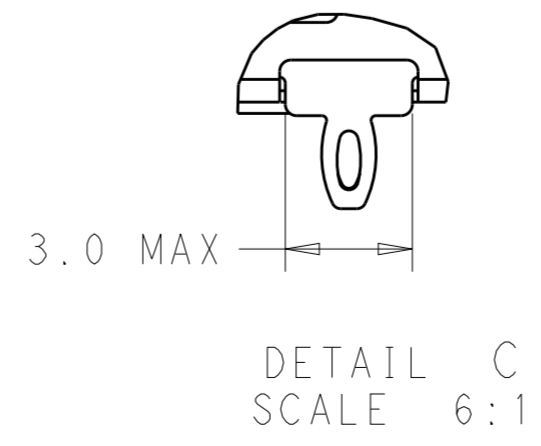
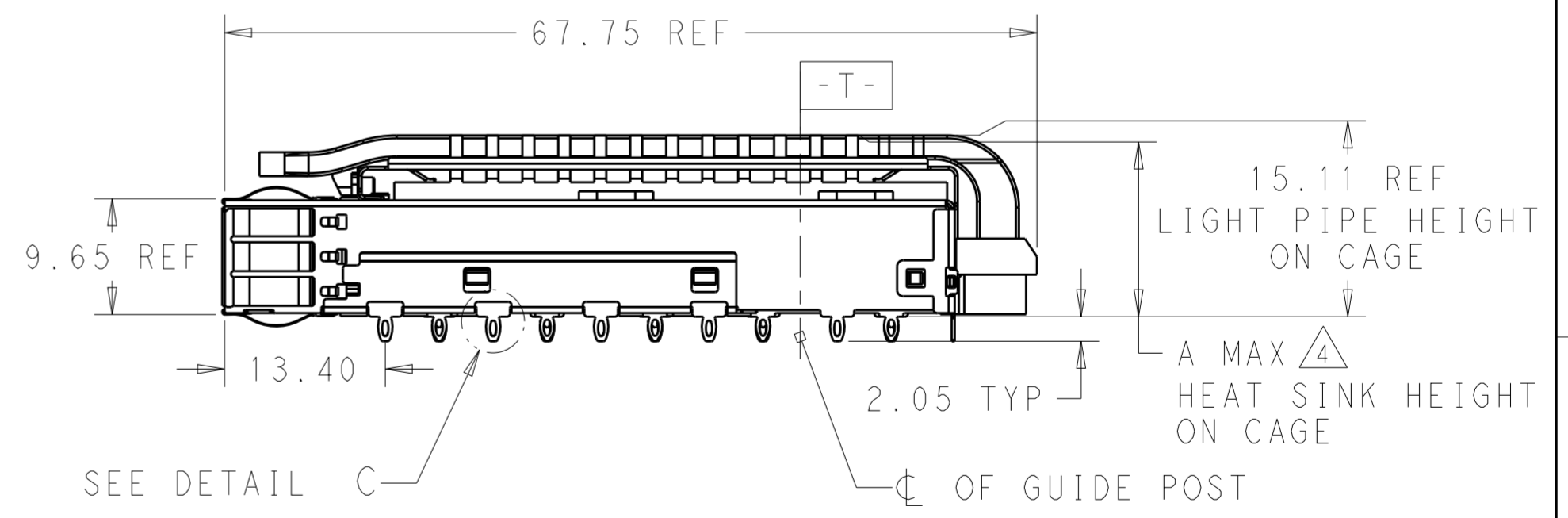
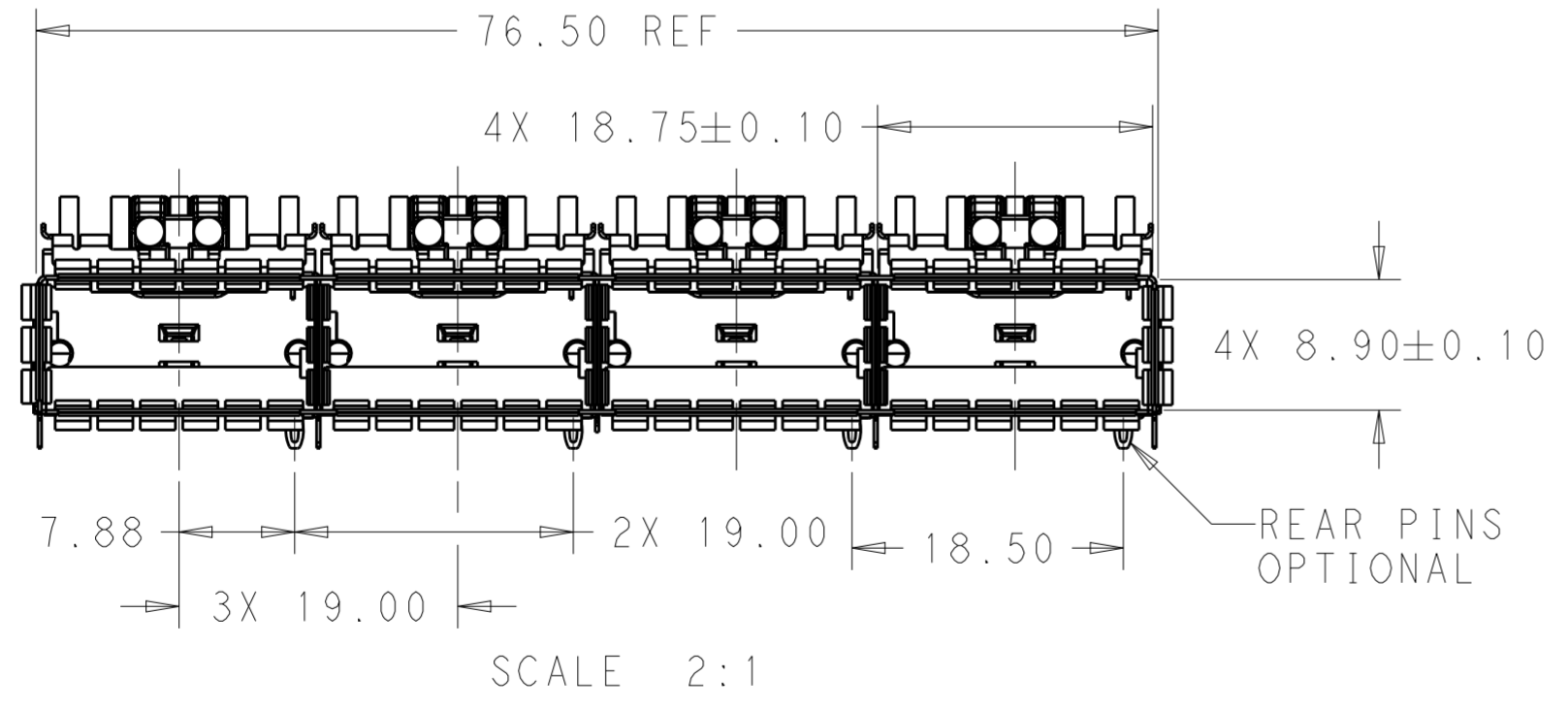
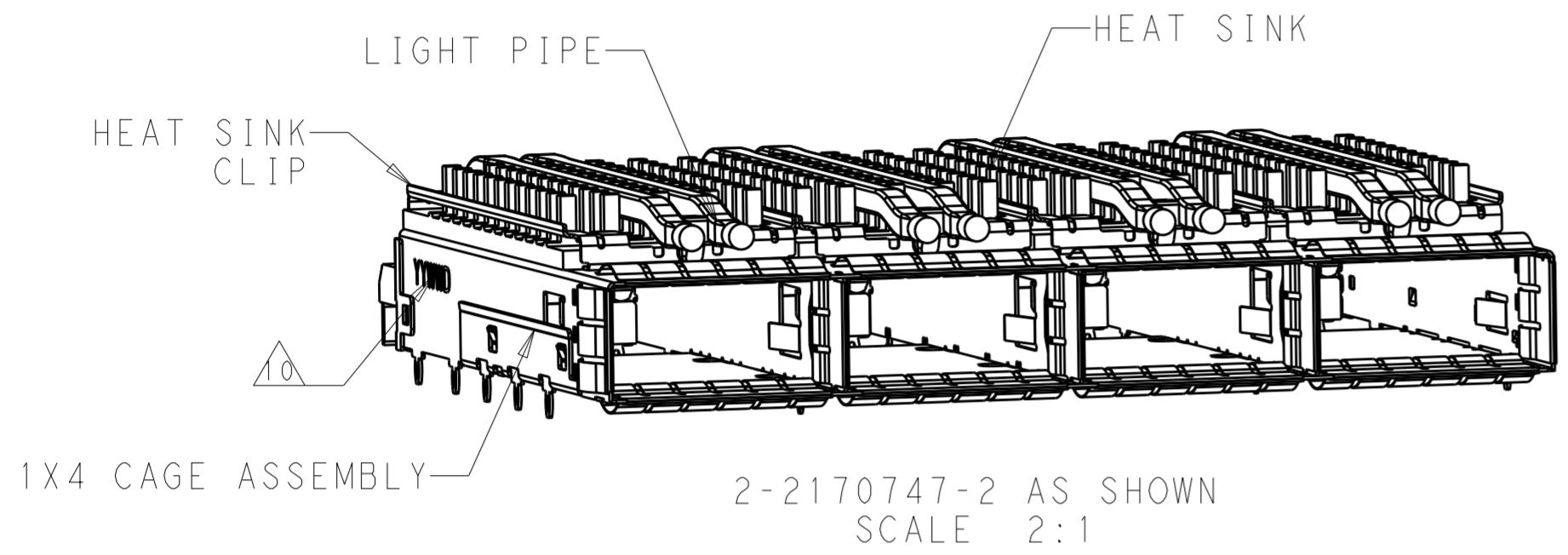


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REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
A		RELEASE	31OCT2016	JY	SH
B		REVISED PER ECO-17-009888	07JUL2017	JY	SH
C		REVISED PER ECO-18-012273	10JUL2018	JY	SH

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.

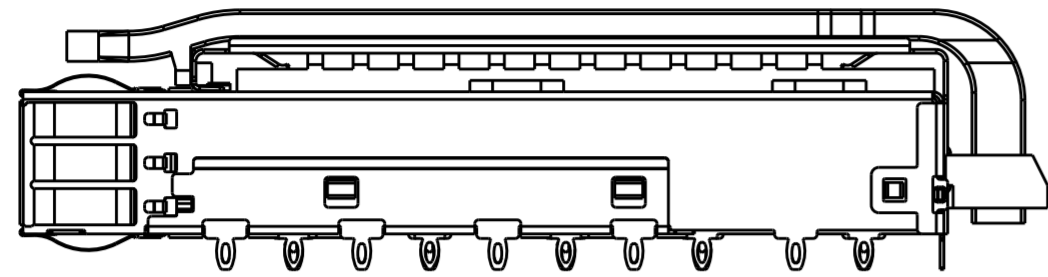


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		CHK SEAN HAN 07JUN2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME	
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ±	PRODUCT SPEC	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
	ANGLES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

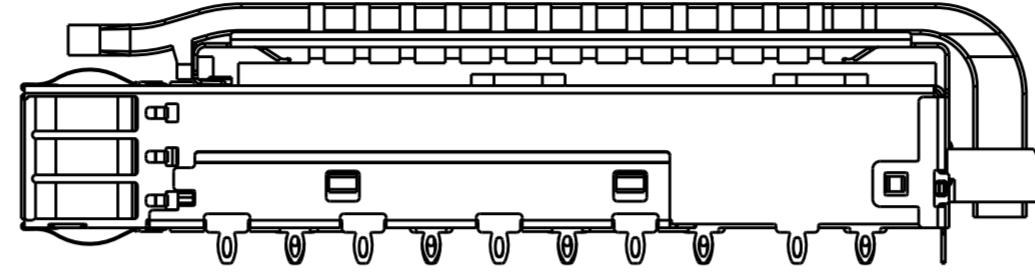
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-		SEE SHEET 1			

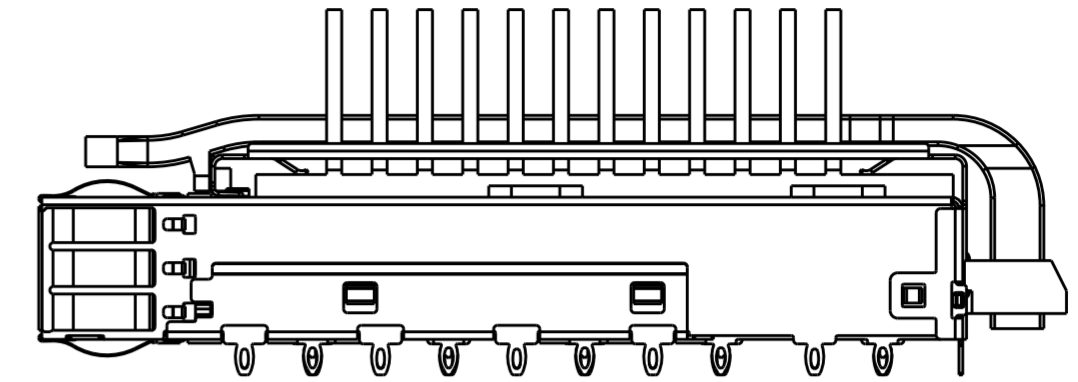
HEAT SINK OPTION



PCI HEAT SINK
SCALE 2:1

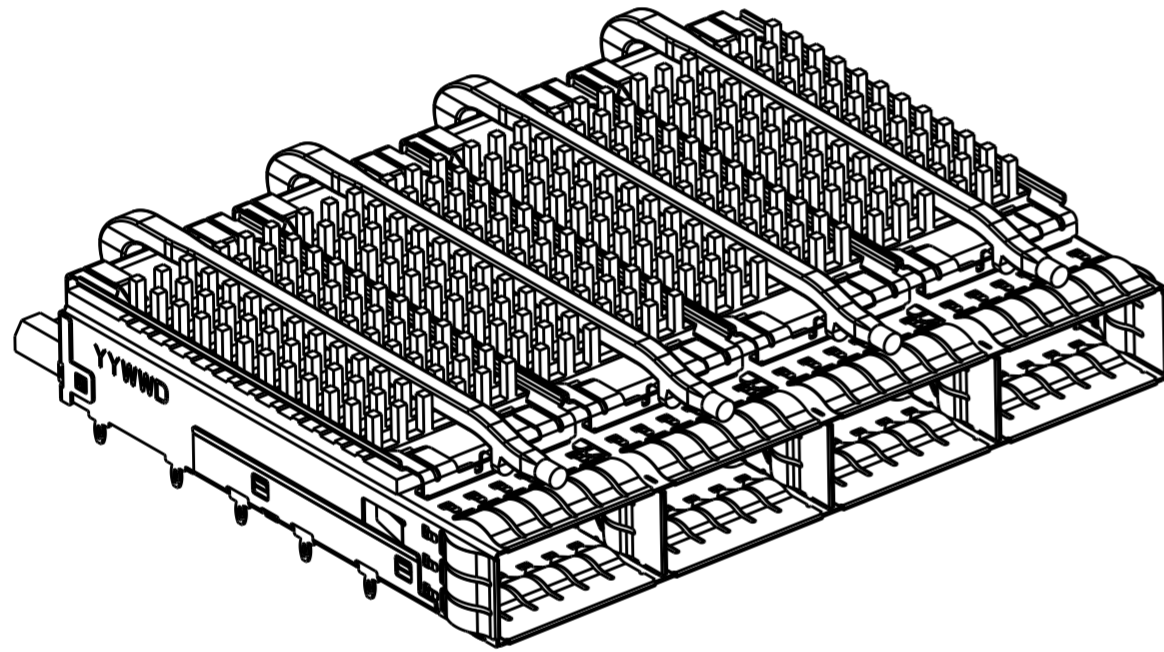


SAN HEAT SINK
SCALE 2:1

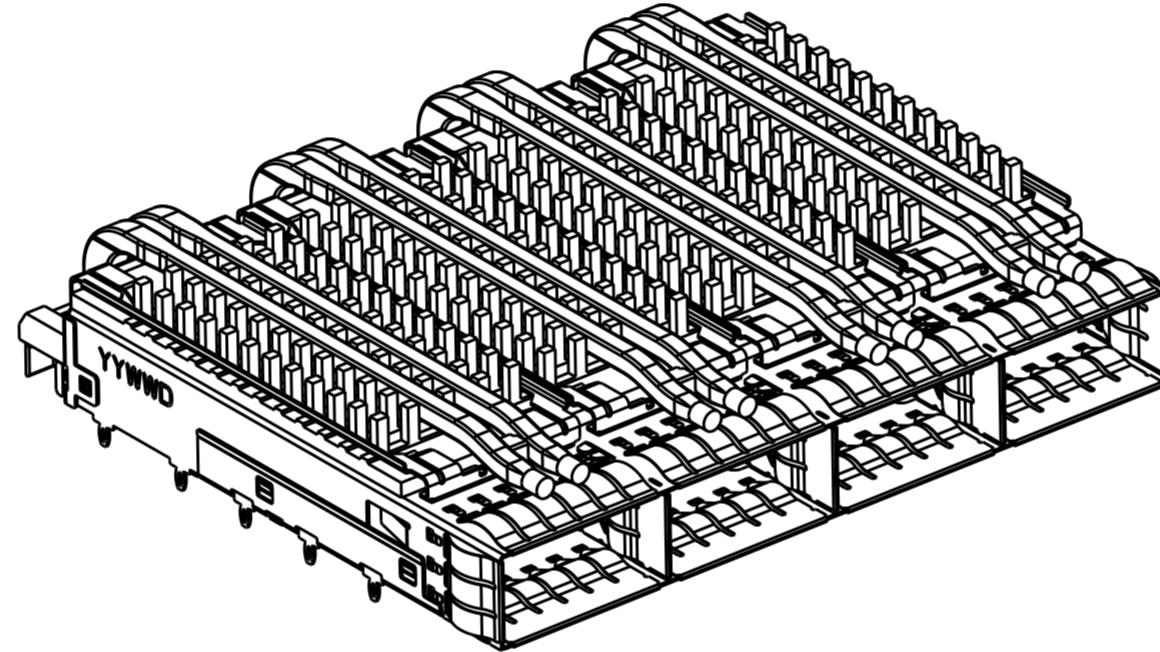


NETWORKING HEAT SINK
SCALE 2:1

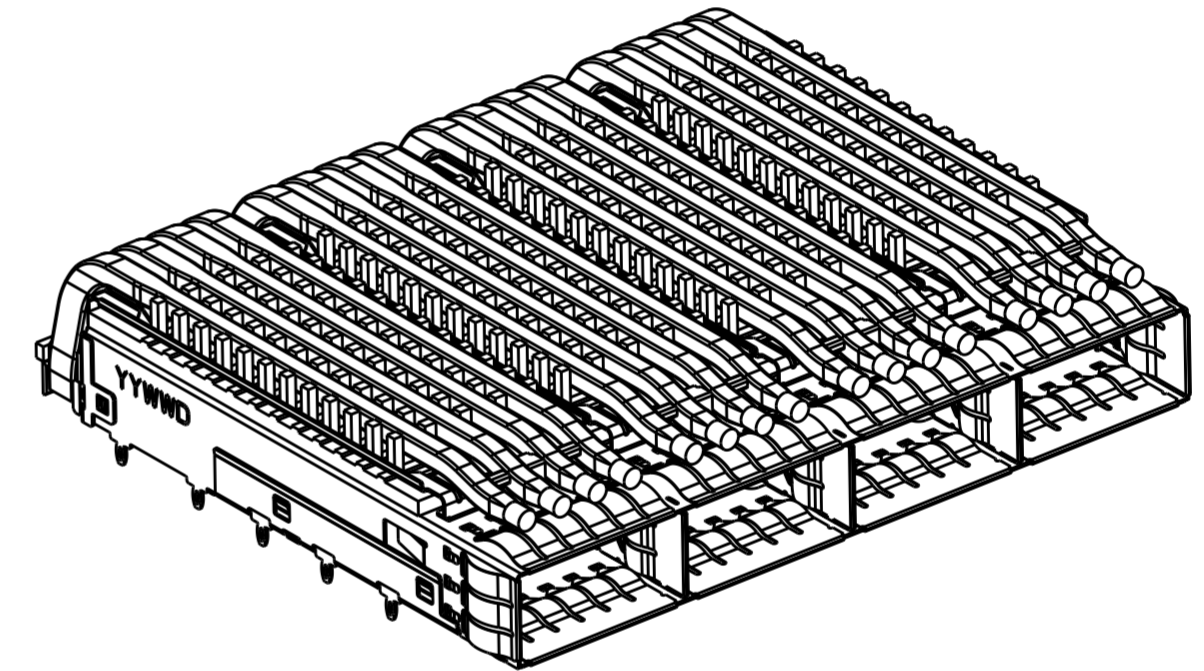
LIGHT PIPE OPTION



SINGLE LIGHT PIPE
SCALE 3:2

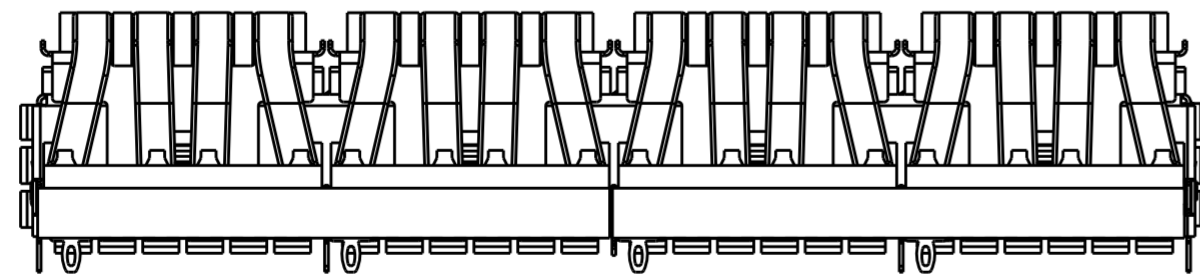


DUAL LIGHT PIPE
SCALE 3:2

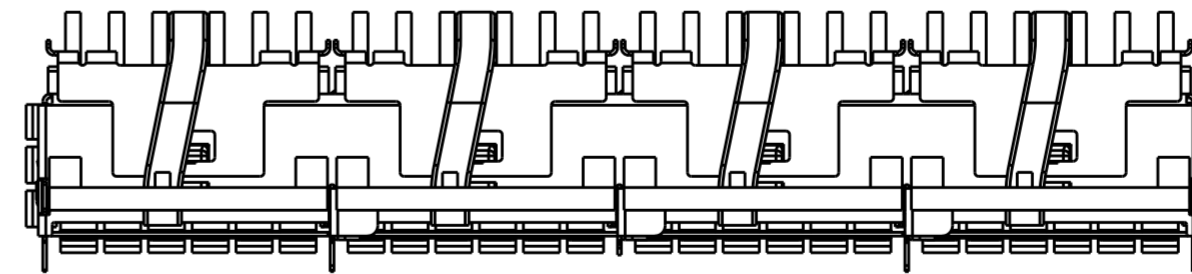


QUAD LIGHT PIPE
SCALE 3:2

OF REAR PIN OPTION



1 REAR PIN
SCALE 2:1

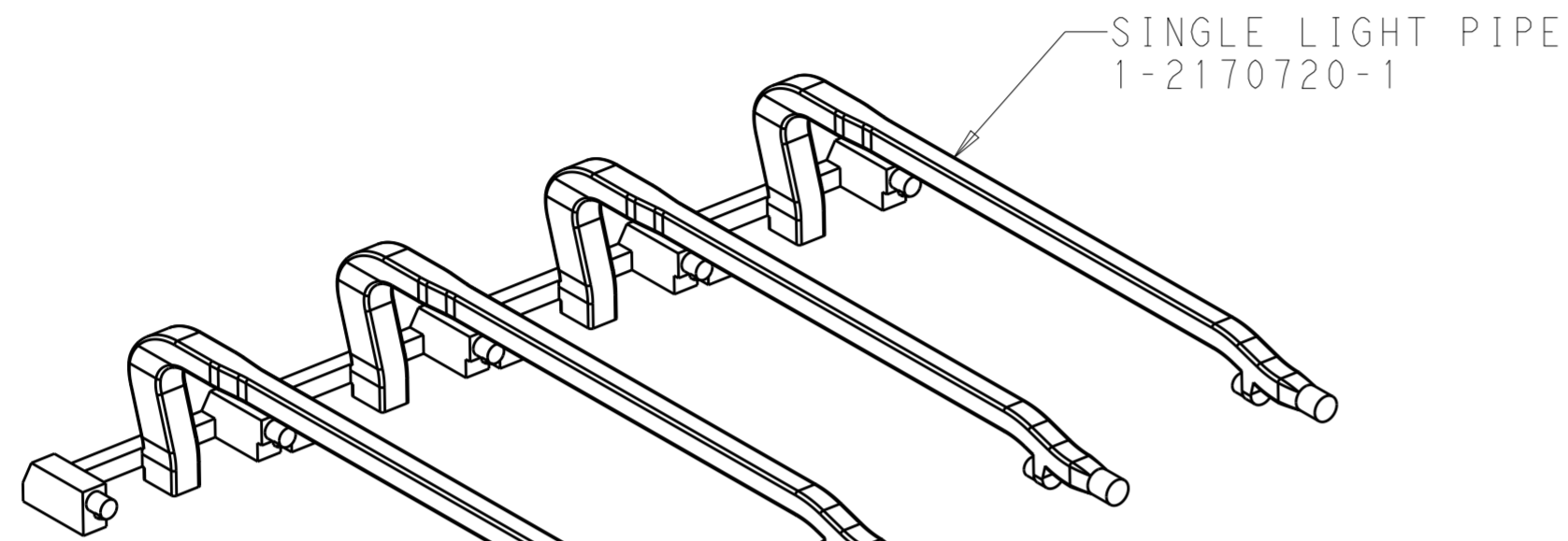


0 REAR PIN
SCALE 2:1

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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		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
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		SCALE 1:1		SHEET 2 OF 13 REV C

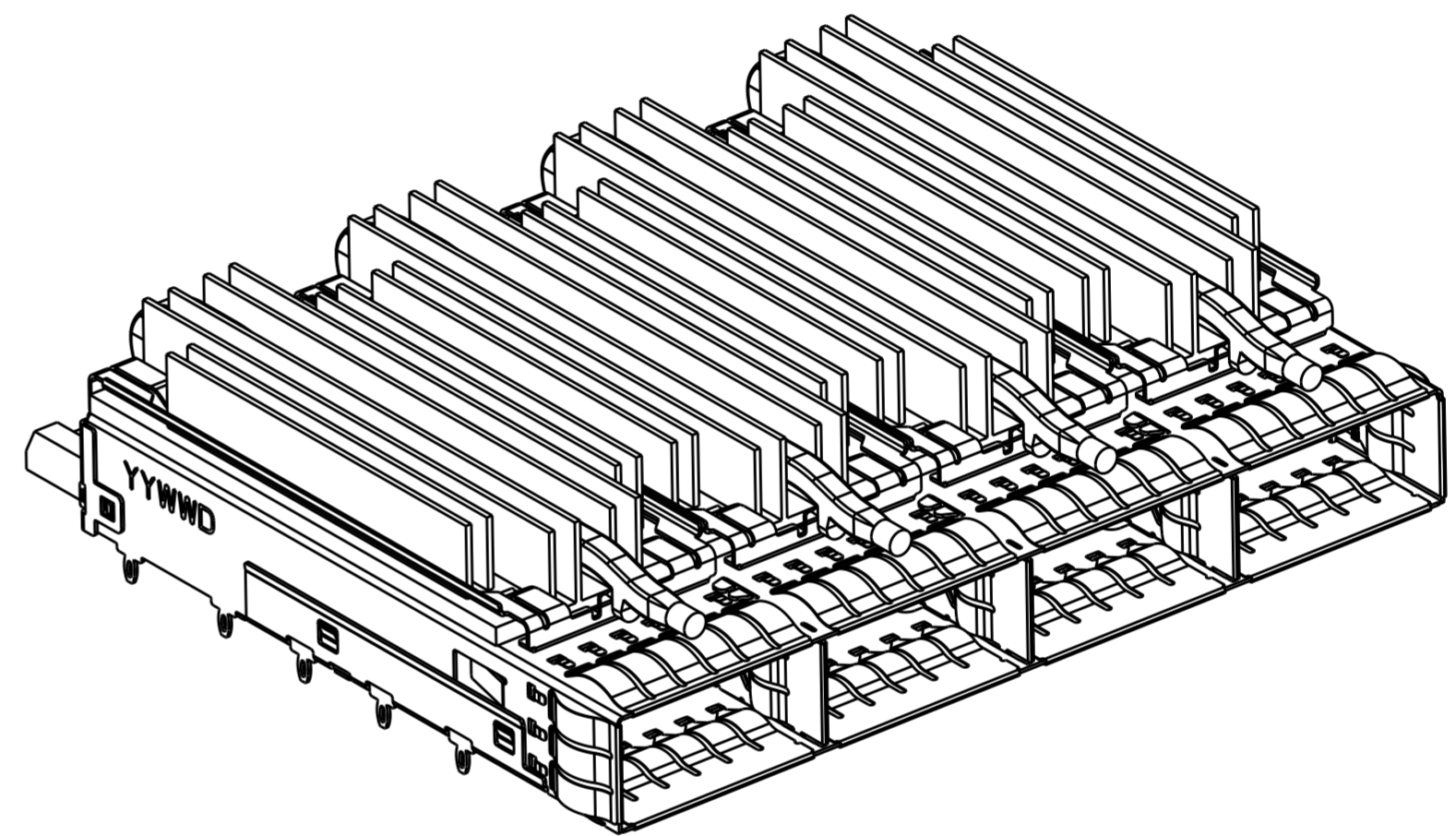
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P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-




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

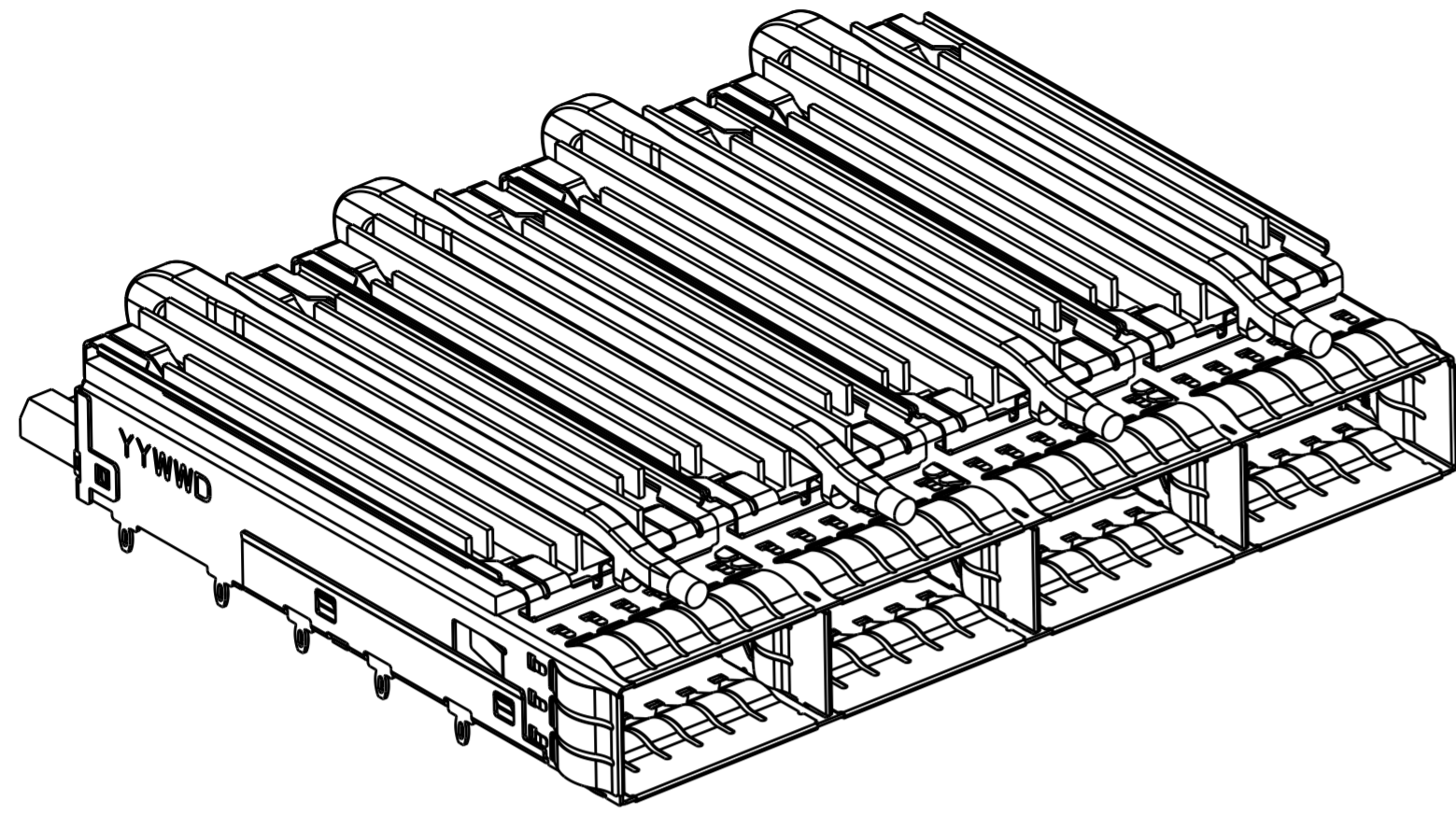


2170747-8 ASSEMBLED
 ASSEMBLED AND PACKAGED TOGETHER, CUSTOMIZED HEAT SINK
 SCALE 2:1

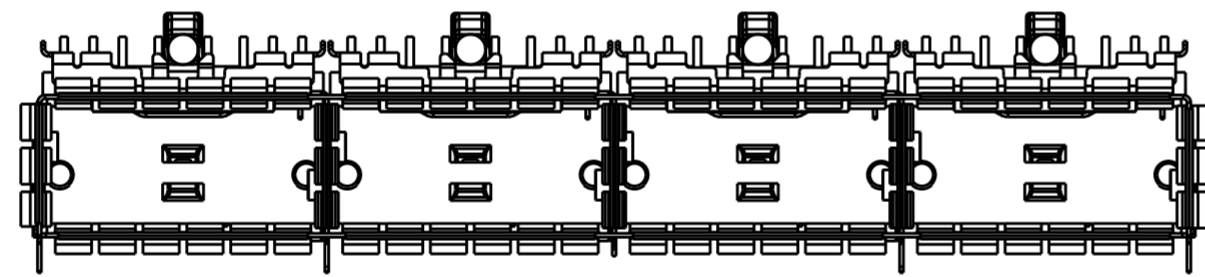
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		CHK SEAN HAN 07JUN2014		
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mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ±	PRODUCT SPEC	SIZE	
		APPLICATION SPEC	CAGE CODE	DRAWING NO
MATERIAL	FINISH	WEIGHT	A200779	C-2170747
SEE NOTES	SEE NOTES	CUSTOMER DRAWING	SCALE 1:1	SHEET 3 OF 13
			REV C	

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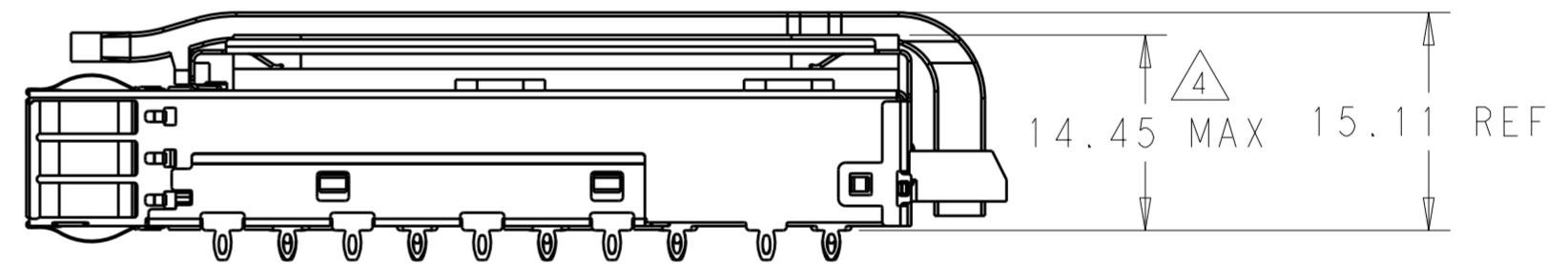
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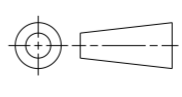


2170747-9 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



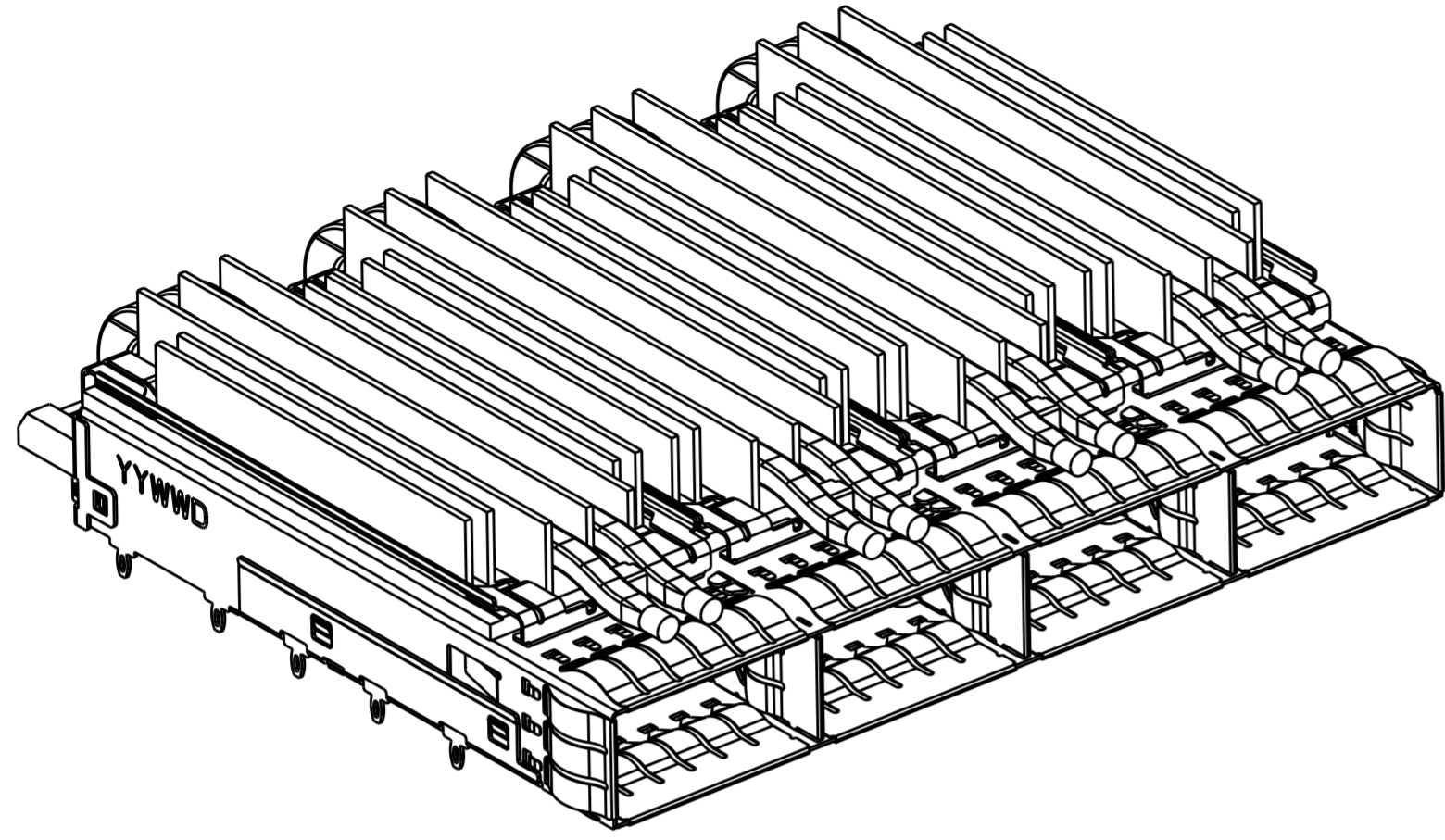
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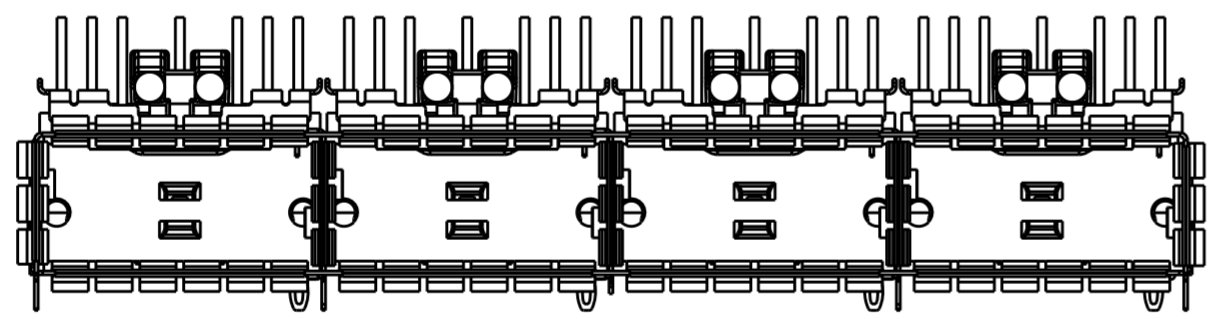
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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
		0 PLC ±-	1 PLC ±0.25	PRODUCT SPEC 108-19428
MATERIAL SEE NOTES		2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

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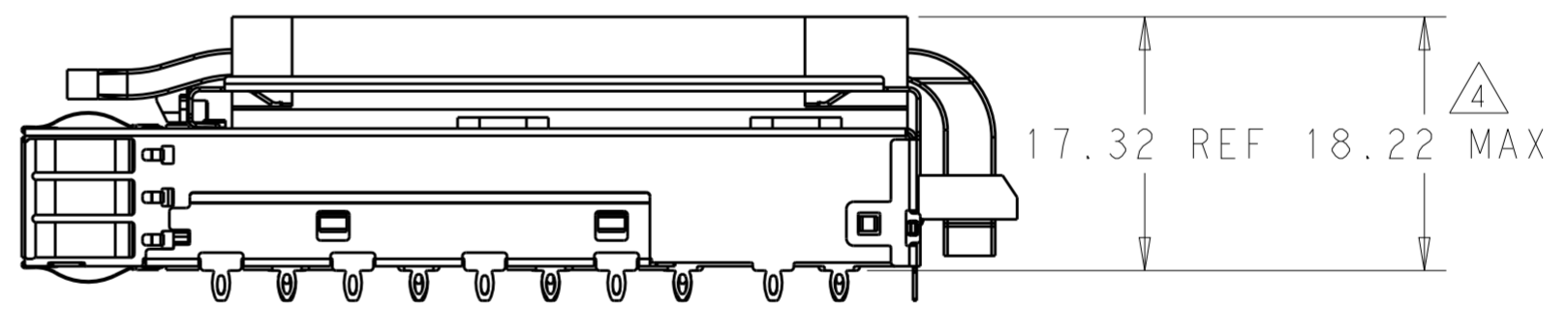
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-



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



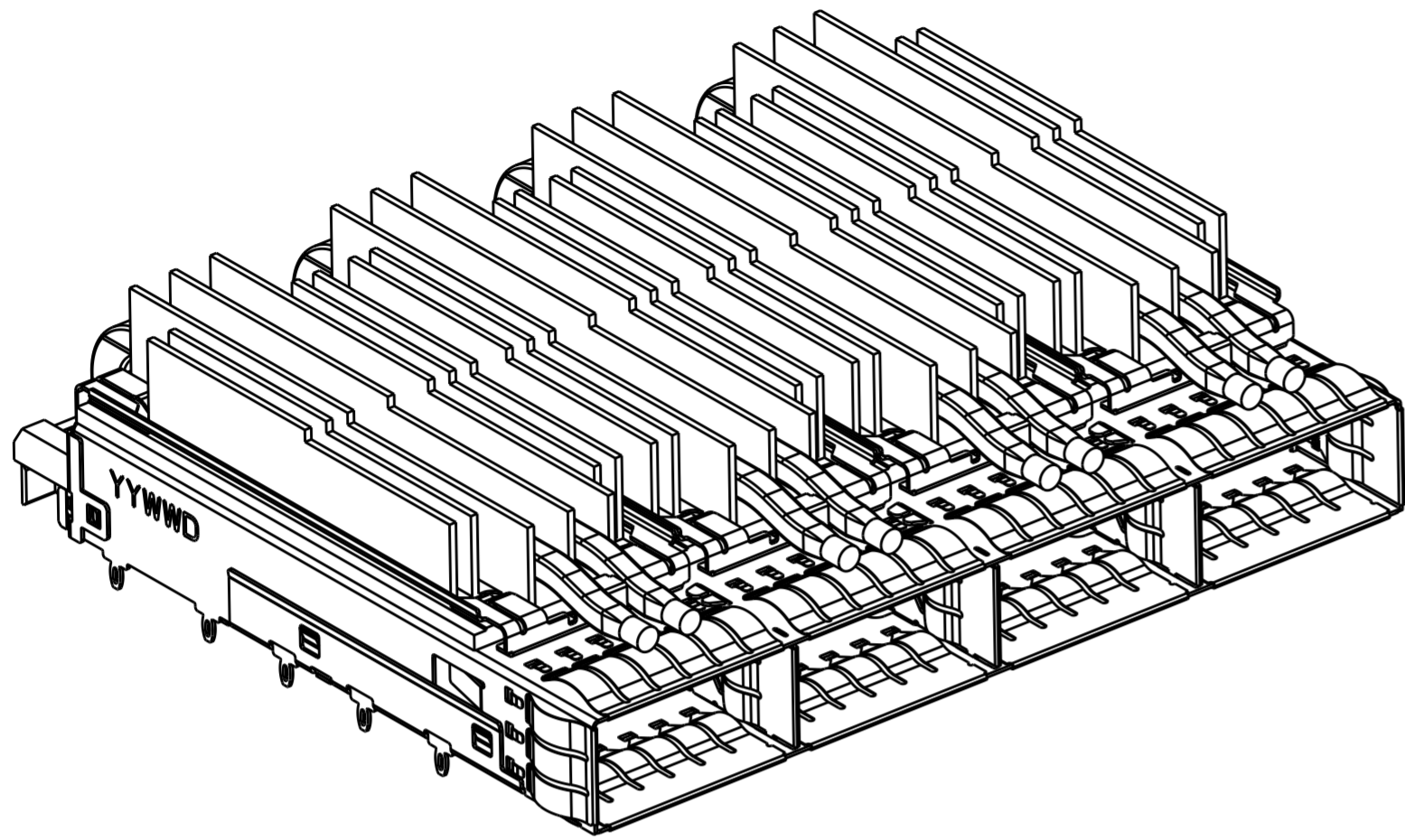
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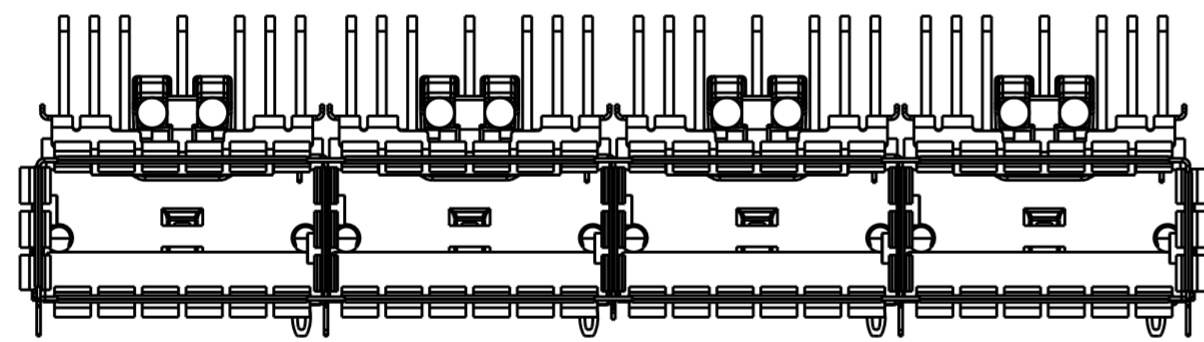
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	TE Connectivity	
		CHK SEAN HAN 07 JUN 2014		
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		0 PLC ±	1 PLC ±0.25	PRODUCT SPEC 108-19428
		2 PLC ±0.2	3 PLC ±	APPLICATION SPEC 114-32023
		4 PLC ±	ANGLES ±	SIZE A200779
MATERIAL SEE NOTES		FINISH SEE NOTES		CAGE CODE C-2170747
		CUSTOMER DRAWING		RESTRICTED TO -
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				REV C

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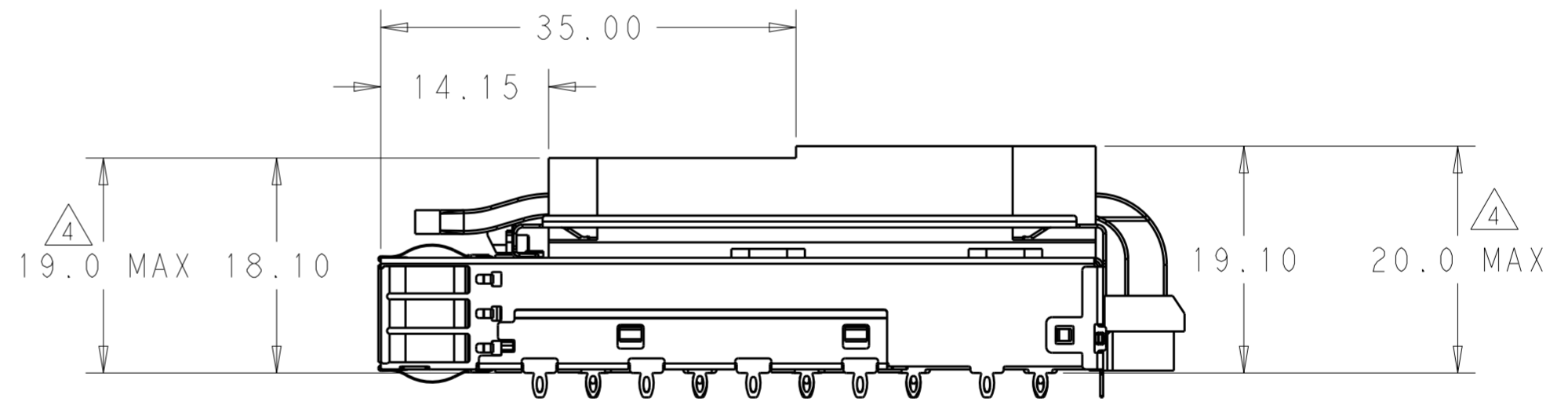
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-



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



SCALE 2:1

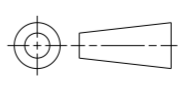
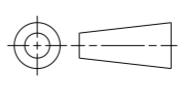


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN 04 JUN 2014 JASON YANG	STE TE Connectivity															
		CHK 07 JUN 2014 SEAN HAN																
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING														
<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 -	WEIGHT -	SIZE CAGE CODE DRAWING NO A200779 C-2170747														
FINISH SEE NOTES		CUSTOMER DRAWING		SCALE 1:1 SHEET 6 OF 13 REV C														

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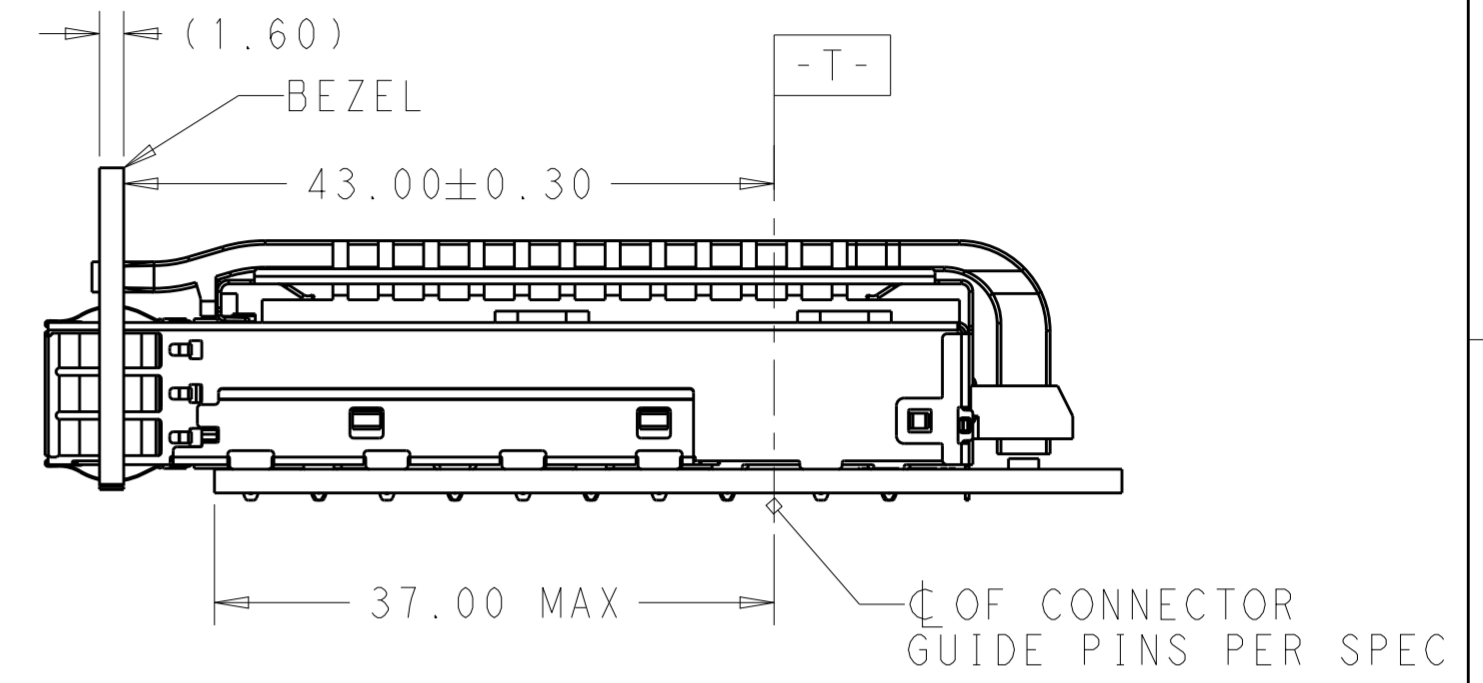
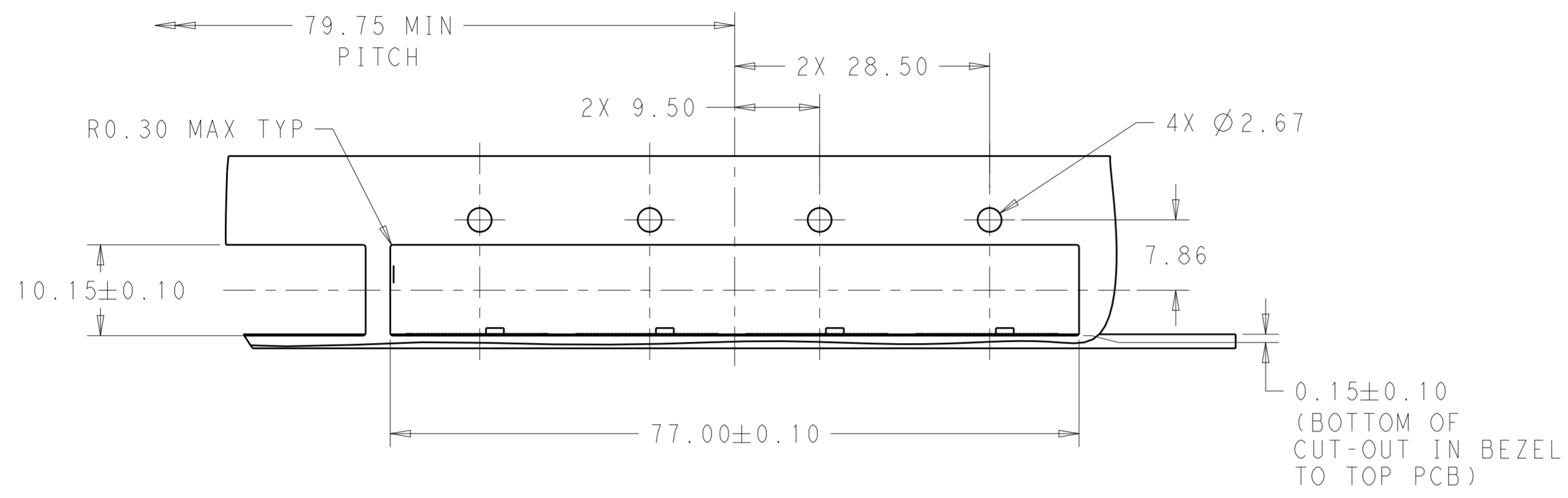
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-

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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 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
1	13.7	PCI	SINGLE LP	2170747-1
# OF REAR PIN	DIM A	APPLICATION	LIGHT PIPE OPTION	PART NUMBER

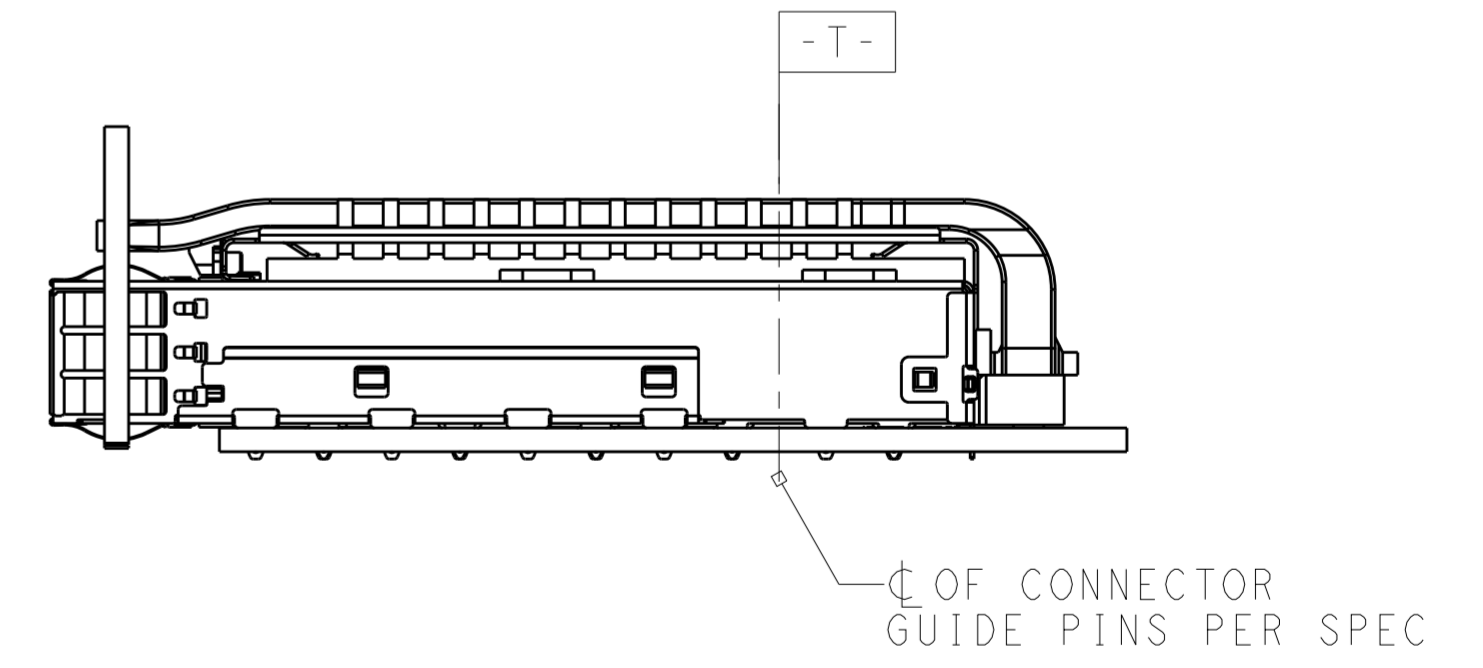
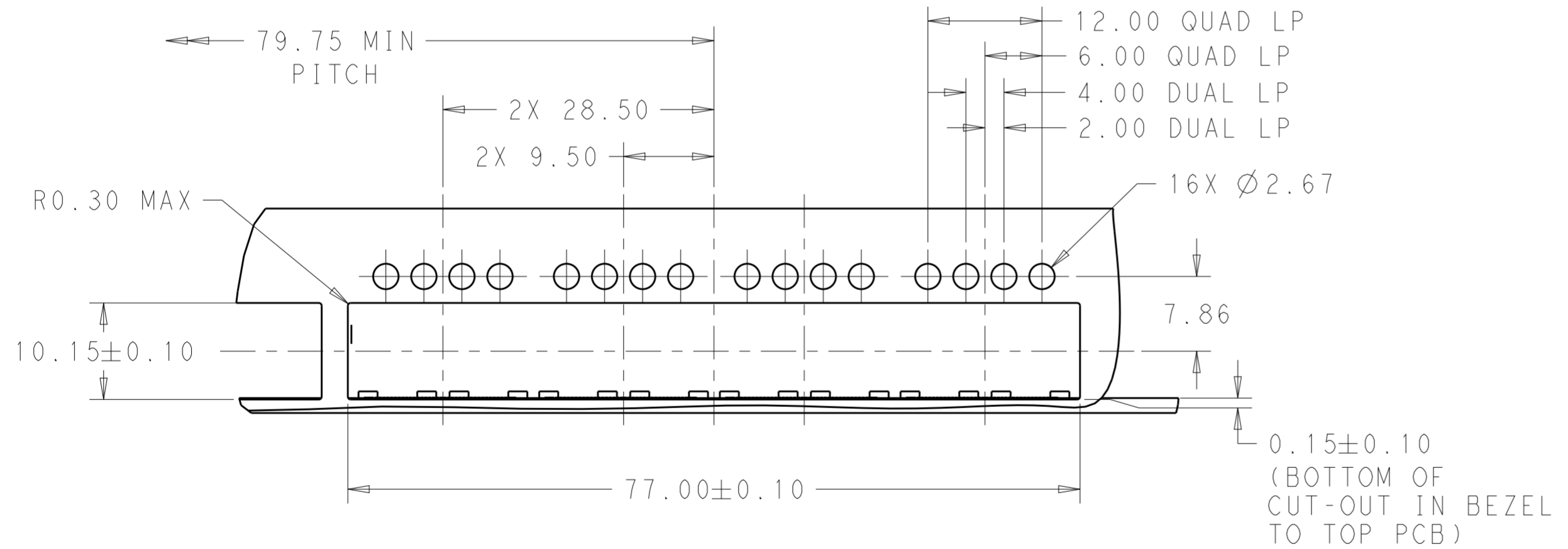
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DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
		0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ±		PRODUCT SPEC 108-19428
MATERIAL SEE NOTES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

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-	-	SEE SHEET 1	-	-



SINGLE SIDE MOUNTING
SCALE 2:1

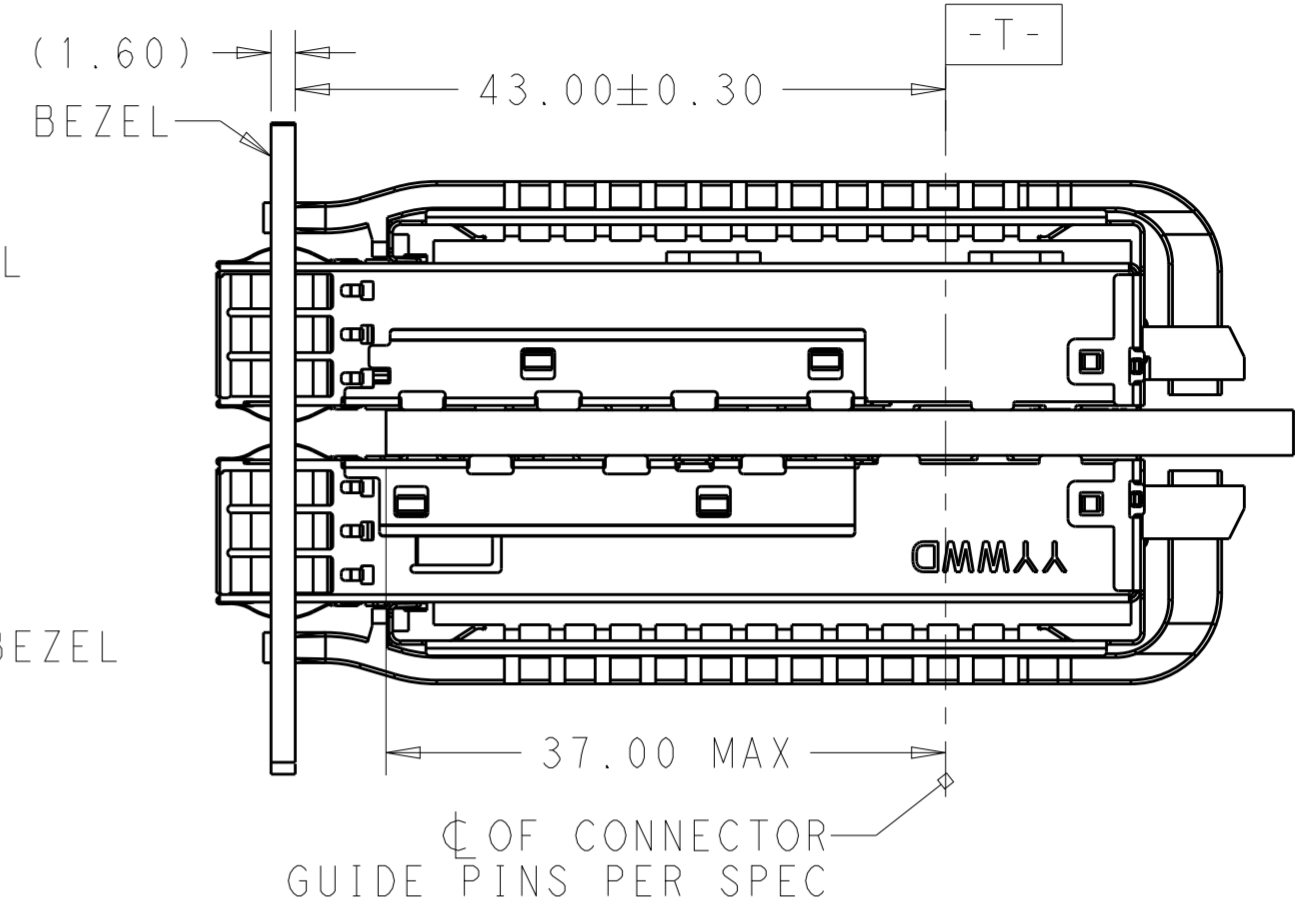
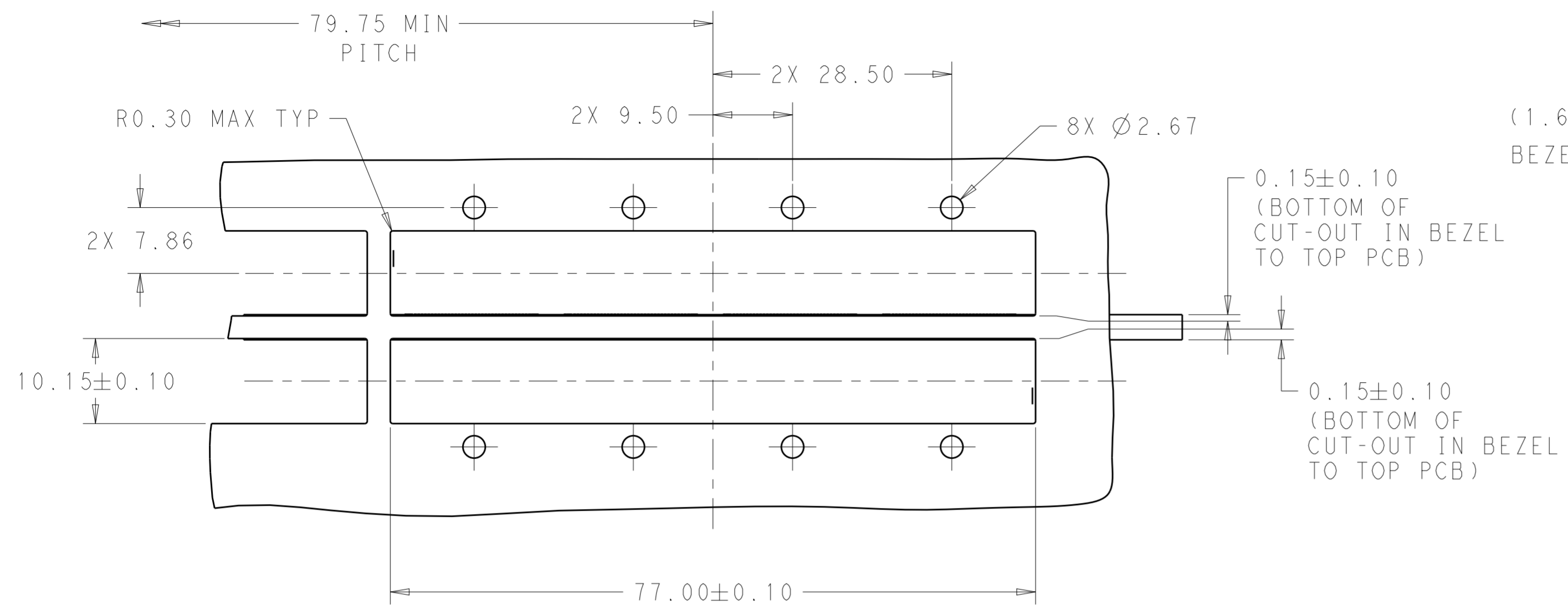


SINGLE SIDE MOUNTING
SCALE 2:1

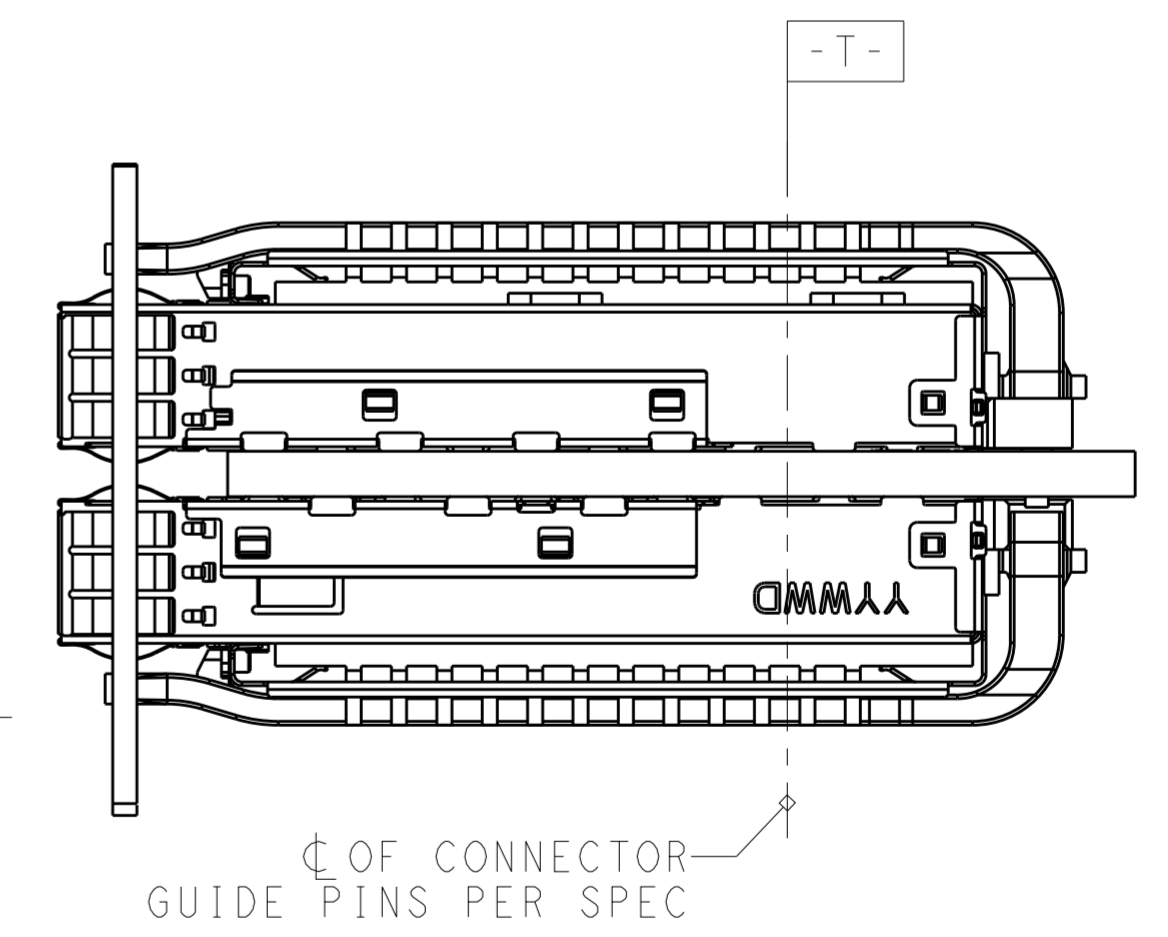
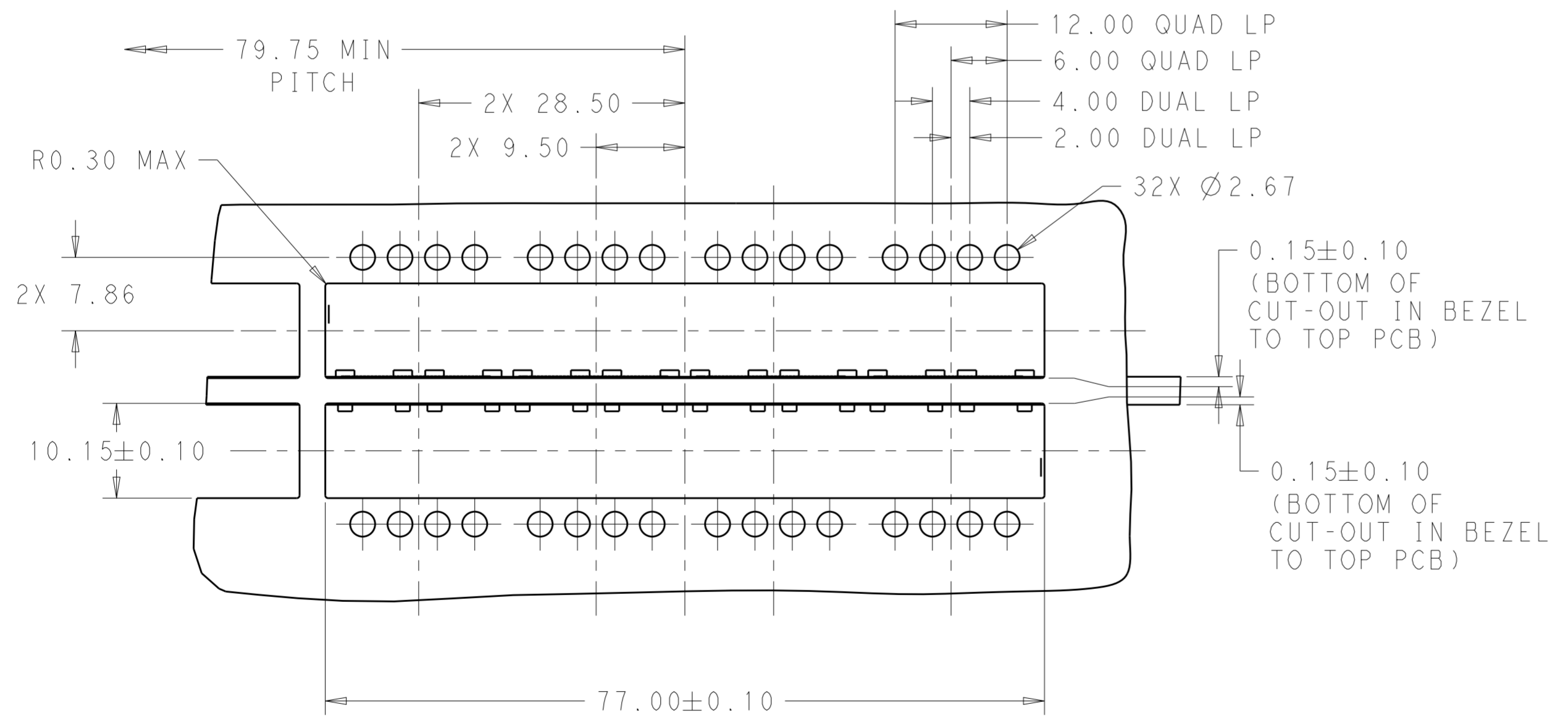
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		CHK 07JUN2014 SEAN HAN		
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	0 PLC ±	PRODUCT SPEC	SIZE CAGE CODE DRAWING NO	
	1 PLC ±0.25	108-19428	A200779C-2170747	
MATERIAL	SEE NOTES	APPLICATION SPEC	RESTRICTED TO	
	SEE NOTES	114-32023	SCALE 1:1 SHEET 8 OF 13 REV C	
		WEIGHT -	CUSTOMER DRAWING	

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BELLY TO BELLY MOUNTING
SCALE 2:1

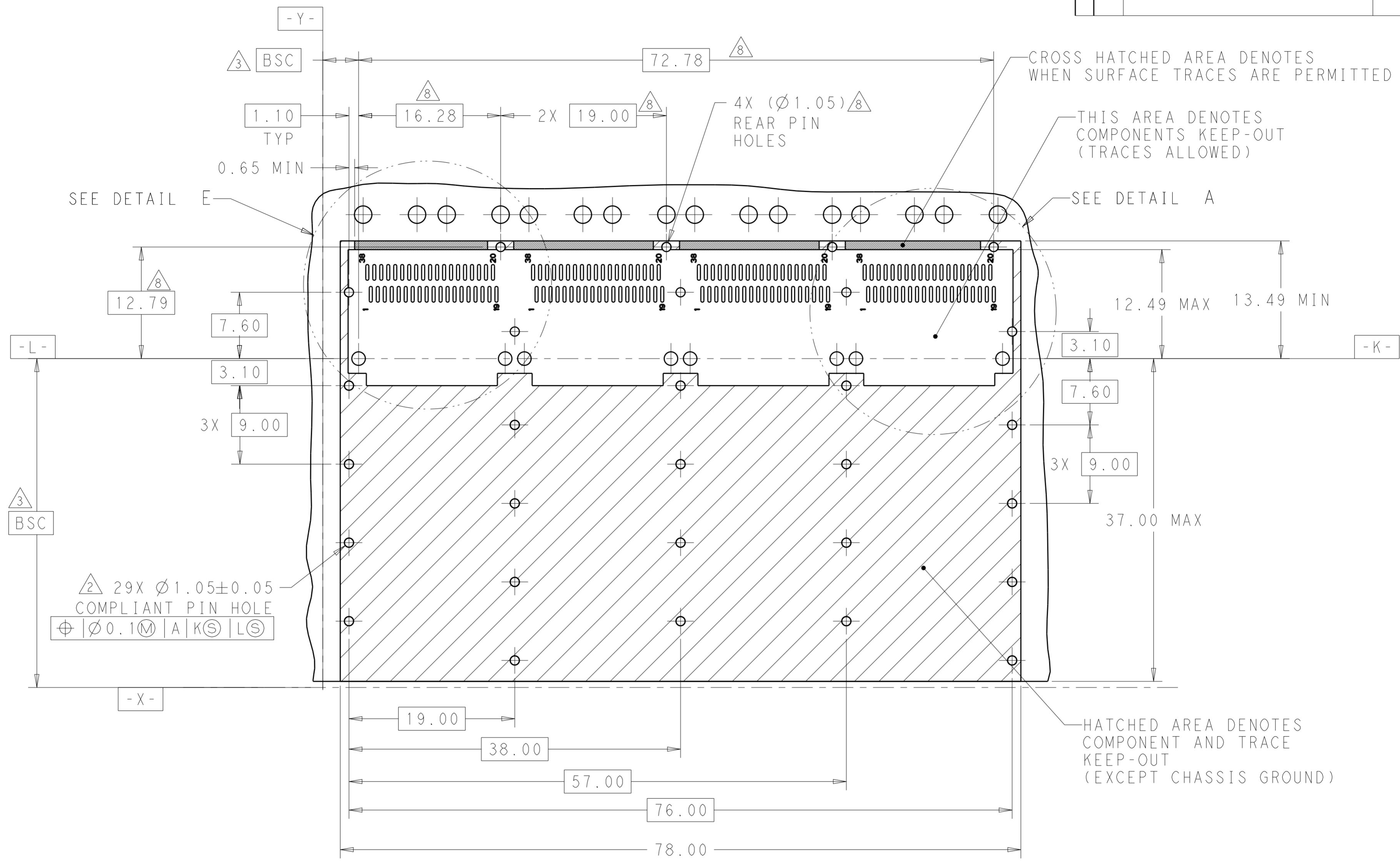


BELLY TO BELLY MOUNTING
SCALE 2:1

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		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME	
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH	PRODUCT SPEC 108-19428	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
MATERIAL SEE NOTES	SEE NOTES	APPLICATION SPEC 114-32023	SIZE A200779	DRAWING NO C-2170747
		WEIGHT	RESTRICTED TO	
		CUSTOMER DRAWING	SCALE 1:1	SHEET 9 OF 13 REV C

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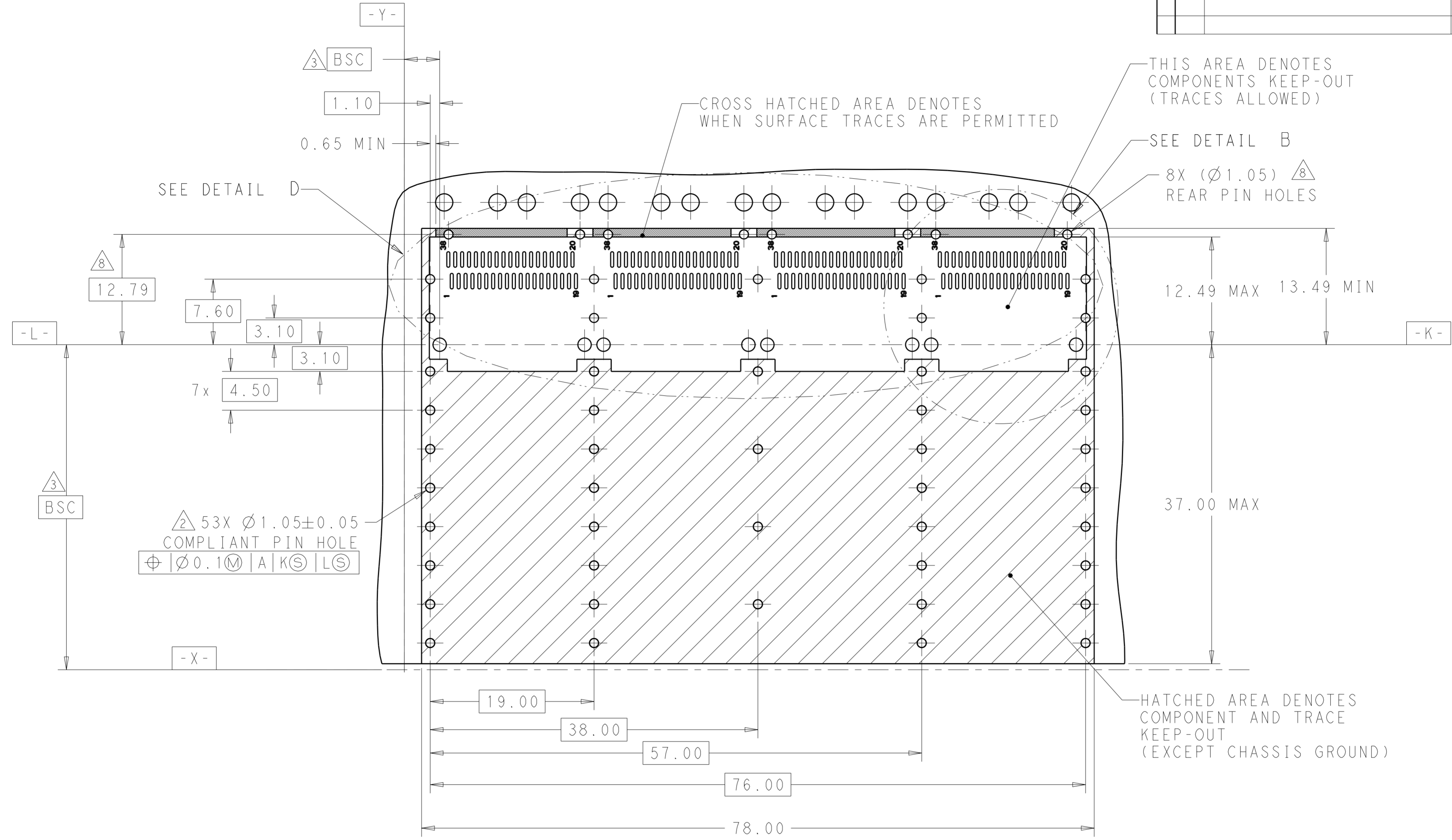
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



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

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		CHK 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	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 10 OF 13 REV C
				CUSTOMER DRAWING

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

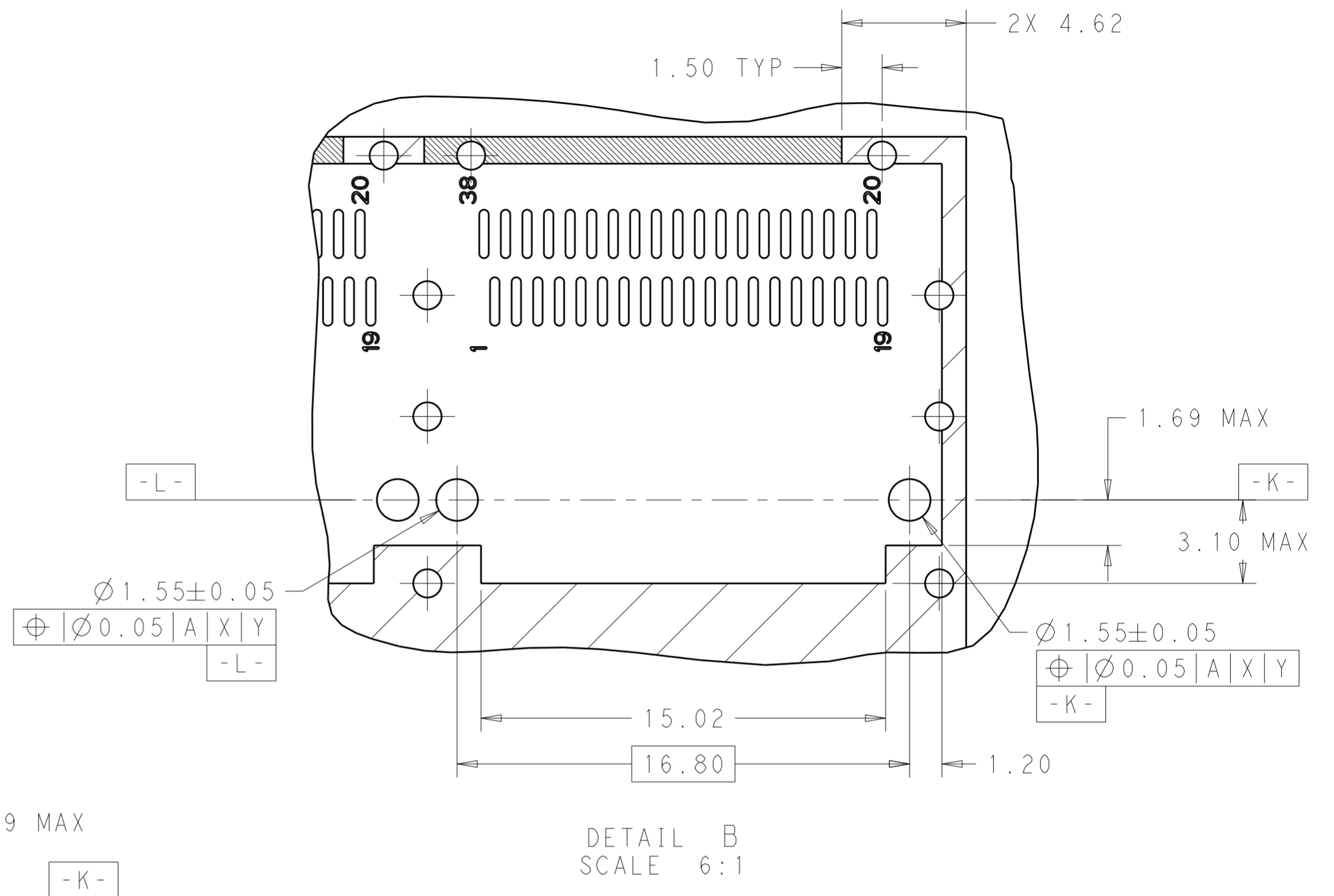
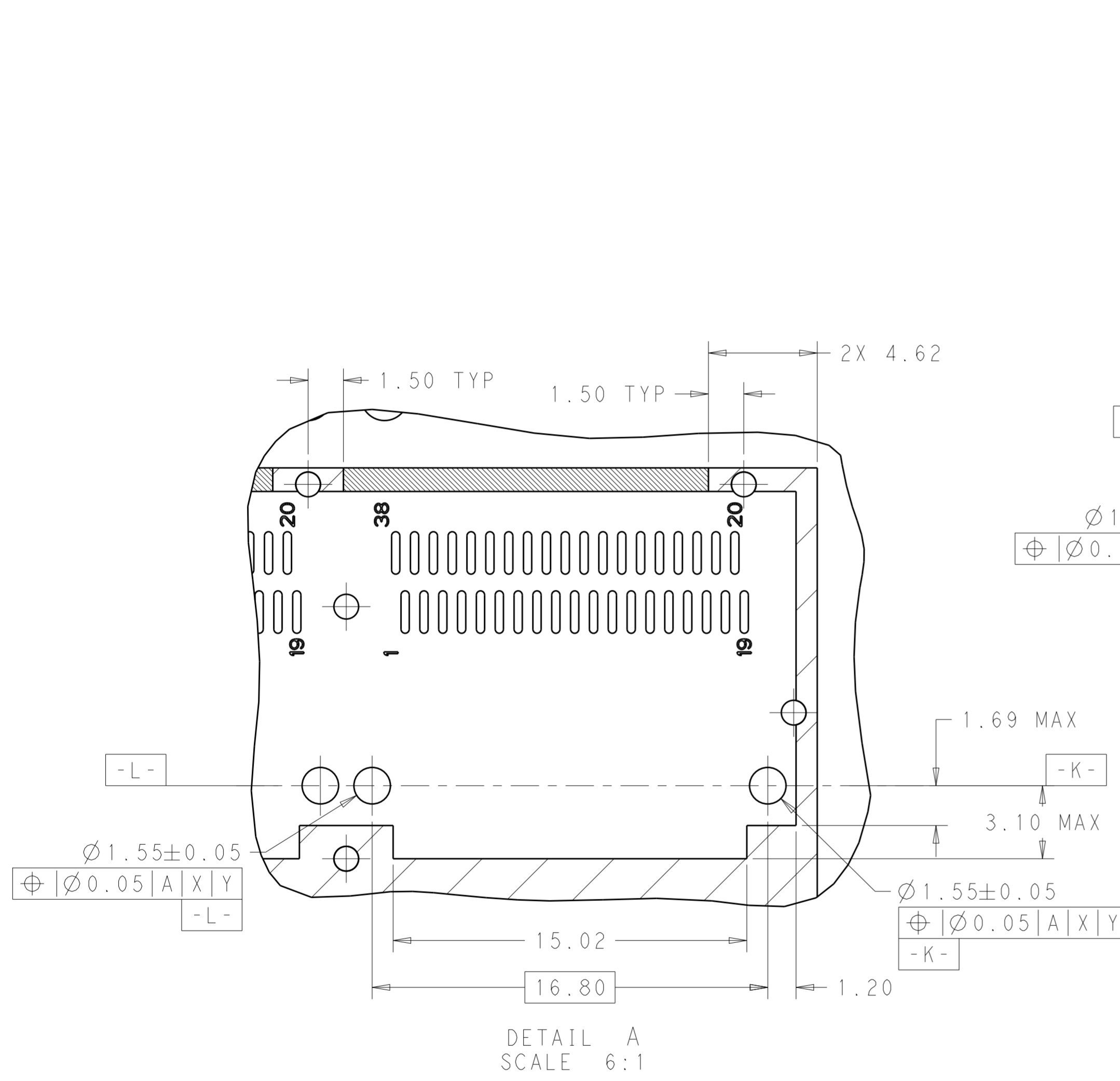


RECOMMENDED PCB LAYOUT
 BELLY TO BELLY TYPE
 PCB TOLERANCE: ±0.05
 SCALE 3:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	STE 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	-	-



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DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
MATERIAL SEE NOTES	SEE NOTES	PRODUCT SPEC 108-19428	SIZE A200779
		APPLICATION SPEC 114-32023	CAGE CODE C-2170747
		WEIGHT -	DRAWING NO -
		CUSTOMER DRAWING	RESTRICTED TO -
		SCALE 1:1	SHEET 12 OF 13 REV C