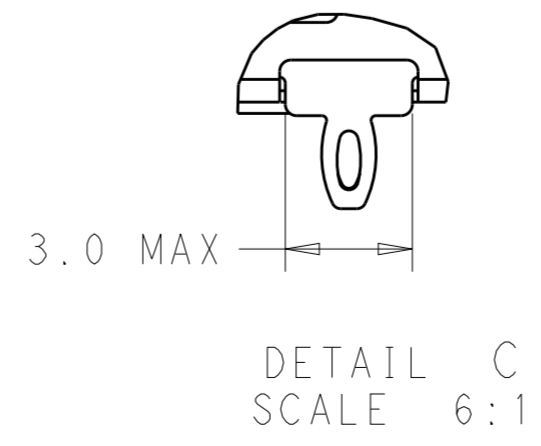
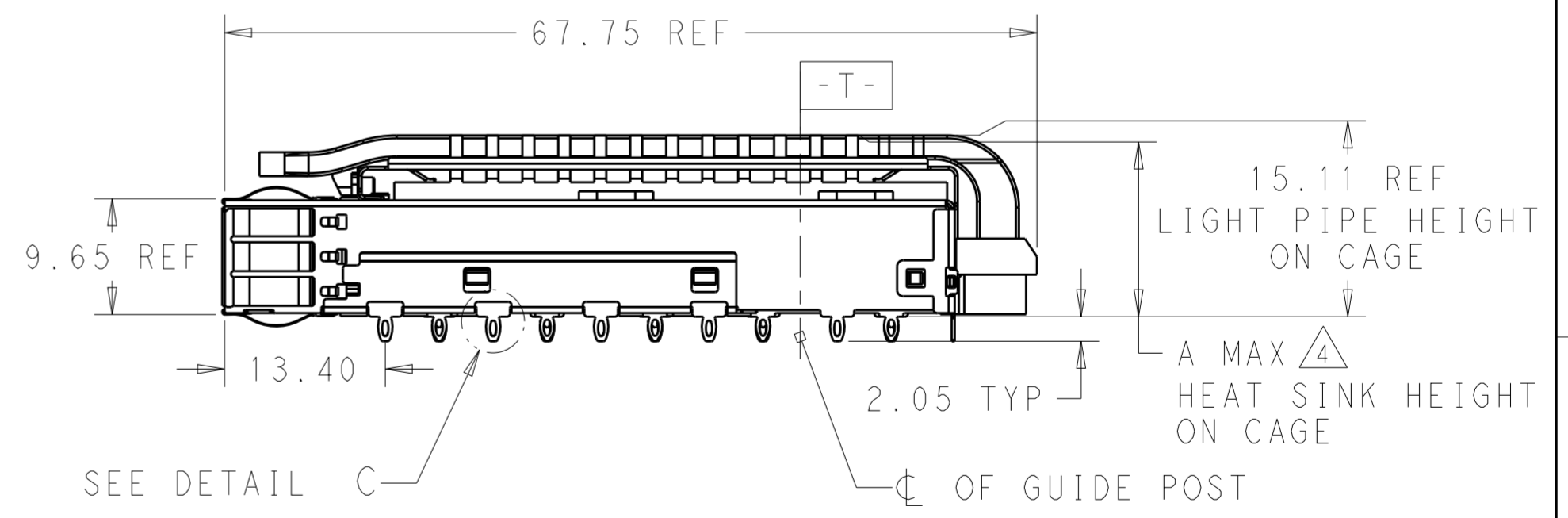
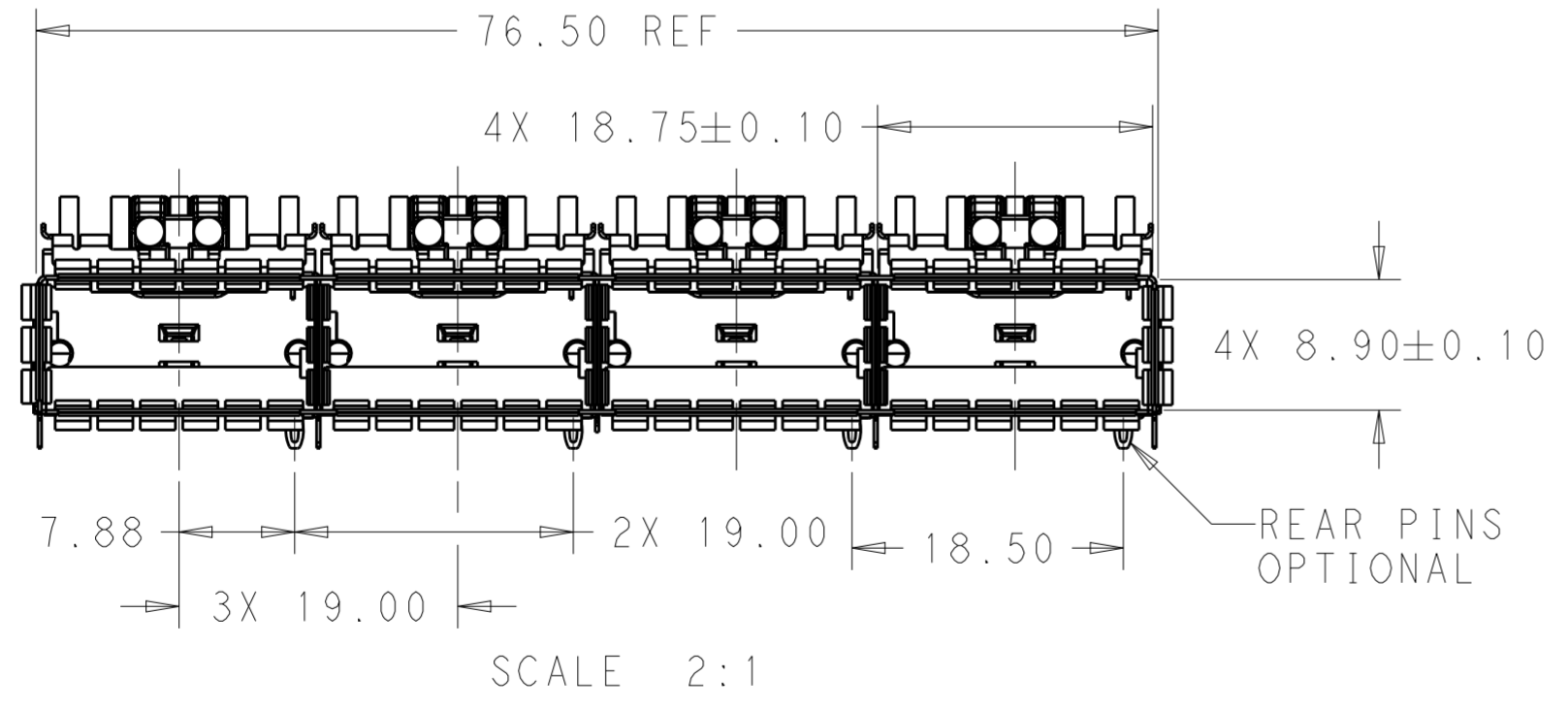
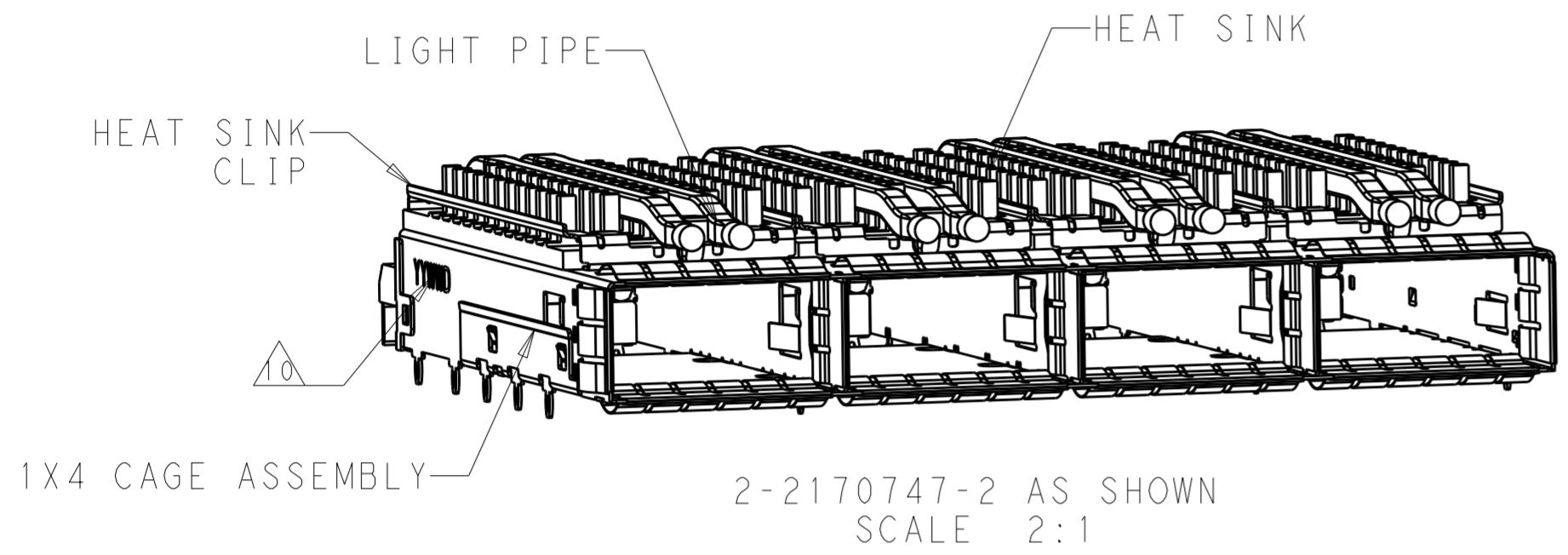


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REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
A		RELEASE	31OCT2016	JY	SH
B		REVISED PER ECO-17-009888	07JUL2017	JY	SH
C		REVISED PER ECO-18-012273	10JUL2018	JY	SH

2-2170747-2 AS SHOWN

- 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
- REFERENCE APPLICATION SPECIFICATION 114-23023 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS
- DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER
- DIMENSION OF HEAT SINK APPLIES WITH MODULE INSERTED IN CAGE.
- HEAT SINKS, HEAT SINK CLIPS AND LIGHT PIPES ARE SHIPPED ASSEMBLED ON CAGE
- MINIMUM PC BOARD THICKNESS: SINGLE SIDED: 1.57 MIN
 DOUBLE SIDED: 2.20 MIN
- DATUM **-A-** IS TOP SURFACE OF THE HOST BOARD.
- THESE HOLES ARE OPTIONAL WHEN THE REAR PINS ARE REMOVED.
- MATES WITH QSFP28 MSA COMPATIBLE TRANSCEIVER.
- DATE CODE (YYWWD) MARKED APPROXIMATELY AS SHOWN.
- NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLY WITH LIGHT PIPE.
- THE CUSTOMIZED HEAT SINK HAVE NO SURFACE FINISH ONLY FOR 2170747-7/-8/-9.
- CAGE ASSEMBLY WITH HS AND LIGHT PIPE ARE UNASSEMBLED, AND PACKAGED INDIVIDUALLY IN TRAYS. ONLY APPLICABLE TO 2170747-7.

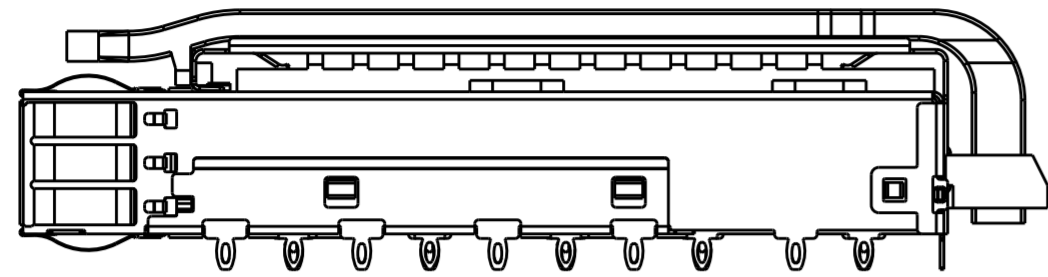


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		CHK SEAN HAN 07JUN2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME	
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ±	PRODUCT SPEC	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
	ANGLES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

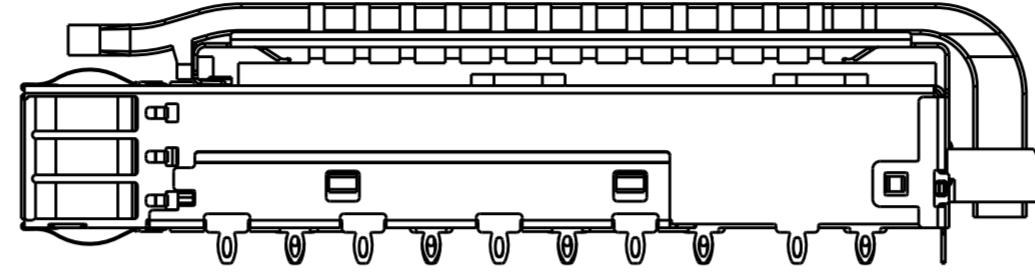
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REVISIONS					
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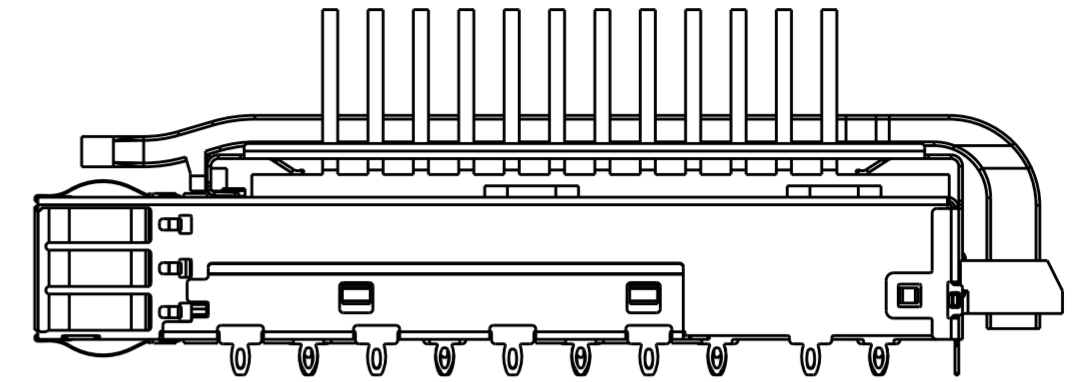
HEAT SINK OPTION



PCI HEAT SINK
SCALE 2:1

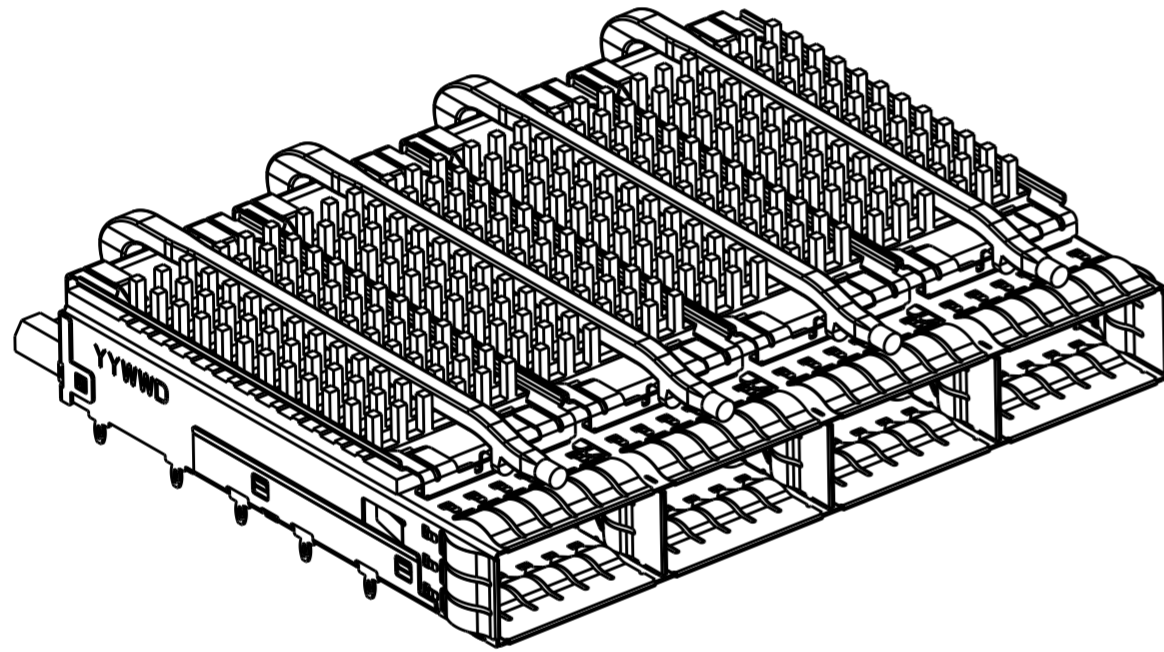


SAN HEAT SINK
SCALE 2:1

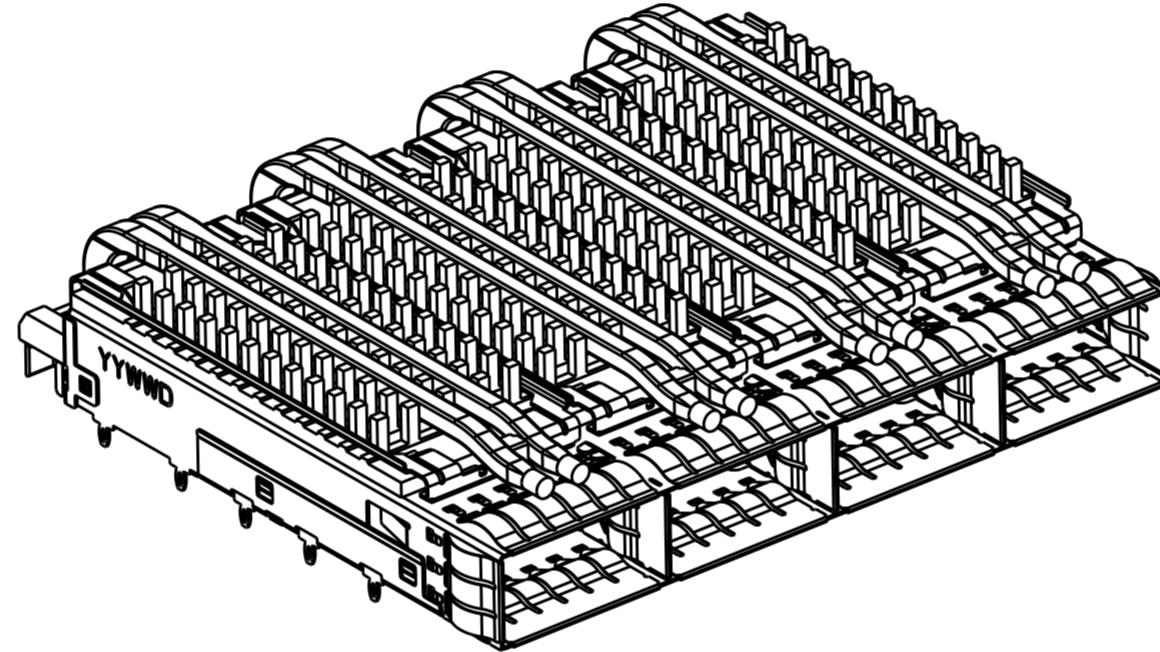


NETWORKING HEAT SINK
SCALE 2:1

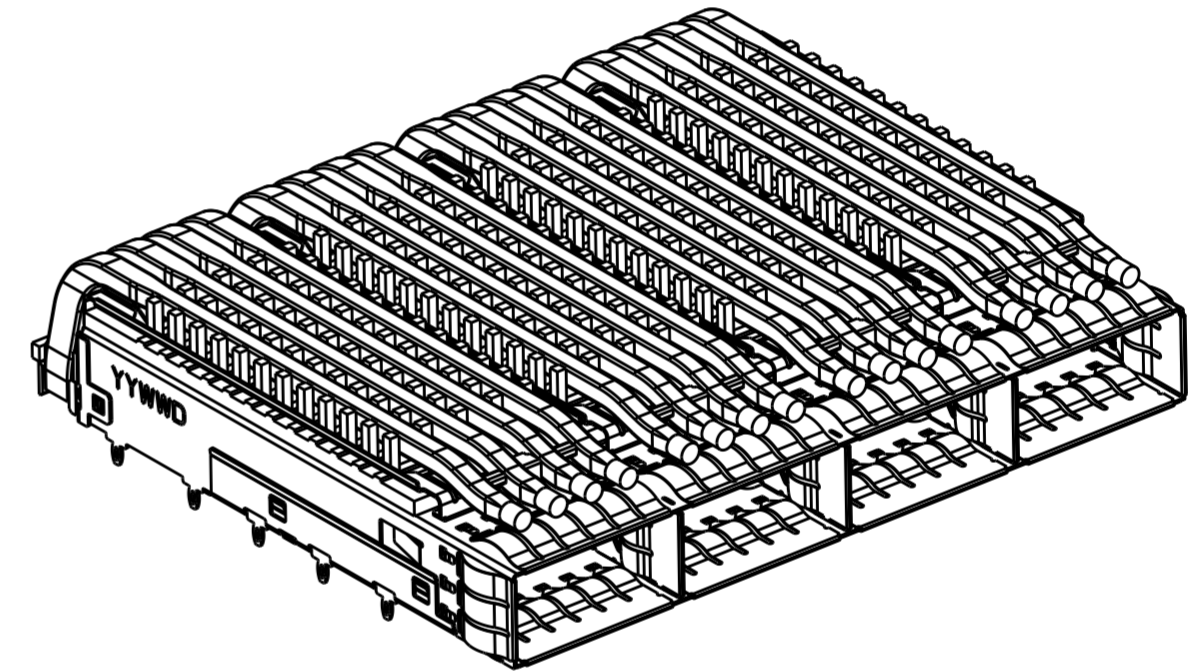
LIGHT PIPE OPTION



SINGLE LIGHT PIPE
SCALE 3:2

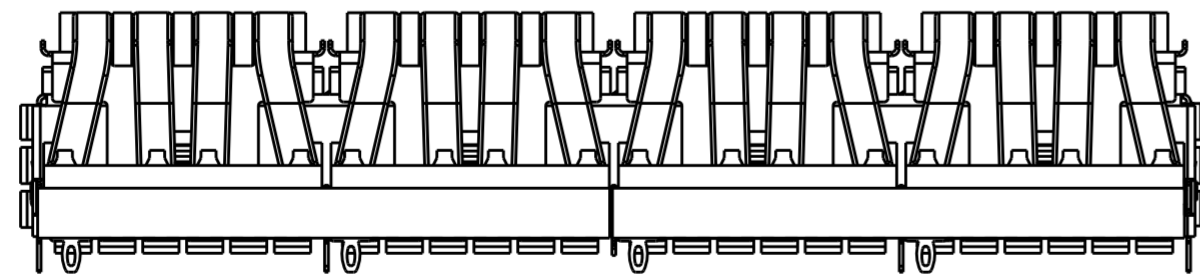


DUAL LIGHT PIPE
SCALE 3:2

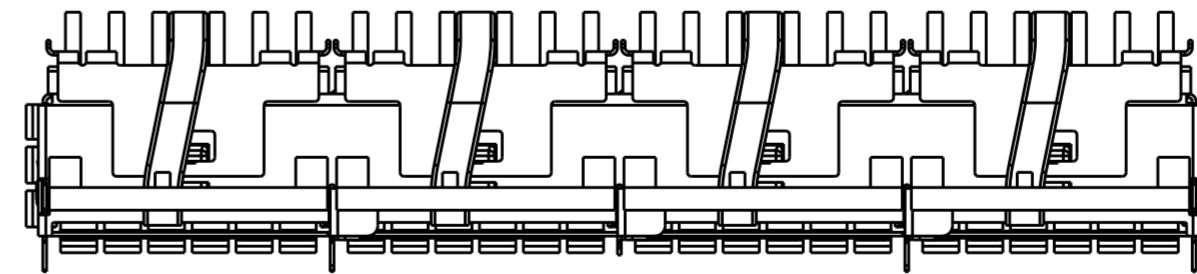


QUAD LIGHT PIPE
SCALE 3:2

OF REAR PIN OPTION



1 REAR PIN
SCALE 2:1

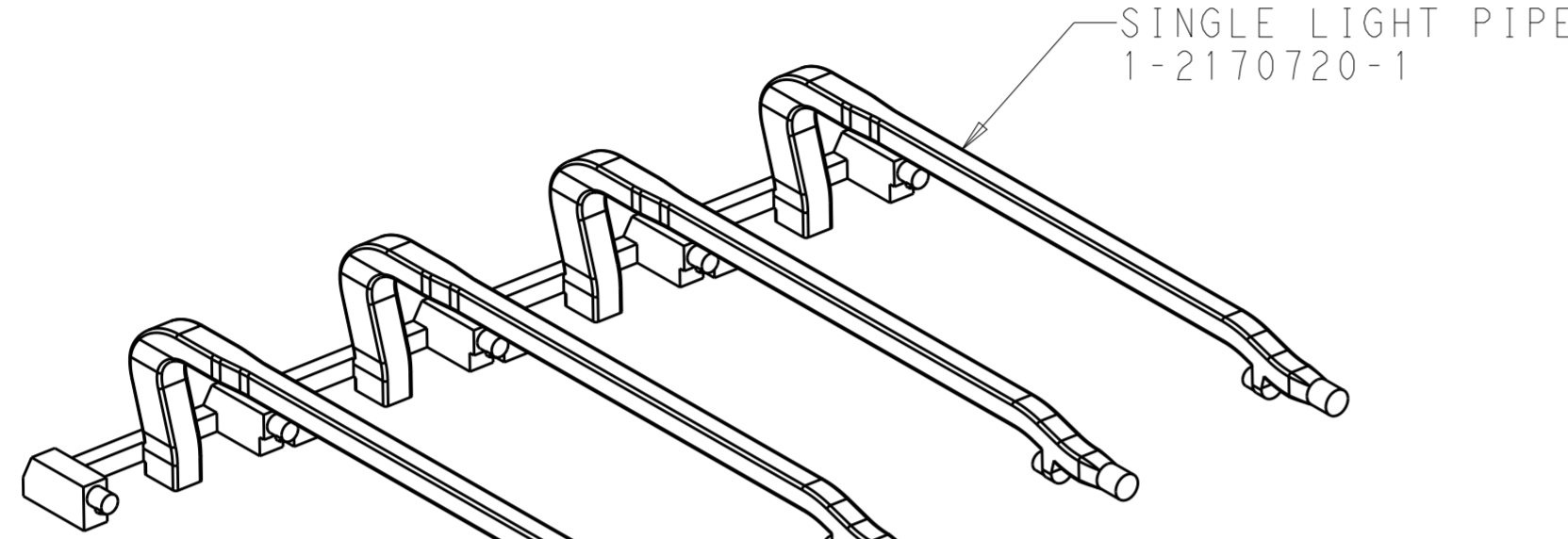


0 REAR PIN
SCALE 2:1

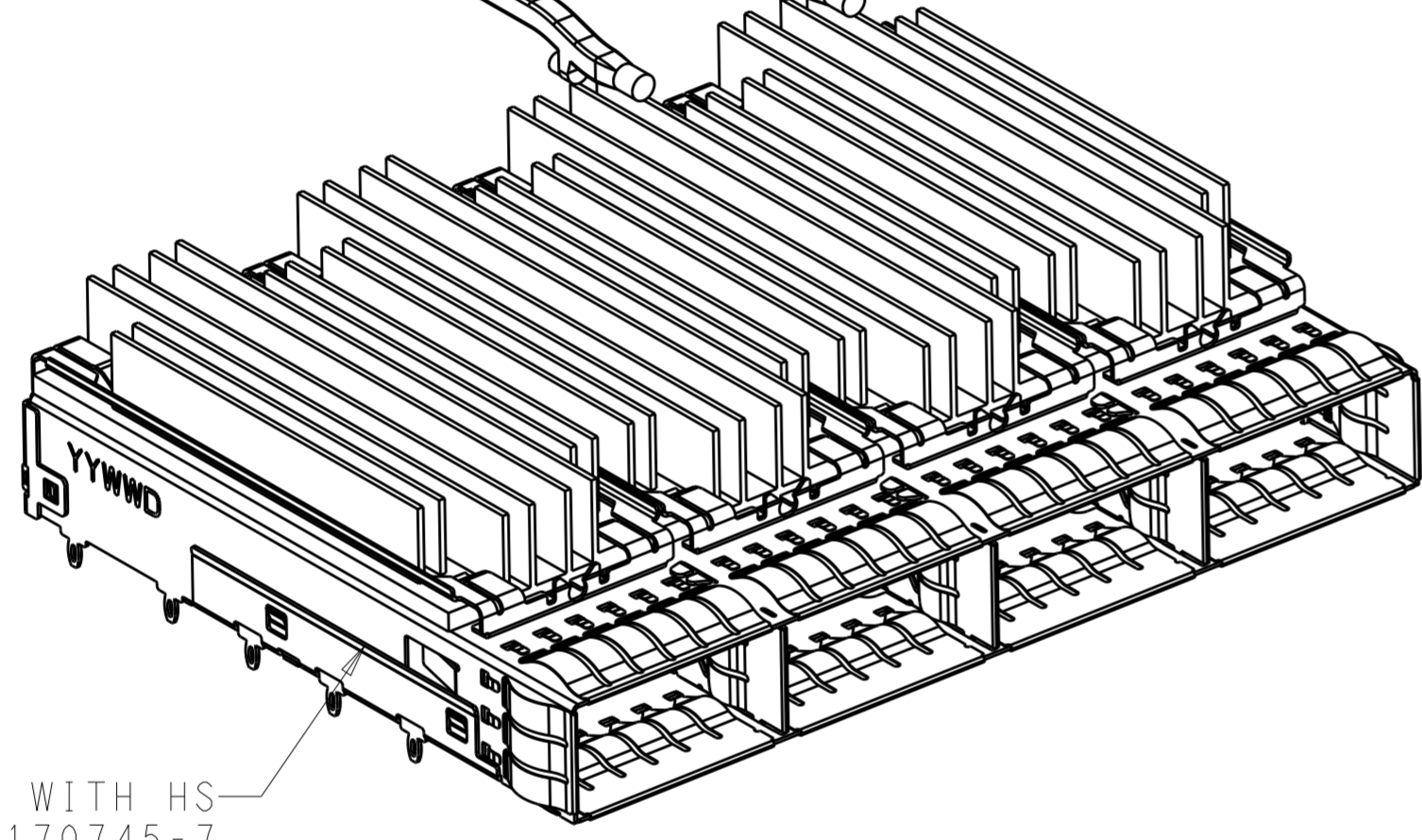
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	TE Connectivity	
		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	RESTRICTED TO
	0 PLC ± 1 PLC ±0.25 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	WEIGHT -	
		CUSTOMER DRAWING	SCALE 1:1	SHEET 2 OF 13

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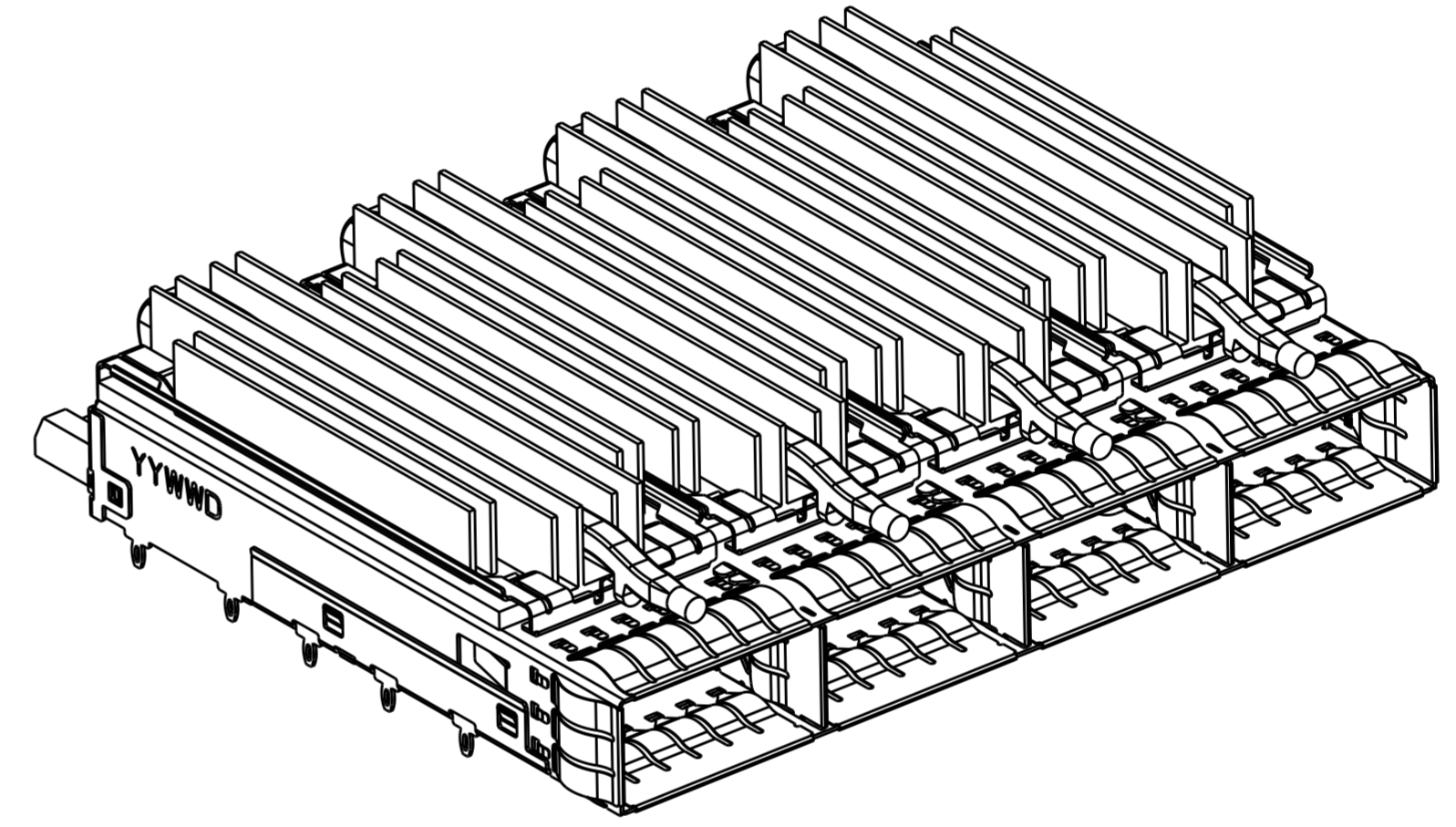
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



CAGE ASSEMBLY WITH HS
2170745-7



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

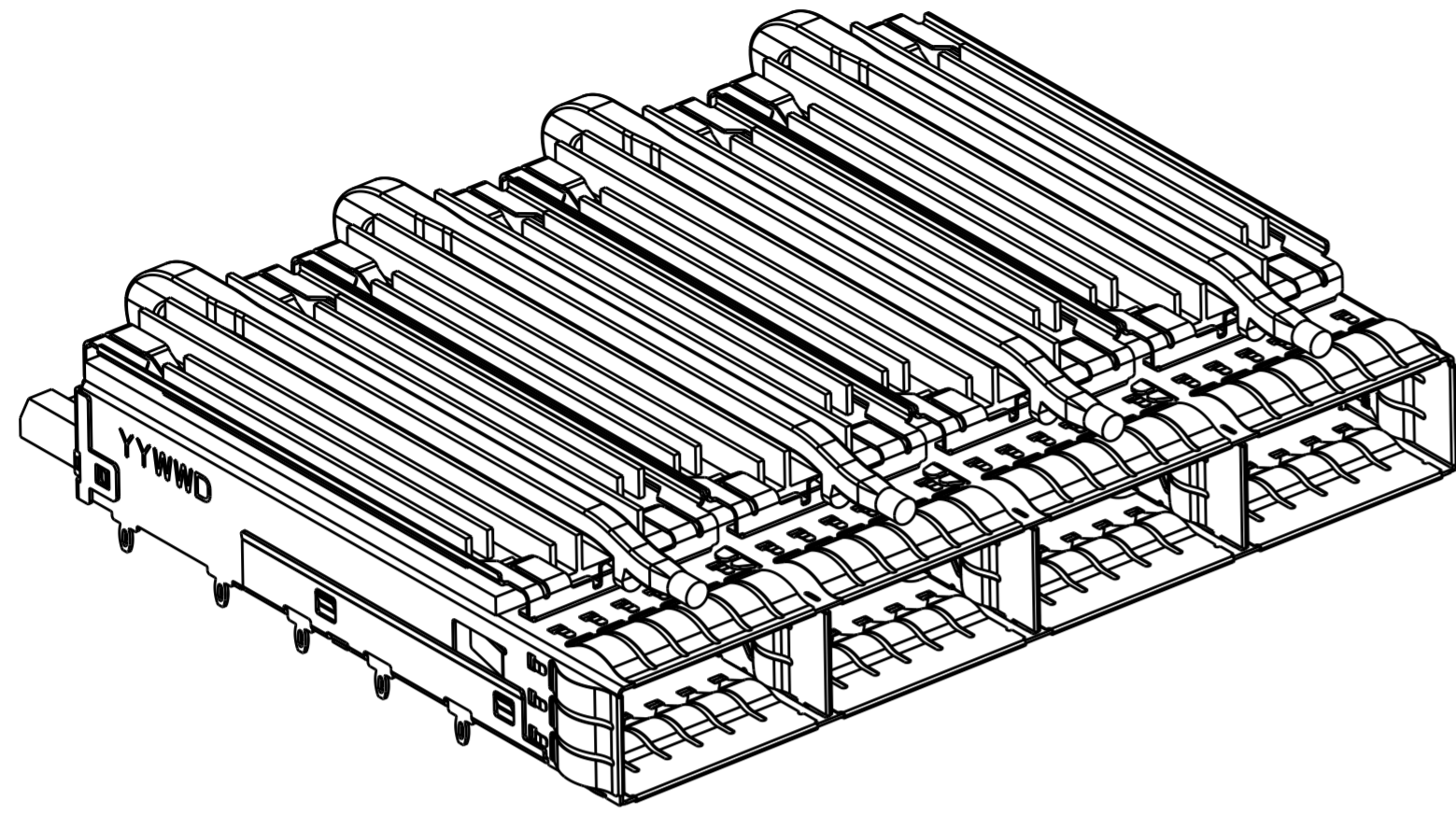


2170747-8 ASSEMBLED
 ASSEMBLED AND PAKCAGED TOGETHER, CUSTOMIZED HEAT SINK
 SCALE 2:1

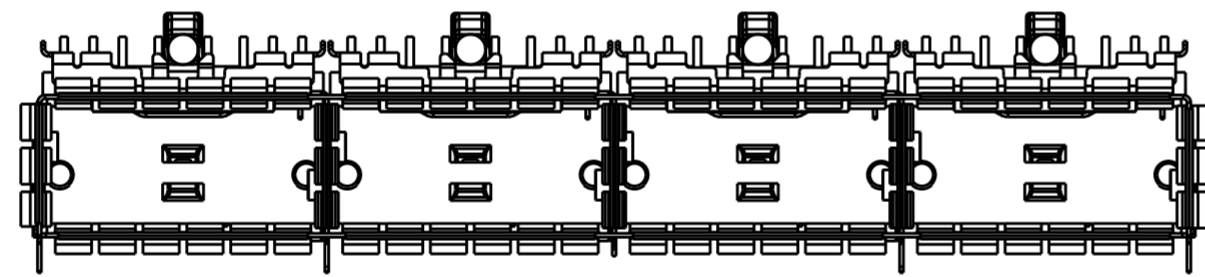
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04JUN2014	TE Connectivity	
		CHK SEAN HAN 07JUN2014		
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC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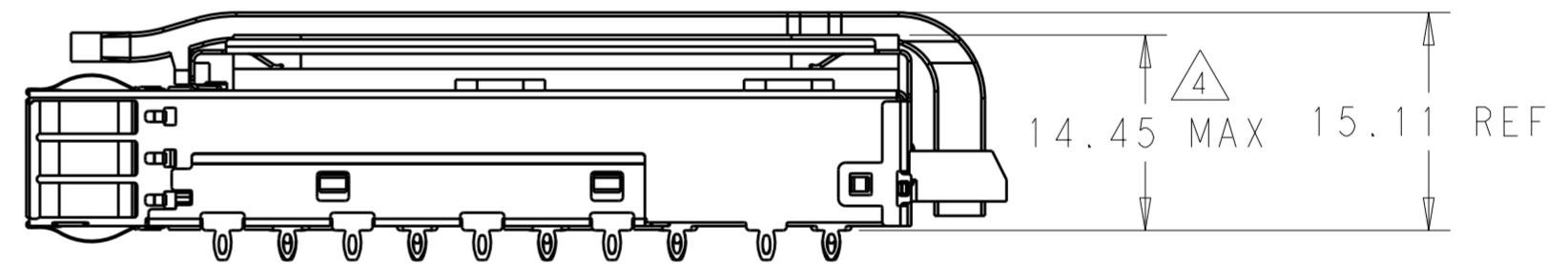
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-		SEE SHEET 1	-	-


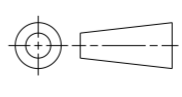


2170747-9 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



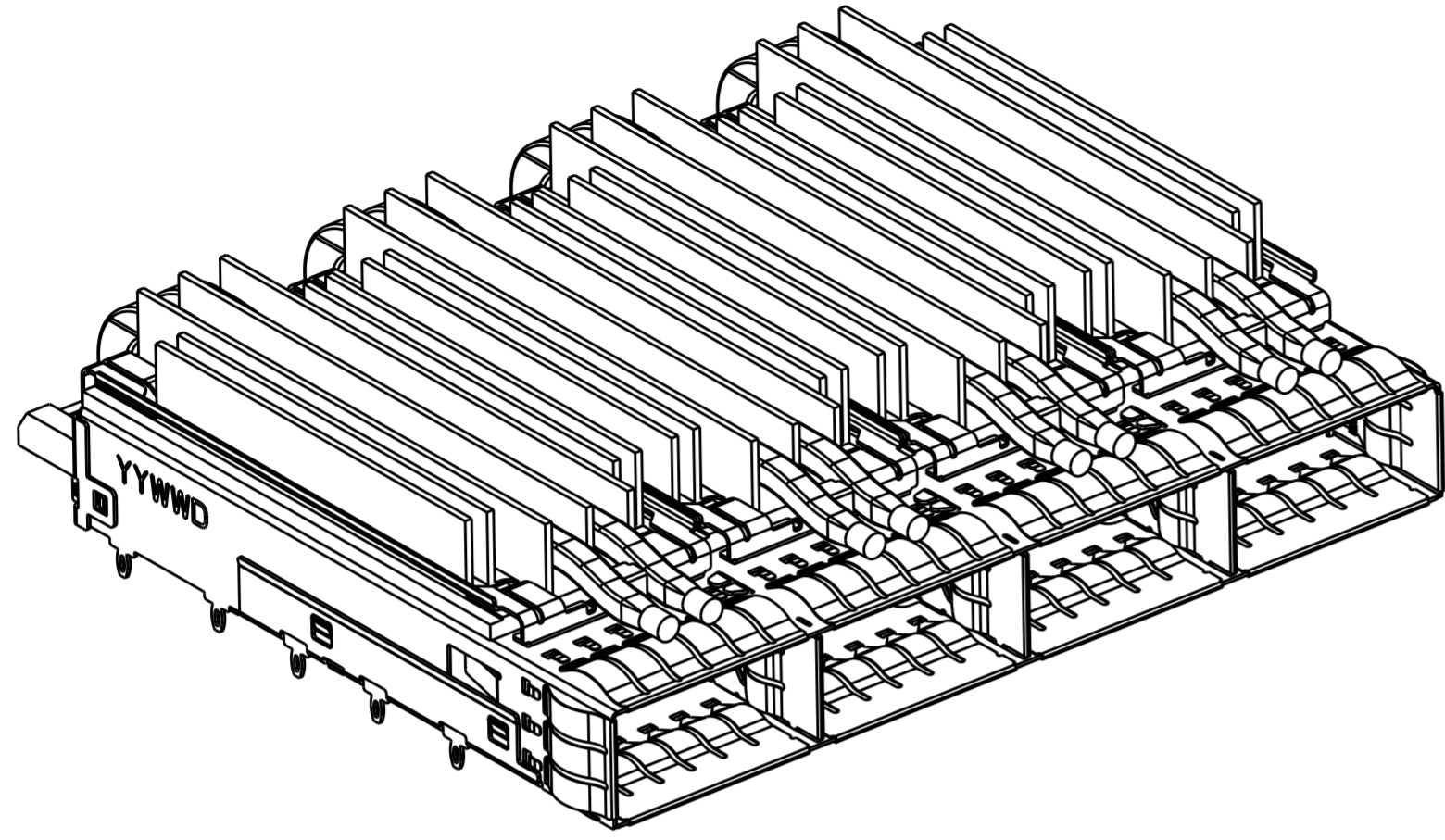
SCALE 2:1



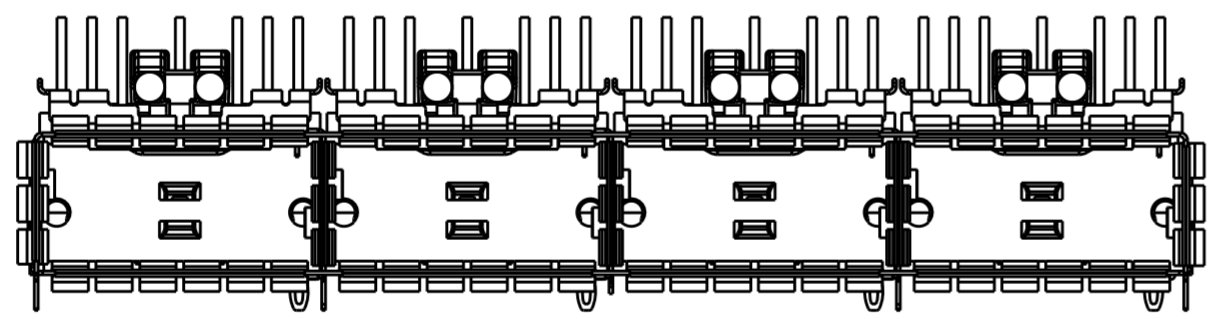
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	 TE Connectivity	
		CHK SEAN HAN 07 JUN 2014		
DIMENSIONS: mm		APVD -		NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC 108-19428
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 4 OF 13		REV C

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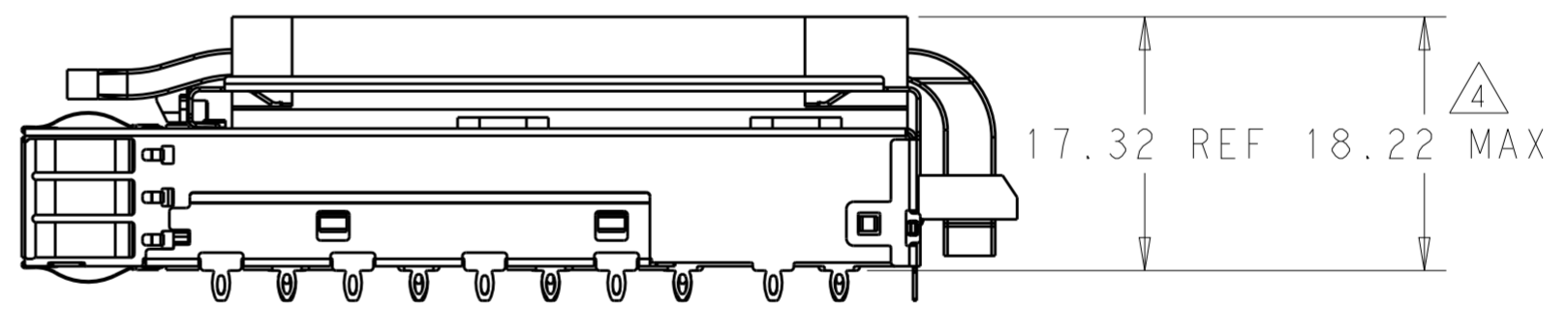
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-		SEE SHEET 1	-	-


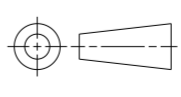


2-2170747-7 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



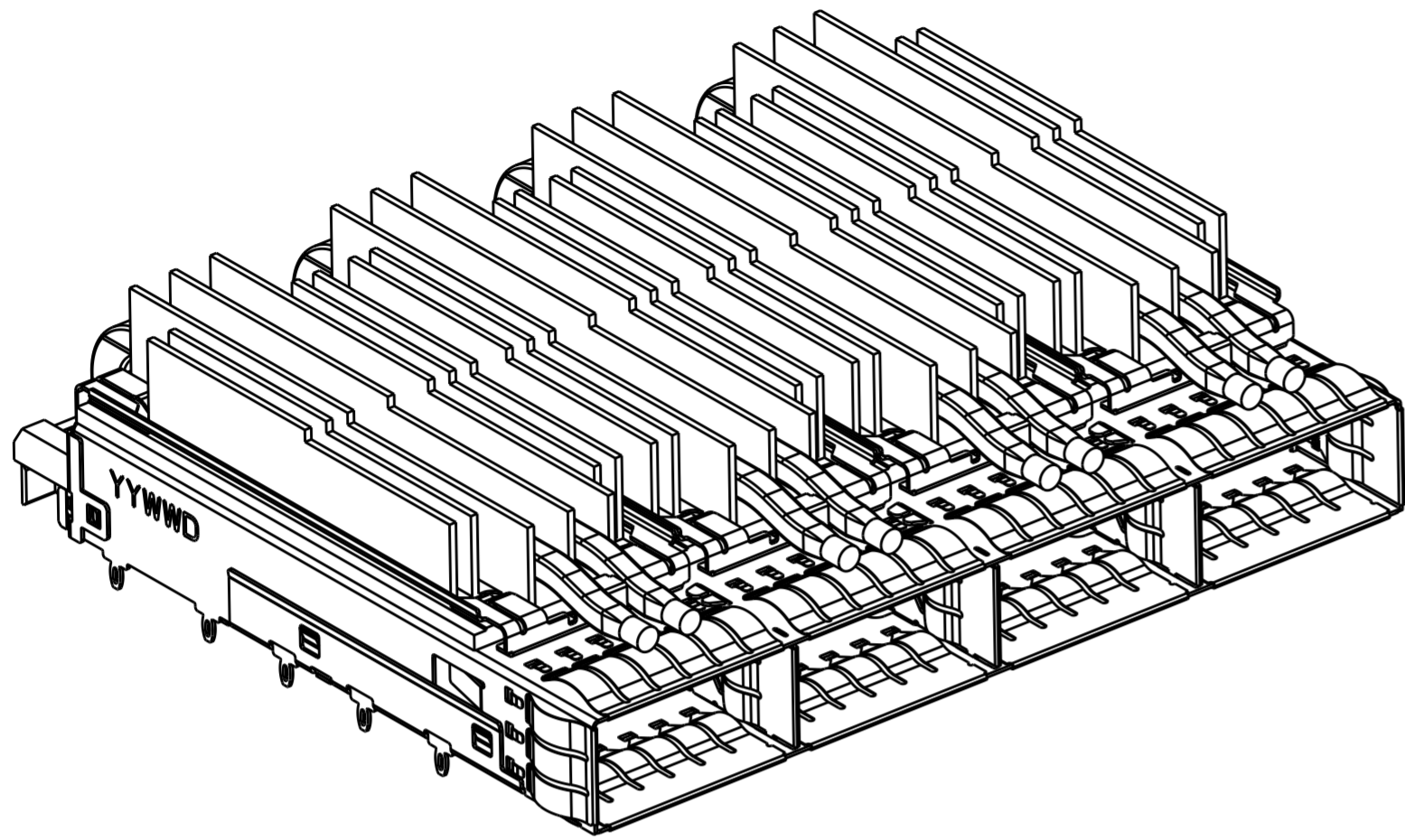
SCALE 2:1



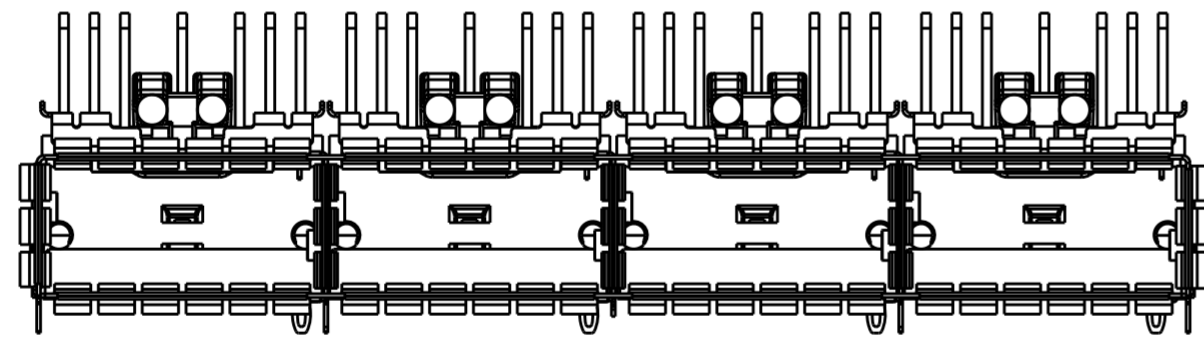
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04JUN2014	 TE Connectivity	
		CHK SEAN HAN 07JUN2014		
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		0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ±		PRODUCT SPEC 108-19428
MATERIAL SEE NOTES		APVD -		APPLICATION SPEC 114-32023
		WEIGHT -		SIZE A2
		CUSTOMER DRAWING		CAGE CODE 00779
		SCALE 1:1		DRAWING NO C-2170747
		SHEET 5 OF 13		RESTRICTED TO -
		REV C		

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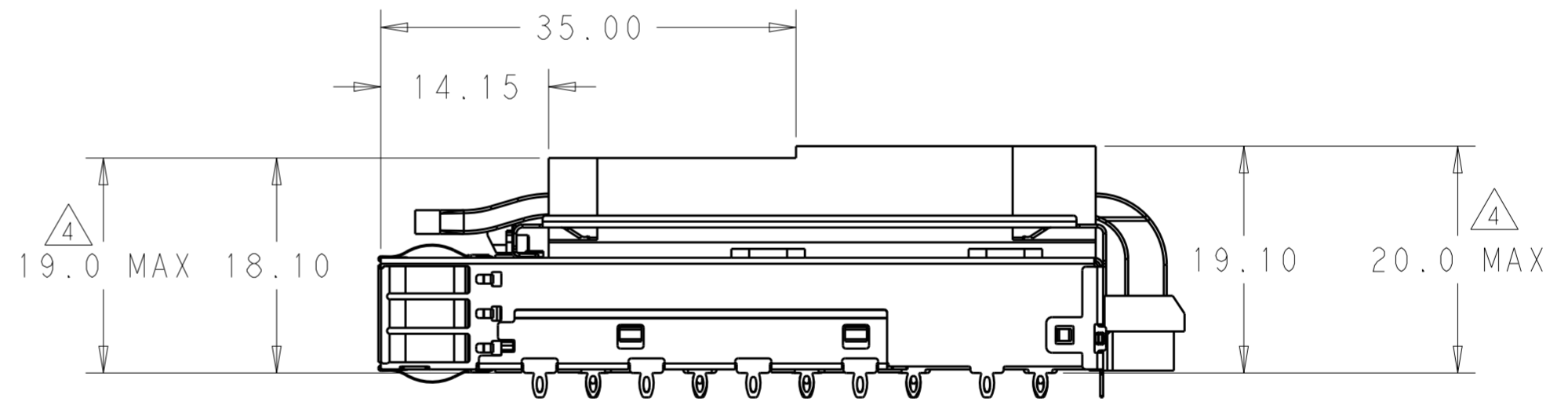
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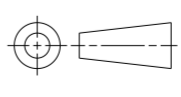


2-2170747-8 AS SHOWN
 WITH CUSTOMIZED HEAT SINK
 SCALE 2:1



SCALE 2:1



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		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
MATERIAL SEE NOTES		MATERIAL SEE NOTES		APPLICATION SPEC 114-32023
				RESTRICTED TO -
				SIZE A200779
				CAGE CODE C-2170747
				DRAWING NO C-2170747
				SCALE 1:1
				SHEET 6 OF 13
				REV C

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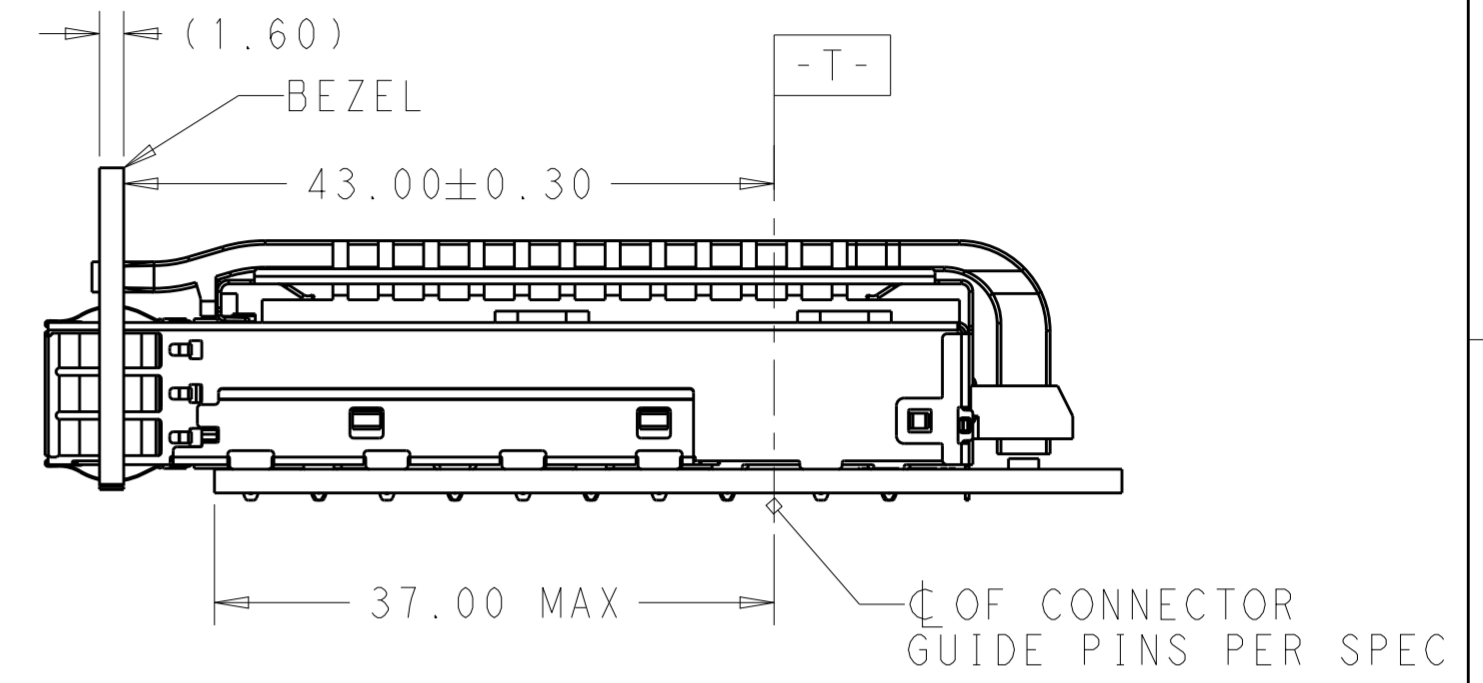
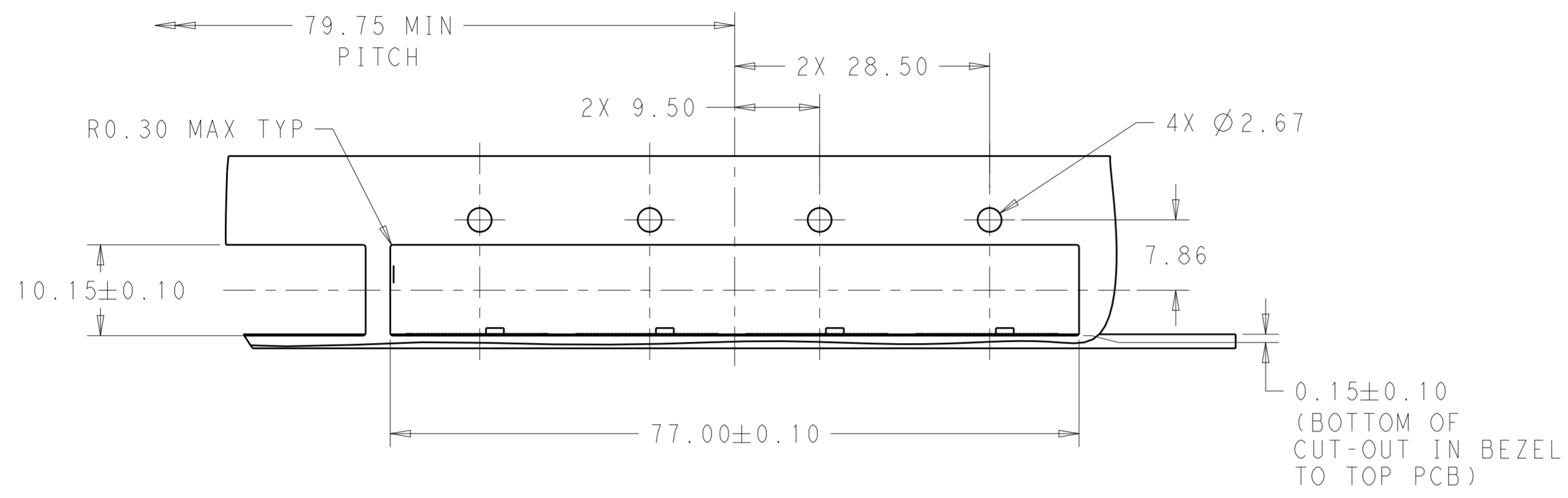
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-		SEE SHEET 1	-	-

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0	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

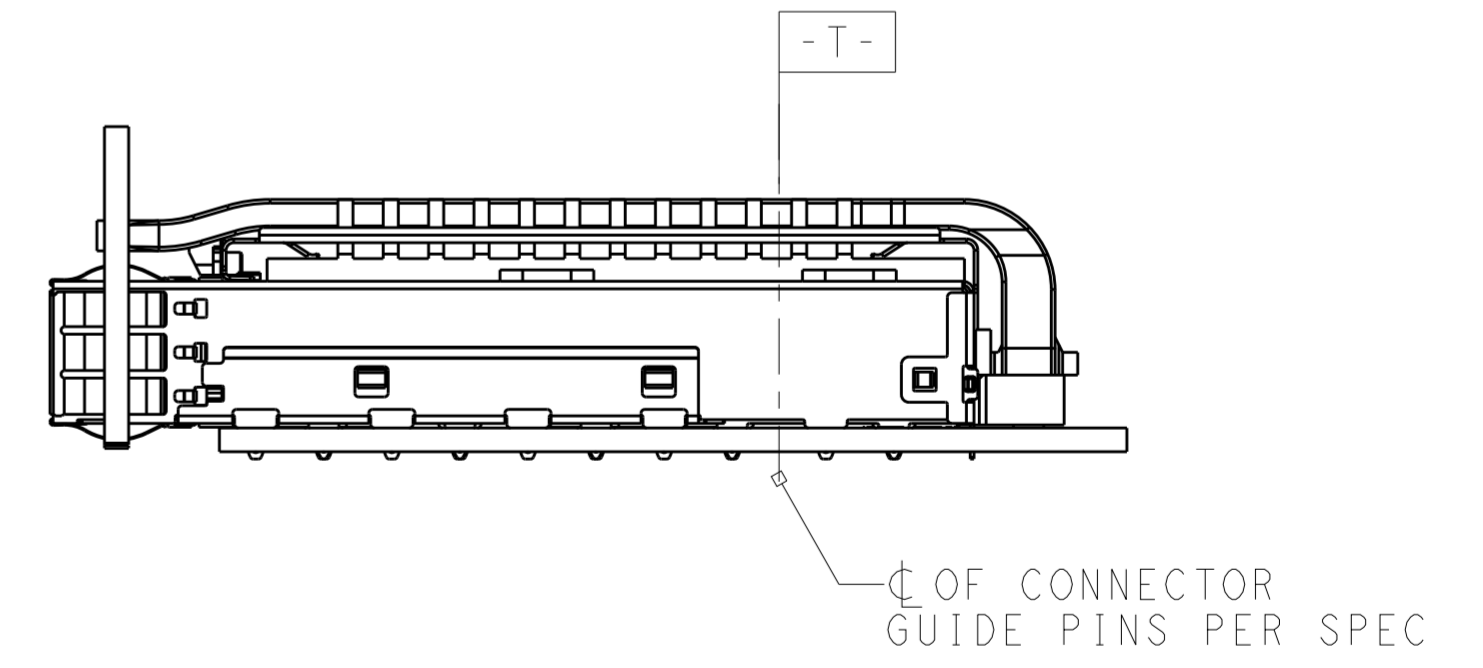
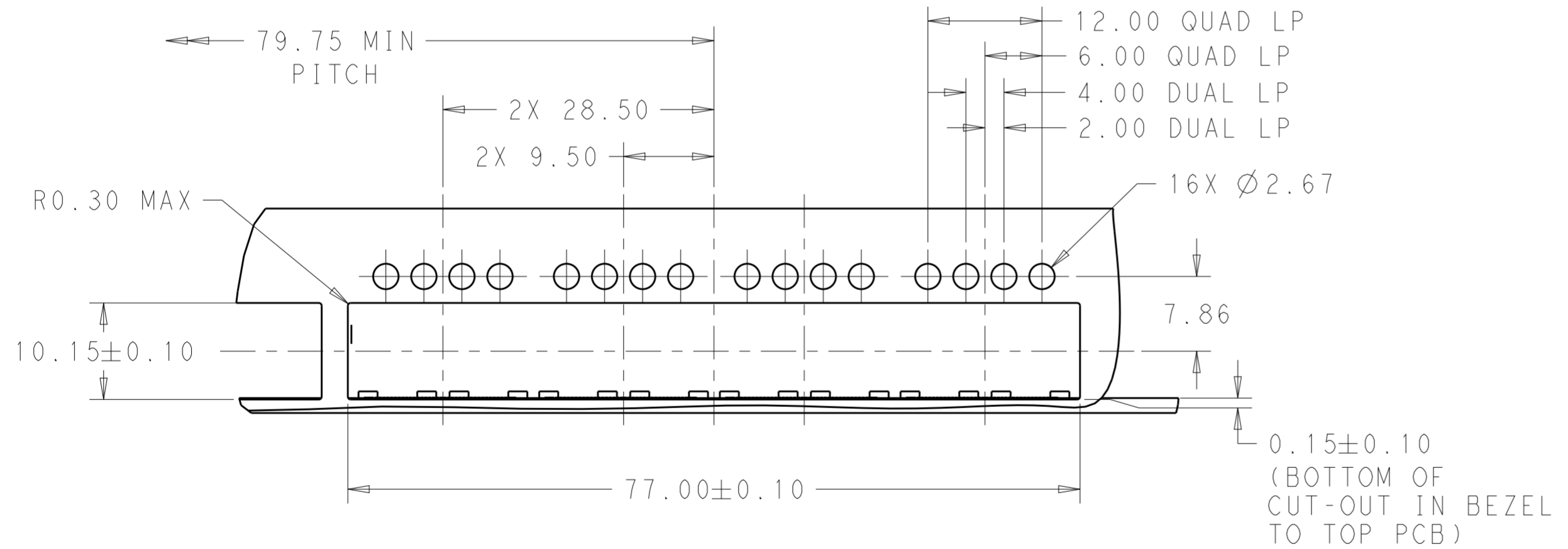
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	STE TE Connectivity	
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DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ±	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	
MATERIAL SEE NOTES	FINISH SEE NOTES	PRODUCT SPEC 108-19428	SIZE 114-32023	RESTRICTED TO -
		WEIGHT -	SCALE 1:1	SHEET 7 OF 13
		CUSTOMER DRAWING	SCALE 1:1	REV C

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-	-	SEE SHEET 1	-	-



SINGLE SIDE MOUNTING
SCALE 2:1

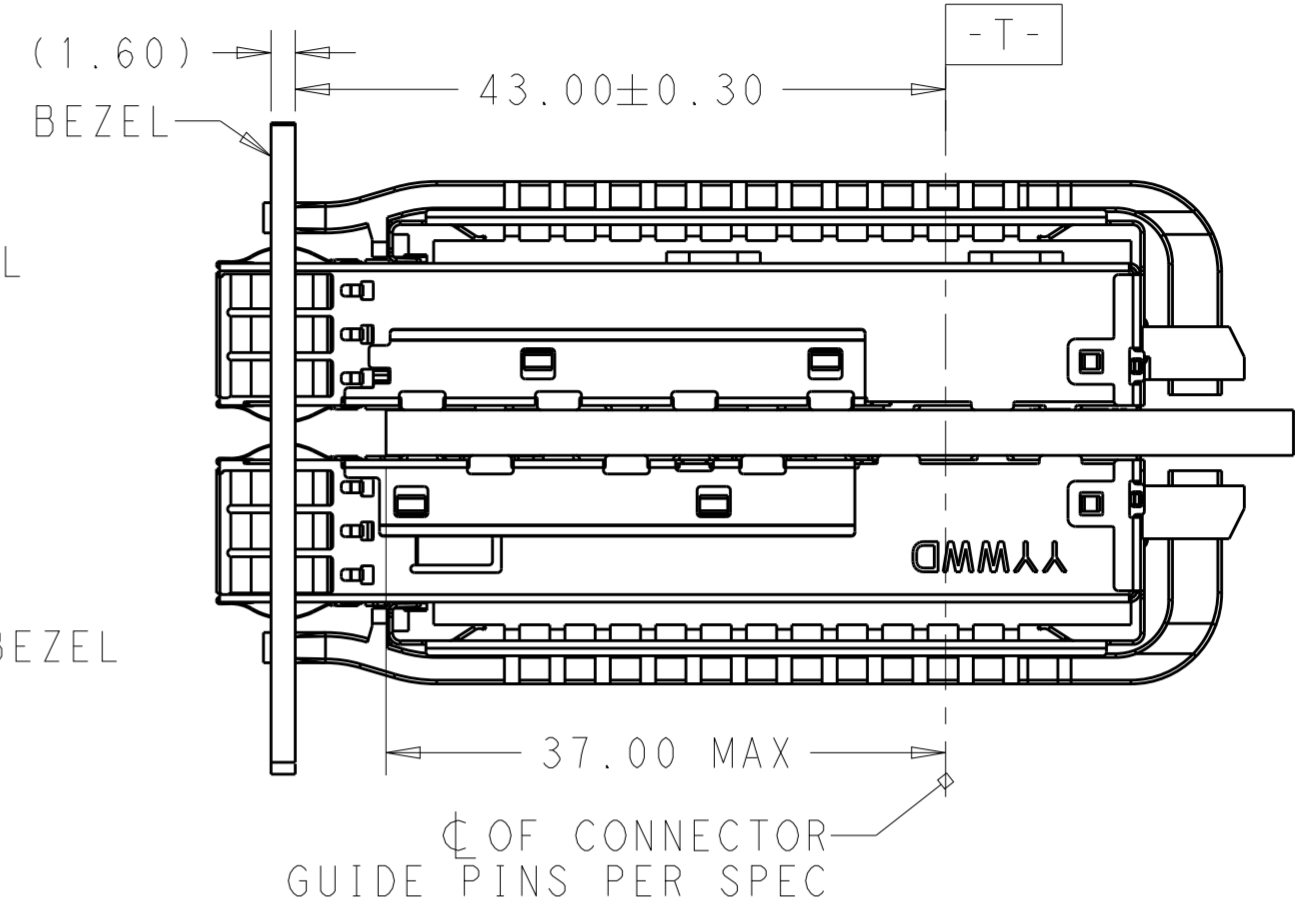
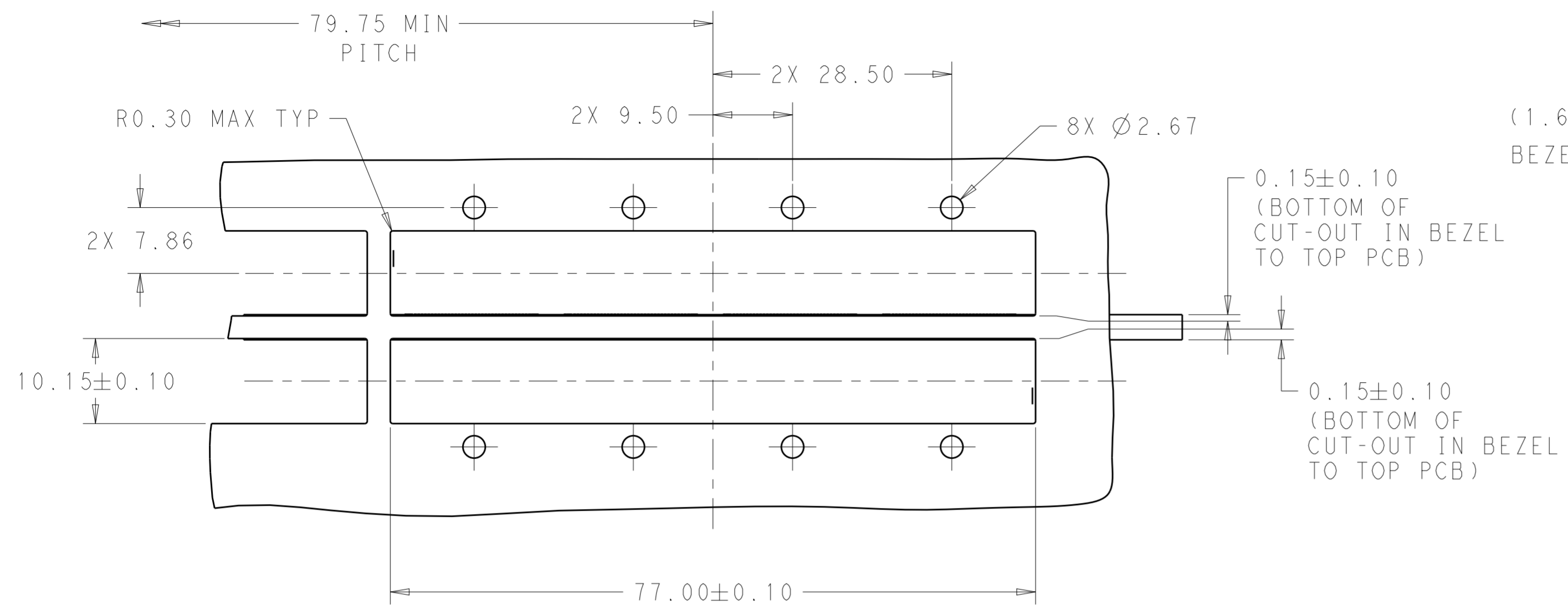


SINGLE SIDE MOUNTING
SCALE 2:1

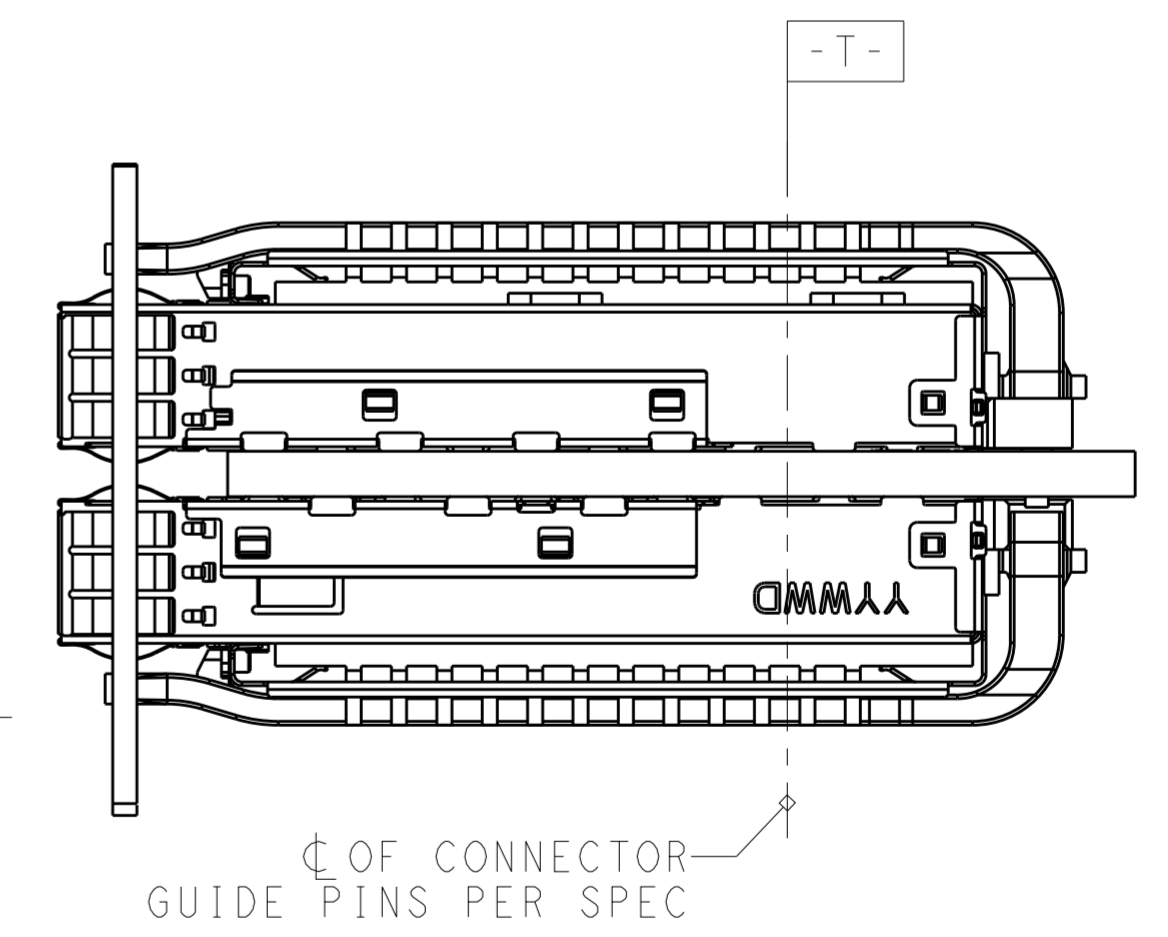
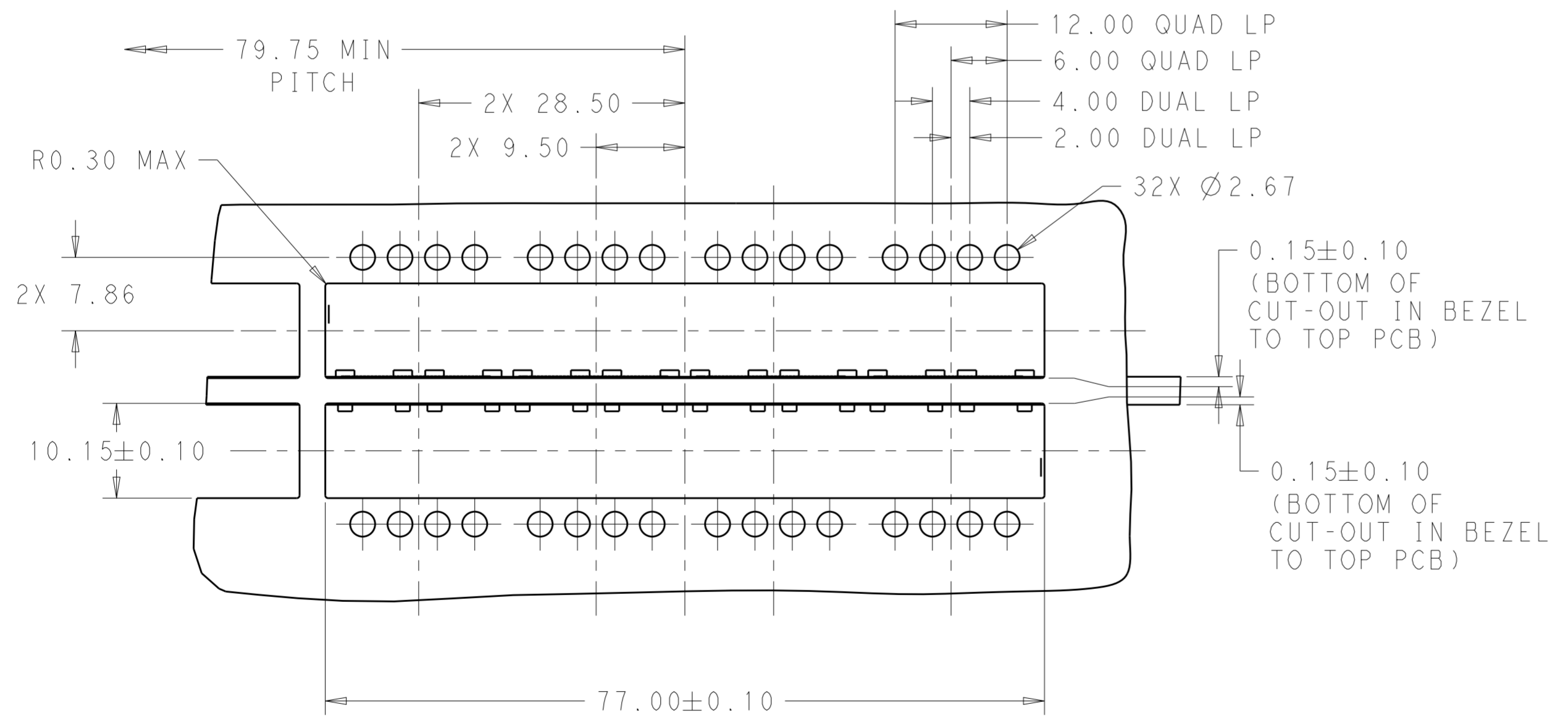
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	TE Connectivity	
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DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD -	NAME RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING	RESTRICTED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

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-	-	SEE SHEET 1	-	-



BELLY TO BELLY MOUNTING
SCALE 2:1

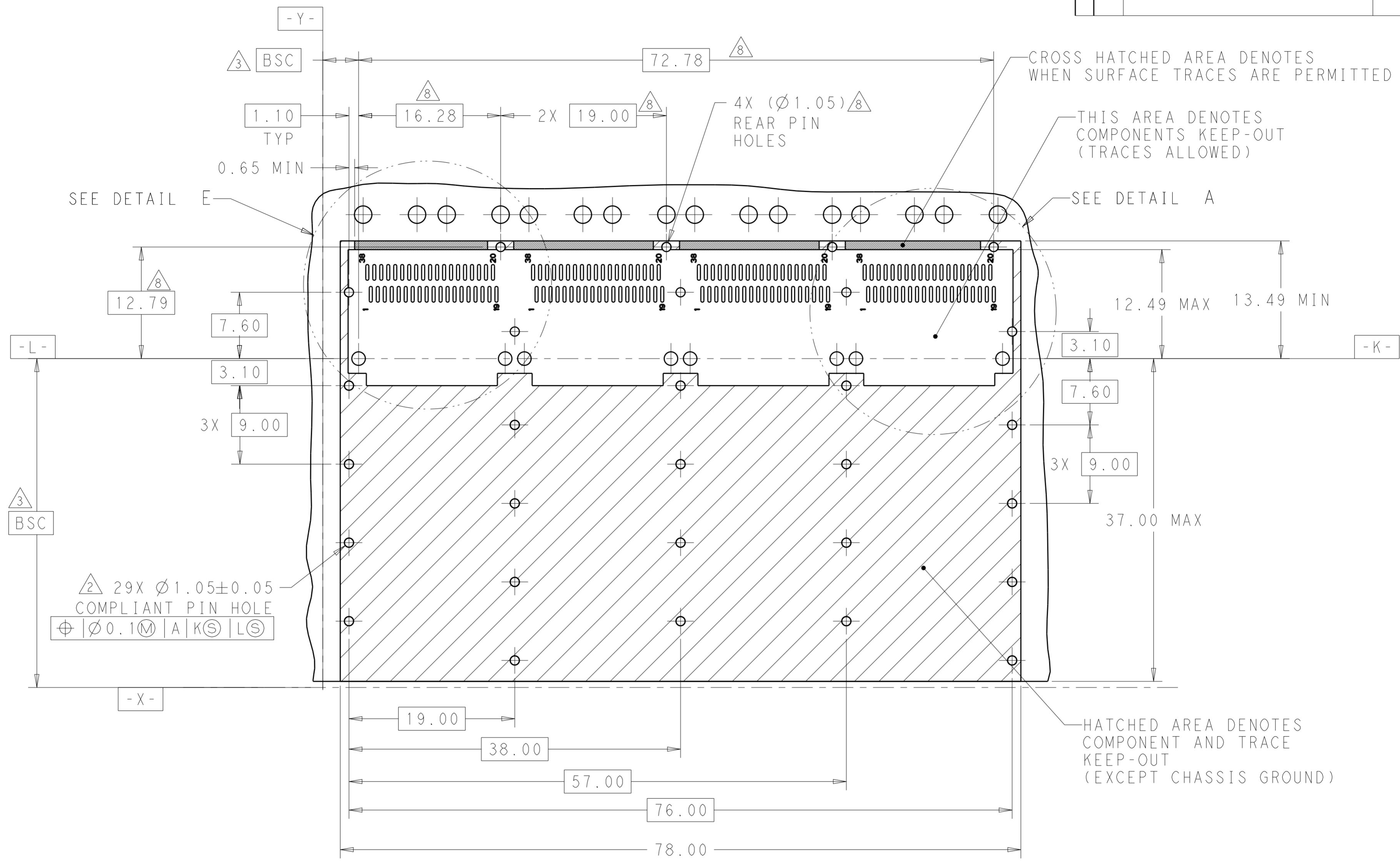


BELLY TO BELLY MOUNTING
SCALE 2:1

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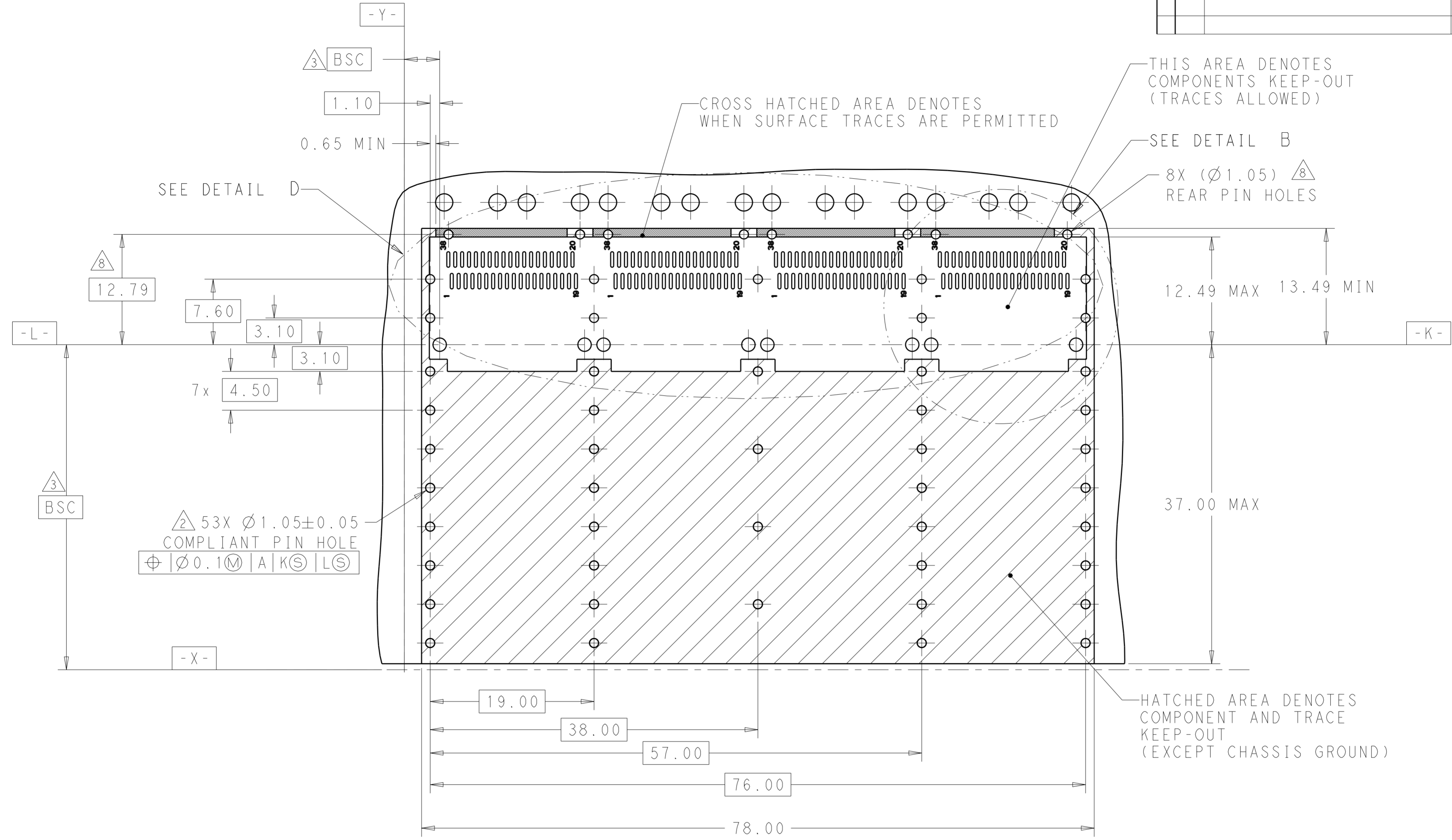
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



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

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN 04 JUN 2014 JASON YANG	TE Connectivity	
		CHK 07 JUN 2014 SEAN HAN		
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 CAGE CODE DRAWING NO A200779 C-2170747
		CUSTOMER DRAWING		RESTRICTED TO SCALE 1:1 SHEET 10 OF 13 REV C

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

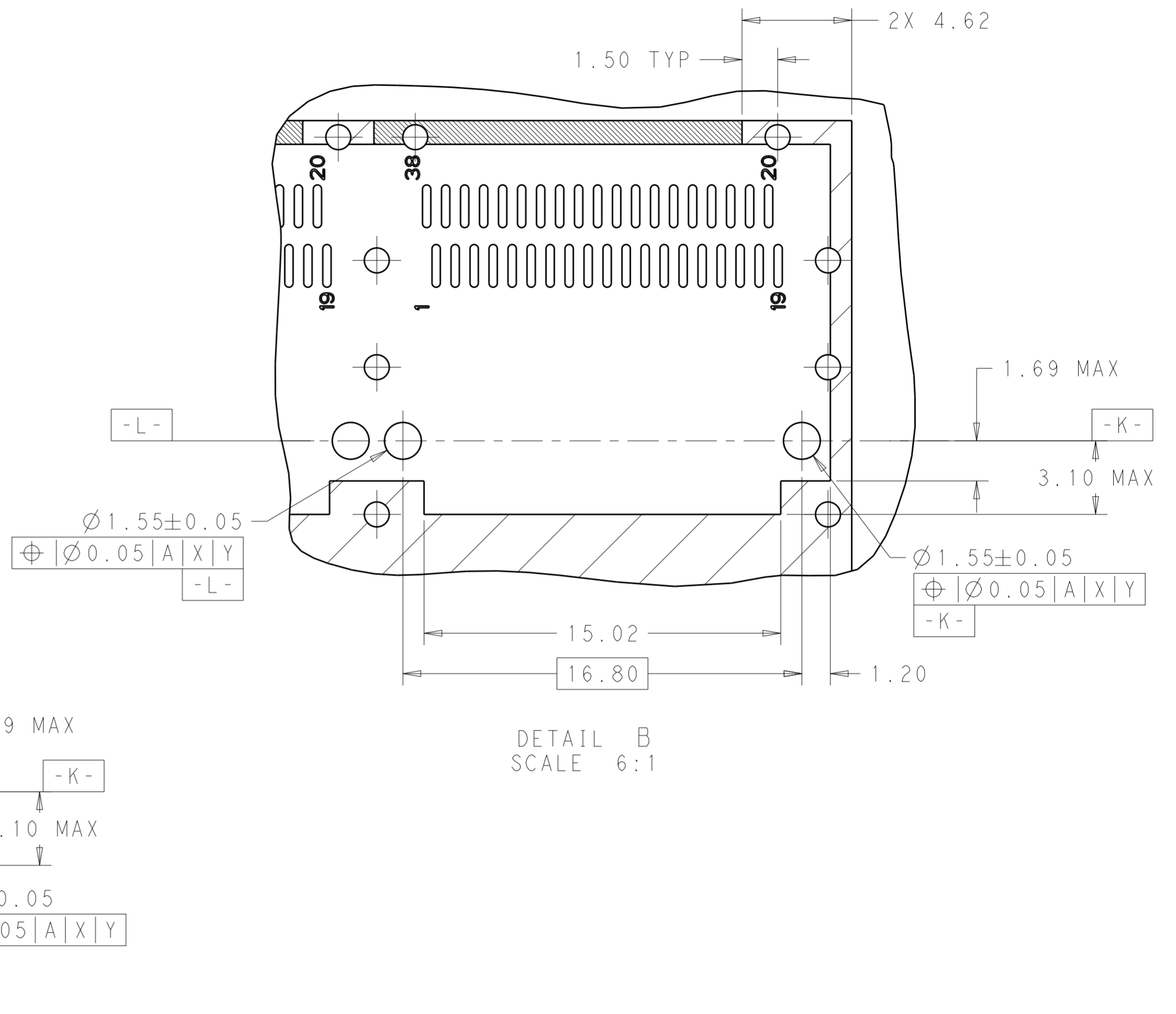
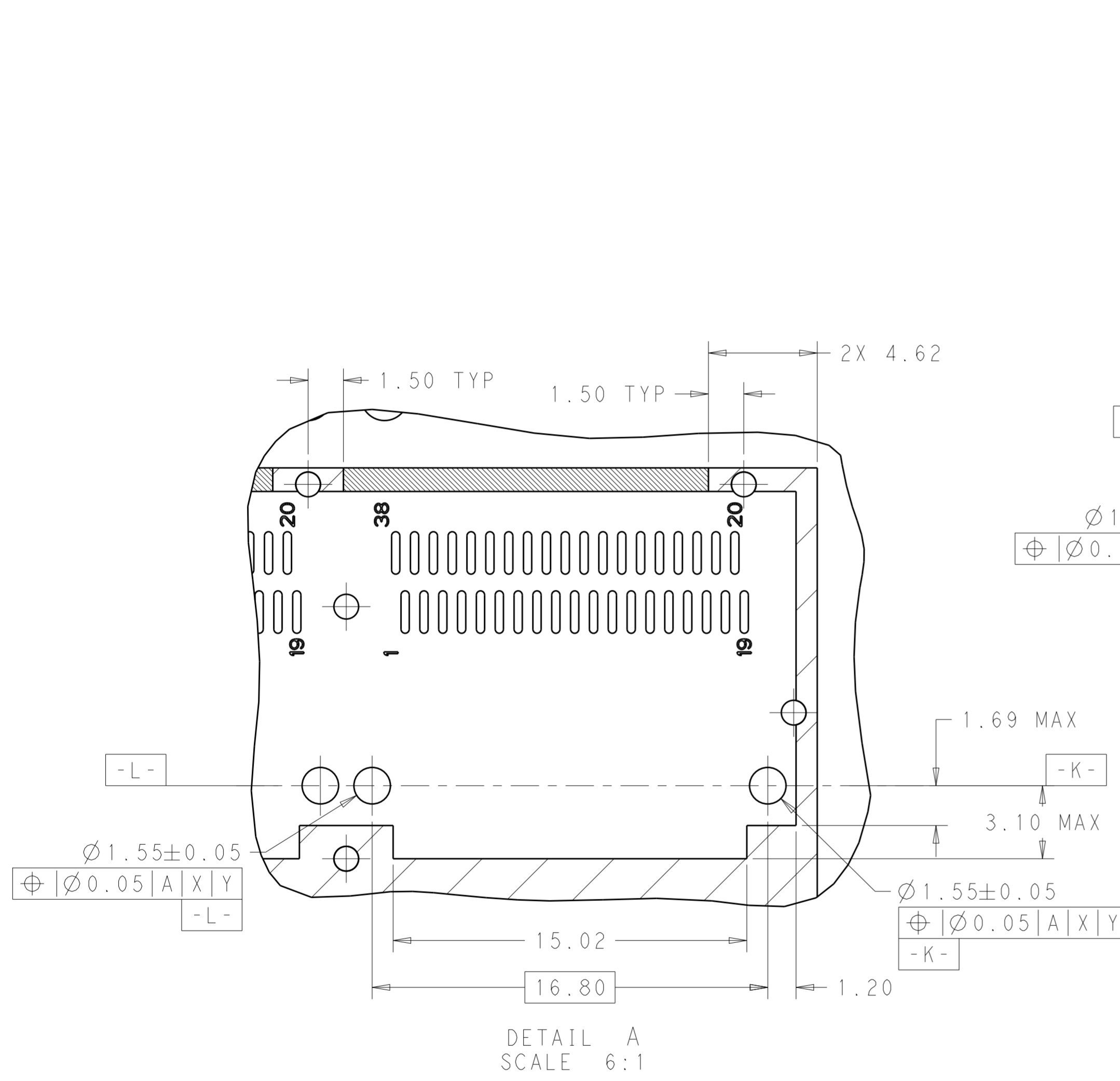


RECOMMENDED PCB LAYOUT
 BELLY TO BELLY TYPE
 PCB TOLERANCE: ±0.05
 SCALE 3:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	 TE Connectivity
		CHK SEAN HAN 07 JUN 2014	
DIMENSIONS: mm 		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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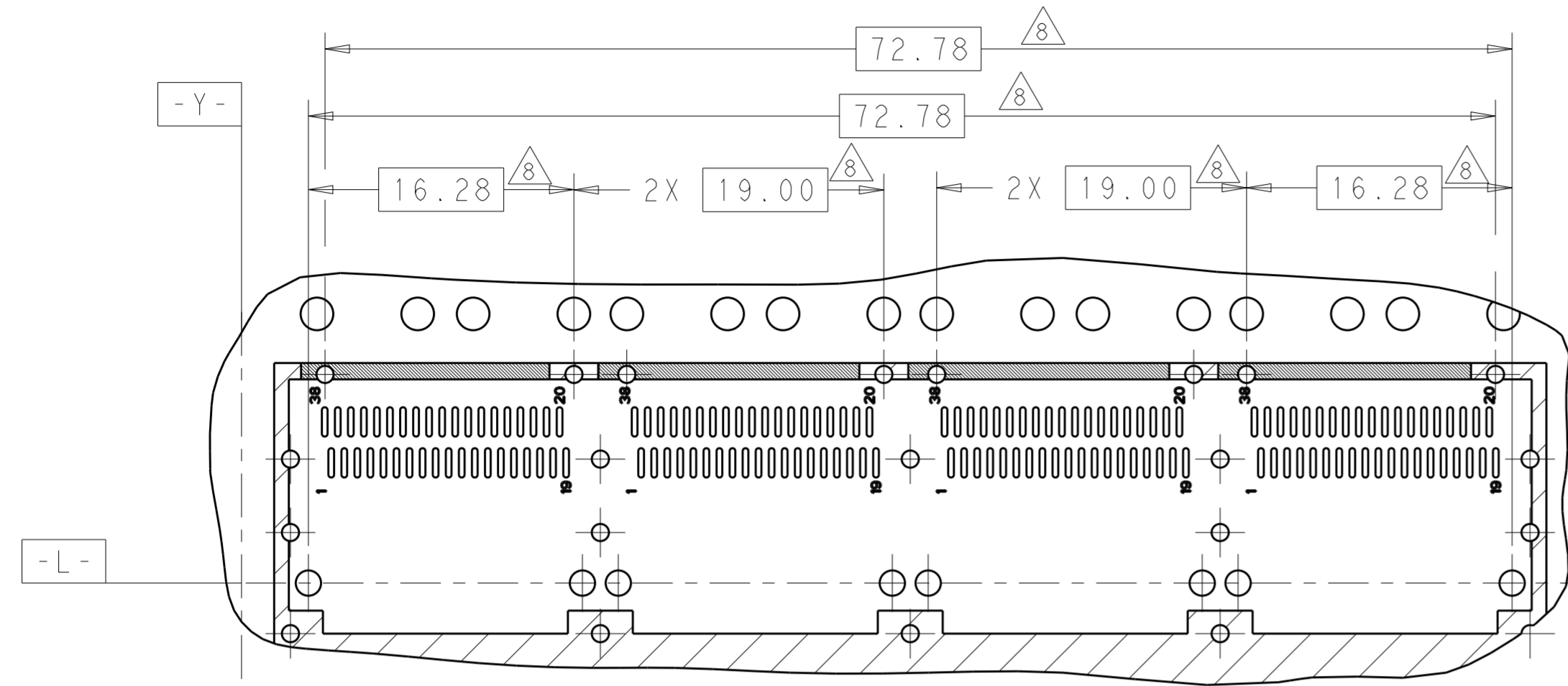
REVISIONS				
P	LTR	DESCRIPTION	DATE	APVD
-	-	SEE SHEET 1	-	-



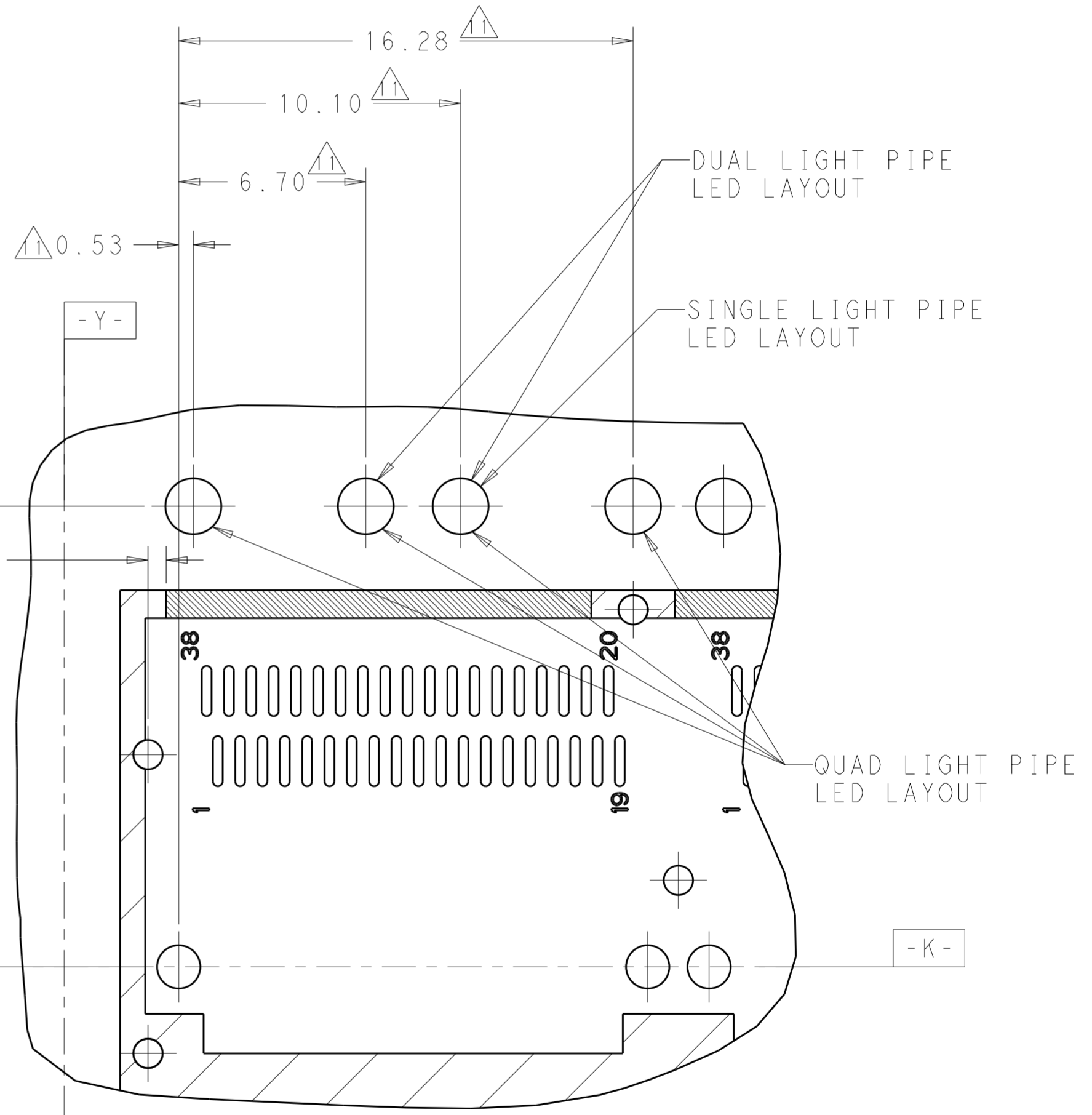
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN JASON YANG 04 JUN 2014	STE TE Connectivity
		CHK SEAN HAN 07 JUN 2014	
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	NAME
mm	0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH	PRODUCT SPEC 108-19428	RECEPTACLE CAGE ASSEMBLY WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, 1X4, QSFP28, SPRING
MATERIAL SEE NOTES	SEE NOTES	APPLICATION SPEC 114-32023	SIZE CAGE CODE DRAWING NO A200779 C-2170747
		WEIGHT	RESTRICTED TO
		CUSTOMER DRAWING	SCALE 1:1 SHEET 12 OF 13 REV C

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



DETAIL D
SCALE 3:1



DETAIL E
SCALE 6:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN 04 JUN 2014 JASON YANG	STE TE Connectivity
		CHK 07 JUN 2014 SEAN HAN	
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
MATERIAL	FINISH	APPLICATION SPEC	SIZE CAGE CODE DRAWING NO
SEE NOTES	SEE NOTES	114-32023	A200779C-2170747
		WEIGHT -	RESTRICTED TO
		CUSTOMER DRAWING	SCALE 1:1 SHEET 13 OF 13 REV C