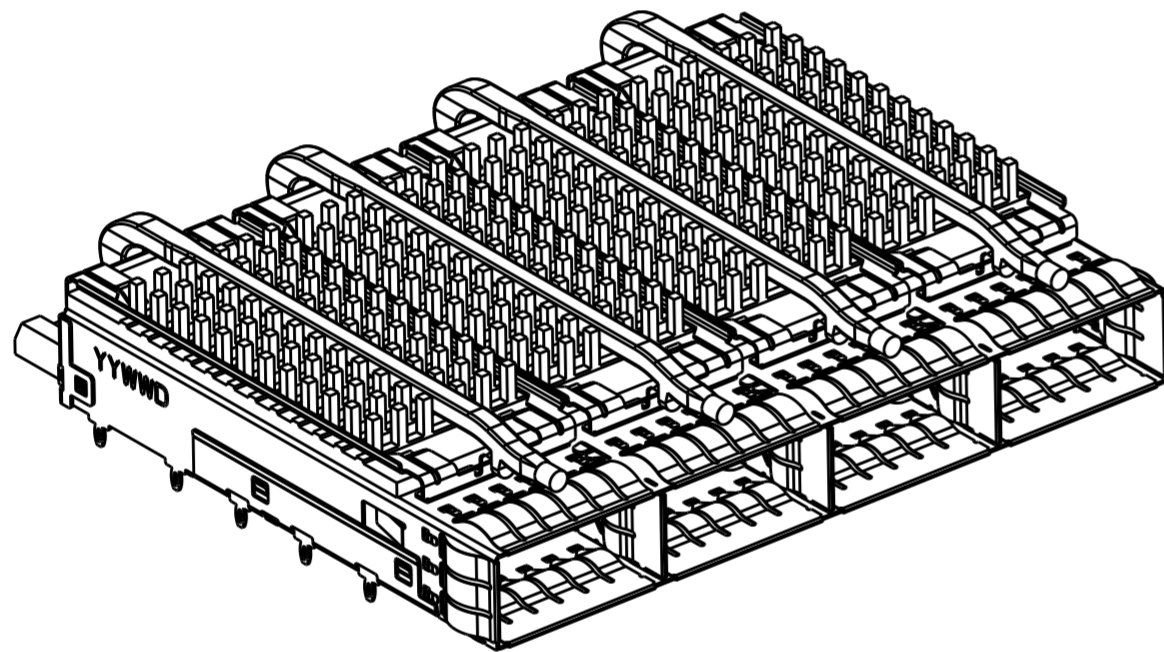


SAN HEAT SINK  
SCALE 2:1

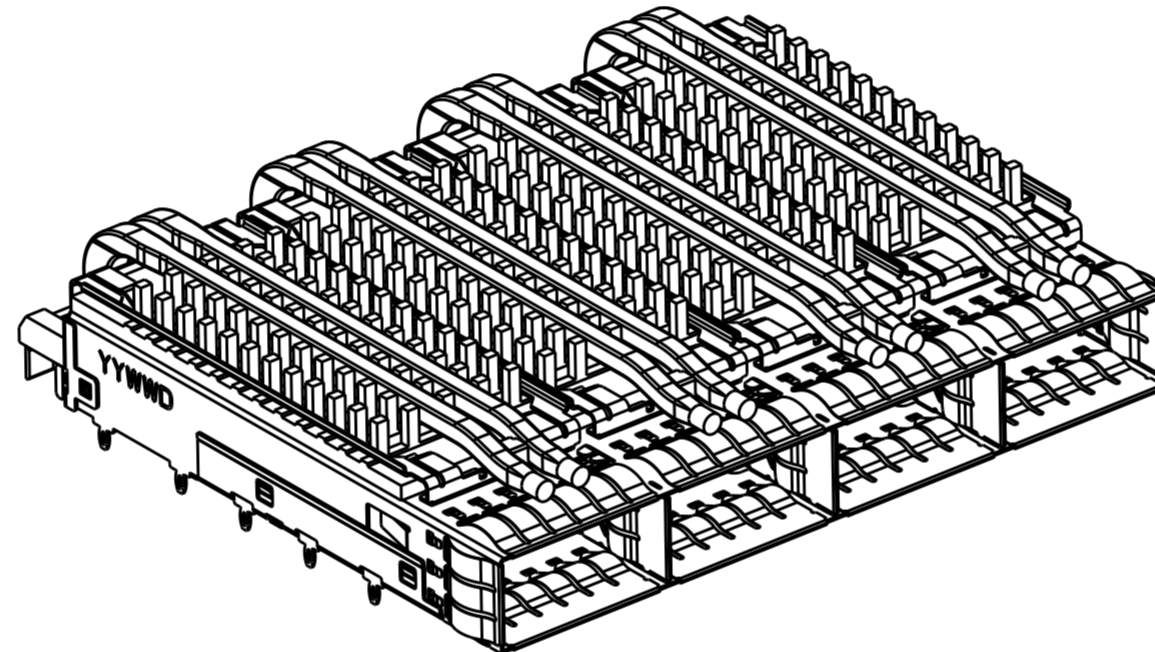


NETWORKING HEAT SINK  
SCALE 2:1

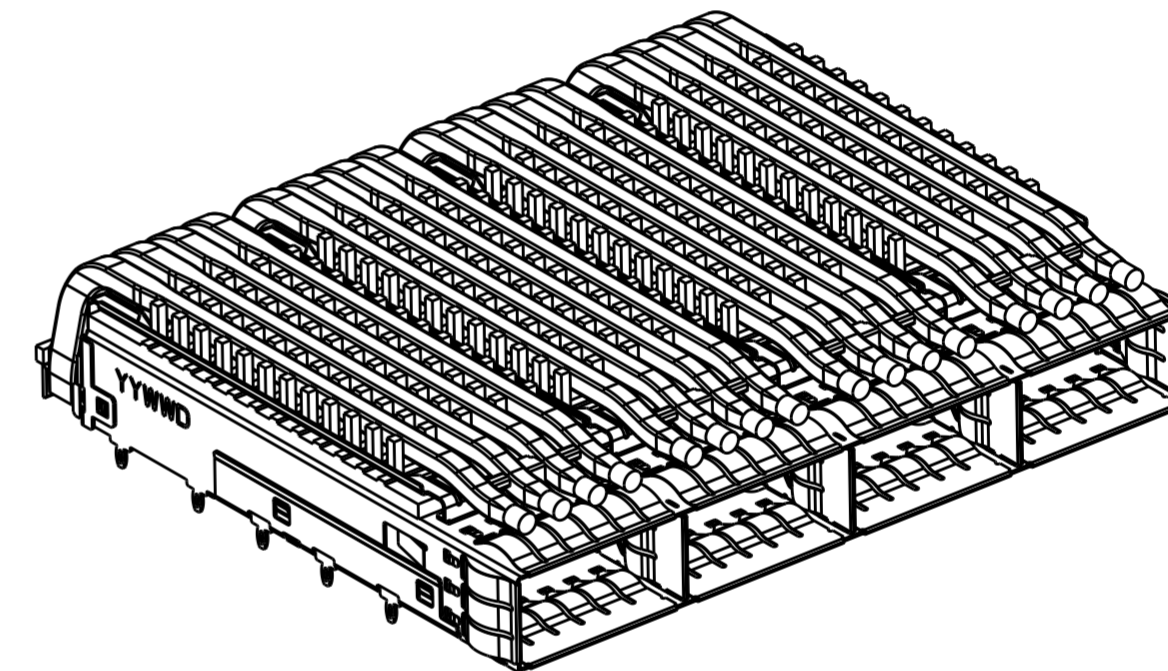
# LIGHT PIPE OPTION



SINGLE LIGHT PIPE  
SCALE 3:2

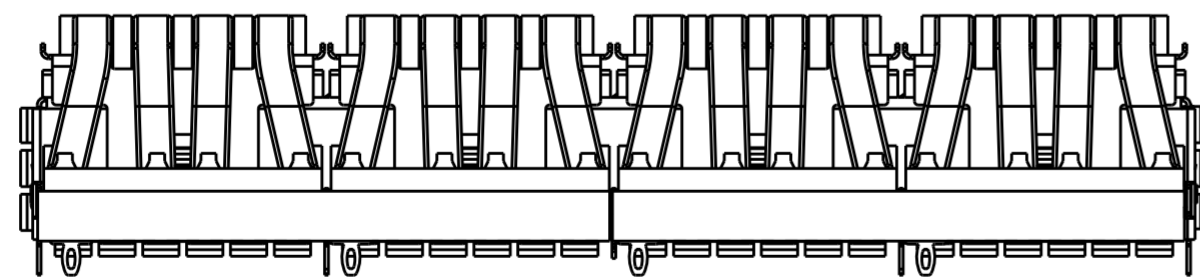


DUAL LIGHT PIPE  
SCALE 3:2

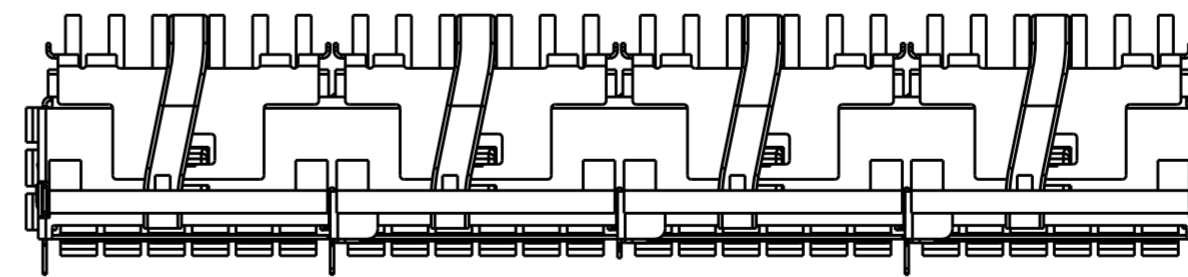


QUAD LIGHT PIPE  
SCALE 3:2

# # OF REAR PIN OPTION



1 REAR PIN  
SCALE 2:1

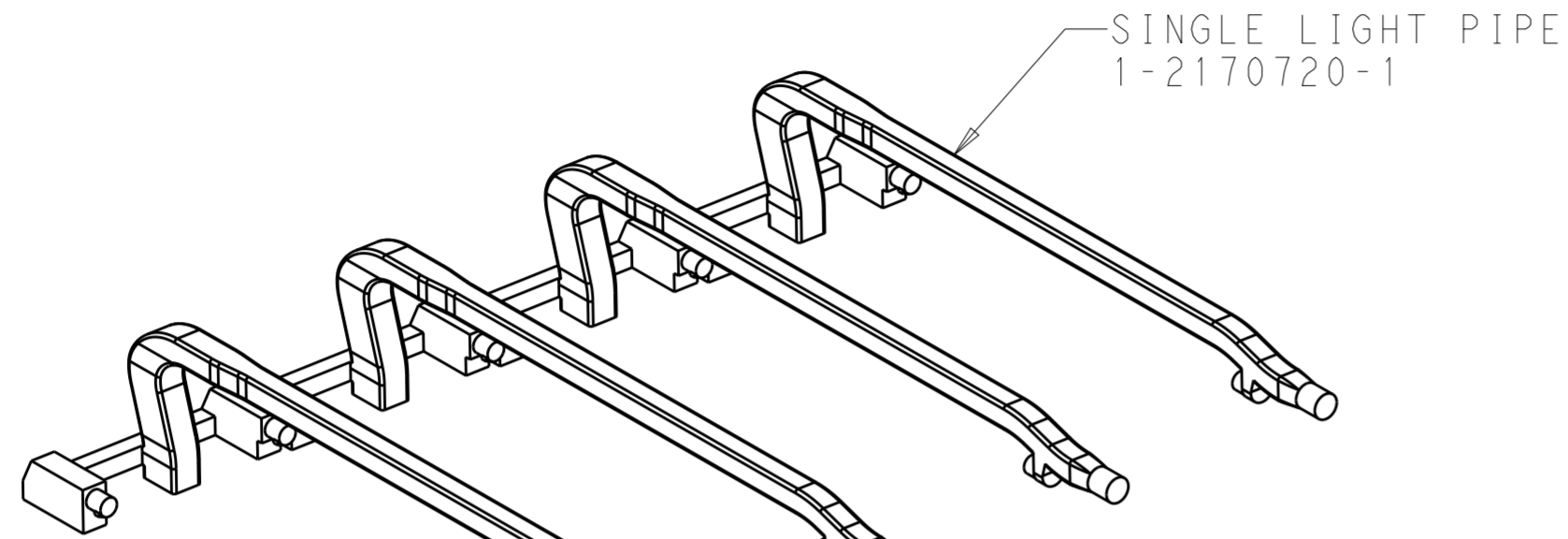


0 REAR PIN  
SCALE 2:1

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

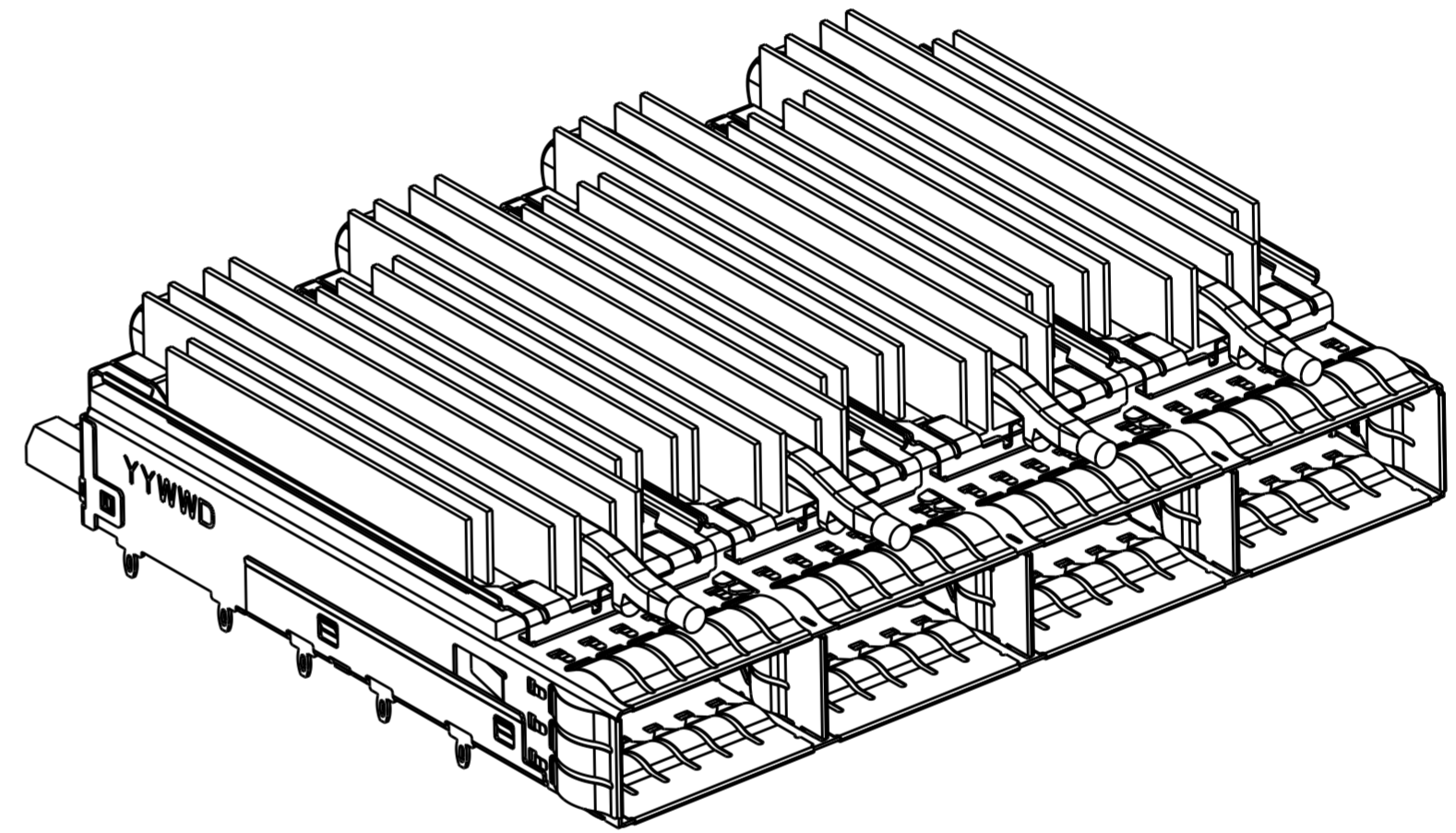
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REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



CAGE ASSEMBLY WITH HS  
2170745-7

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

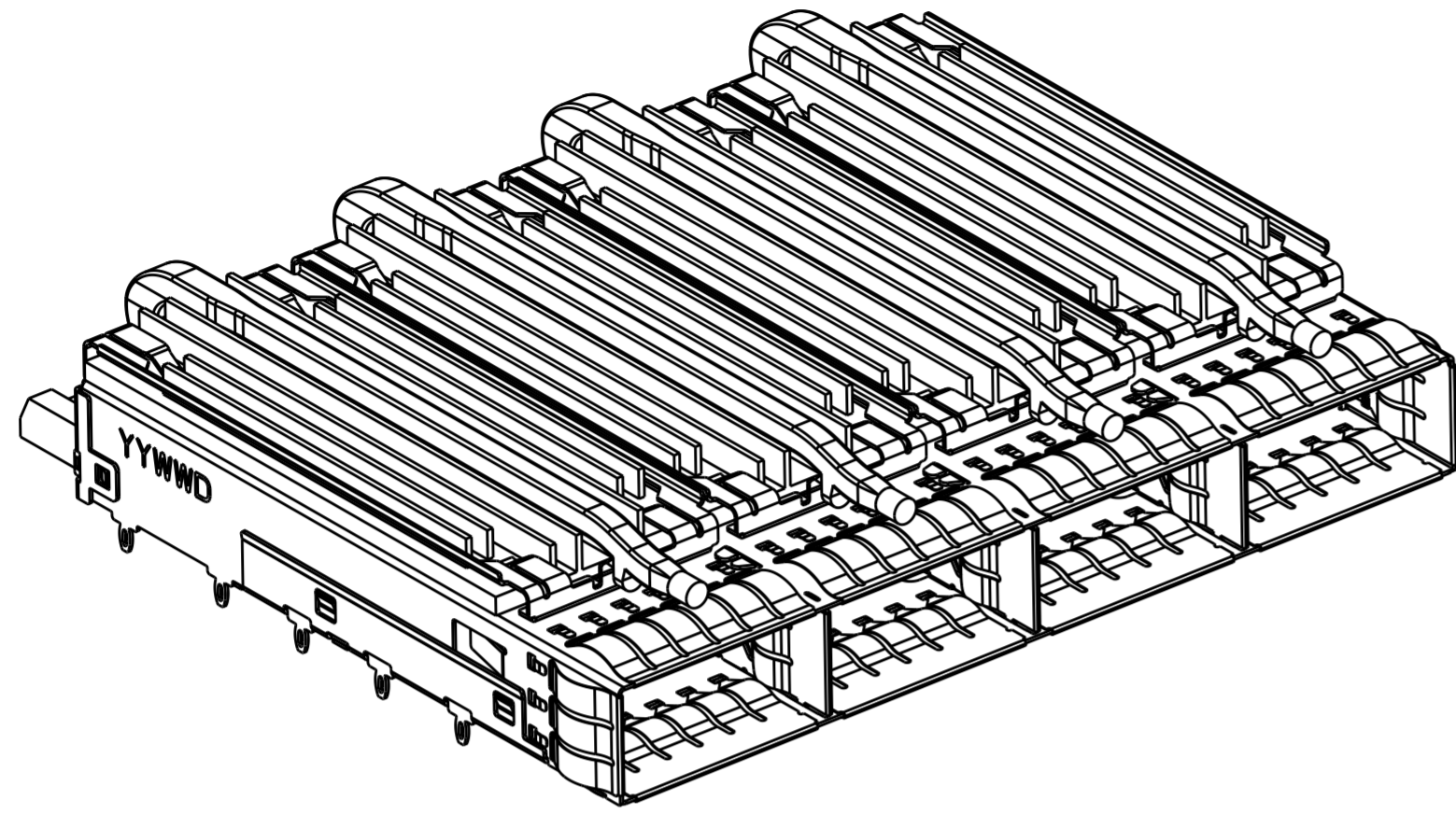


2170747-8 ASSEMBLED  
 ASSEMBLED AND PAKCAGED TOGETHER, CUSTOMIZED HEAT SINK  
 SCALE 2:1

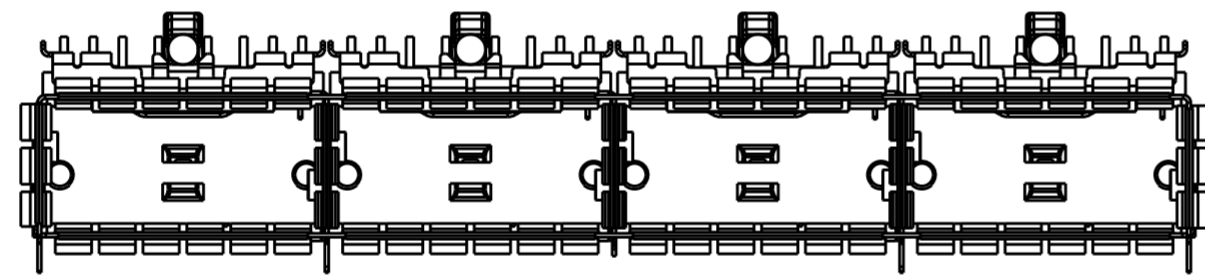
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	<b>STE</b> TE Connectivity	
		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
	0 PLC ± 1 PLC ±0.25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

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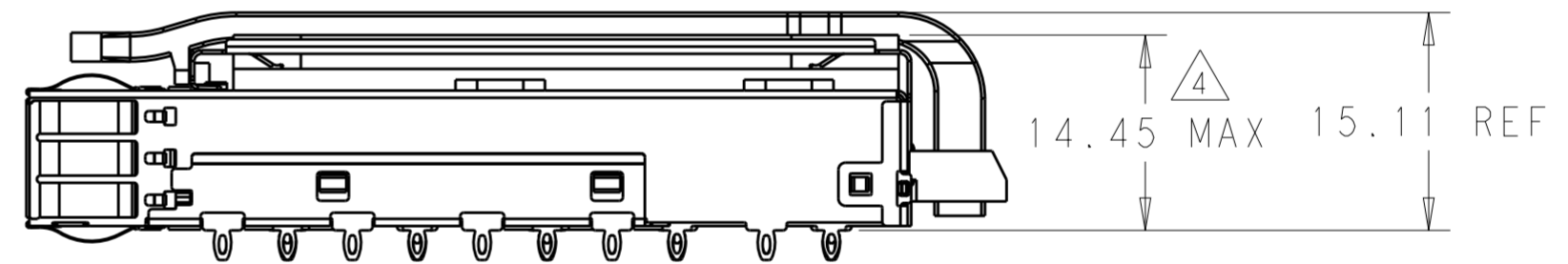
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-




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



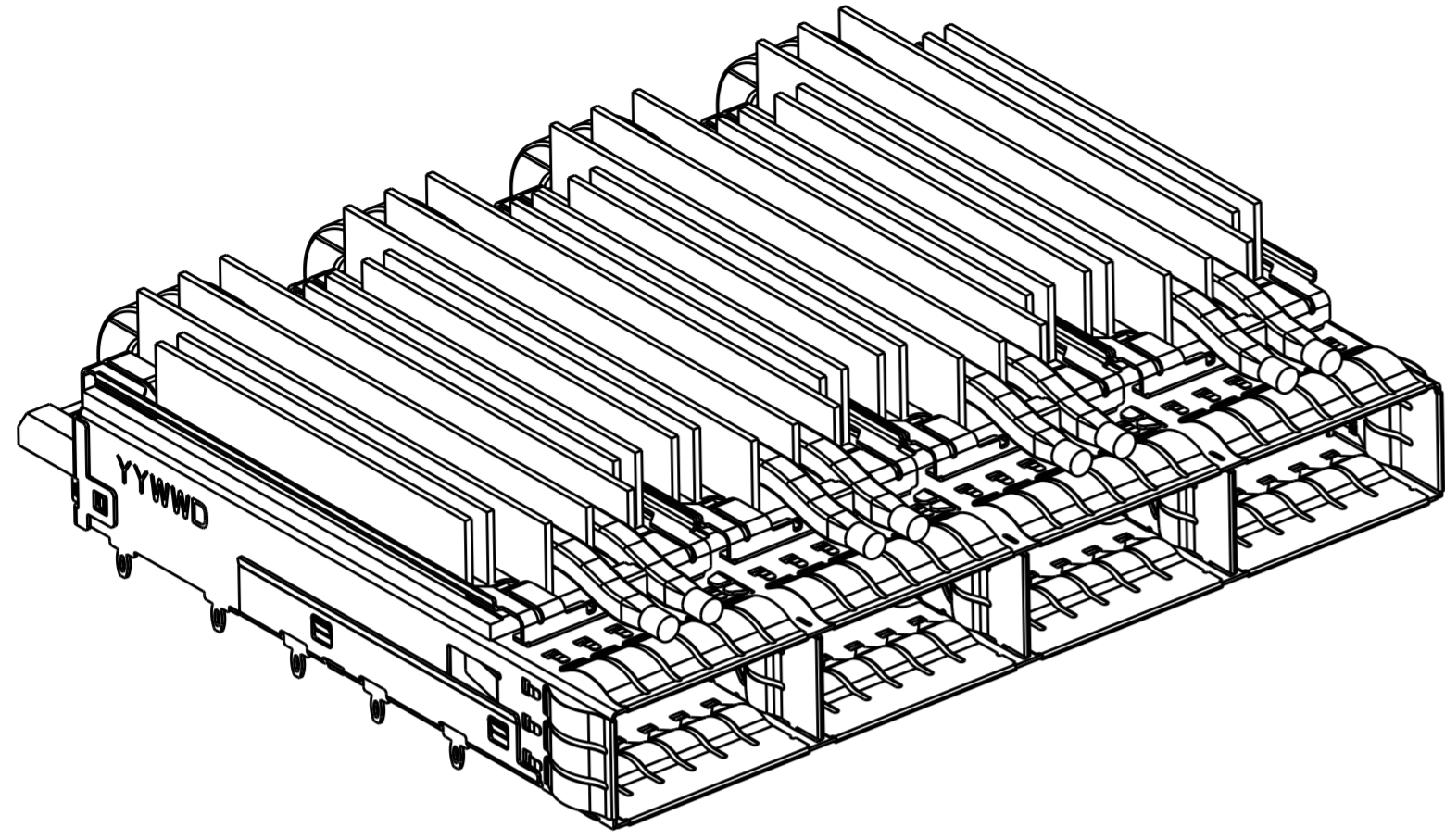
SCALE 2:1



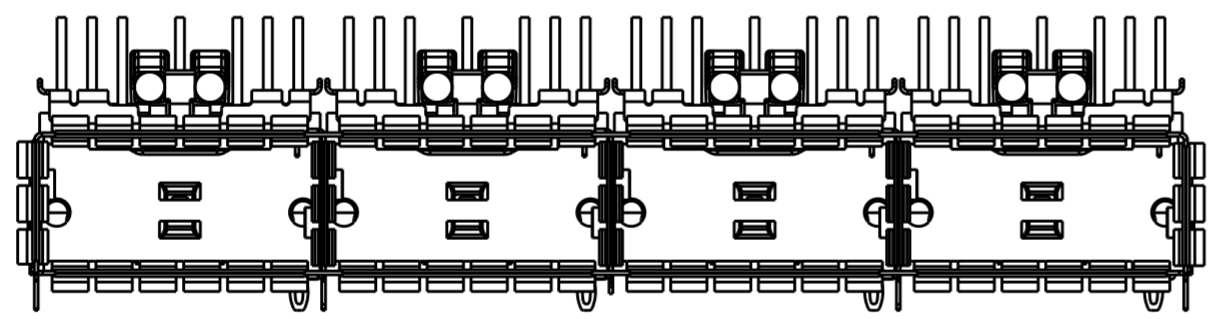
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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH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

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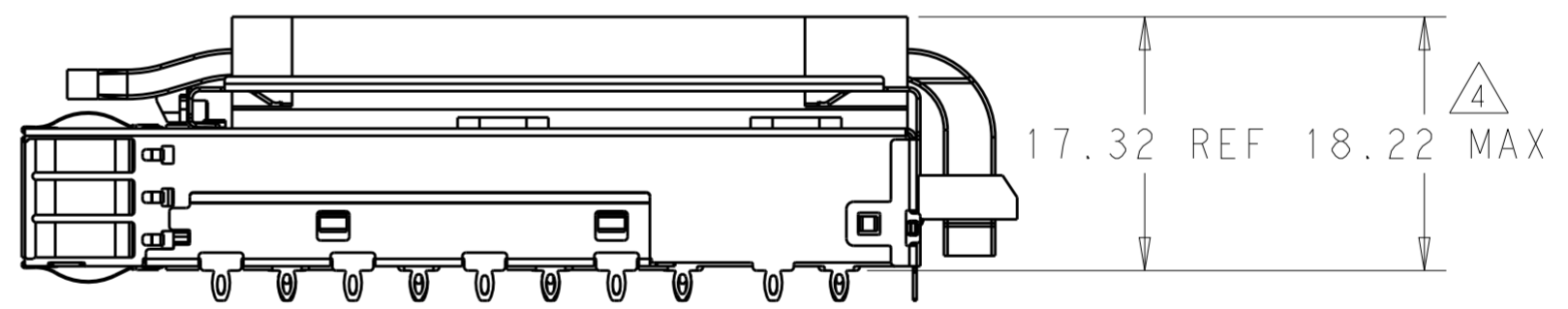
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-



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



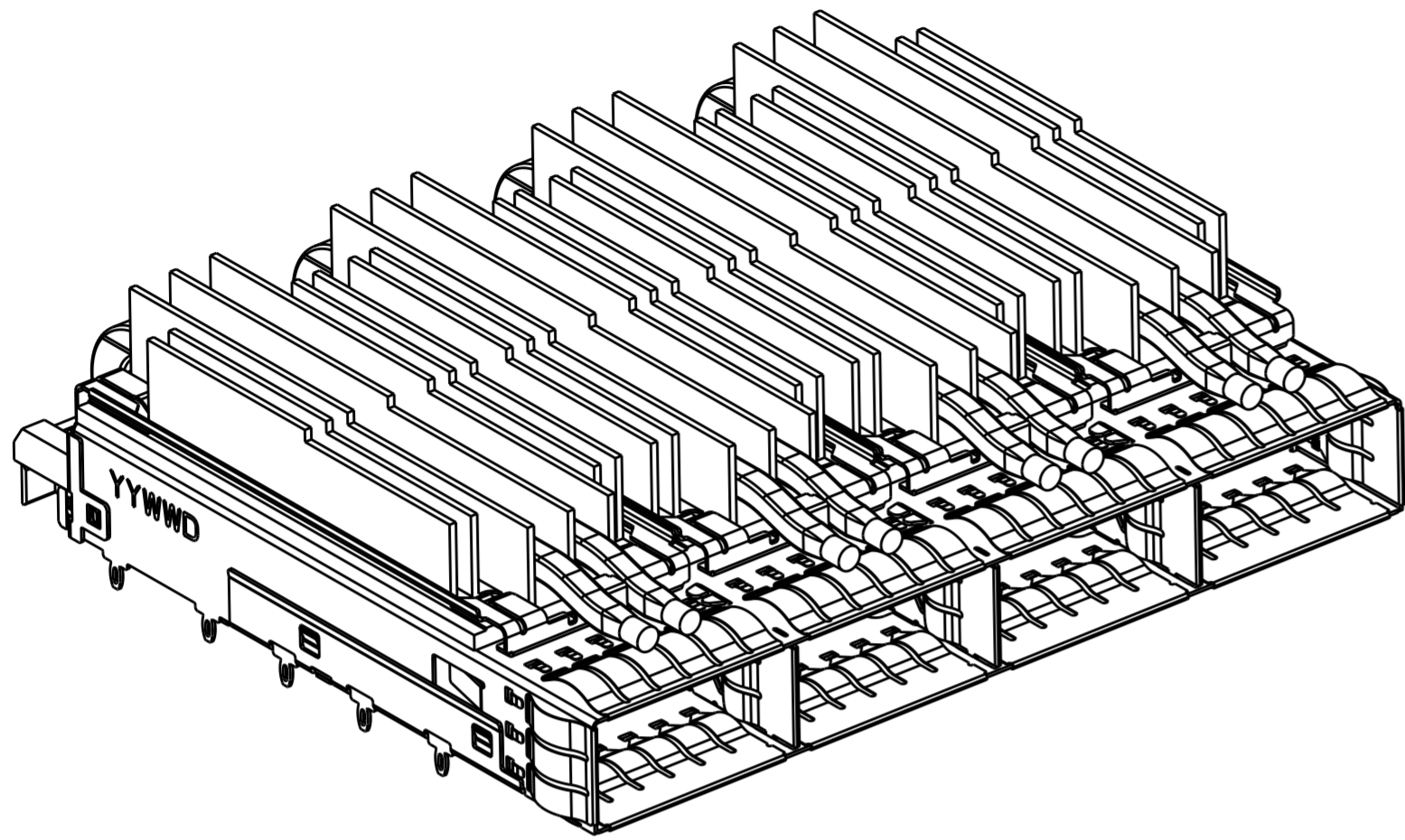
SCALE 2:1



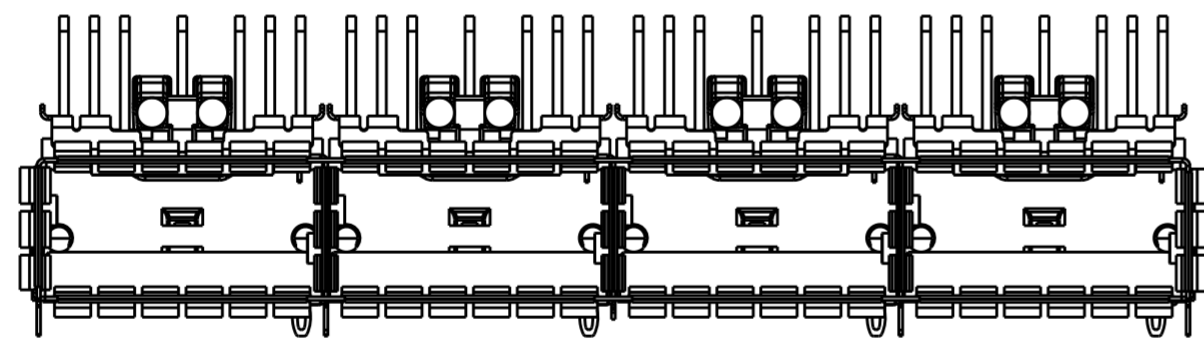
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04JUN2014	TE Connectivity	
		CHK SEAN HAN 07JUN2014		
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		0 PLC ±	1 PLC ±0.25	PRODUCT SPEC 108-19428
MATERIAL SEE NOTES		2 PLC ±0.2	3 PLC ±	APPLICATION SPEC 114-32023
		4 PLC ±	ANGLES ±	SIZE A200779
		FINISH	SEE NOTES	CAGE CODE C-2170747
				DRAWING NO C-2170747
				RESTRICTED TO -
				SCALE 1:1 SHEET 5 OF 13 REV C
				CUSTOMER DRAWING

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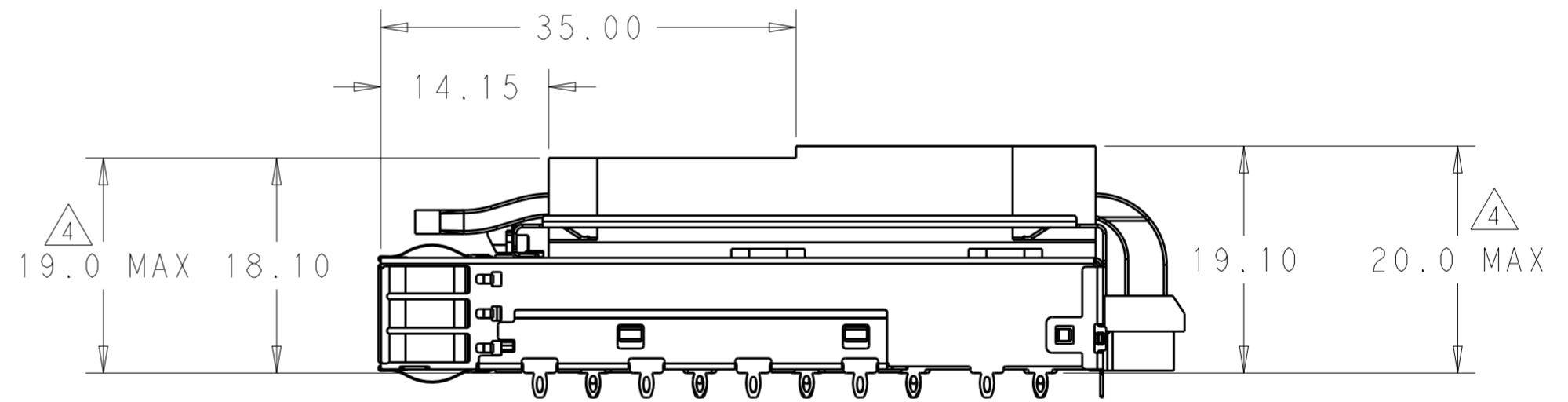
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-



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



SCALE 2:1

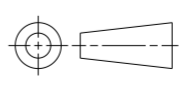


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		CHK SEAN HAN 07 JUN 2014		
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		0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC 108-19428
MATERIAL SEE NOTES		MATERIAL SEE NOTES		APPLICATION SPEC 114-32023
		WEIGHT -		SIZE A200779
		CUSTOMER DRAWING		CAGE CODE C-2170747
		SCALE 1:1		RESTRICTED TO -
		SHEET 6 OF 13		REV C

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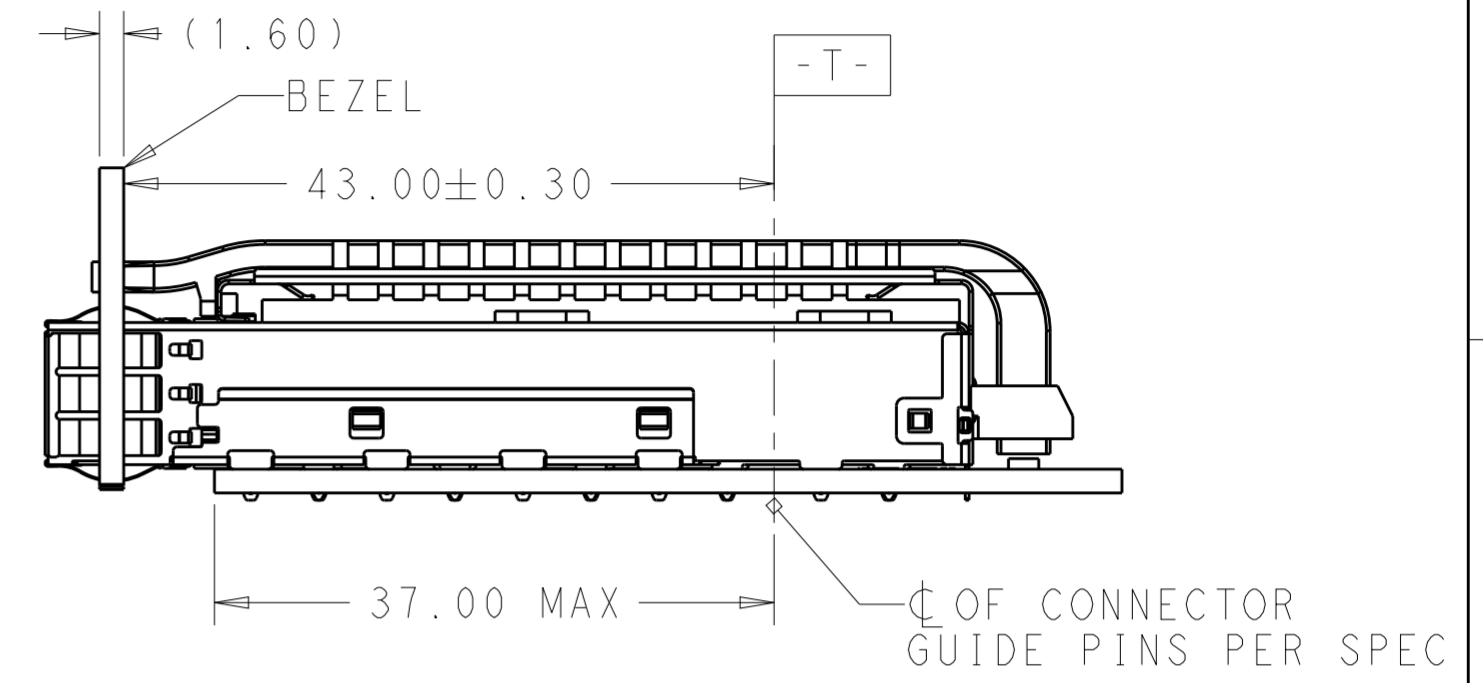
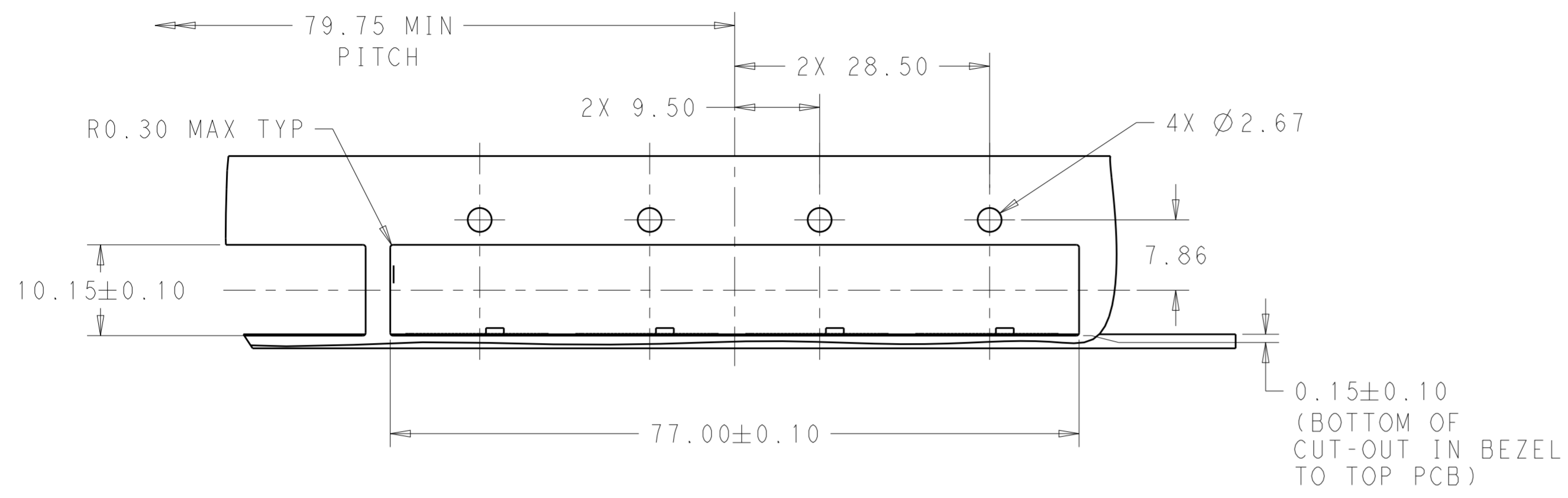
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-

1	16.0	SAN	COATED QUAD LP	5-2170747-2
0	23.0	NETWORKING	QUAD LP	4-2170747-6
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 <sup>13</sup>
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
1	13.7	PCI	SINGLE LP	2170747-1
# OF REAR PIN	DIM A	APPLICATION	LIGHT PIPE OPTION	PART NUMBER

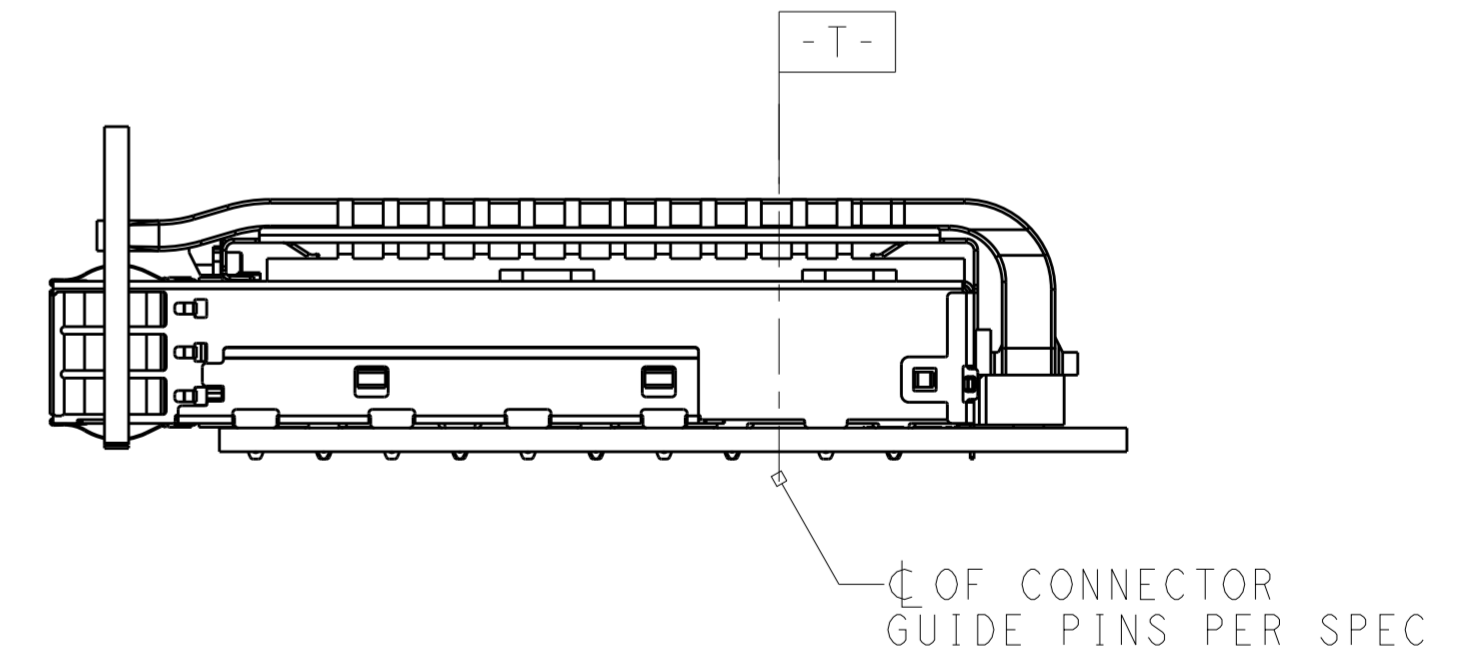
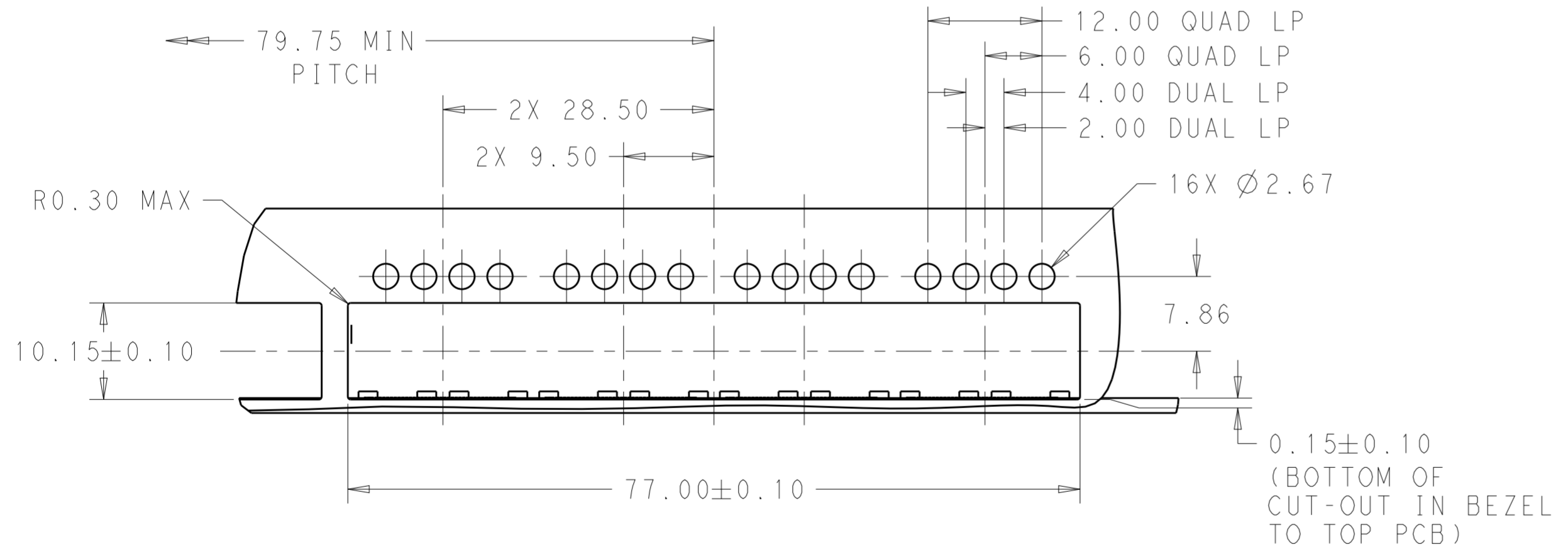
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DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH	PRODUCT SPEC 108-19428	SIZE A2	CAGE CODE 00779
MATERIAL SEE NOTES	SEE NOTES	APPLICATION SPEC 114-32023	DRAWING NO C-2170747	RESTRICTED TO -
		WEIGHT -	SCALE 1:1 SHEET 7 OF 13 REV C	
		CUSTOMER DRAWING		

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-	-	SEE SHEET 1	-	-



SINGLE SIDE MOUNTING  
SCALE 2:1



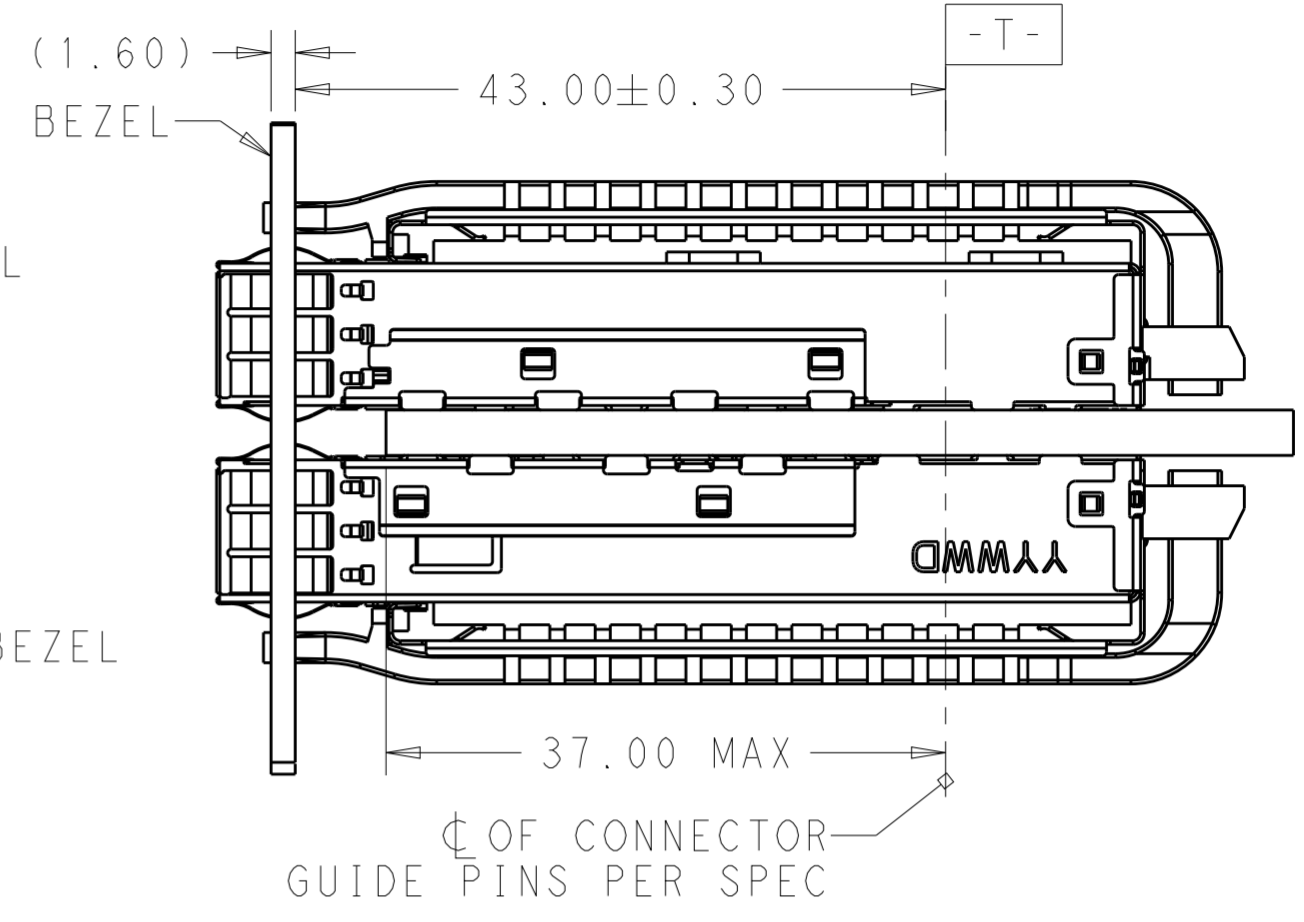
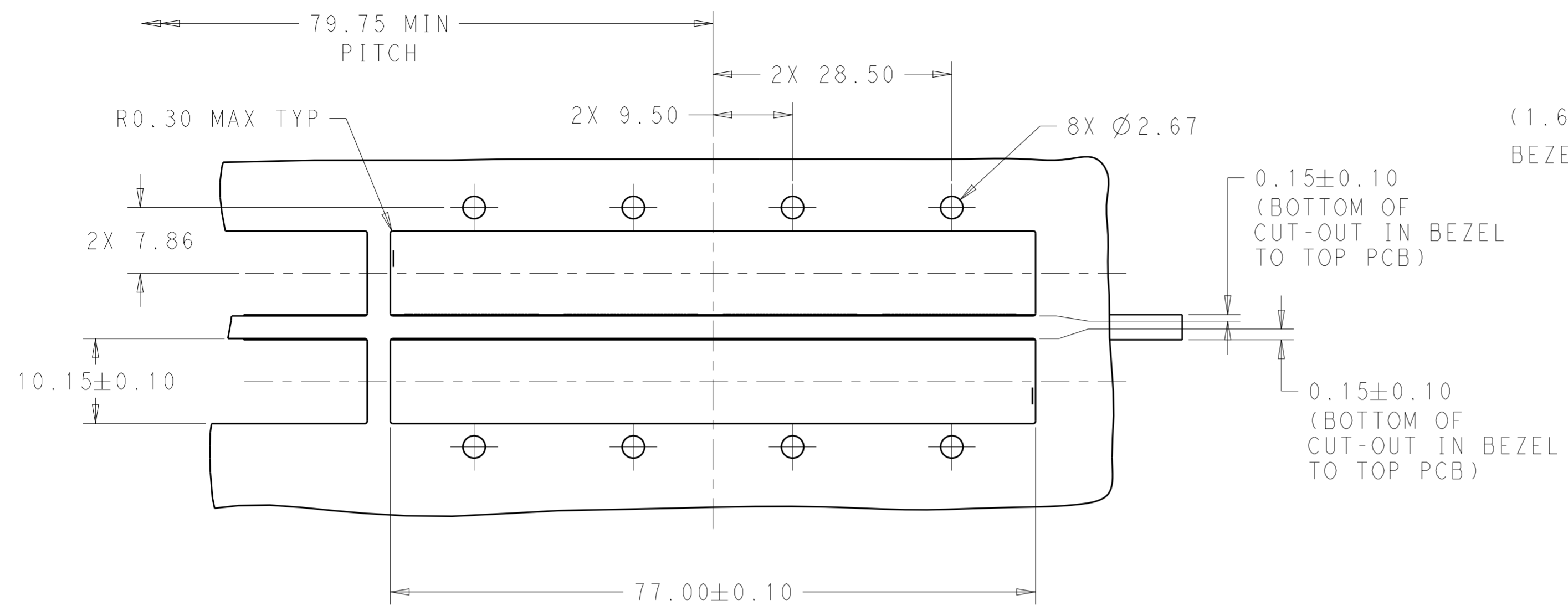
SINGLE SIDE MOUNTING  
SCALE 2:1

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		CHK 07 JUN 2014 SEAN HAN		
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 ± ANGLES ± FINISH	PRODUCT SPEC 108-19428	SIZE A2	CAGE CODE C-2170747
MATERIAL SEE NOTES	SEE NOTES	APPLICATION SPEC 114-32023	RESTRICTED TO	
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		CUSTOMER DRAWING	REV C	

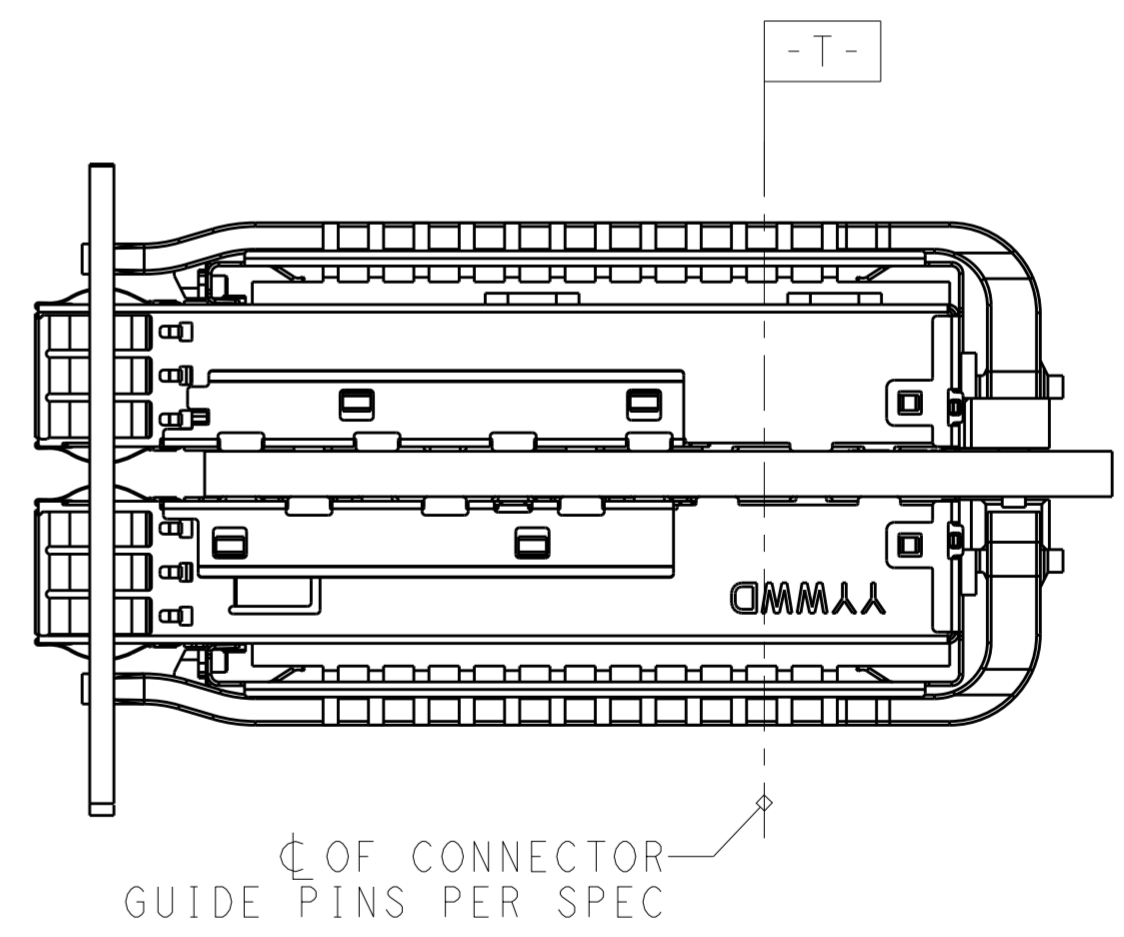
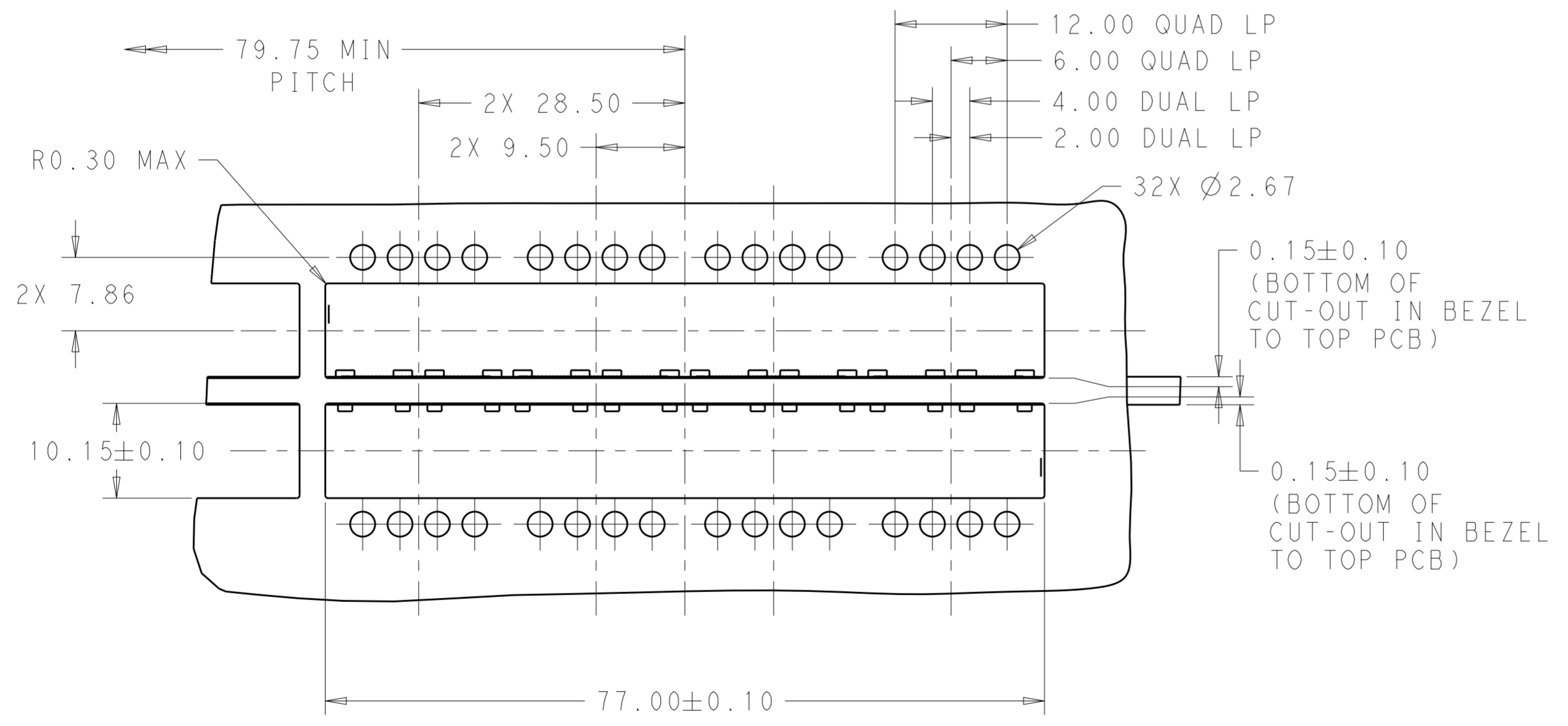


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-	-	SEE SHEET 1	-	-



BELLY TO BELLY MOUNTING  
SCALE 2:1

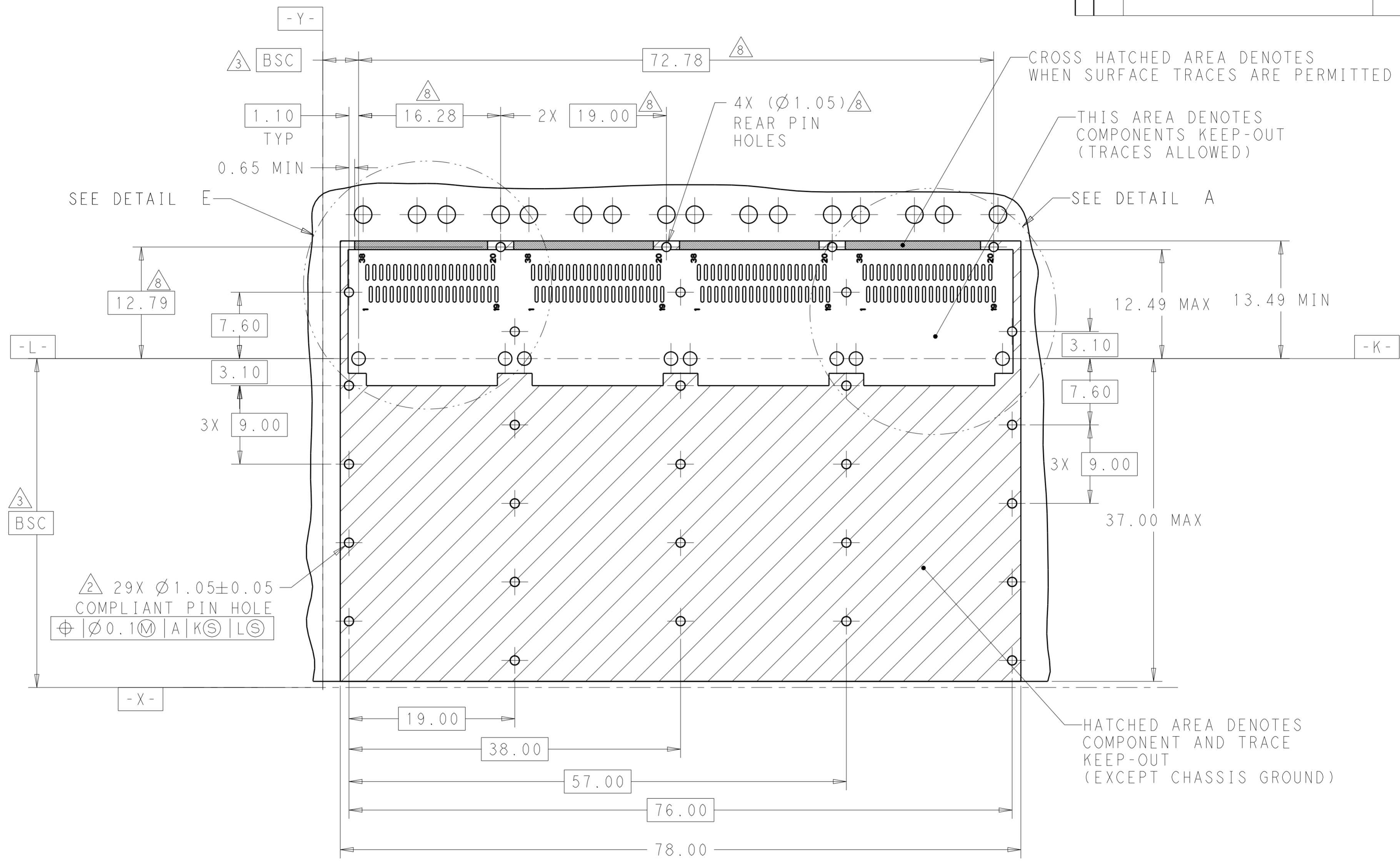


BELLY TO BELLY MOUNTING  
SCALE 2:1

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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME	
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH	PRODUCT SPEC	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
MATERIAL	SEE NOTES	APPLICATION SPEC	SIZE	CAGE CODE
SEE NOTES	SEE NOTES	114-32023	A2	00779
		WEIGHT	DRAWING NO	RESTRICTED TO
		CUSTOMER DRAWING	C-2170747	-
		SCALE	SHEET	REV
		1:1	9 OF 13	C

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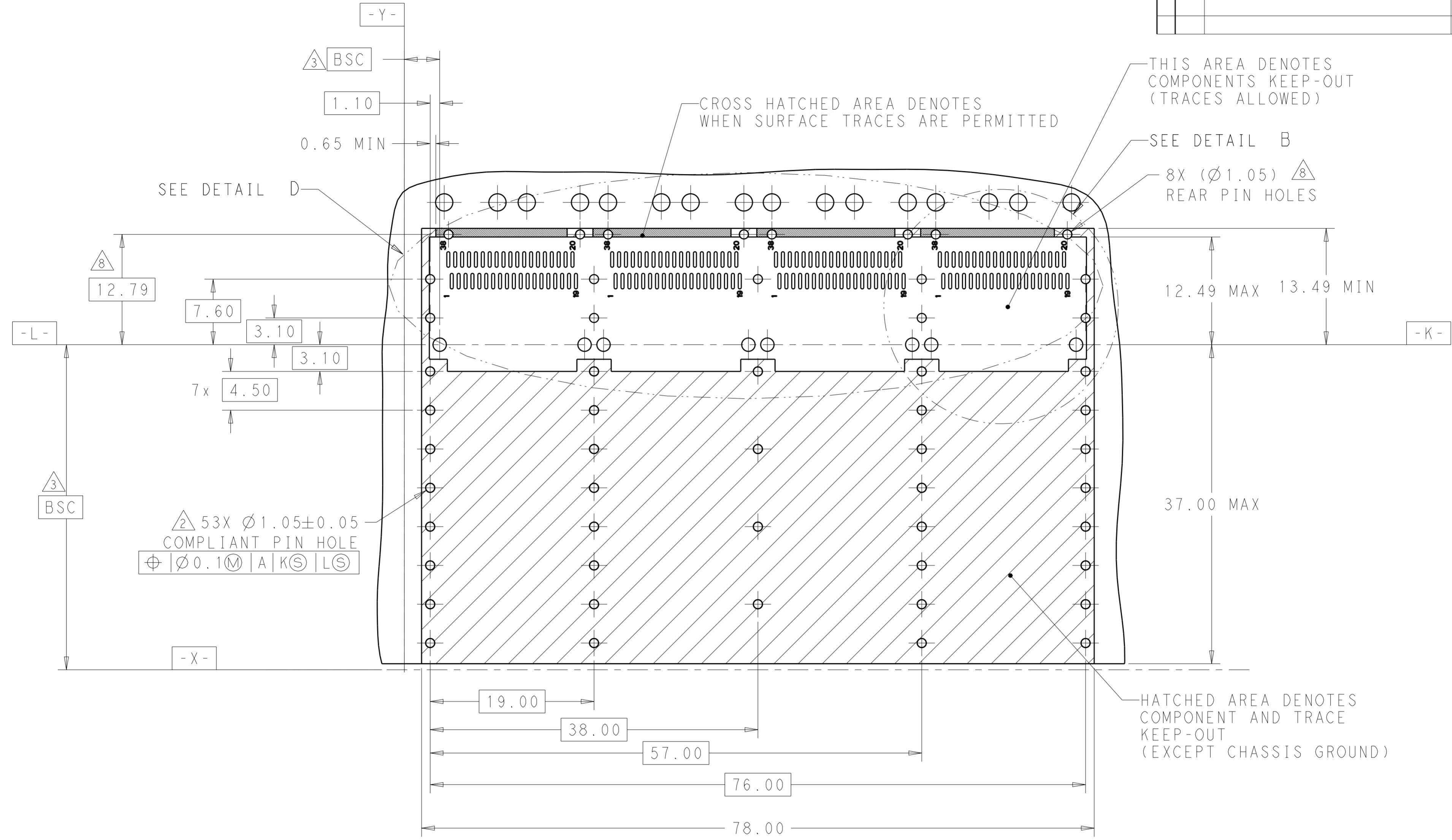
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



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

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

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

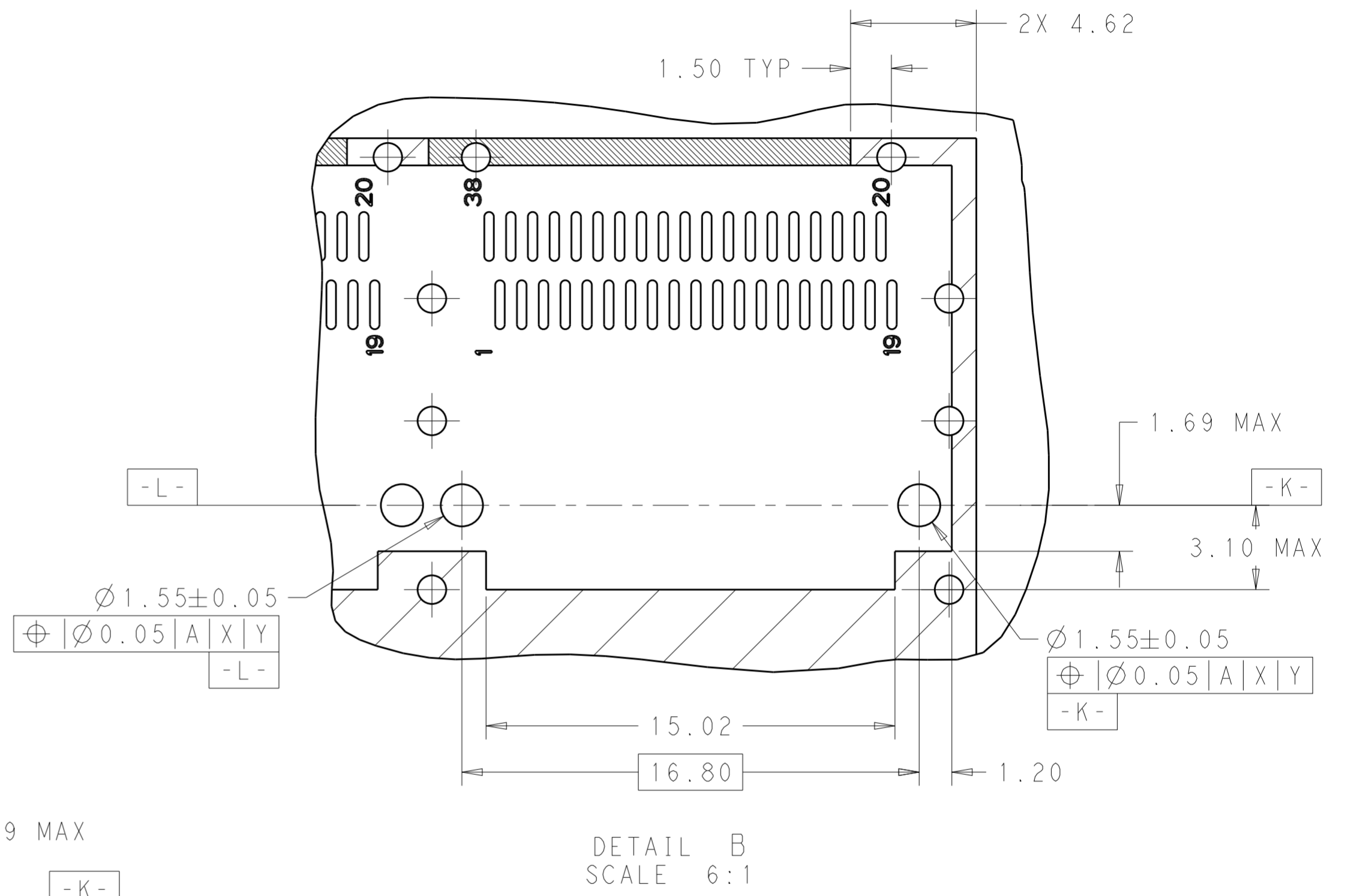
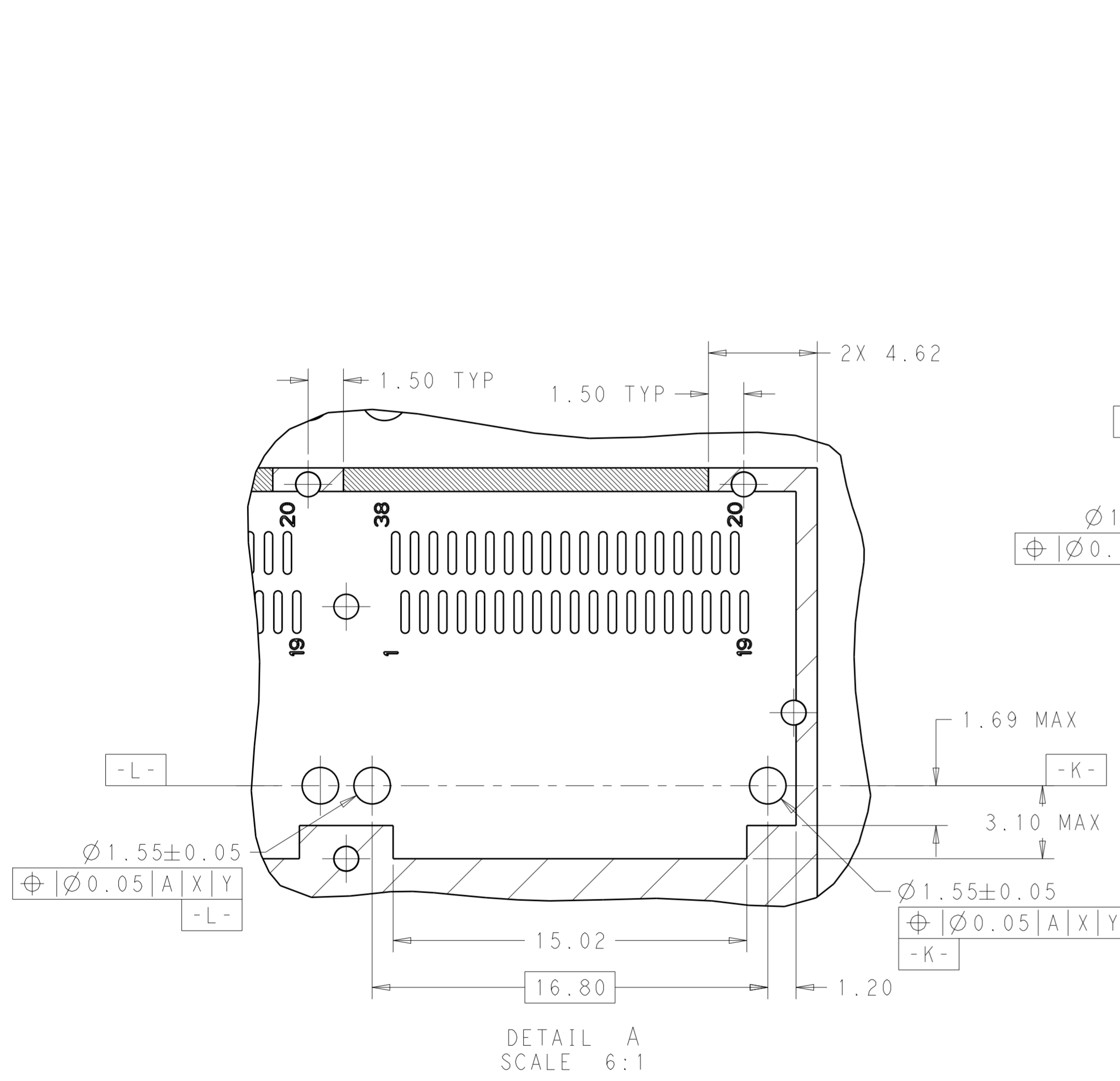


RECOMMENDED PCB LAYOUT  
 BELLY TO BELLY TYPE  
 PCB TOLERANCE: ±0.05  
 SCALE 3:1

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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		APVD - PRODUCT SPEC 108-19428 APPLICATION SPEC 114-32023 WEIGHT - CUSTOMER DRAWING	SIZE A2 CAGE CODE 00779 DRAWING NO C-2170747 RESTRICTED TO -
		SCALE 1:1	SHEET 11 OF 13 REV C

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REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 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	SIZE A200779
MATERIAL SEE NOTES	ANGLES ± FINISH	APPLICATION SPEC 114-32023	CAGE CODE C-2170747
		WEIGHT -	DRAWING NO -
		CUSTOMER DRAWING	RESTRICTED TO -
		SCALE 1:1	SHEET 12 OF 13 REV C