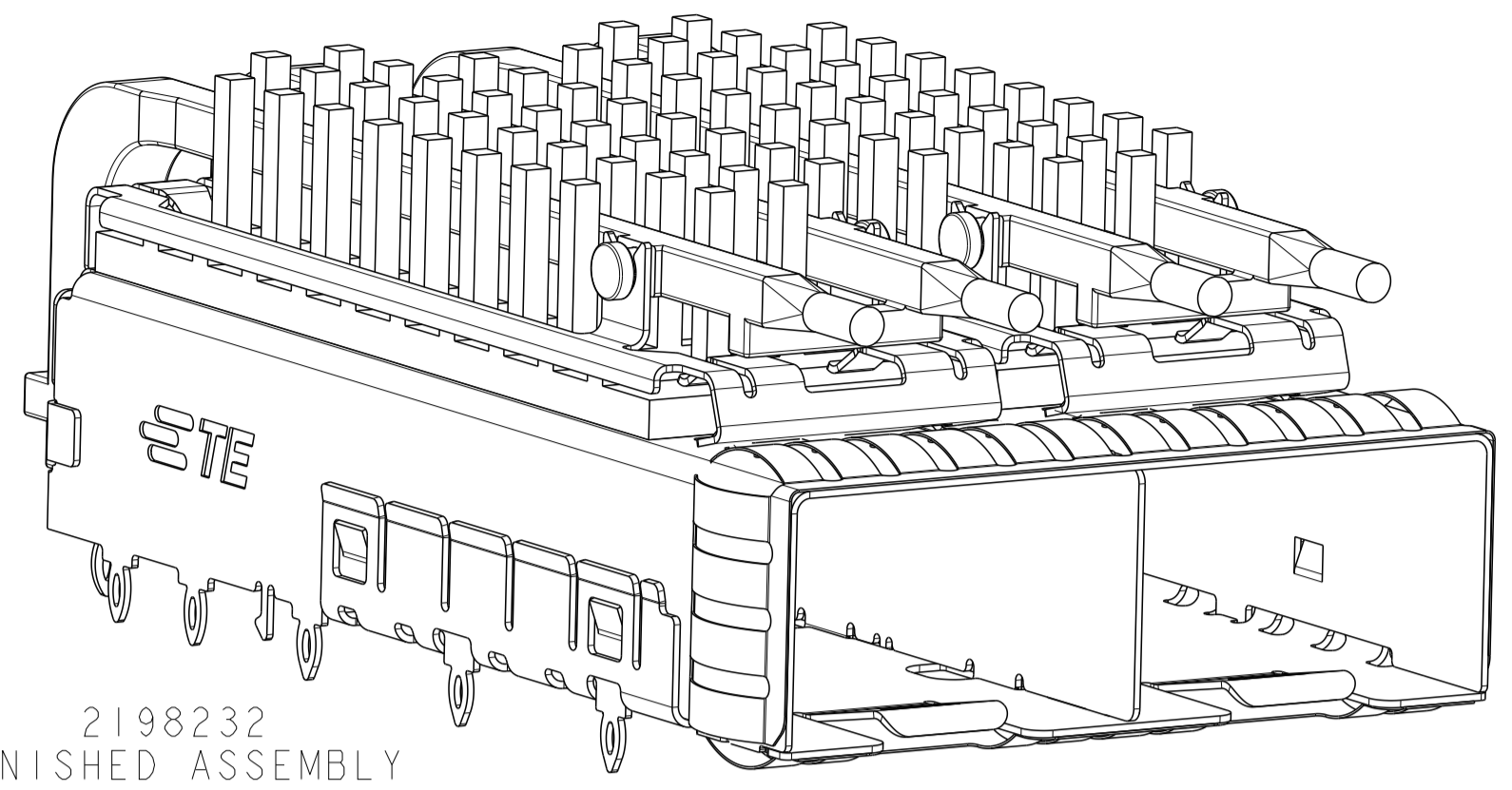


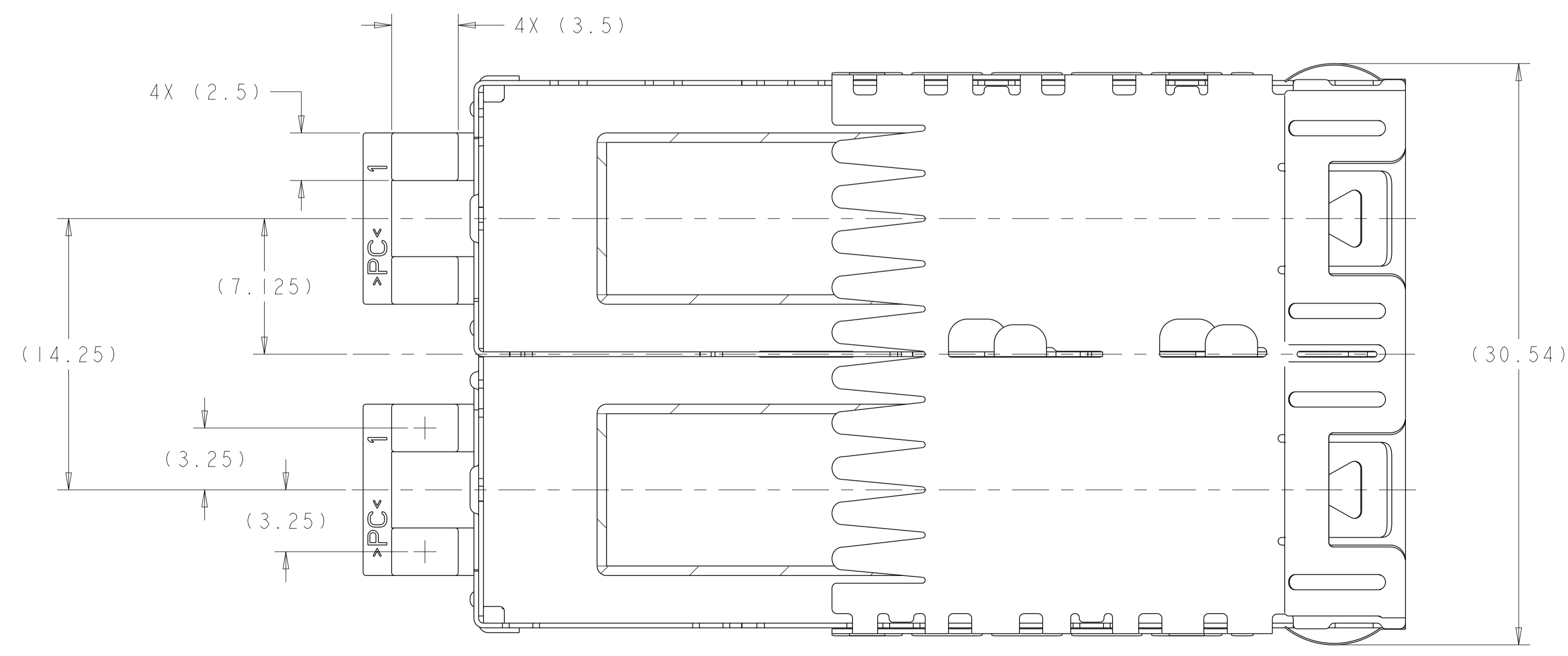
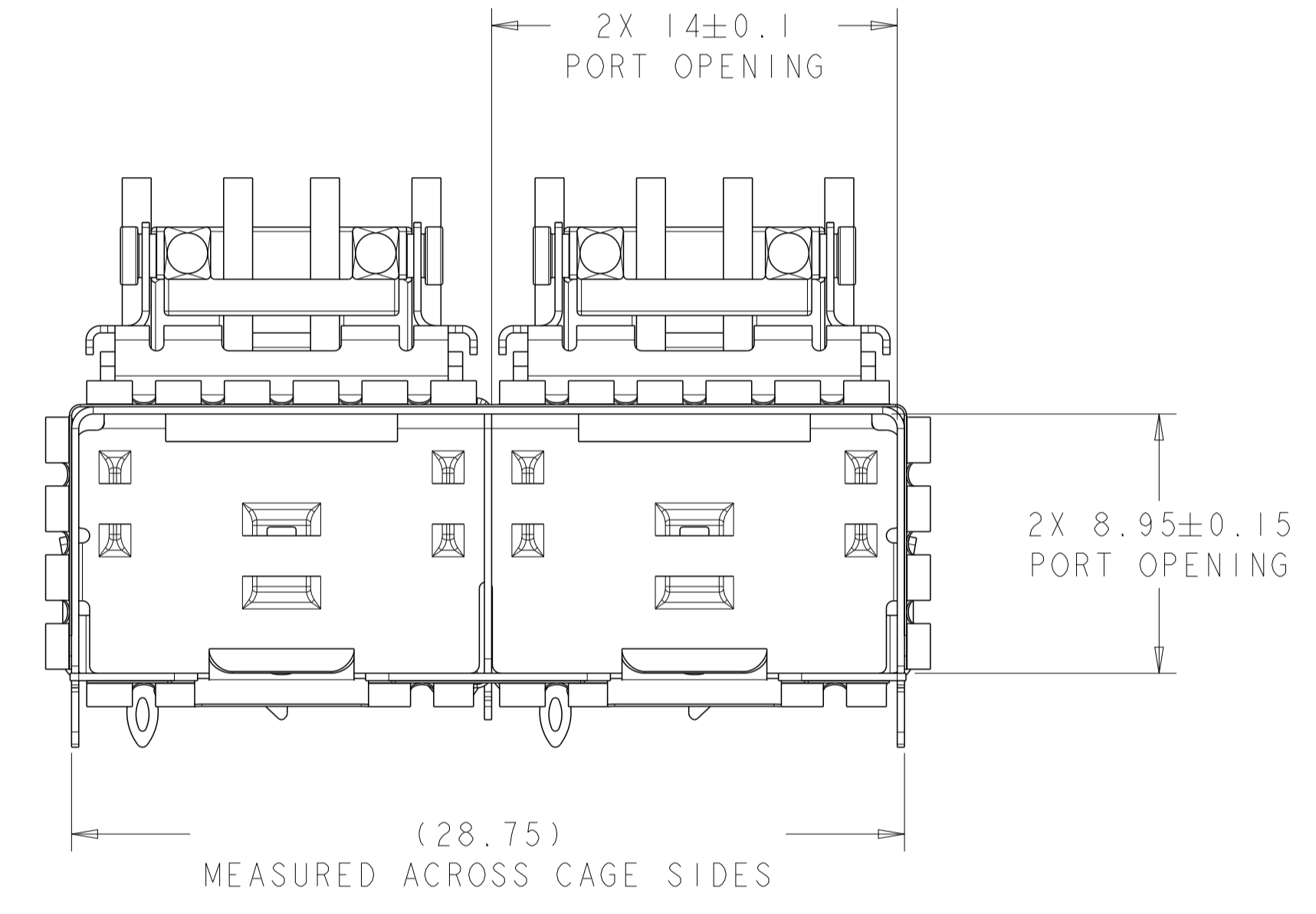
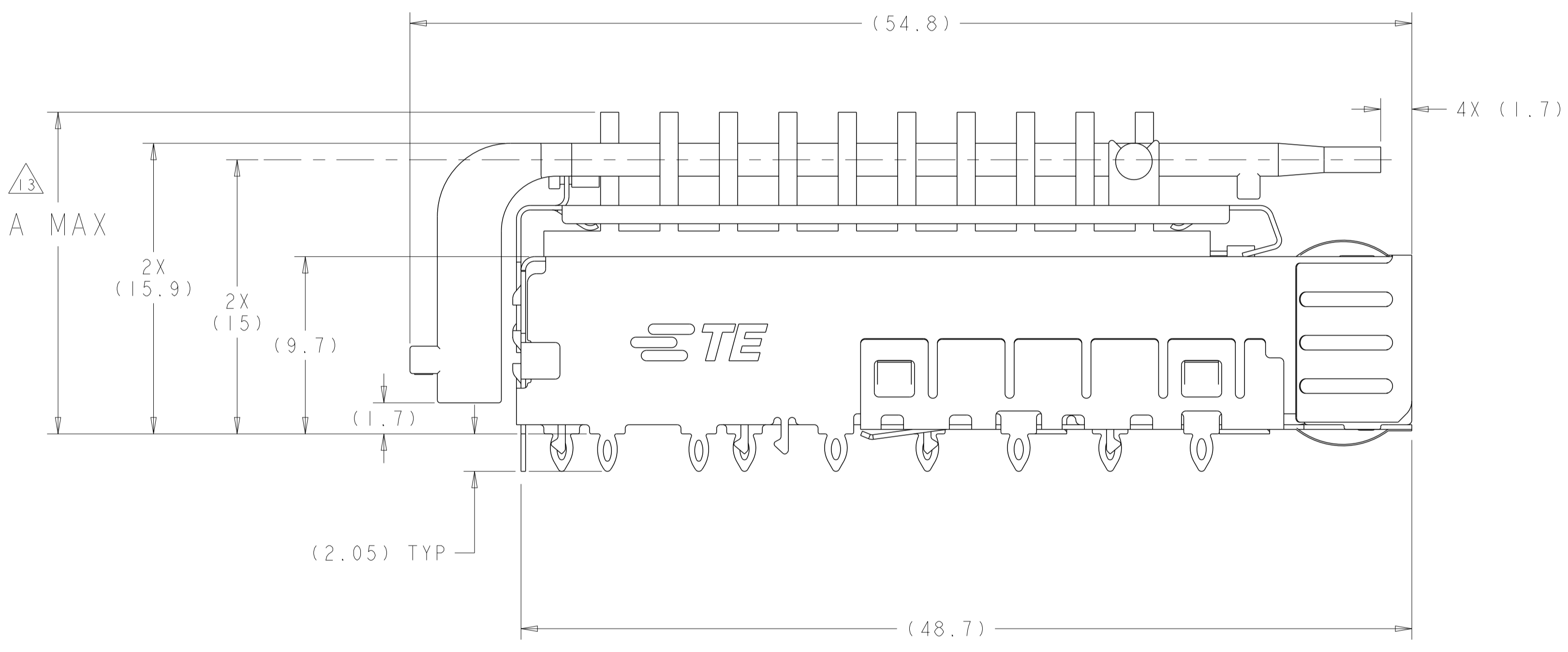
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GP	00	P	LTN	DESCRIPTION	DATE	DWN	APVD
		A		RELEASED PER ECO-12-013192	08OCT2012	BMM	MRS
		A1		RELEASED PER ECO-14-008488	06JUN2014	PP	SH
		A2		RELEASED PER ECN-22-178209	08OCT2022	CZ	SZ



2198232
 FINISHED ASSEMBLY
 SCALE 4:1

- ⚠ MATERIAL:
 CAGE ASSEMBLY: 0.25mm THICK NICKEL SILVER ALLOY
 EMI SPRINGS: COPPER ALLOY
 HEAT SINK: ALUMINUM
 HEAT SINK/LIGHTPIPE CLIP: STAINLESS STEEL.
 LIGHTPIPE: POLYCARBONATE, CLEAR
- ⚠ FINISH:
 SPRINGS: MINIMUM OF 0.8um TIN PLATE OVER MINIMUM OF 0.8um NICKEL UNDERPLATE. NON-PLATED EDGES PERMISSIBLE.
 HEAT SINK: ELECTROLESS NICKEL
 HEAT SINK CLIP: PASSIVATE.
- ⚠ DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- ⚠ PADS AND VIAS CHASSIS GROUND.
- 5. MATES WITH SFP MSA COMPLIANT RECEIVERS.
- 6. INTERPRETATION OF DATUM REFERENCE FRAME IN ACCORDANCE WITH SECT 4.4.1.1 OR ASME Y14.5M-1994.
- ⚠ MINIMUM PC BOARD THICKNESS:
 SINGLE SIDED: 1.5mm
 DOUBLE SIDED: 2.25mm
- ⚠ HOLE PATTERN REPEATS FOR EACH PORT, SPACING BETWEEN PORTS IS 14.25mm.
- ⚠ REFERENCE APPLICATION SPEC. 114-13120, HOLE A, FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.

- ⚠ 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.
- ⚠ DIMENSION APPLIES PRIOR TO INSERTION OF SFP MODULE.
- ⚠ HEATSINK, HEATSINK CLIP, AND LIGHTPIPE SHIPPED UNASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY TO BE PRESSED INTO PCB PRIOR TO ATTACHING HEATSINK, HEATSINK CLIP, AND LIGHTPIPE TO THE CAGE ASSEMBLY.
- ⚠ PACKAGED AS A COMPLETE ASSEMBLY.
- ⚠ WITH PAINTED LIGHT PIPE, FOUR SIDES BE PAINTED.



⚠	13.2	PC1	3-2198232-1
⚠	13.2	PC1	2198232-5
⚠	13.2	PC1	2-2198232-1
⚠	22.5	NETWORKING, TALL	2198232-4
⚠	18.1	NETWORKING, SHORT	2198232-3
⚠	15.5	SAN	2198232-2
⚠	13.2	PC1	2198232-1
	A MAX	DESCRIPTION	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	±0.13
1 PLC	±0.1
2 PLC	±0.08
3 PLC	±0.05
4 PLC	±0.05
ANGLES	±0.5

MATERIAL: ⚠ FINISH: ⚠

Customer Drawing

DWN: B. MATTHEWS 01NOV2011
 CHK: M. SCHMITT 01NOV2011
 APVD: M. SCHMITT 01NOV2011

NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EXTERNAL EMI SPRINGS WITH HEATSINK AND LIGHTPIPE

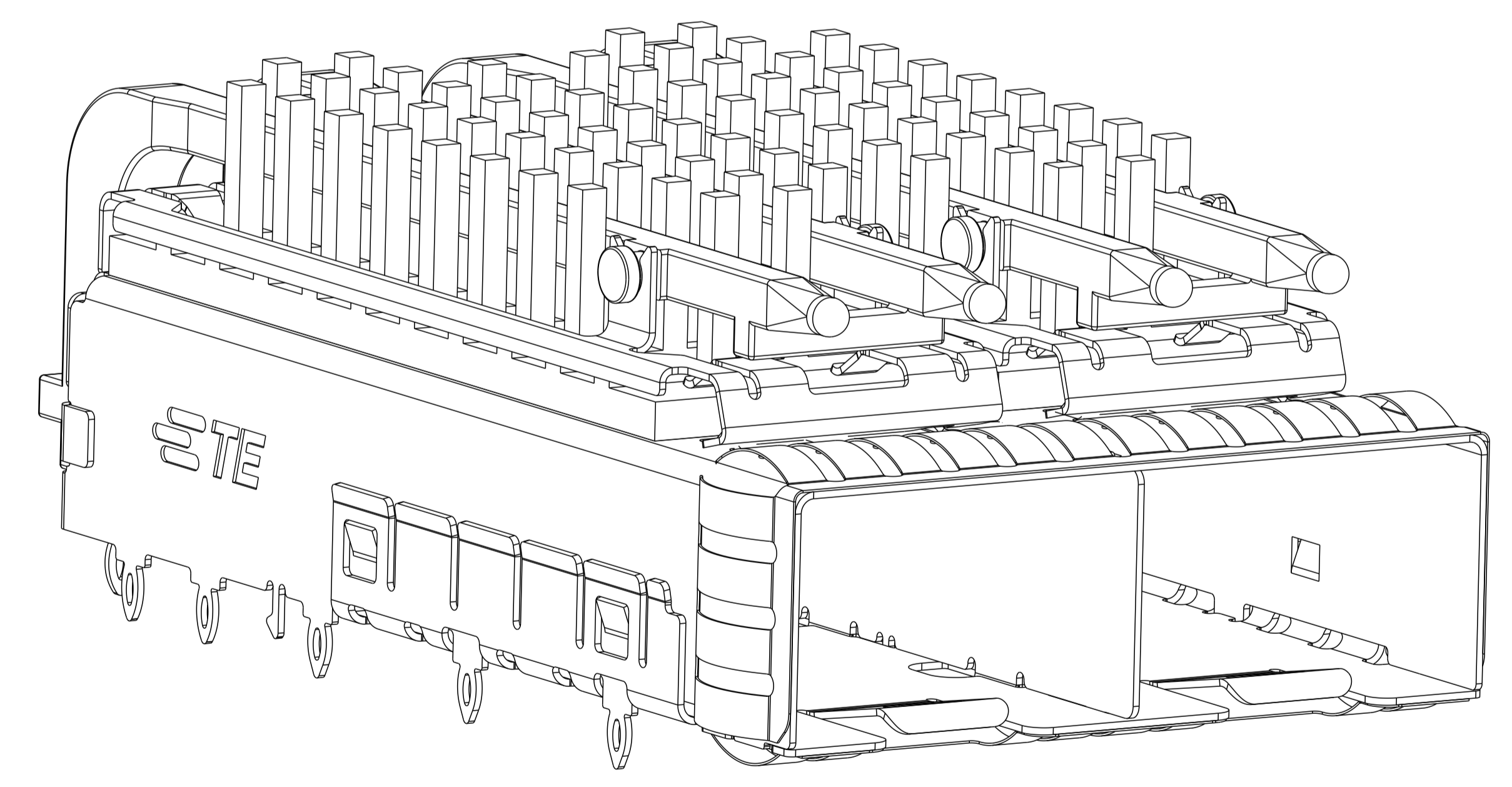
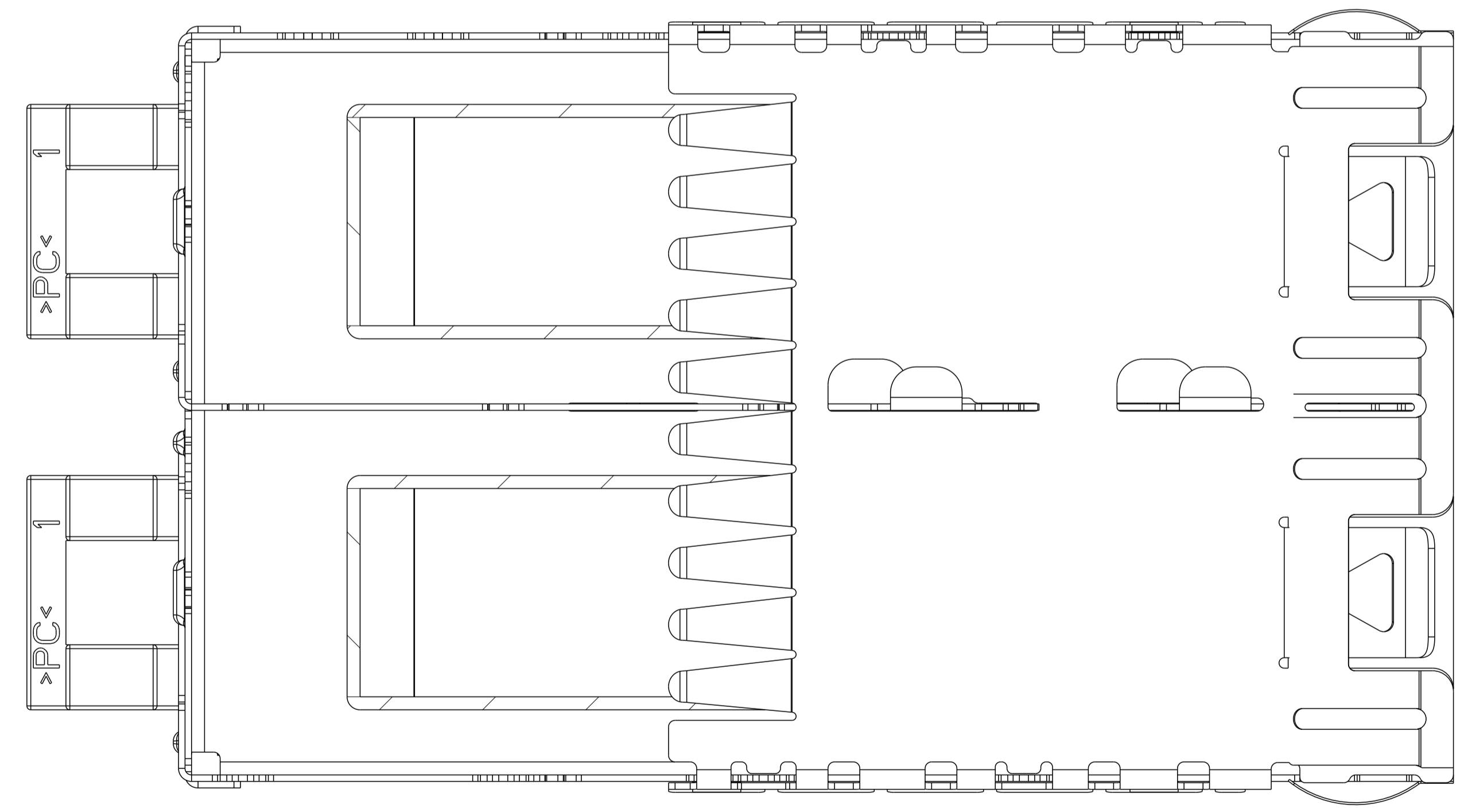
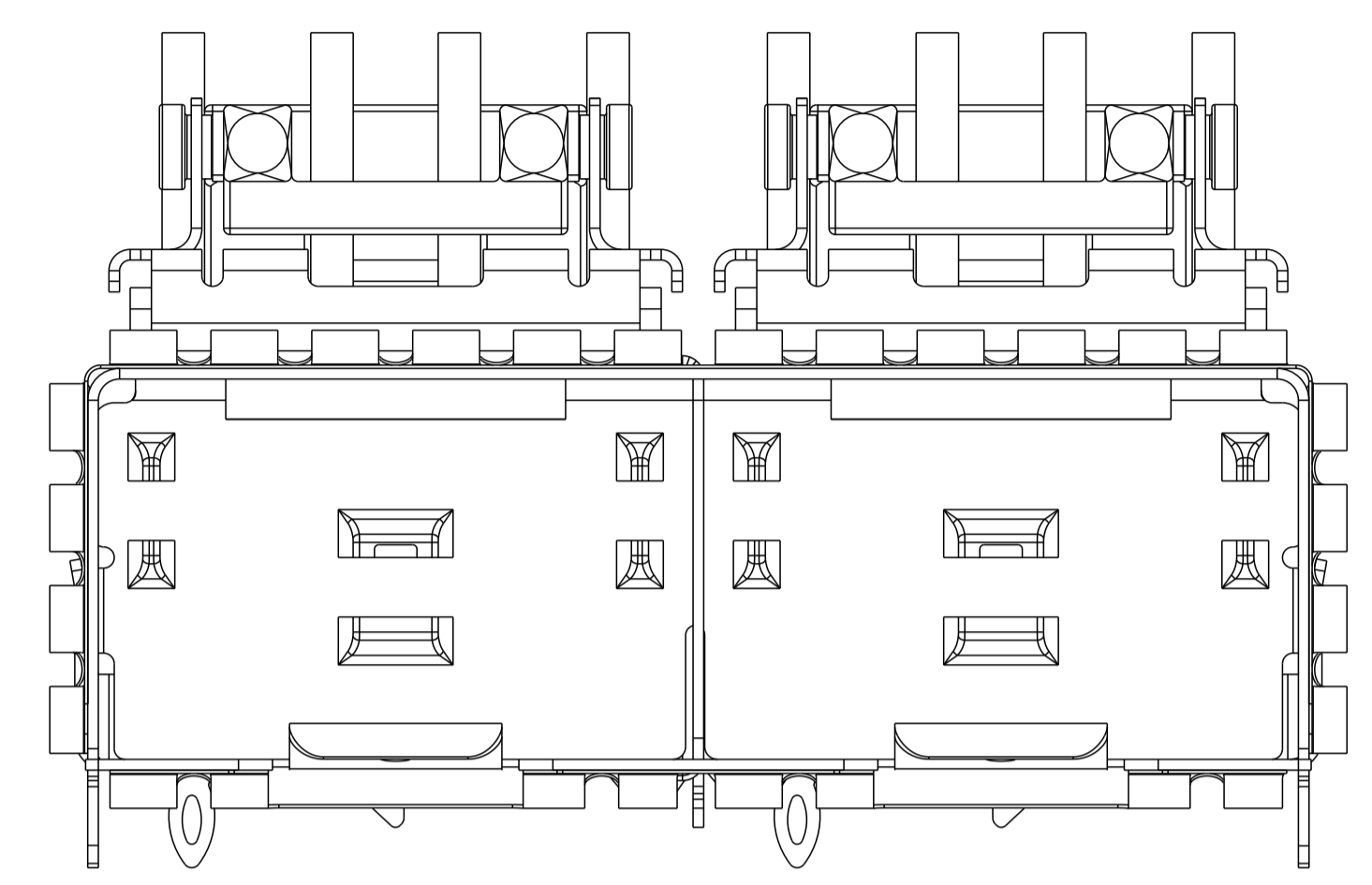
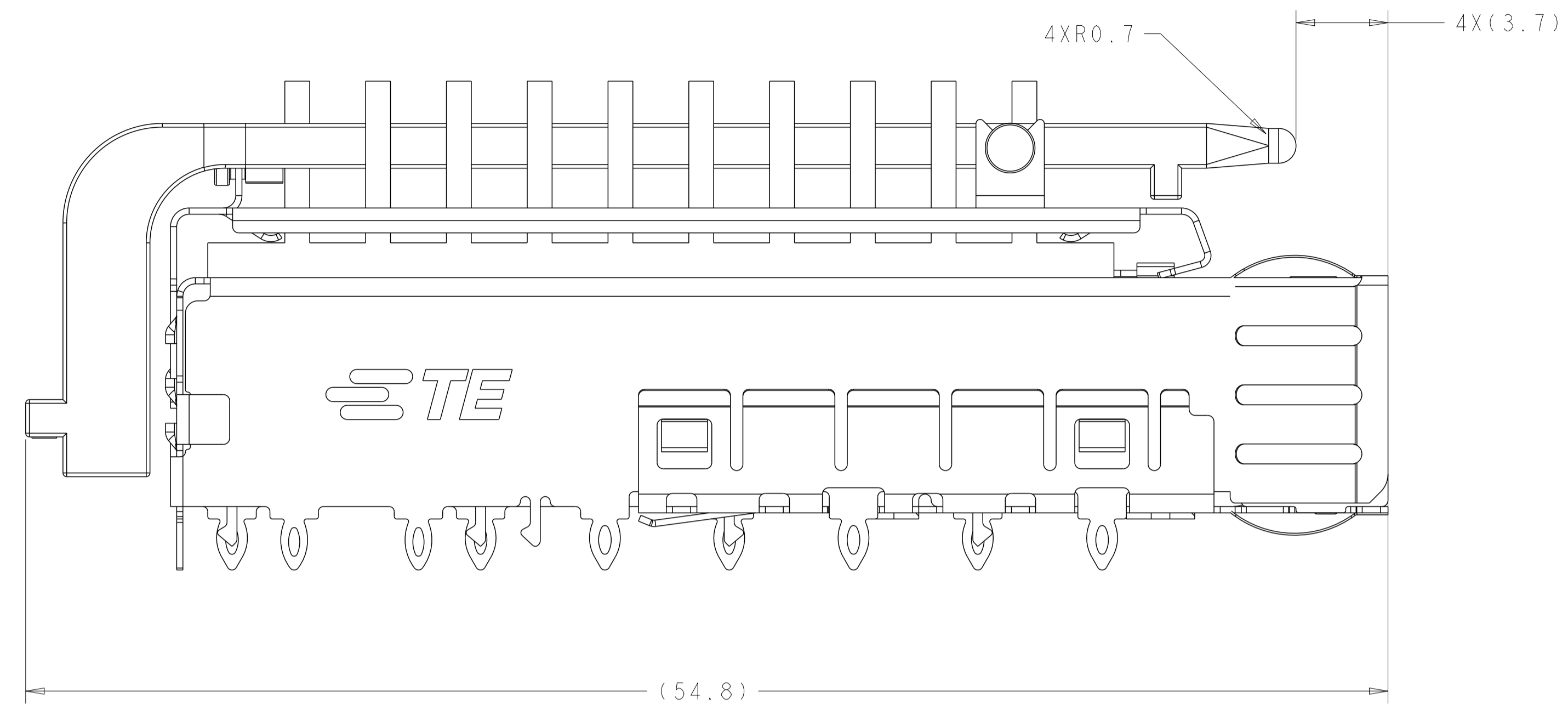
PRODUCT SPEC: 108-2364
 APPLICATION SPEC: 114-13120

SIZE: A1 CAGE CODE: 00779 DRAWING NO: 2198232

RESTRICTED TO: A1

SCALE: 6:1 SHEET: 1 OF 5 REV: A2

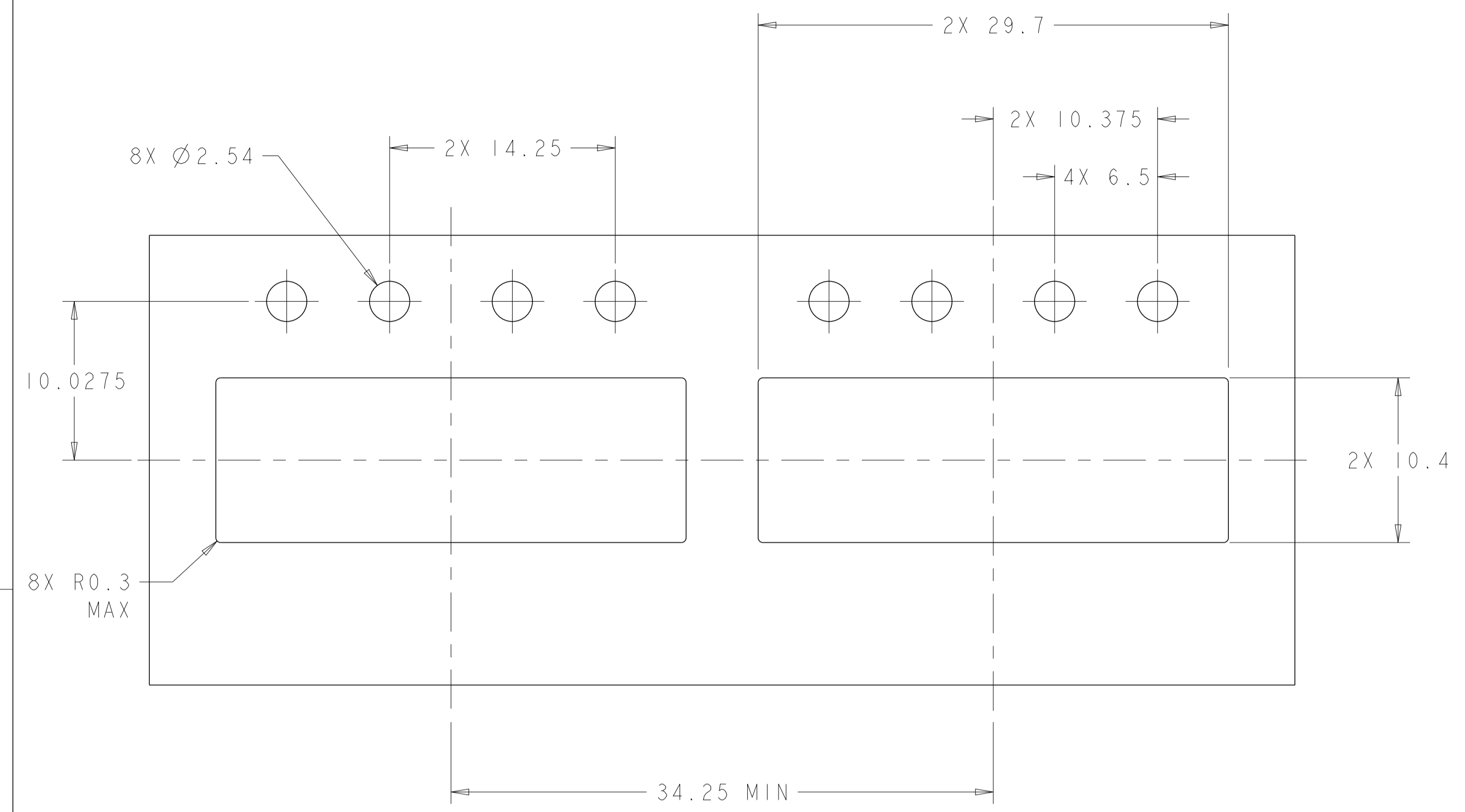
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P	LYR	DESCRIPTION	DATE	OWN	APVD		
-	-	SEE SHEET 1	-	-	-		



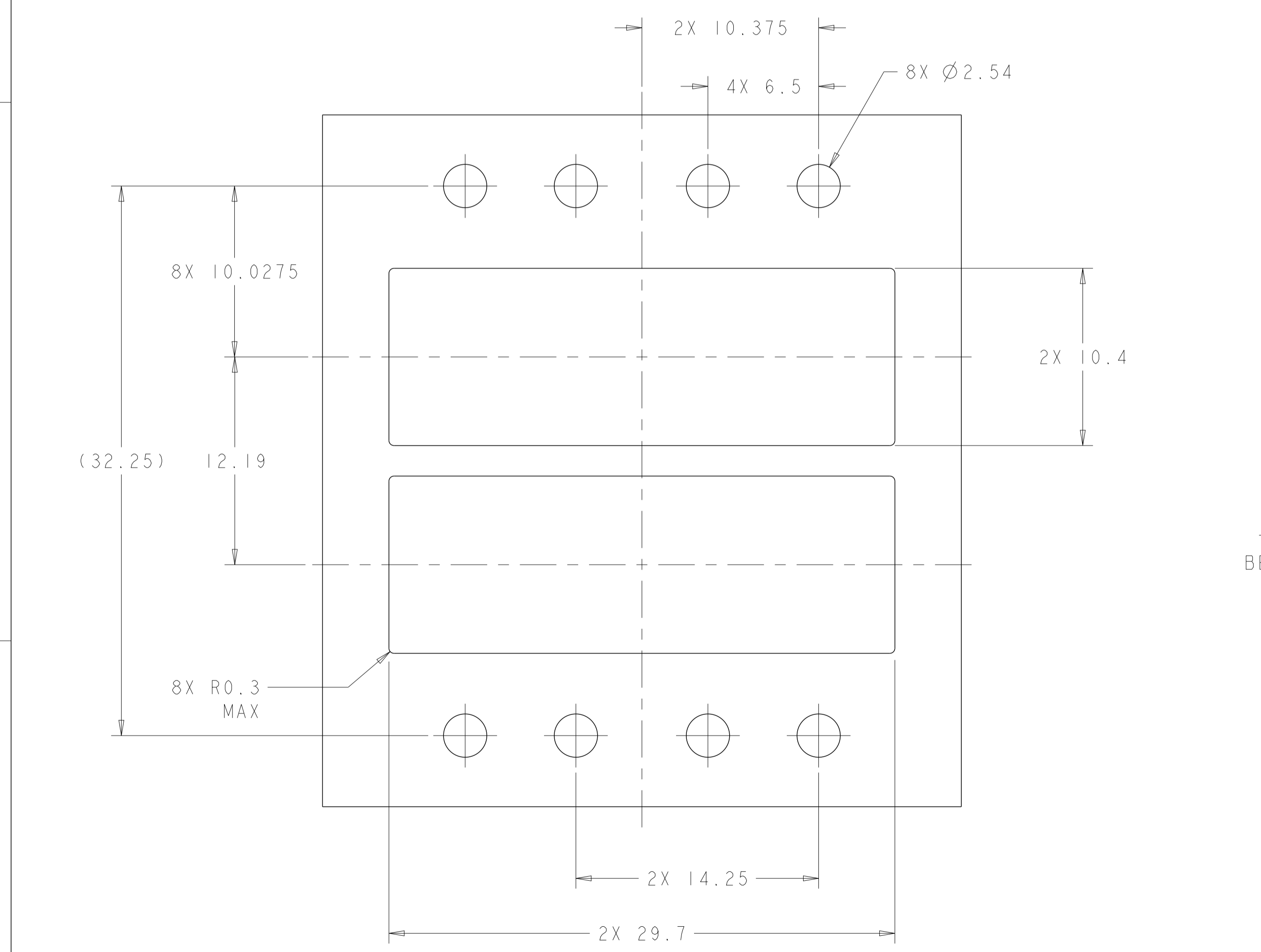
3-2198232-1
 UNMARKED DIMENSIONS SAME AS 2198232-1

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN B. MATTHEWS	01NOV2011	STE TE Connectivity
DIMENSIONS: mm		CHK M. SCHMITT	01NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD M. SCHMITT	01NOV2011	NAME SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EXTERNAL EMI SPRINGS WITH HEATSINK AND LIGHTPIPE
0 PLC ±0.13		PRODUCT SPEC	108-2364	
1 PLC ±0.1		APPLICATION SPEC	114-13120	SIZE A1
2 PLC ±0.08		WEIGHT	-	
3 PLC ±0.05		RESTRICTED TO	-	SCALE 6:1 SHEET 2 OF 5 REV A2
4 PLC ±0.05		Customer Drawing	-	
ANGLES ±1				
FINISH				

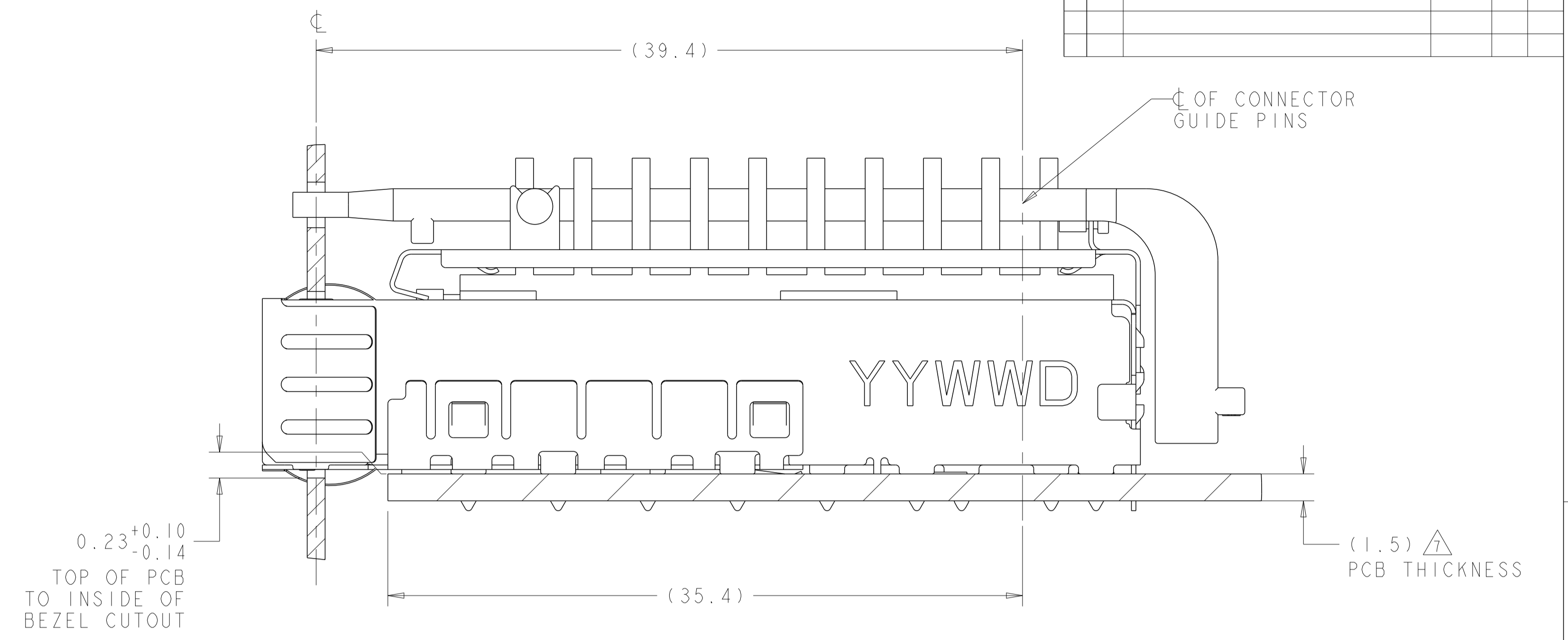
LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	OWN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



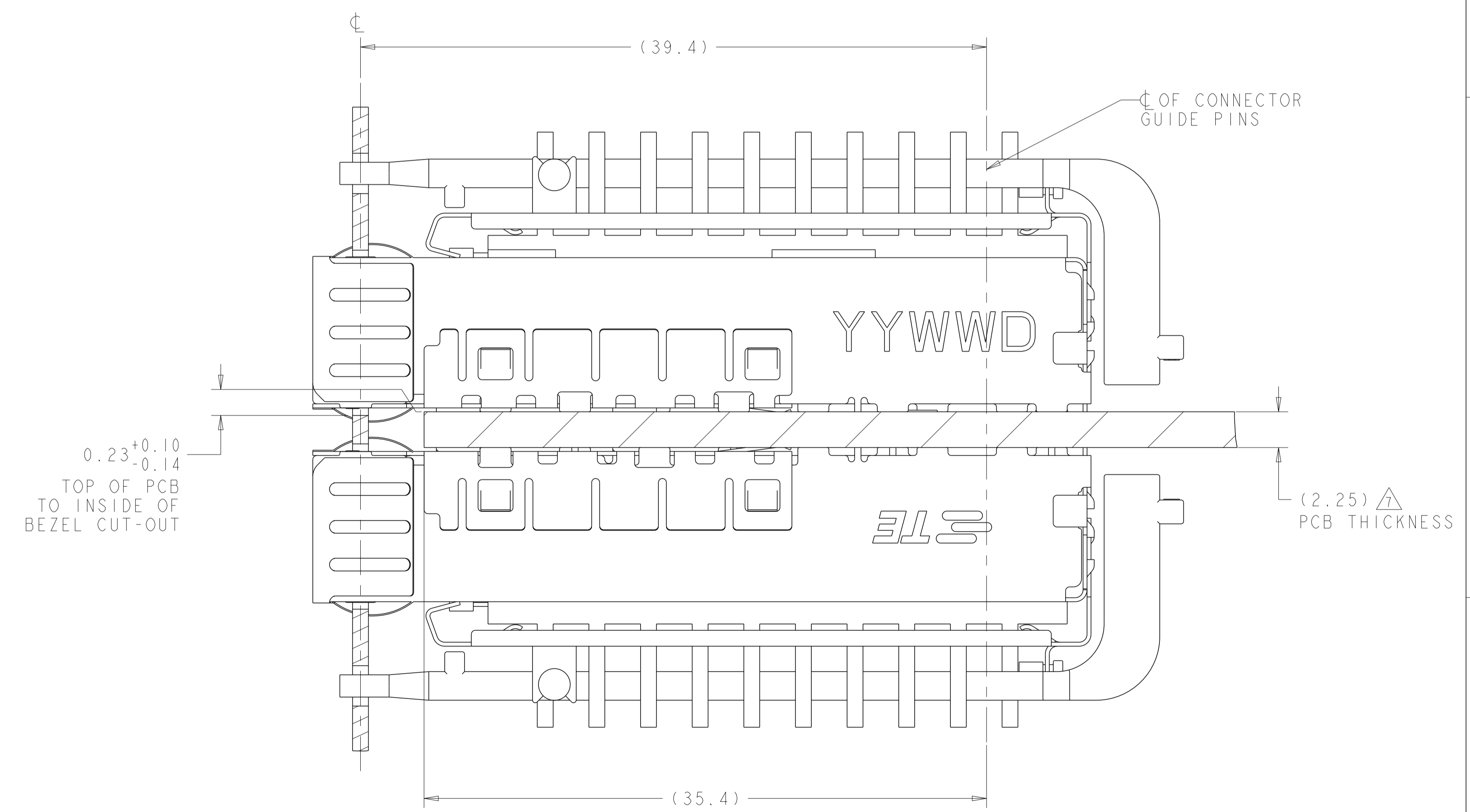
RECOMMENDED BEZEL CUT-OUT
 SINGLE SIDED APPLICATIONS
 SCALE 4:1



RECOMMENDED BEZEL CUT-OUT
 BELLY TO BELLY APPLICATIONS



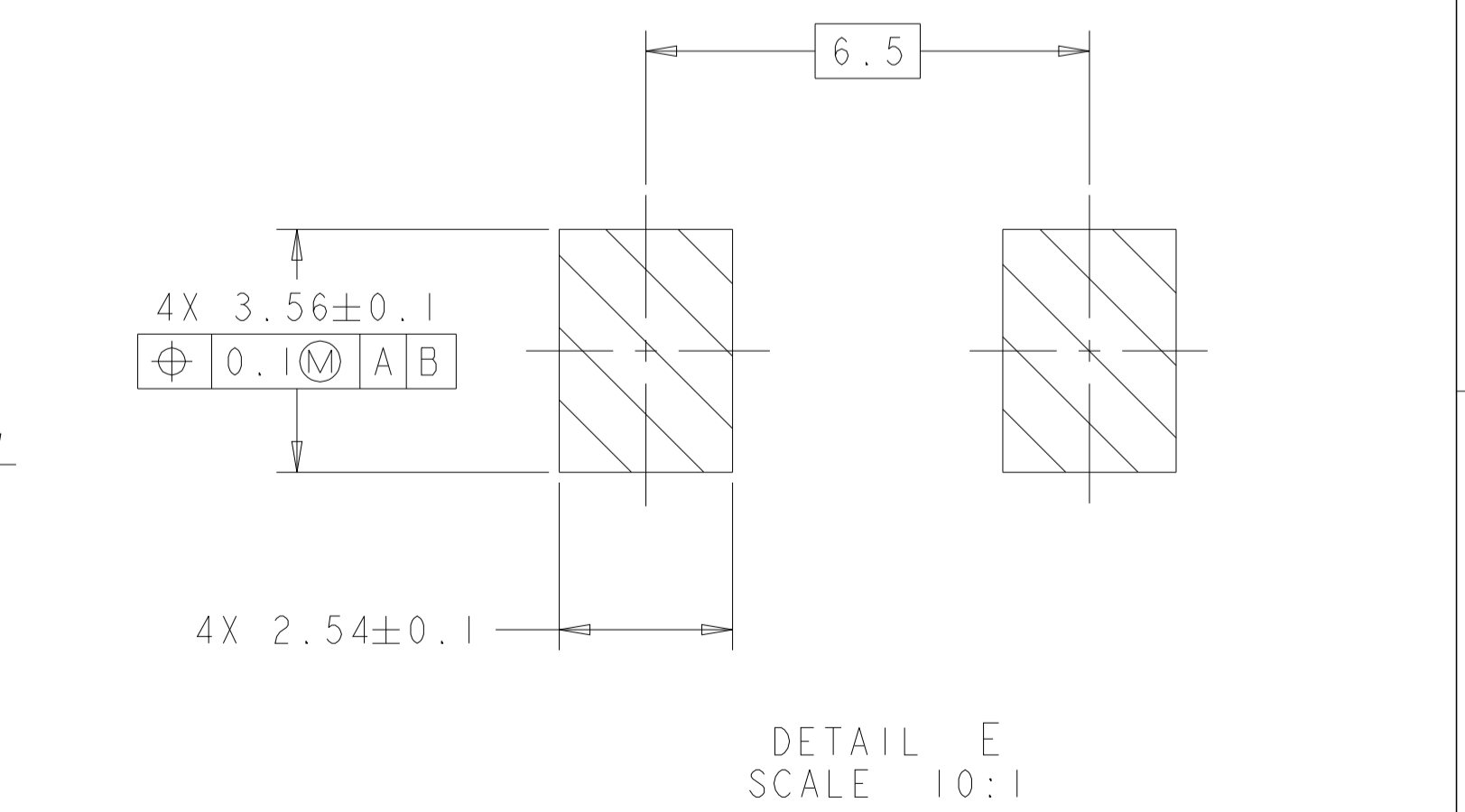
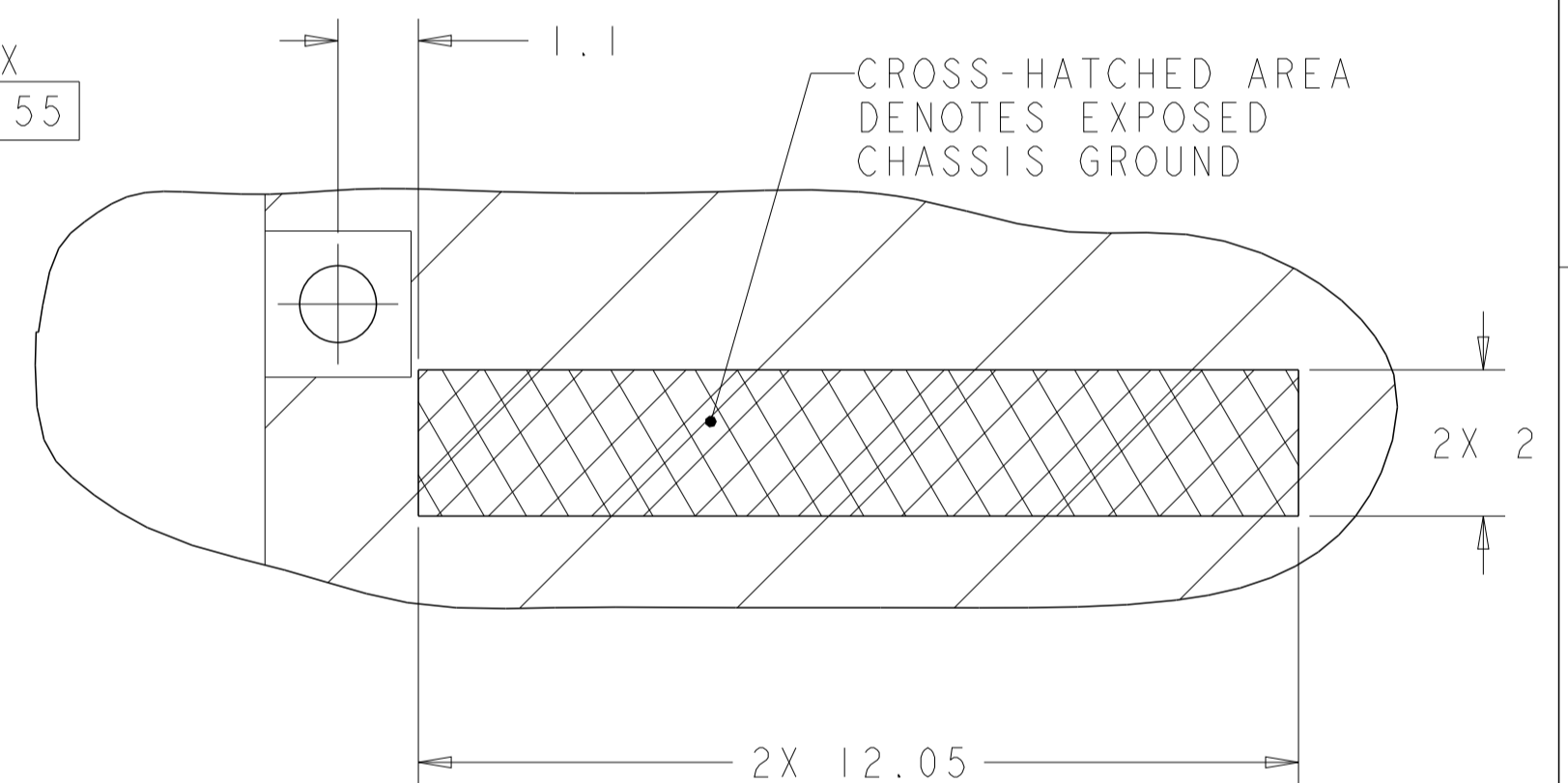
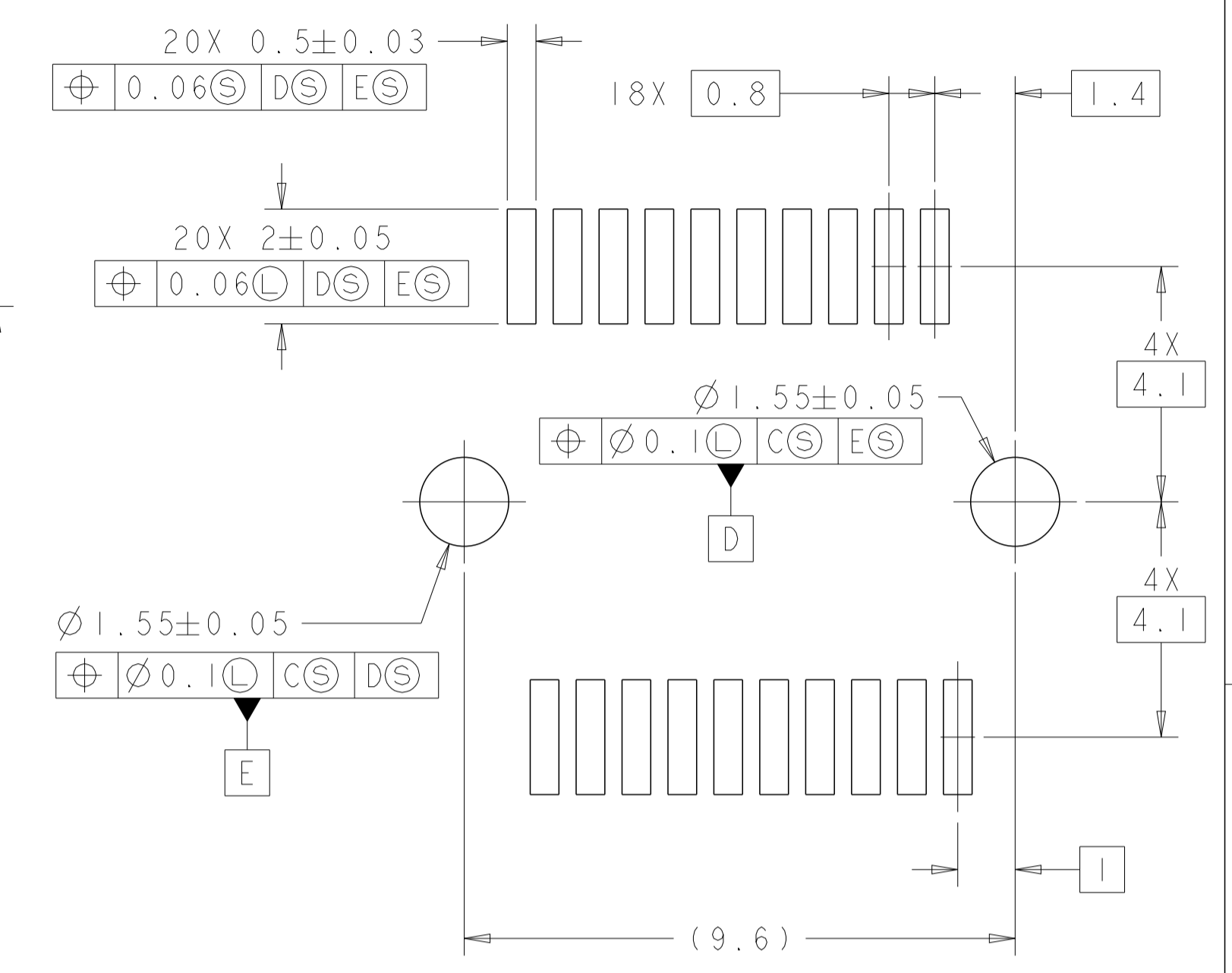
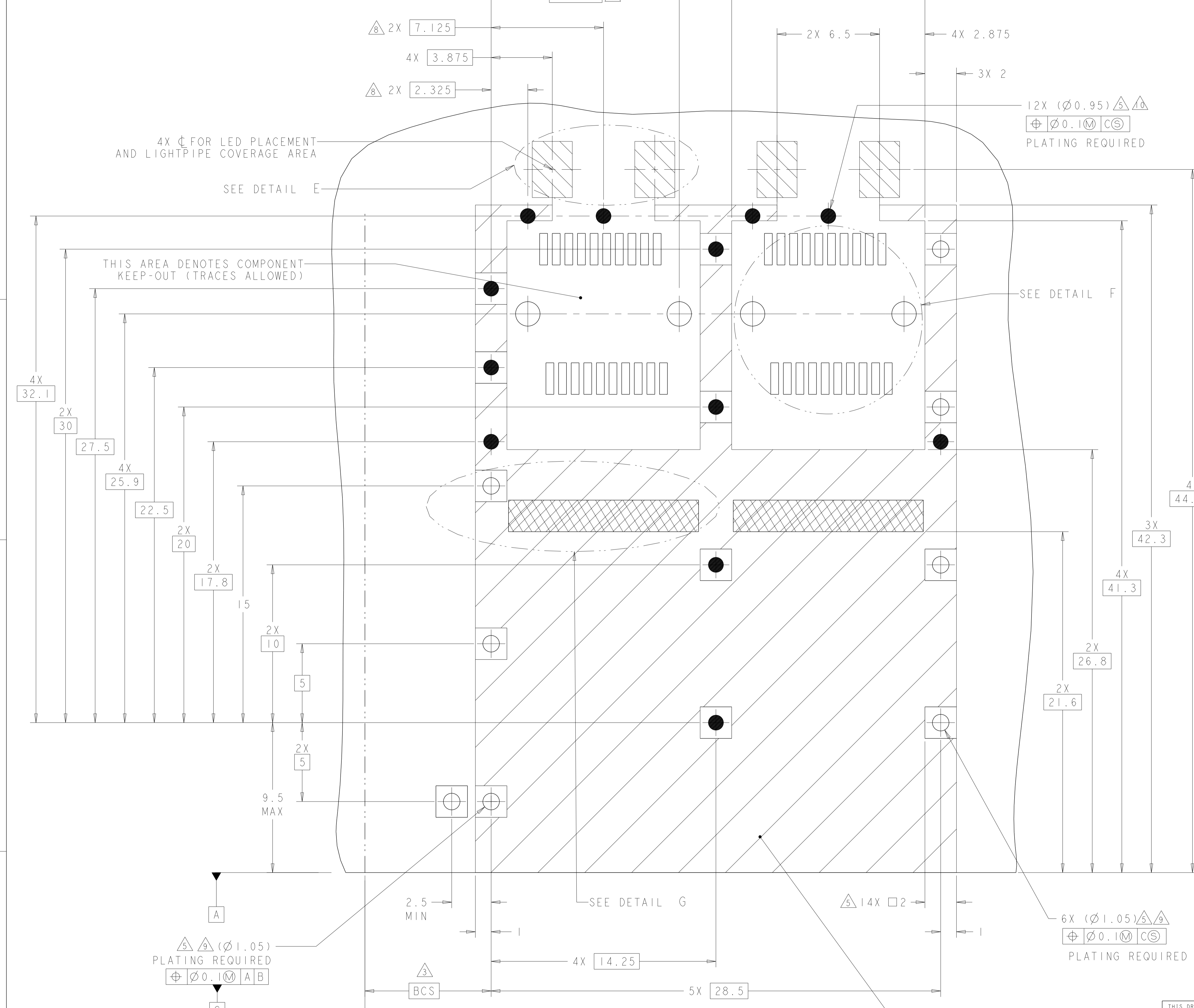
2198232
 MOUNTED ON PC BOARD
 SHOWN THRU RECOMMENDED BEZEL



2198232
 MOUNTED BELLY TO BELLY ON PC BOARD
 SHOWN THRU RECOMMENDED BEZEL

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: B. MATTHEWS 01NOV2011	TE Connectivity
DIMENSIONS: mm		CHK: M. SCHMITT 01NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.13 1 PLC ±0.1 2 PLC ±0.08 3 PLC ±0.05 4 PLC ±0.05 ANGLES ±1		APVD: M. SCHMITT 01NOV2011	NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EXTERNAL EMI SPRINGS WITH HEATSINK AND LIGHTPIPE
MATERIAL: FINISH		PRODUCT SPEC: 108-2364	RESTRICTED TO: A100779
		APPLICATION SPEC: 114-13120	SCALE: 6:1
		WEIGHT: -	SHEET 3 OF 5
		Customer Drawing	REV: A2

LOC	DIST	REV	DATE	BY	APPV
GP	00				



4X ϕ FOR LED PLACEMENT AND LIGHTPIPE COVERAGE AREA
SEE DETAIL E

THIS AREA DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)

SEE DETAIL F

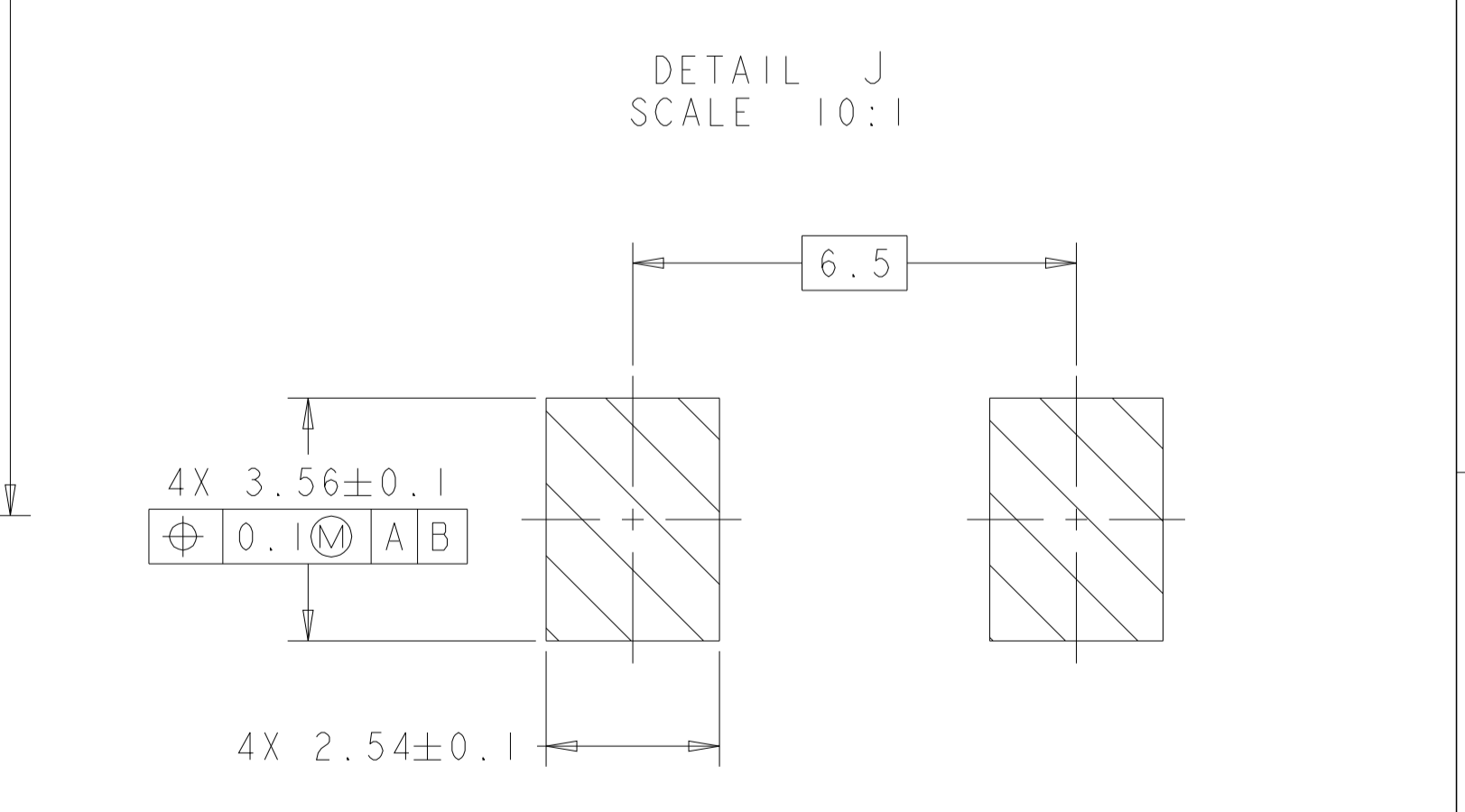
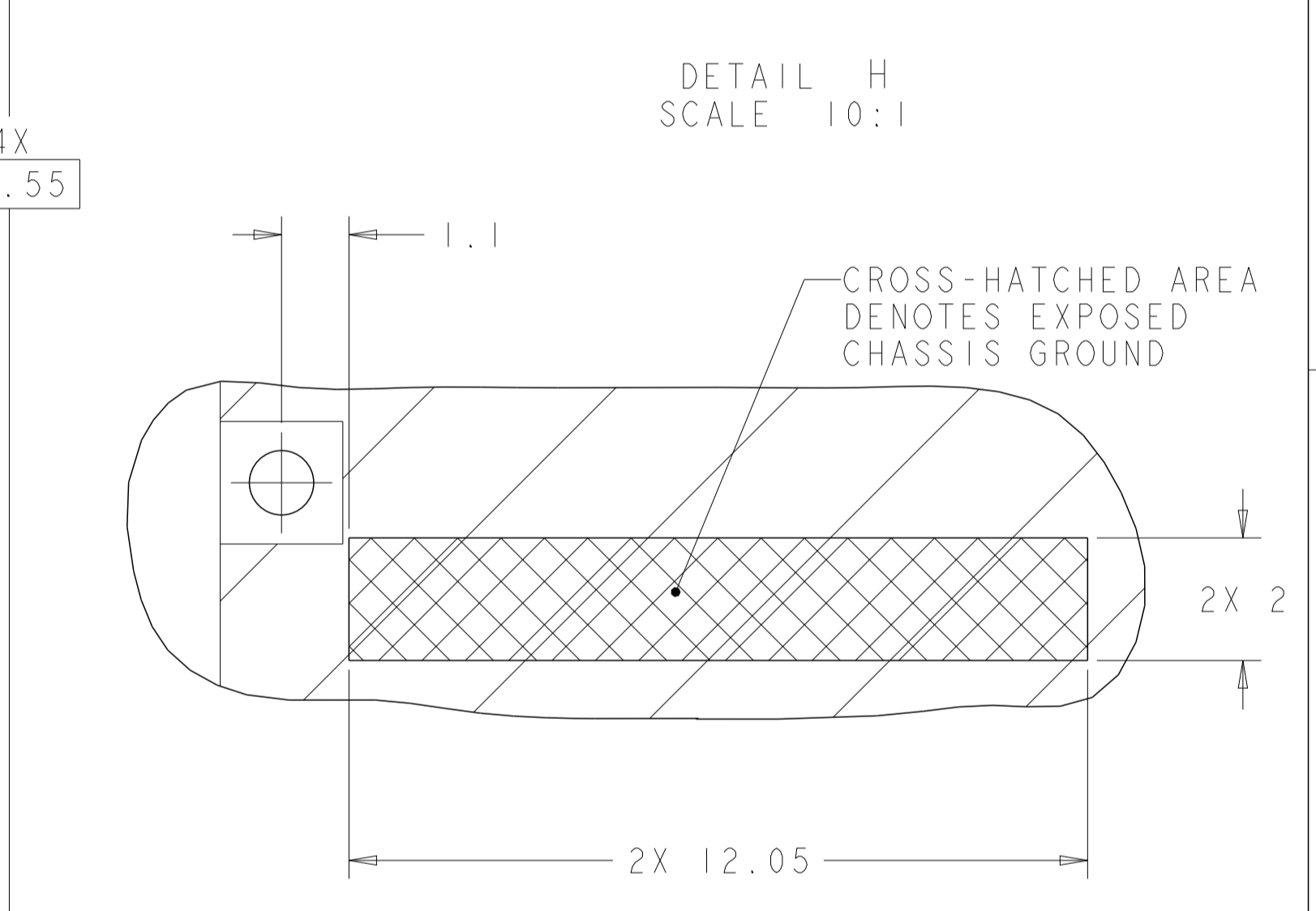
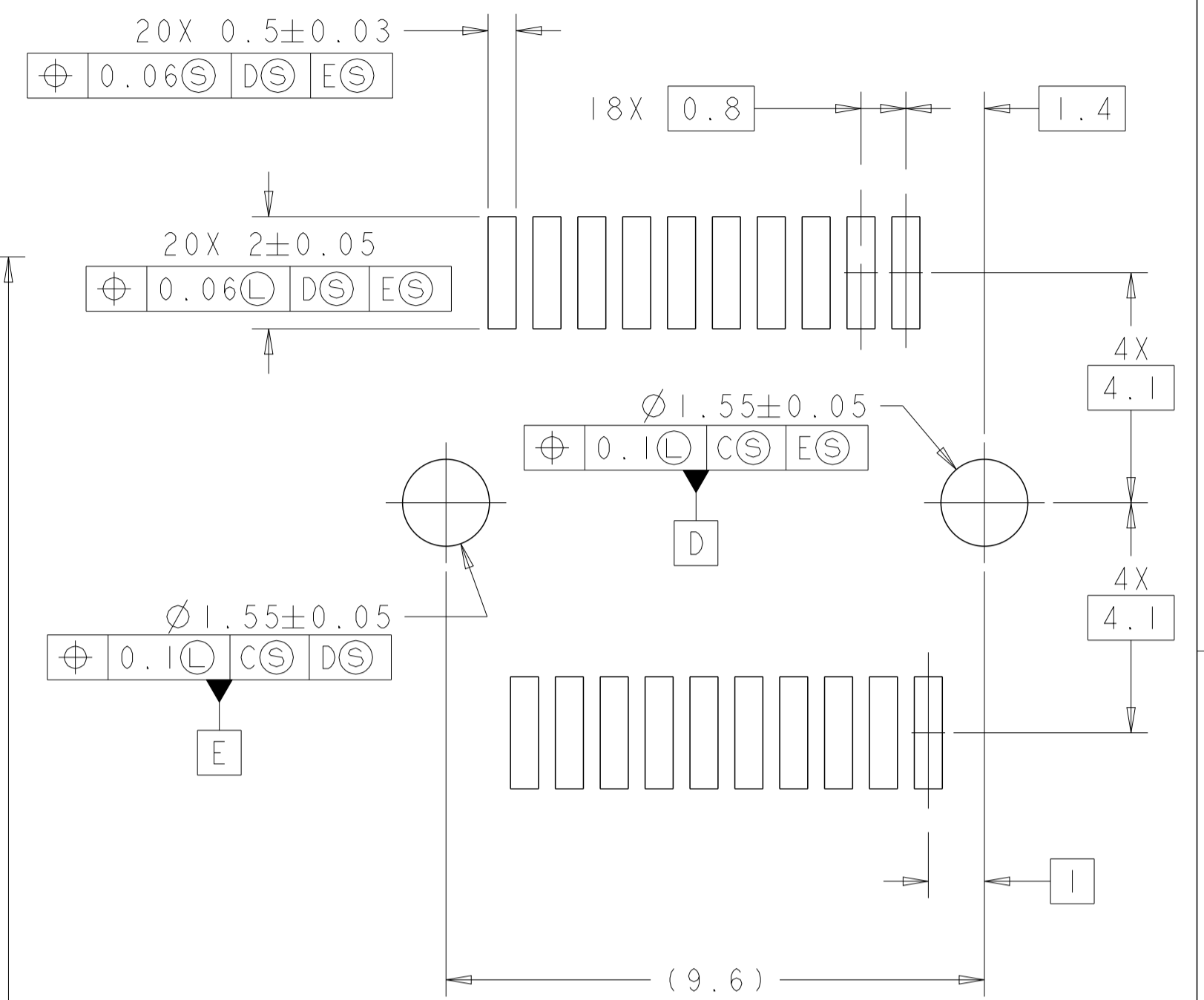
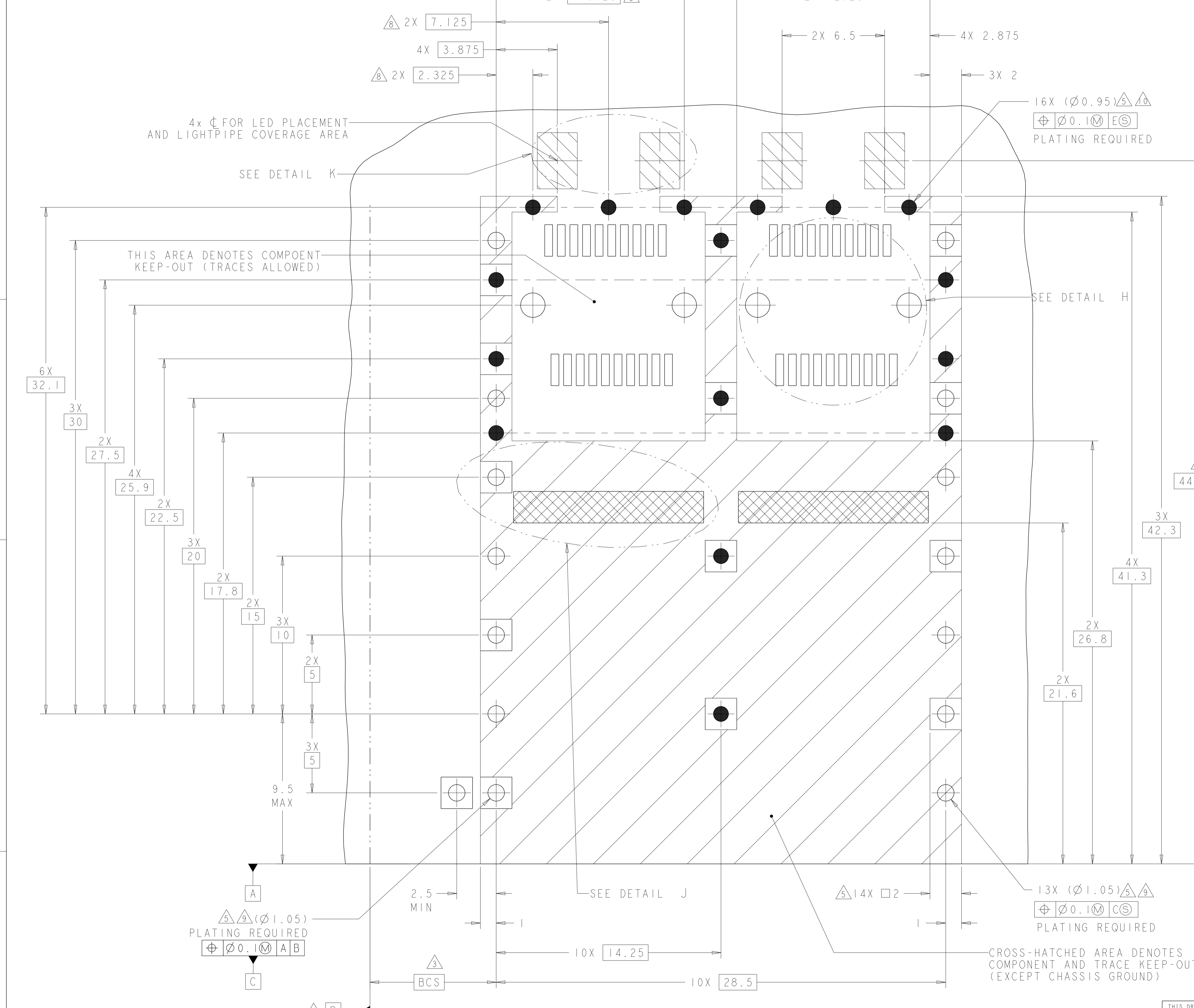
SEE DETAIL G

RECOMMENDED PCB CONFIGURATION WITH KEEP-OUT AREAS SINGLE SIDED APPLICATIONS SCALE 8:1

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

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: B. MATTHEWS 01NOV2011	TE Connectivity
DIMENSIONS: mm		CHK: M. SCHMITT 01NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APV: M. SCHMITT 01NOV2011	NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EXTERNAL EMI SPRINGS WITH HEATSINK AND LIGHTPIPE
0 PLC	±0.13	PRODUCT SPEC	108-2364
1 PLC	±0.1	APPLICATION SPEC	114-13120
2 PLC	±0.08	WEIGHT	-
3 PLC	±0.05	SIZE	A1 00779
4 PLC	±0.05	CAGE CODE	2198232
ANGLES	±1	DRAWING NO	Customer Drawing
MATERIAL	FINISH	SCALE	6:1
		SHEET	4 OF 5
		REV	A2

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



4x ϕ FOR LED PLACEMENT AND LIGHTPIPE COVERAGE AREA
 SEE DETAIL K
 THIS AREA DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)
 SEE DETAIL H
 SEE DETAIL J
 PLATING REQUIRED
 PLATING REQUIRED
 PLATING REQUIRED
 PLATING REQUIRED
 CROSS-HATCHED AREA DENOTES EXPOSED CHASSIS GROUND
 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: B. MATTHEWS 01NOV2011	TE Connectivity
DIMENSIONS: mm		CHK: M. SCHMITT 01NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: M. SCHMITT 01NOV2011	NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EXTERNAL EMI SPRINGS WITH HEATSINK AND LIGHTPIPE PRODUCT SPEC: 108-2364 APPLICATION SPEC: 114-13120 WEIGHT: - Customer Drawing
0 PLC ±0.13 1 PLC ±0.1 2 PLC ±0.08 3 PLC ±0.05 4 PLC ±0.05 ANGLES ±1		SIZE: A1 CAGE CODE: 100779 DRAWING NO: 2198232 SCALE: 6:1 SHEET: 5 OF 5 REV: A2	