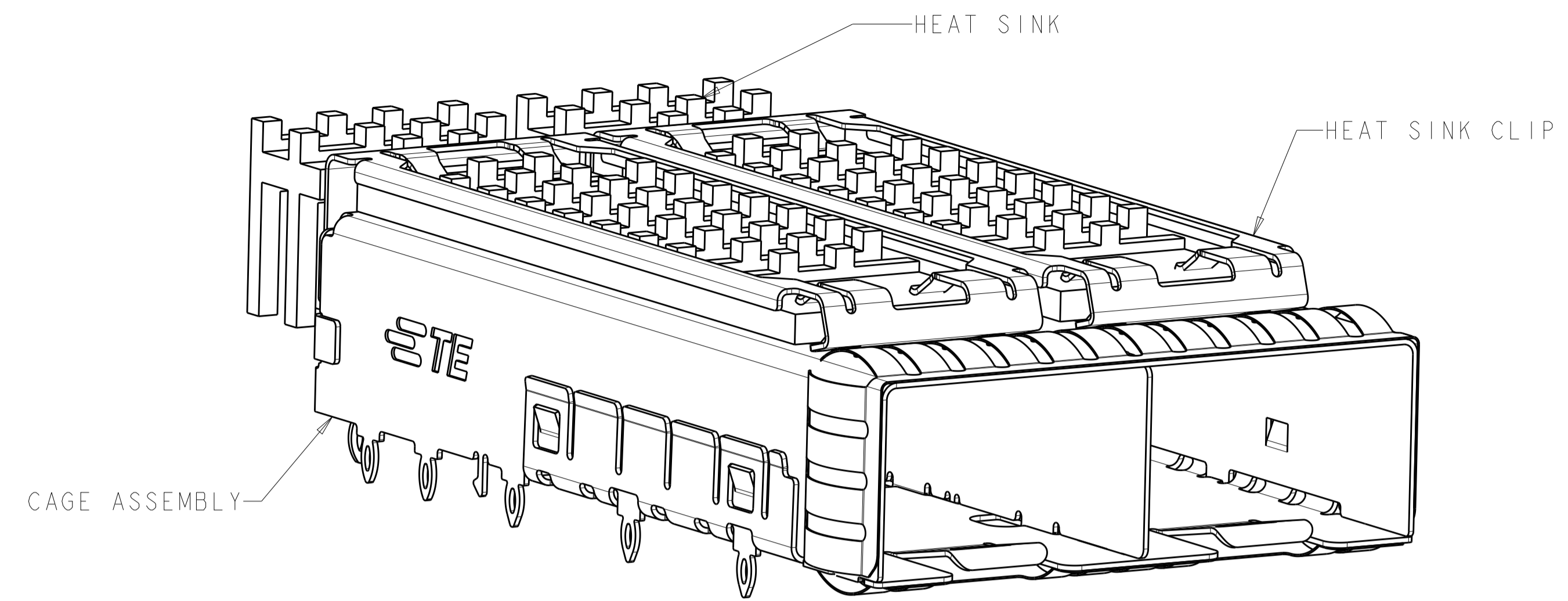
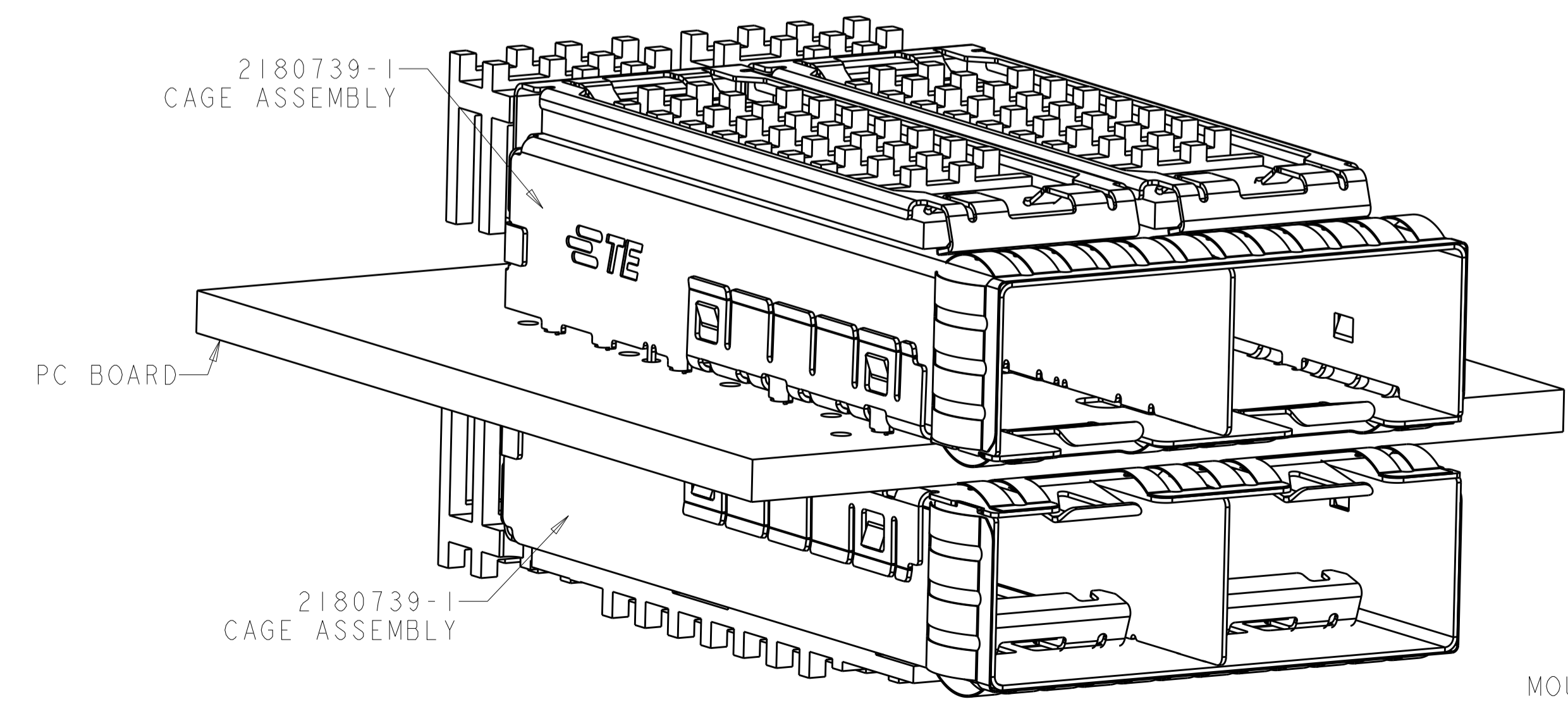
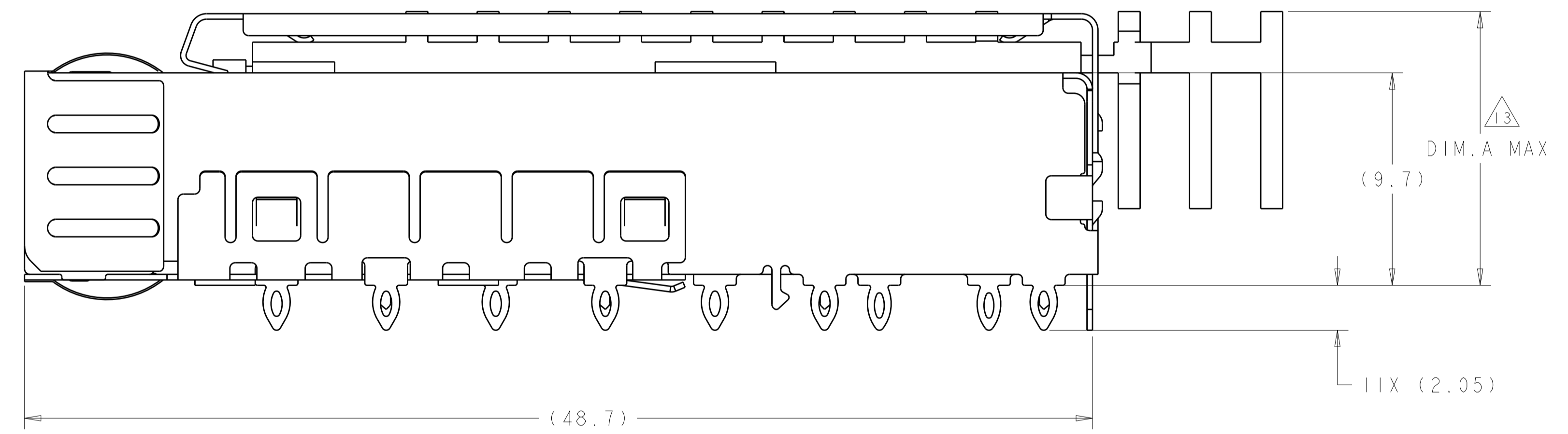
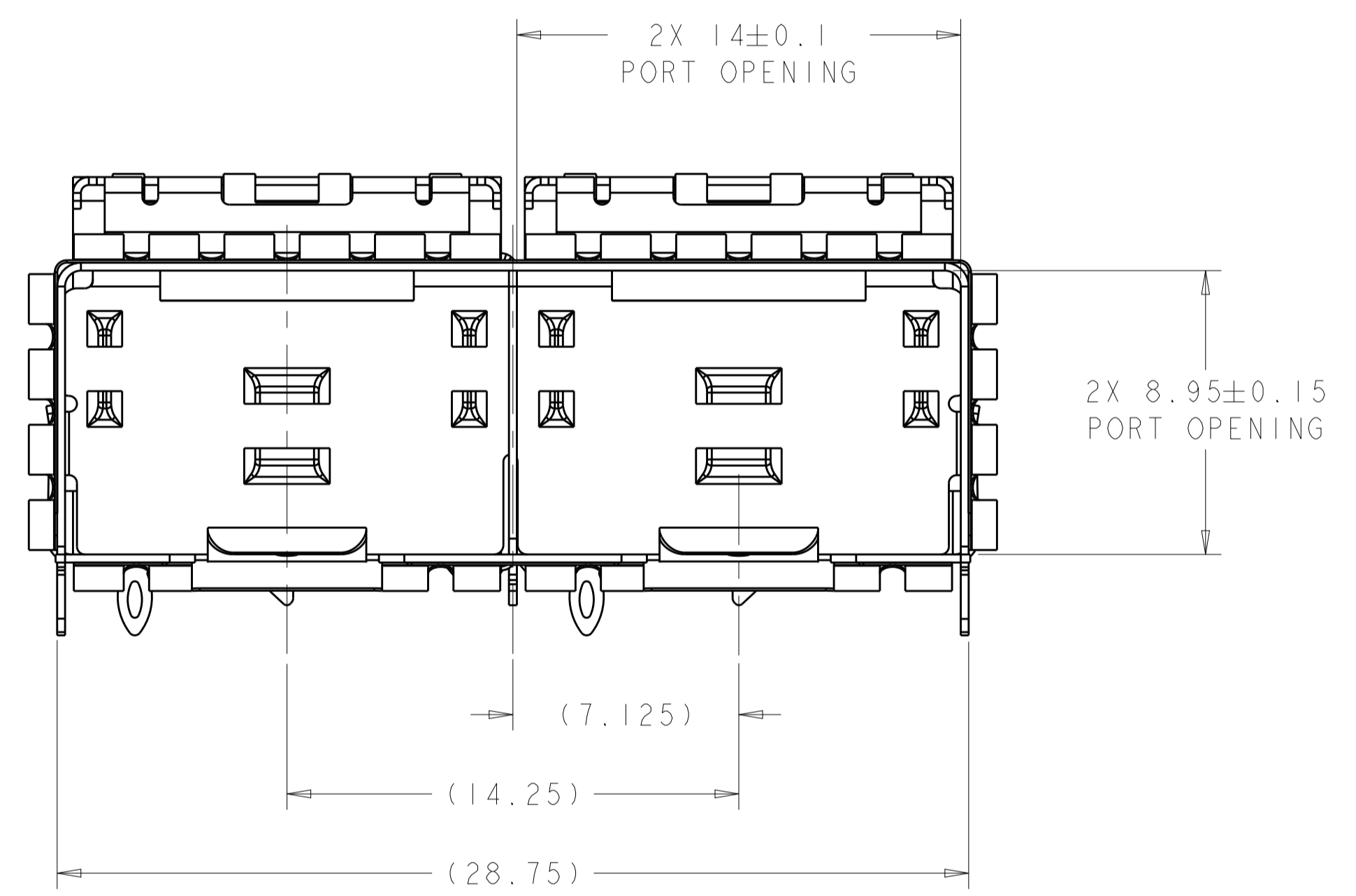


LOC	DIST	REV	DATE	BY	CHK	APPD
GP	00					

REVISIONS						
REV	DATE	BY	CHK	APPD	DESCRIPTION	DATE
A1	30AUG2018	IT	SH		REVISED PER ECR-18-013796	
A2	10OCT2018	IT	SH		REVISED PER ECR-18-016039	
A3	27MAY2019	IT	SH		ADD PART *-5	
A4	09JAN2020	IT	SH		ADD PN 2170190-6	



2170190-1
SCALE 5:1



2170190-1
MOUNTED BELLY TO BELLY
SCALE 4:1

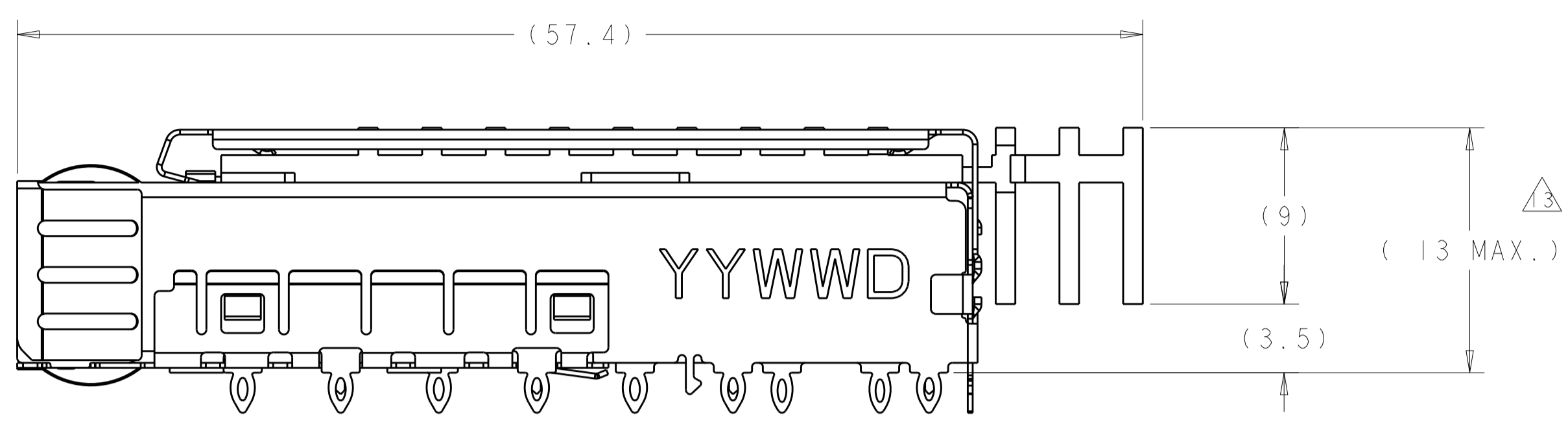
- 1. MATERIAL:
 CAGE ASSEMBLY: 0.25mm THICK NICKEL SILVER ALLOY
 EMI SPRINGS: COPPER ALLOY
 HEAT SINK: ALUMINUM
 HEAT SINK CLIP: STAINLESS STEEL.
 INSULATOR: KAPTON
- 2. FINISH:
 2170190-1/-2/-4 HEAT SINK: HARD ANODIC COATING
 2170190-3 HEAT SINK: BLACK ANODIZE
 2170190-5/-6 HEAT SINK: GRAY ANODIZE
 HEAT SINK CLIP: PASSIVATE.
- 3. DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- 4. PADS AND VIAS CHASSIS GROUND.
- 5. MATES WITH SFP MSA COMPLIANT RECIEVERS.
- 6. INTERPRETATION OF DATUM REFERENCE FRAME IN ACCORDANCE WITH SECT 4.4.1.1 OR ASME Y14.5M-1994.
- 7. MINIMUM PC BOARD THICKNESS:
 SINGLE SIDED: 1.5mm
 DOUBLE SIDED: 2.25
- 8. HOLE PATTERN REPEATS FOR EACH PORT, SPACING BETWEEN PORTS IS 14.25mm.
- 9. REFERENCE APPLICATION SPEC. 114-13120, HOLE A, FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- 10. REFERENCE APPLICATION SPEC. 114-13120, HOLE B, FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- 11. CERTAIN MATING TRANCEIVERS MAY REQUIRE ADDITIONAL PCB THICKNESS THAT WOULD NEED TO BE DETERMINED BY THE CUSTOMER.

- 12. PRODUCT COMPLIES WITH SPECIFICATION SFF-8433 IMPROVED PLUGGABLE FORM FACTOR FOR SFP+ GANGED CAGES.
- 13. DIMENSION APPLIES PRIOR TO INSERTION OF SFP MODULE.
- 14. PRELIMINARY PART, NO RELEASED TO MASS PRODUCTION

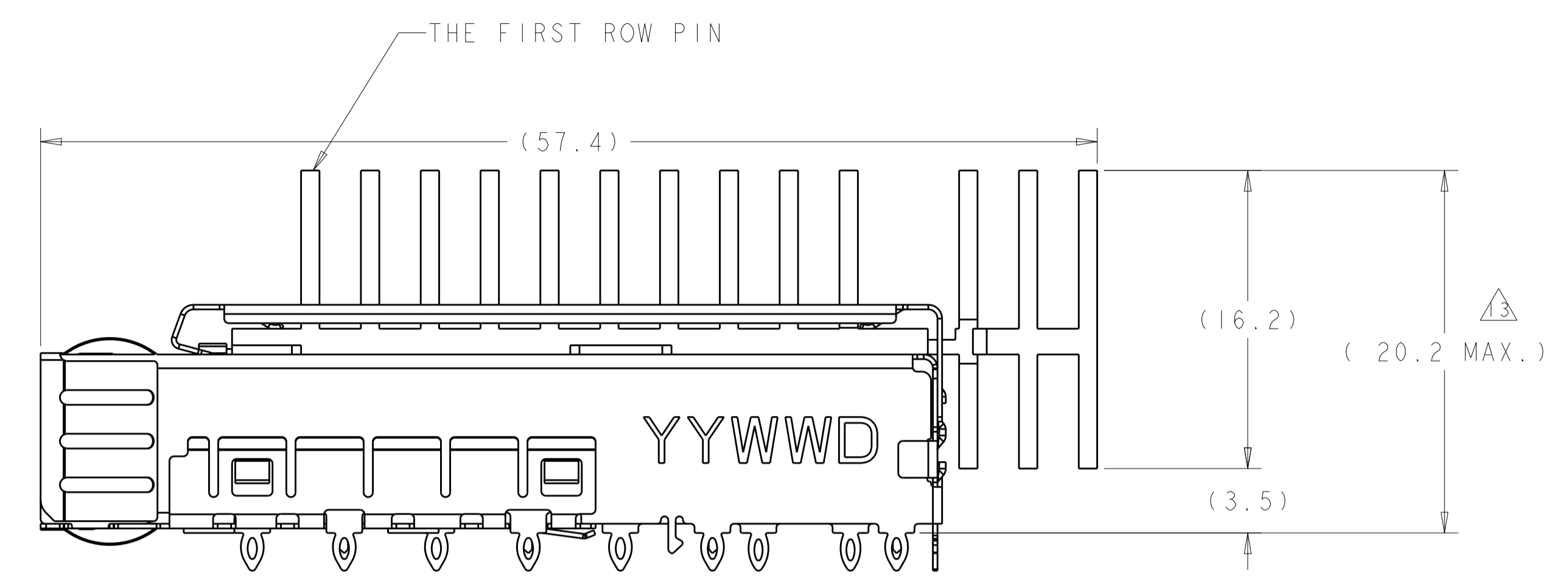
PIN TYPE	HEAT SINK W/ THE FRIST ROW PIN	2170190-6
PIN TYPE	HEAT SINK W/ THE FRIST ROW PIN	2170190-5
PIN TYPE	HEAT SINK W/ THE FRIST ROW PIN	2170190-4
FIN TYPE	HEAT SINK W/ THE FRIST ROW PIN	2170190-3
PIN TYPE	HEAT SINK W/ THE FIRST ROW PIN	2170190-2
PIN TYPE	HEAT SINK W/O THE FIRST ROW PIN	2170190-1
HEAT SINK	DESCRIPTION	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN	TIM XUE	21NOV2011
DIMENSIONS:		CHK	ALEX CAI	21NOV2011
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APPD	ALEX CAI	21NOV2011
0 PLC	±0.13	NAME		
1 PLC	±0.1	SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK		
2 PLC	±0.08	PRODUCT SPEC		
3 PLC	±0.05	108-2364		
4 PLC	±0.05	APPLICATION SPEC		
ANGLES	±0.5	114-13120		
MATERIAL	FINISH	WEIGHT	SIZE	CAGE CODE
			A1	00779
CUSTOMER DRAWING		SCALE	6:1	SHEET 1 OF 6

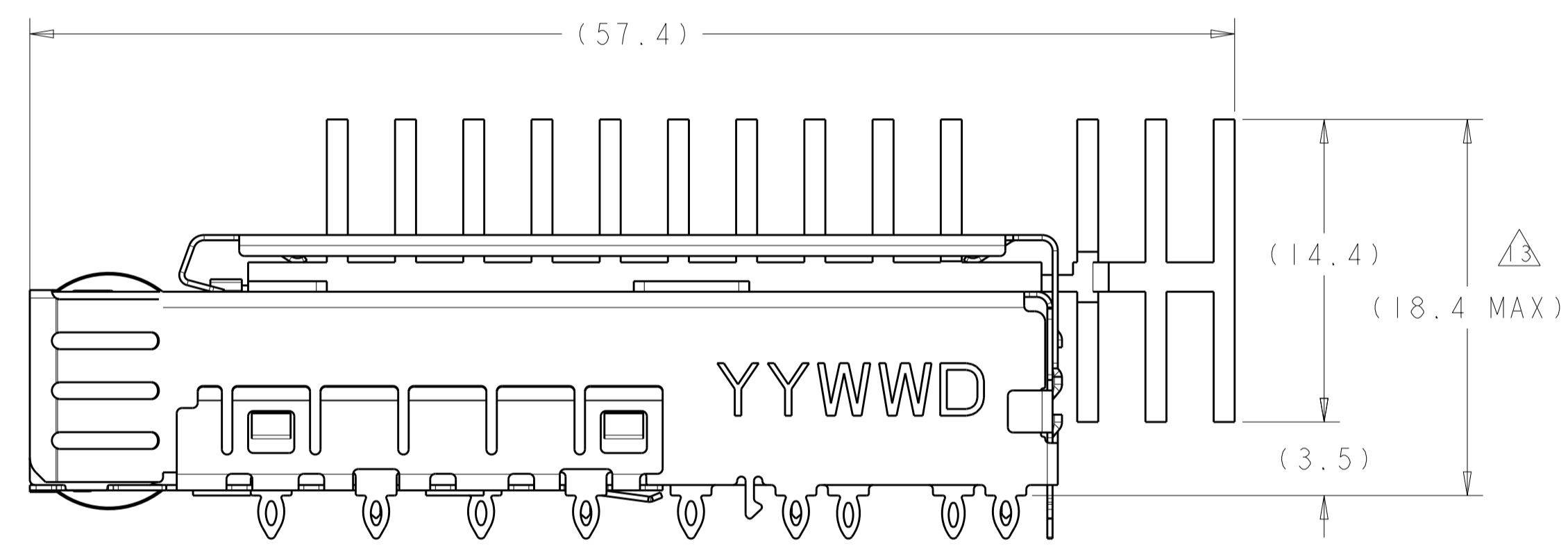
LOC	DIST	REVISIONS			
GP	00	REV	DATE	BY	APPD
-	-	SEE SHEET 1	-	-	-



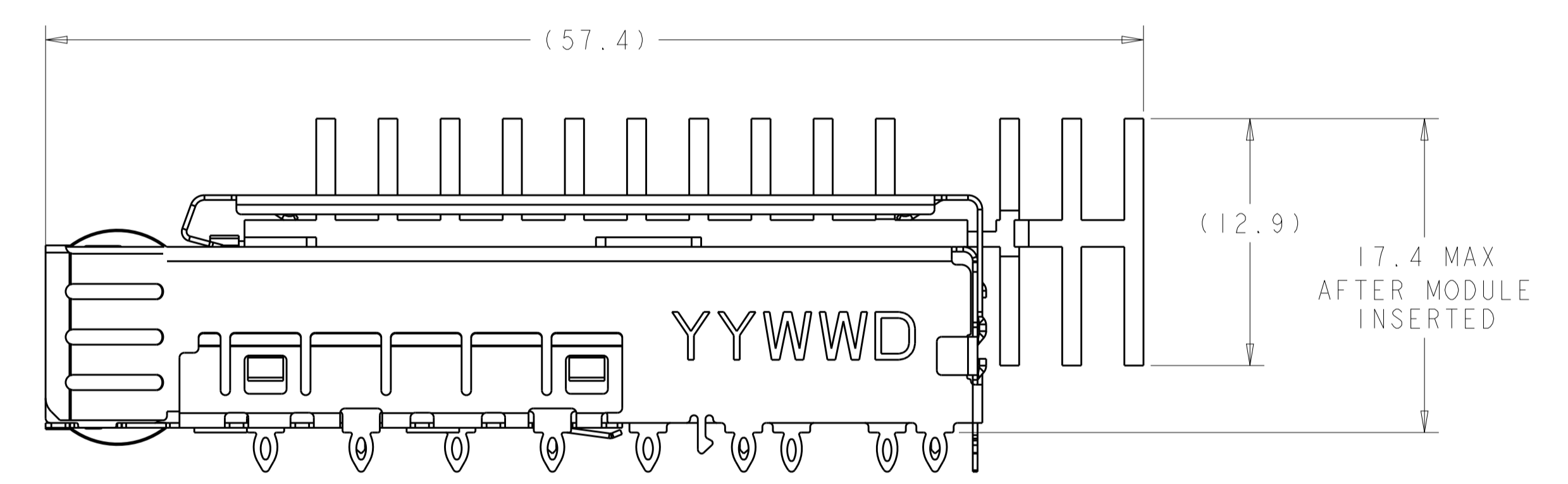
2170190-1 AS SHOWN
HEAT SINK W/O THE FIRST ROW PIN



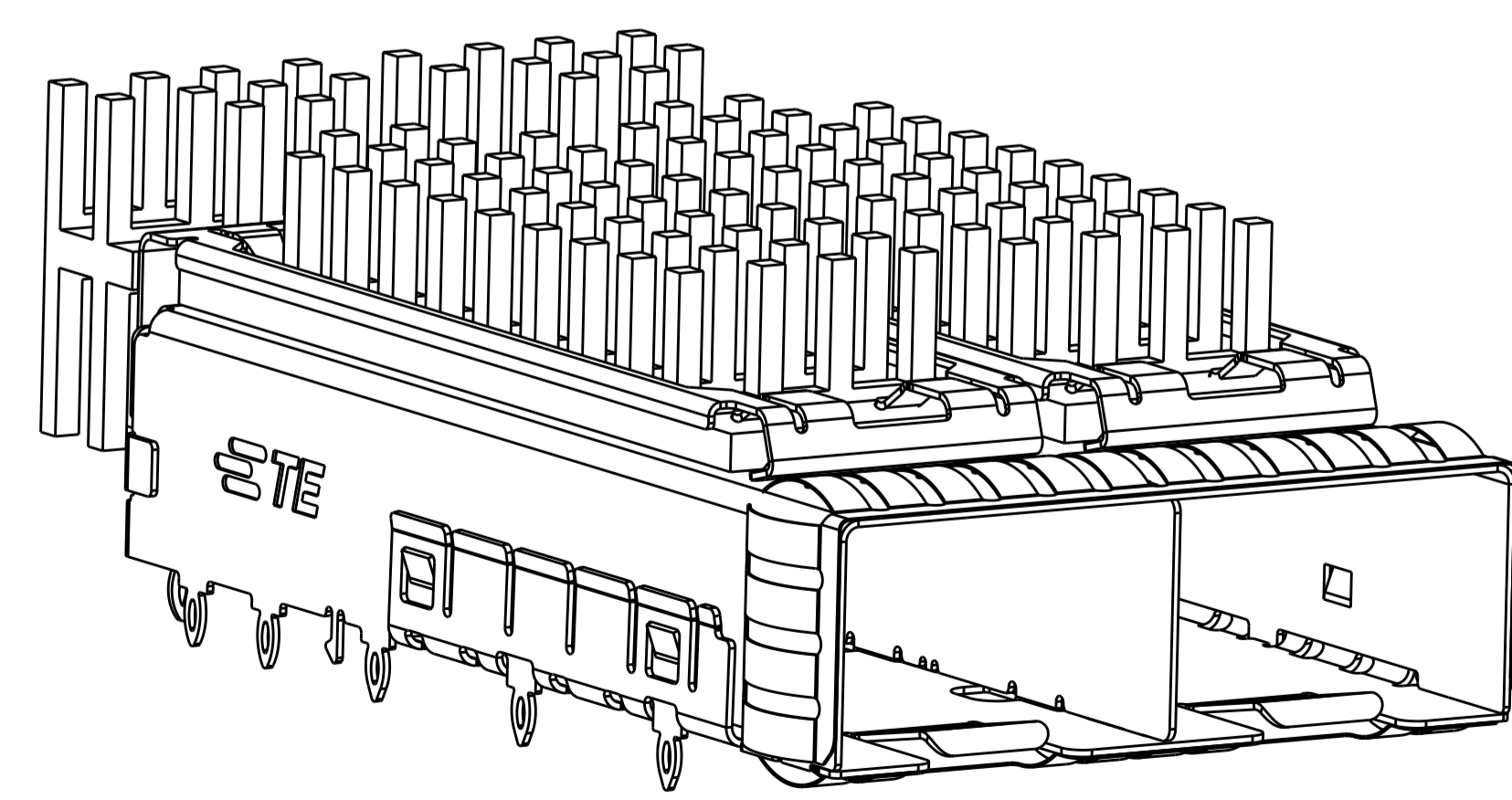
2170190-2 AS SHOWN



2170190-5 AS SHOWN
SCALE 4:1



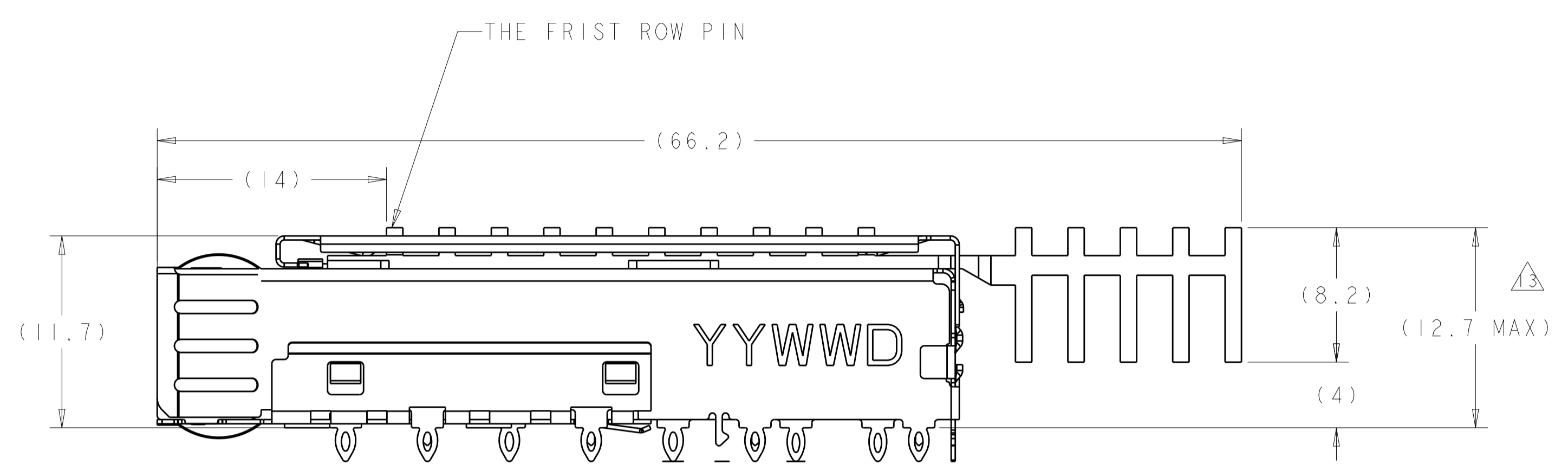
2170190-6 AS SHOWN
SCALE 4:1



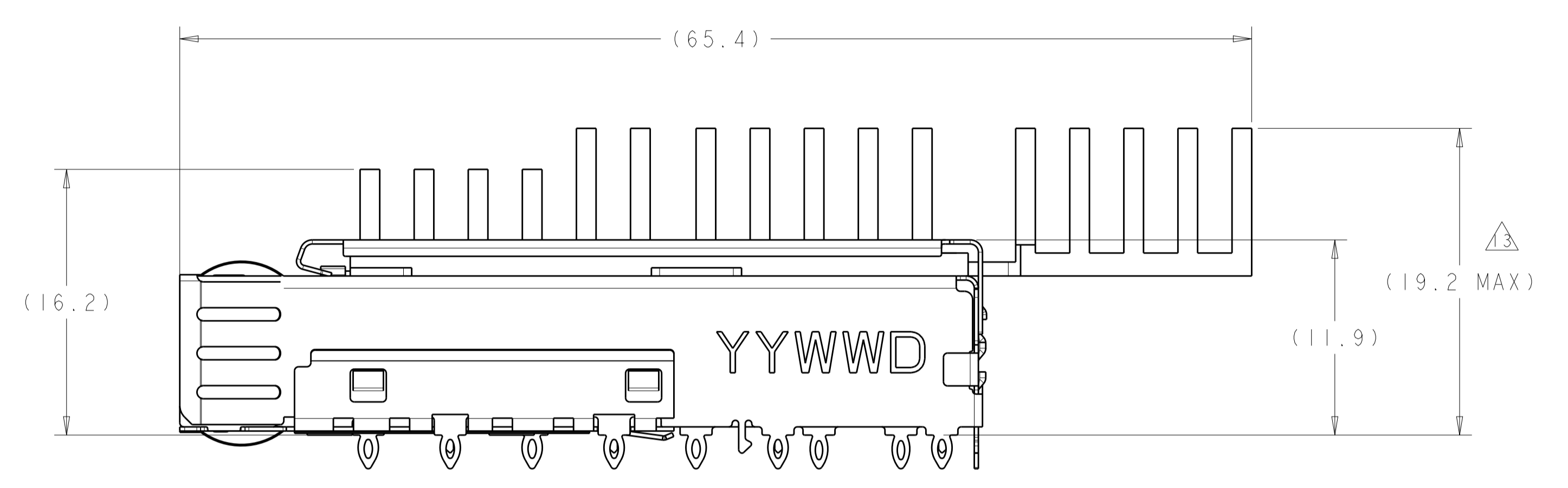
2170190-2, 5, 6 WITH PIN TYPE HEATSINK
SCALE 4:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: TIM XUE 21NOV2011	TE Connectivity
DIMENSIONS:		CHK: ALEX CAI 21NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEX CAI 21NOV2011	
mm		NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK	
0 PLC ±0.13	1 PLC ±0.1	PRODUCT SPEC: 108-2364	SIZE: CAGE CODE DRAWING NO: 114-13120
2 PLC ±0.08	3 PLC ±0.05	APPLICATION SPEC: 114-13120	RESTRICTED TO: -
4 PLC ±0.05	ANGLES ±0.1	WEIGHT: -	A100779C=2170190
MATERIAL:	FINISH:	CUSTOMER DRAWING	SCALE: 6:1 SHEET 2 OF 6 REV: A4

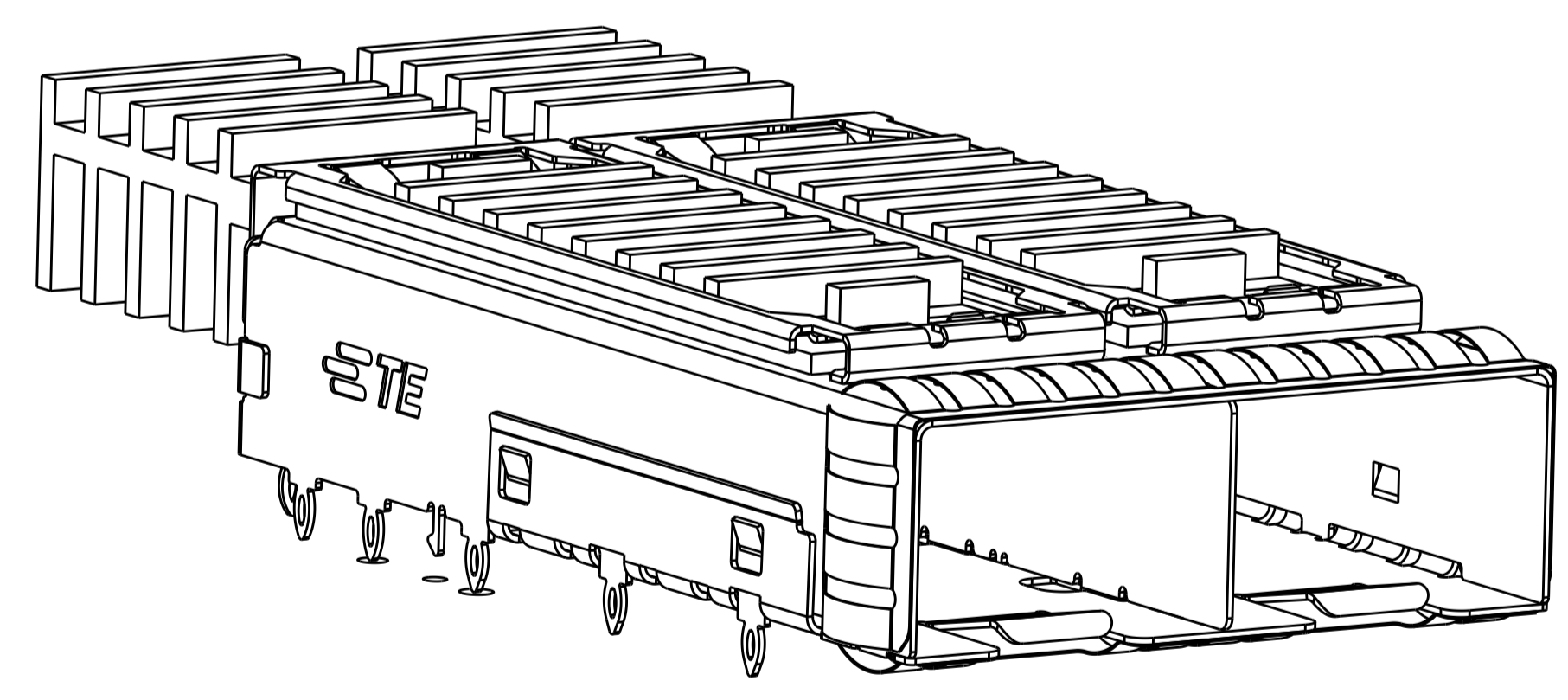
LOC		DIST		REVISIONS			
GP	00	P	LYR	DESCRIPTION	DATE	DMN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



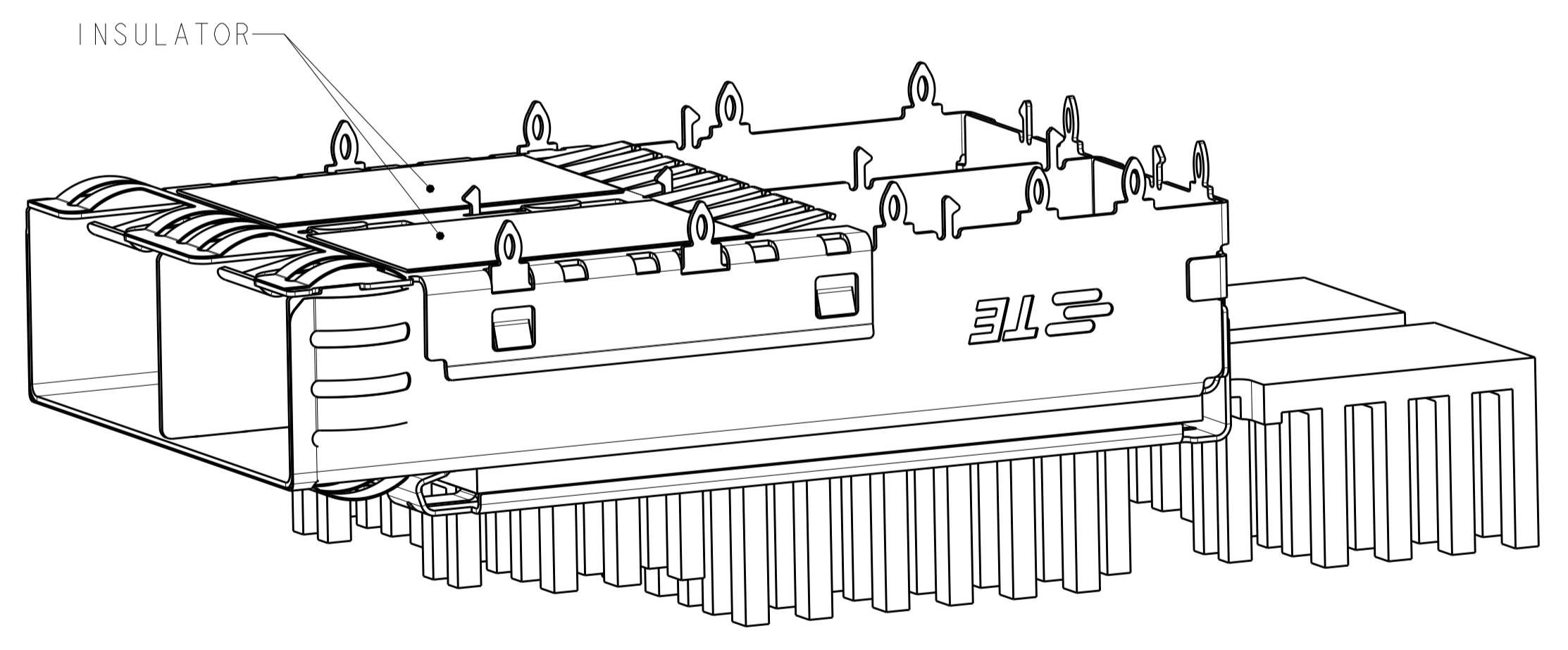
2170190-3 AS SHOWN



2170190-4 AS SHOWN
SCALE 4:1



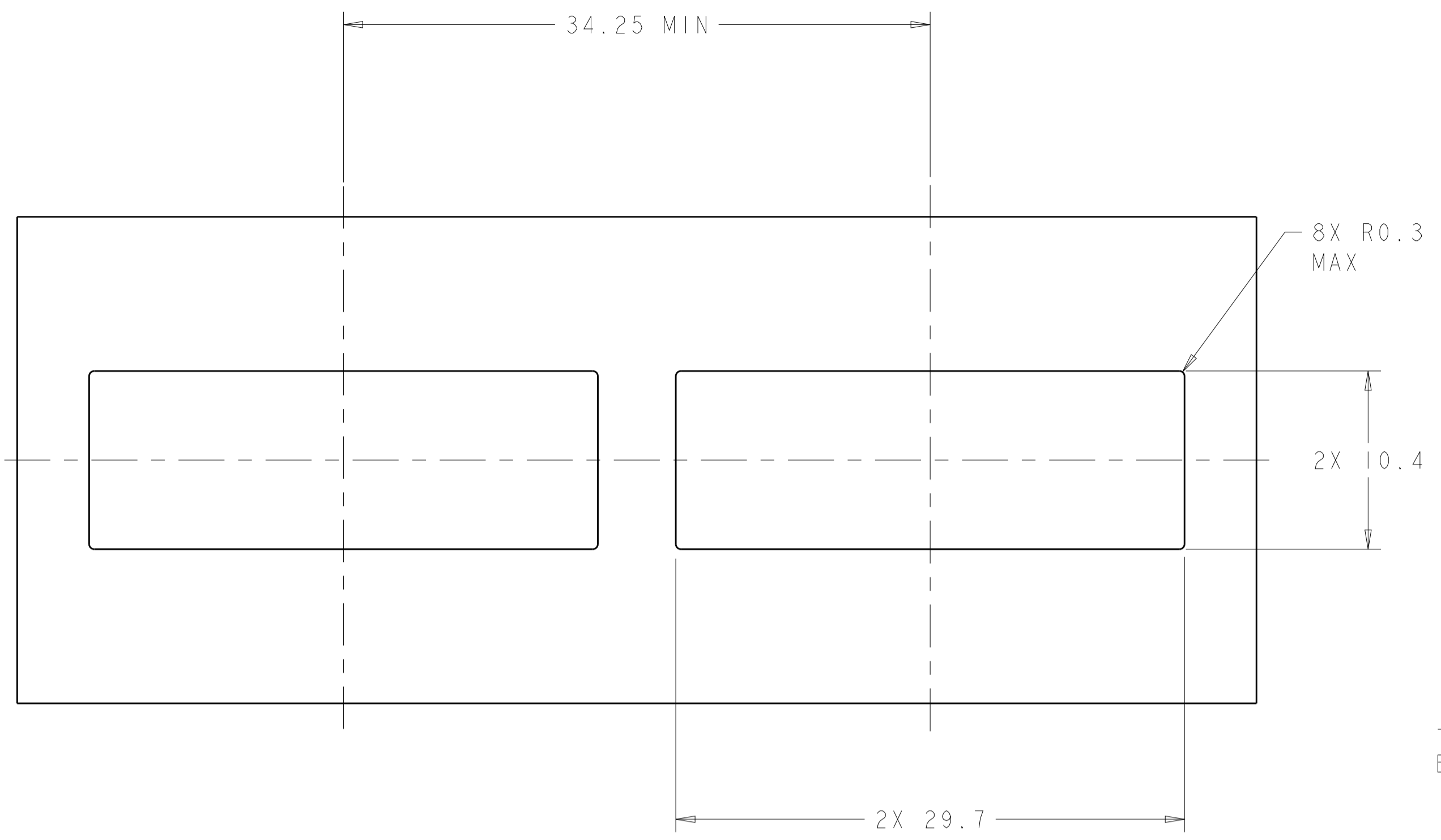
2170190-3 FIN TYPE HEATSINK
3D VIEW



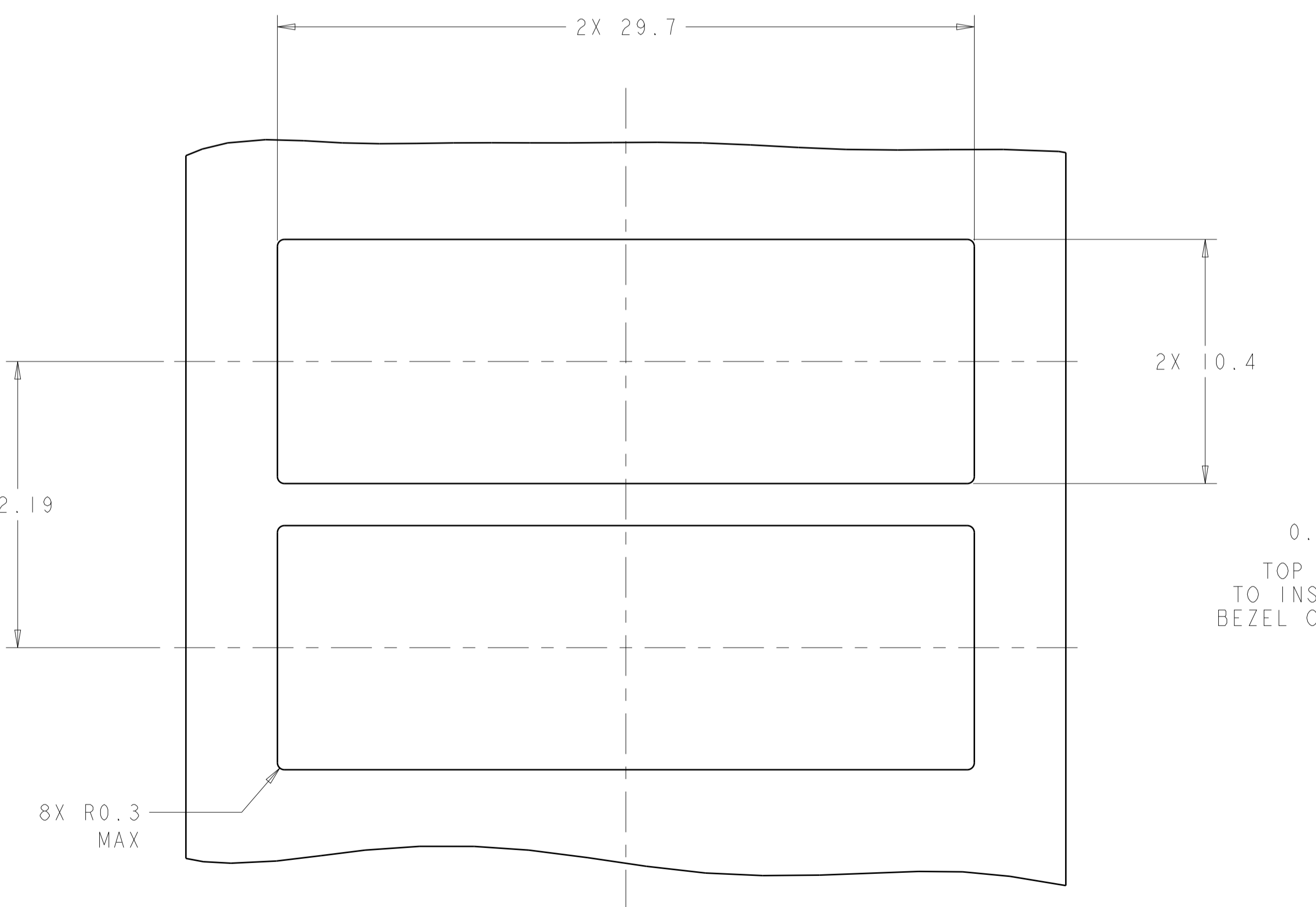
2170190-4 WITH PIN TYPE HEATSINK AND INSULATOR
3D VIEW

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN	TIM XUE	Z1NOV2011	STE TE Connectivity
DIMENSIONS:		CHK	ALEX CAI	Z1NOV2011	
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD	ALEX CAI	Z1NOV2011	NAME SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK
0 PLC	±0.13	PRODUCT SPEC	108-2364	APPLICATION SPEC	
1 PLC	±0.1	114-13120	114-13120	114-13120	RESTRICTED TO
2 PLC	±0.08	WEIGHT	-	-	A100779 ©=2170190
3 PLC	±0.05	CUSTOMER DRAWING	SCALE 6:1	SHEET 3 OF 6	
4 PLC	±0.05	FINISH	-	REV A4	
ANGLES	MATERIAL				

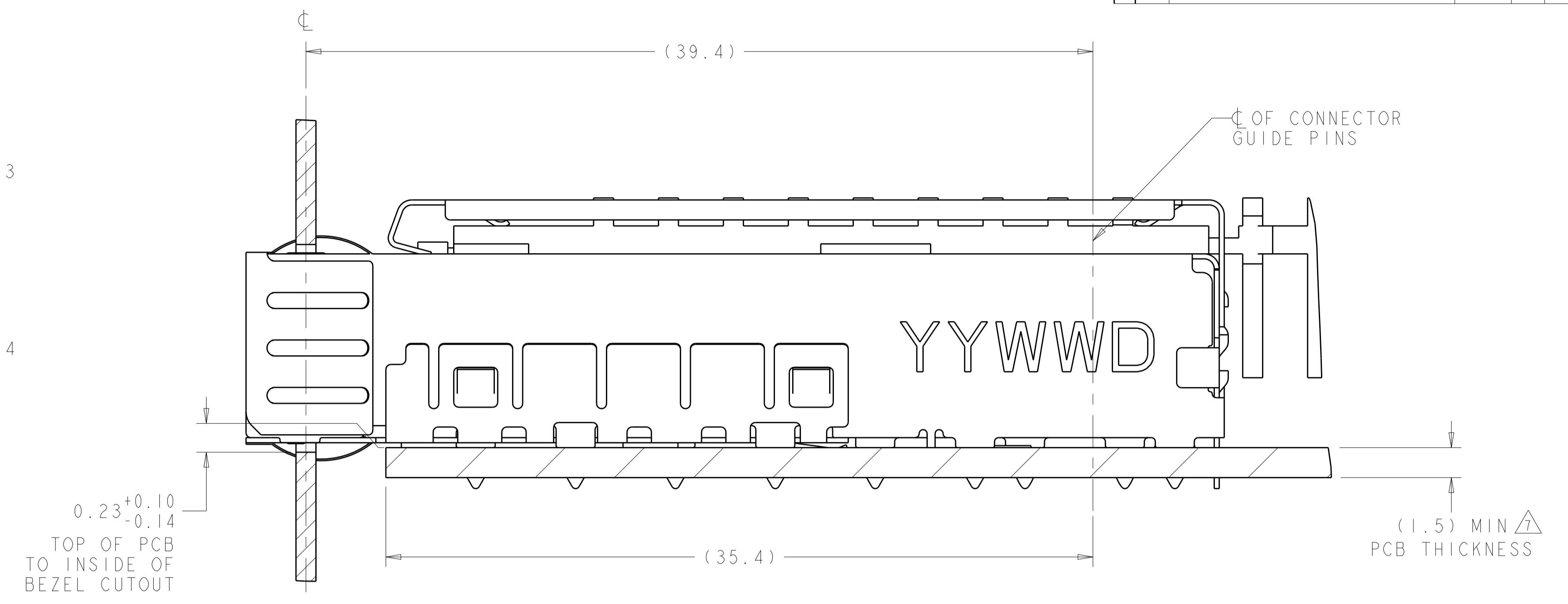
LOC		DIST		REVISIONS			
GP	00	P	LTN	DESCRIPTION	DATE	DMN	APVD
		-		SEE SHEET 1			



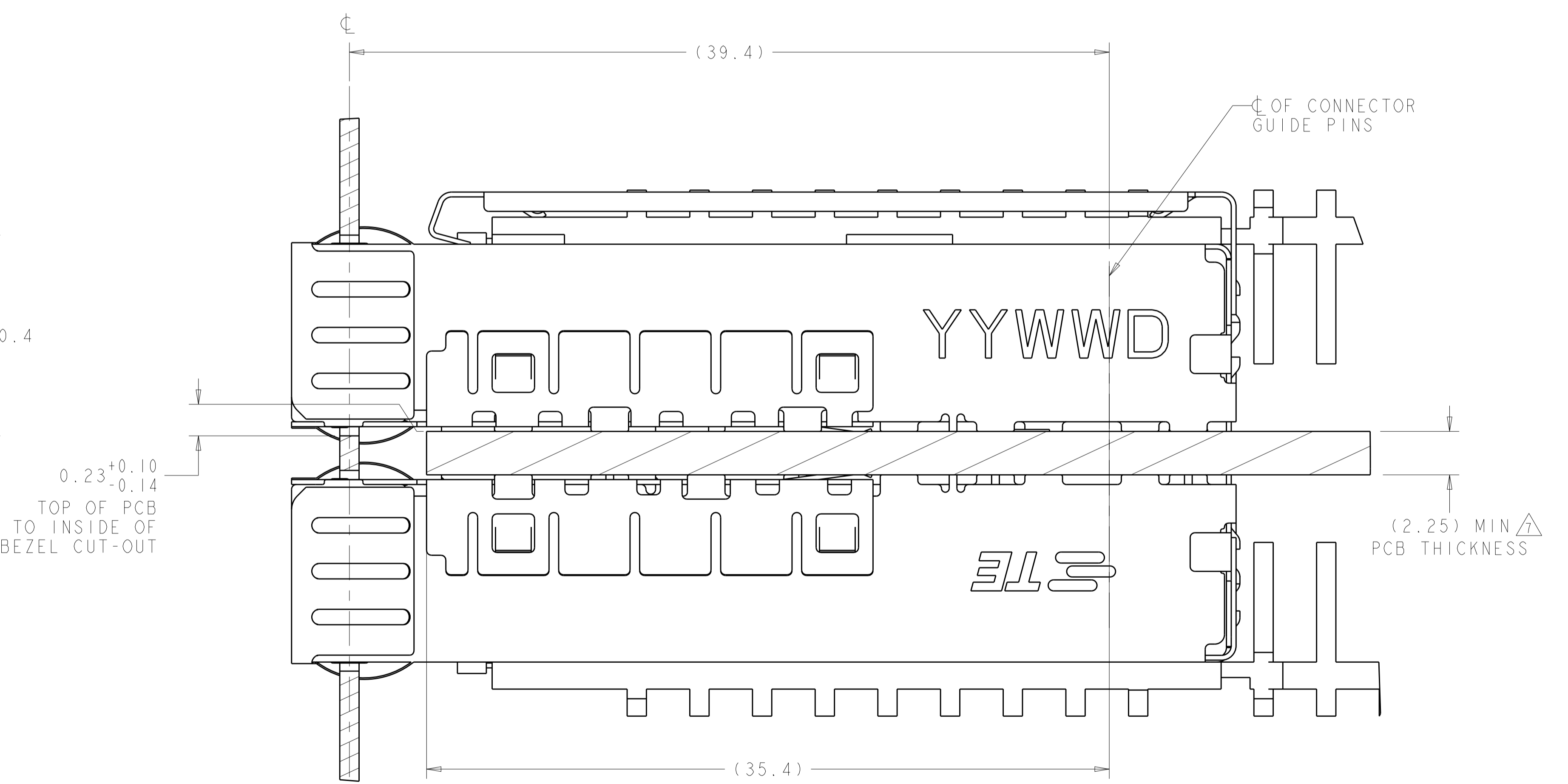
RECOMMENDED BEZEL CUT-OUT
 SINGLE SIDED APPLICATIONS
 SCALE 4:1



RECOMMENDED BEZEL CUT-OUT
 BELLY TO BELLY APPLICATIONS



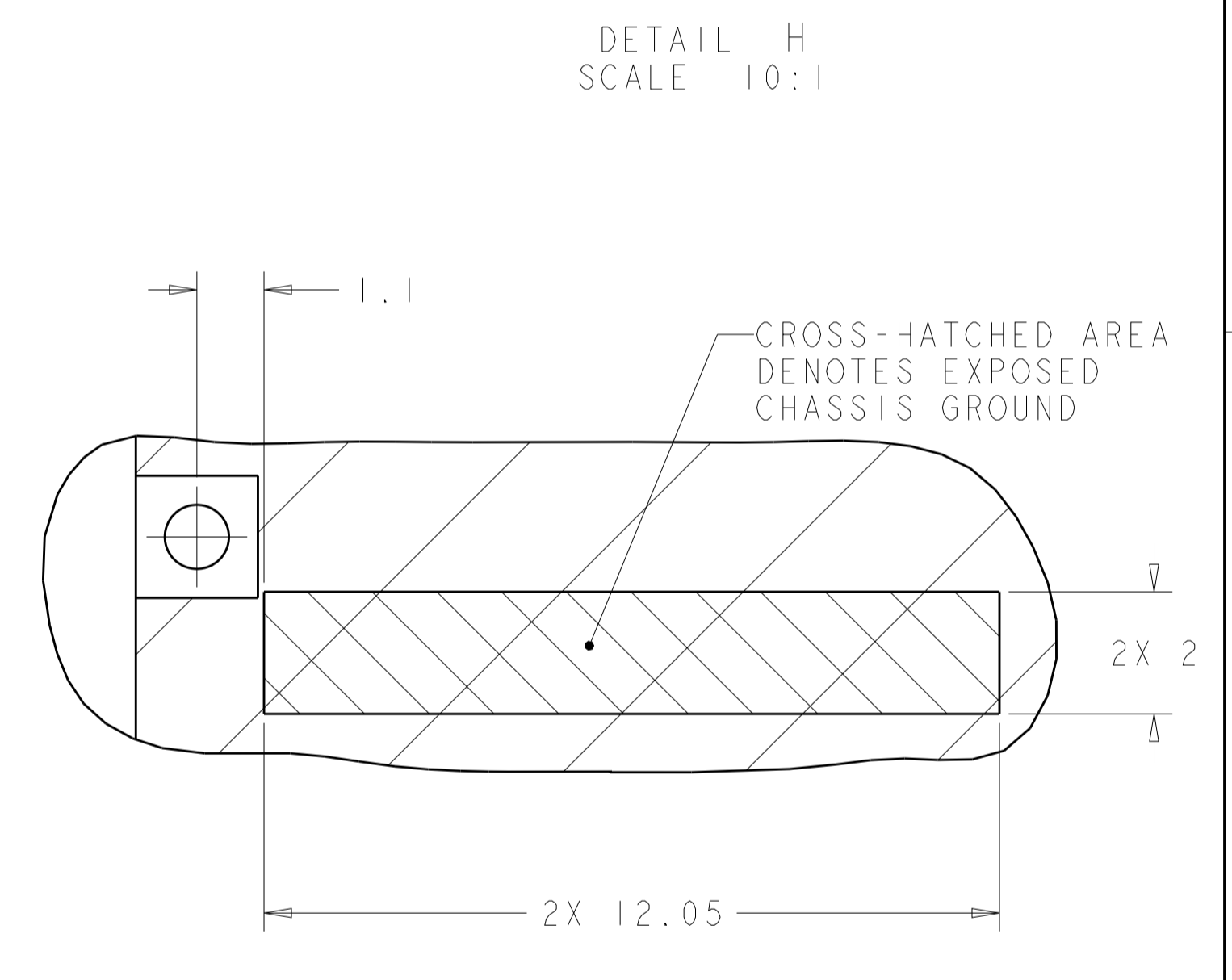
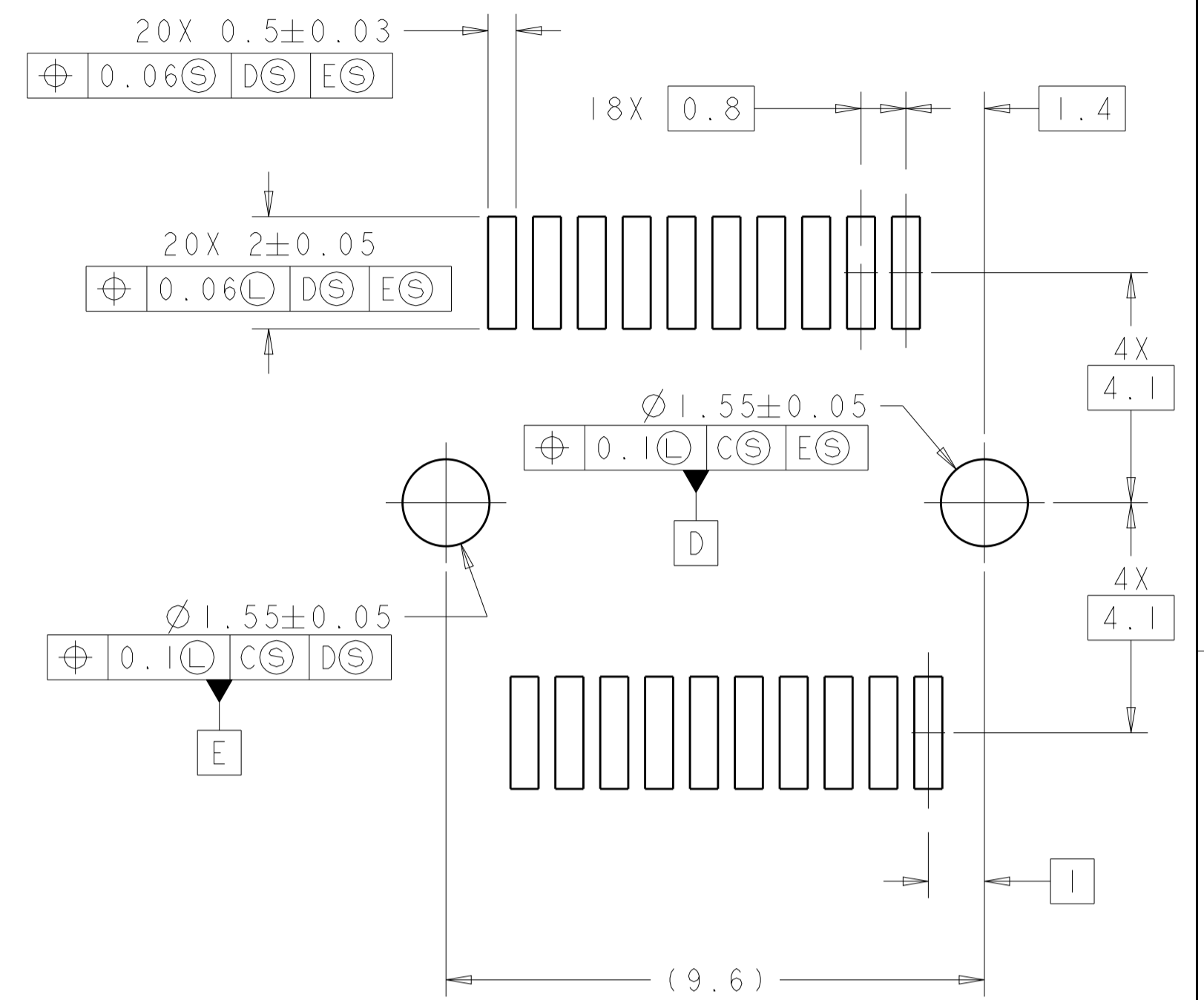
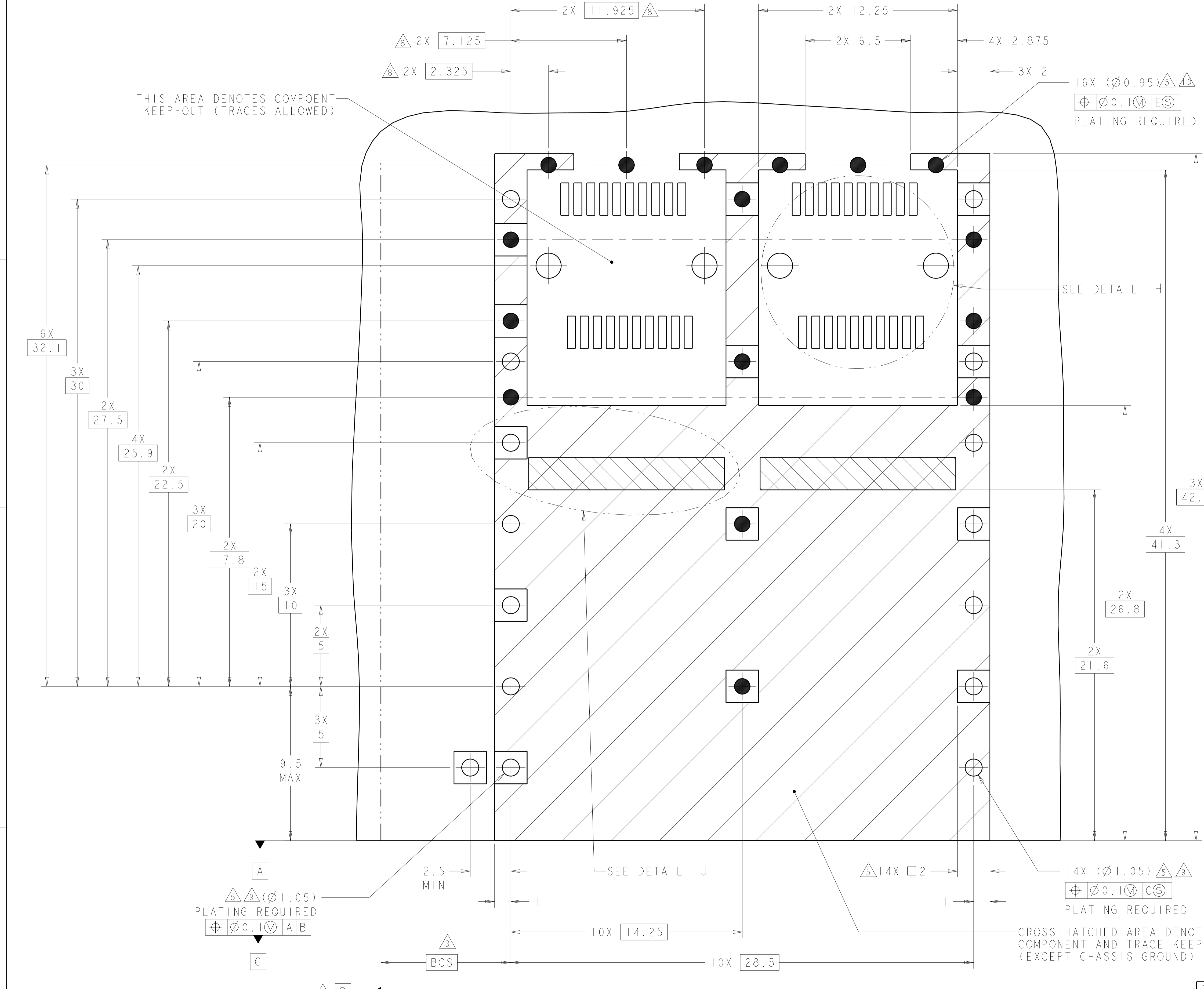
2170190-1
 MOUNTED ON PC BOARD
 SHOWN THRU RECOMMENDED BEZEL



2170190-1
 MOUNTED BELLY TO BELLY ON PC BOARD
 SHOWN THRU RECOMMENDED BEZEL

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN: TIM XUE 21NOV2011	TE Connectivity
DIMENSIONS: mm		CHK: ALEX CAI 21NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEX CAI 21NOV2011	NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK
0 PLC ±0.13	1 PLC ±0.1	PRODUCT SPEC: 108-2364	APPLICATION SPEC: 114-13120
2 PLC ±0.08	3 PLC ±0.05	SIZE: A1	CAGE CODE: 2170190
4 PLC ±0.05	ANGLES ±0.1	WEIGHT: -	RESTRICTED TO: -
MATERIAL: -	FINISH: -	CUSTOMER DRAWING	SCALE: 6:1 SHEET: 4 OF 6 REV: A4

LOC	DIST	REVISIONS			
GP	00	REV	DATE	BY	APPD
		1	SEE SHEET 1		



THIS AREA DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)

SEE DETAIL H

SEE DETAIL J

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

RECOMMENDED PCB CONFIGURATION WITH KEEP-OUT AREAS BELLY TO BELLY APPLICATIONS SCALE 8:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: TIM XUE 21NOV2011	TE Connectivity
DIMENSIONS: mm		CHK: ALEX CAI 21NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: ALEX CAI 21NOV2011	NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK
0 PLC ±0.13	1 PLC ±0.1	PRODUCT SPEC: 108-2364	SIZE: CAGE CODE DRAWING NO: A100779C=2170190
2 PLC ±0.08	3 PLC ±0.05	APPLICATION SPEC: 114-13120	RESTRICTED TO: -
4 PLC ±0.05	ANGLES ±0.1	WEIGHT: -	SCALE: 6:1 SHEET 6 OF 6 REV: A4
MATERIAL: -	FINISH: -	CUSTOMER DRAWING	