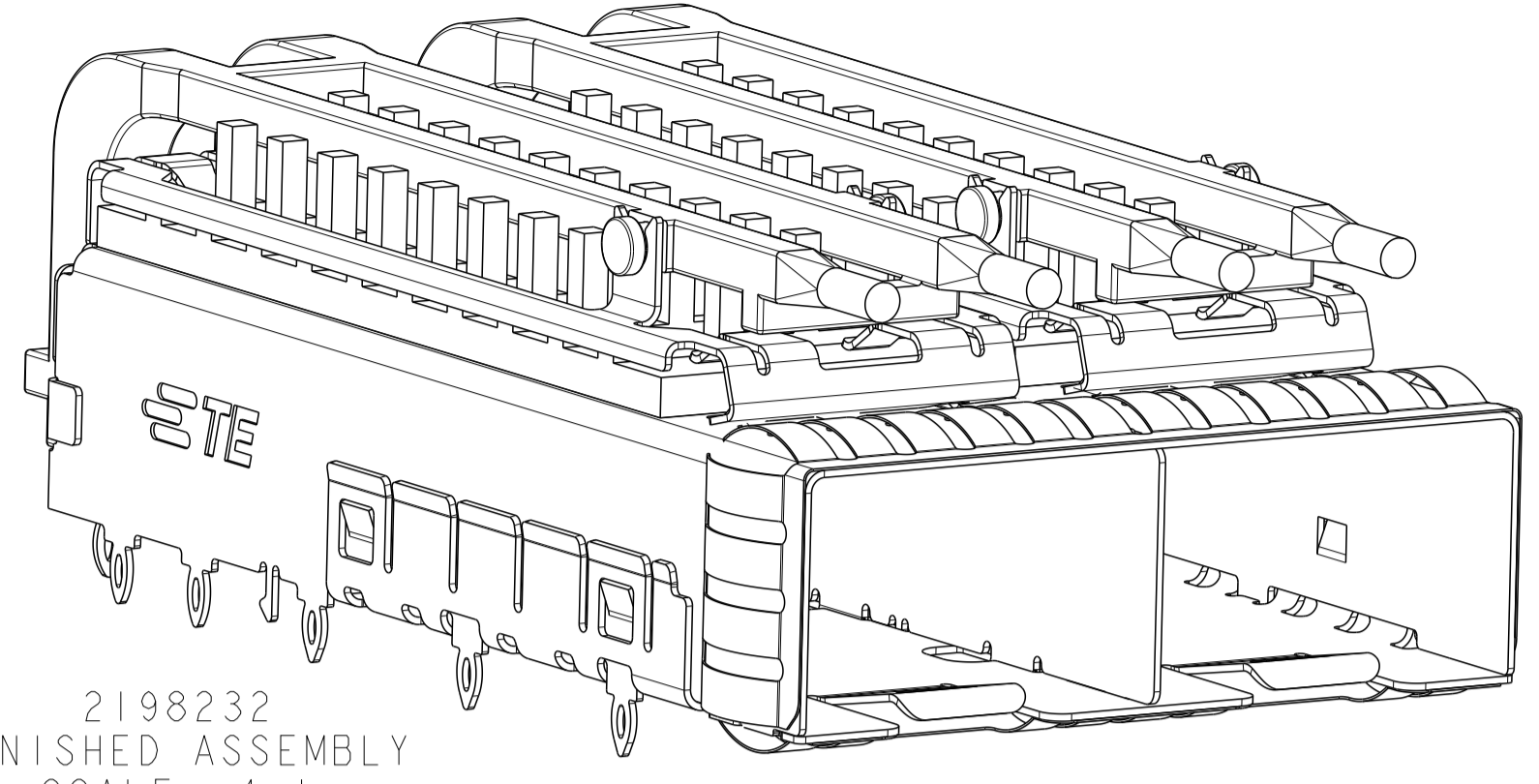


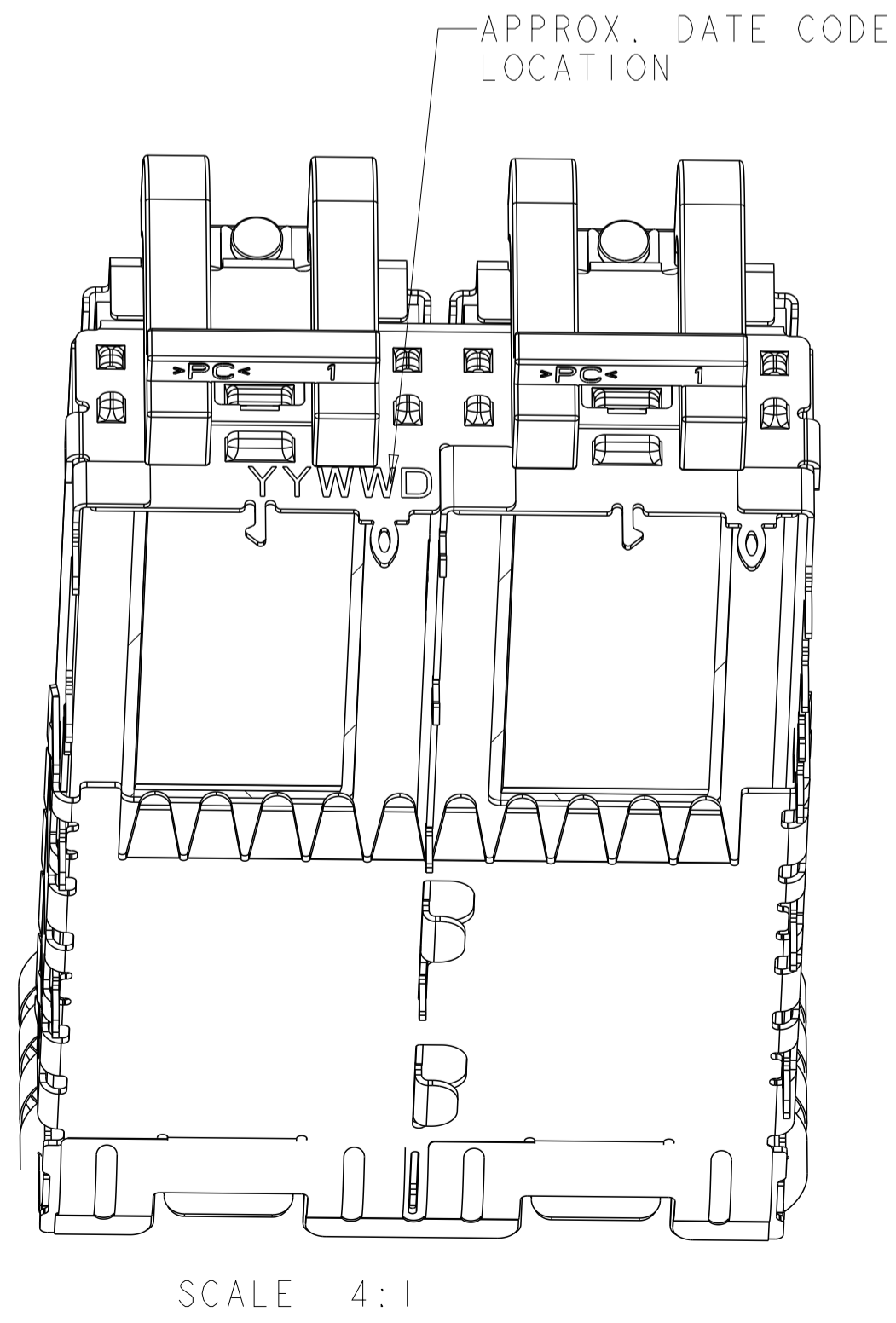
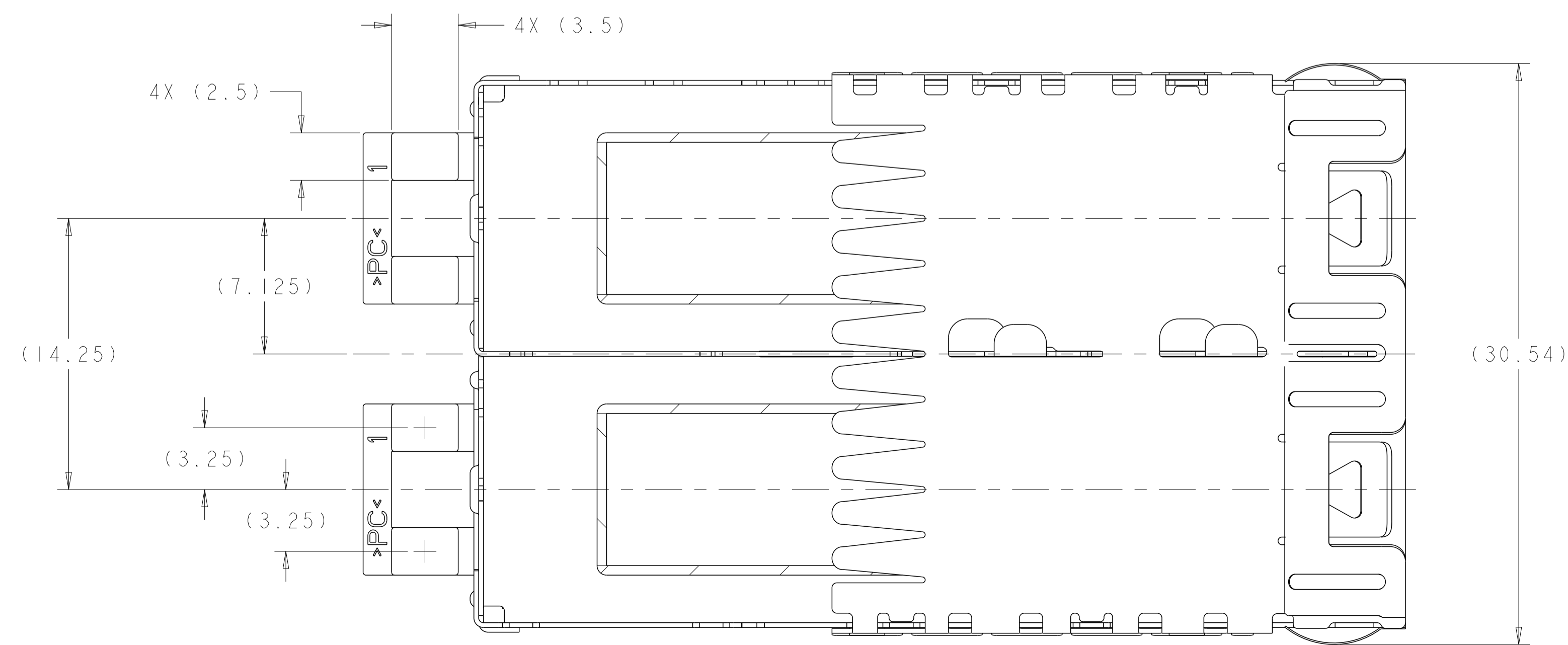
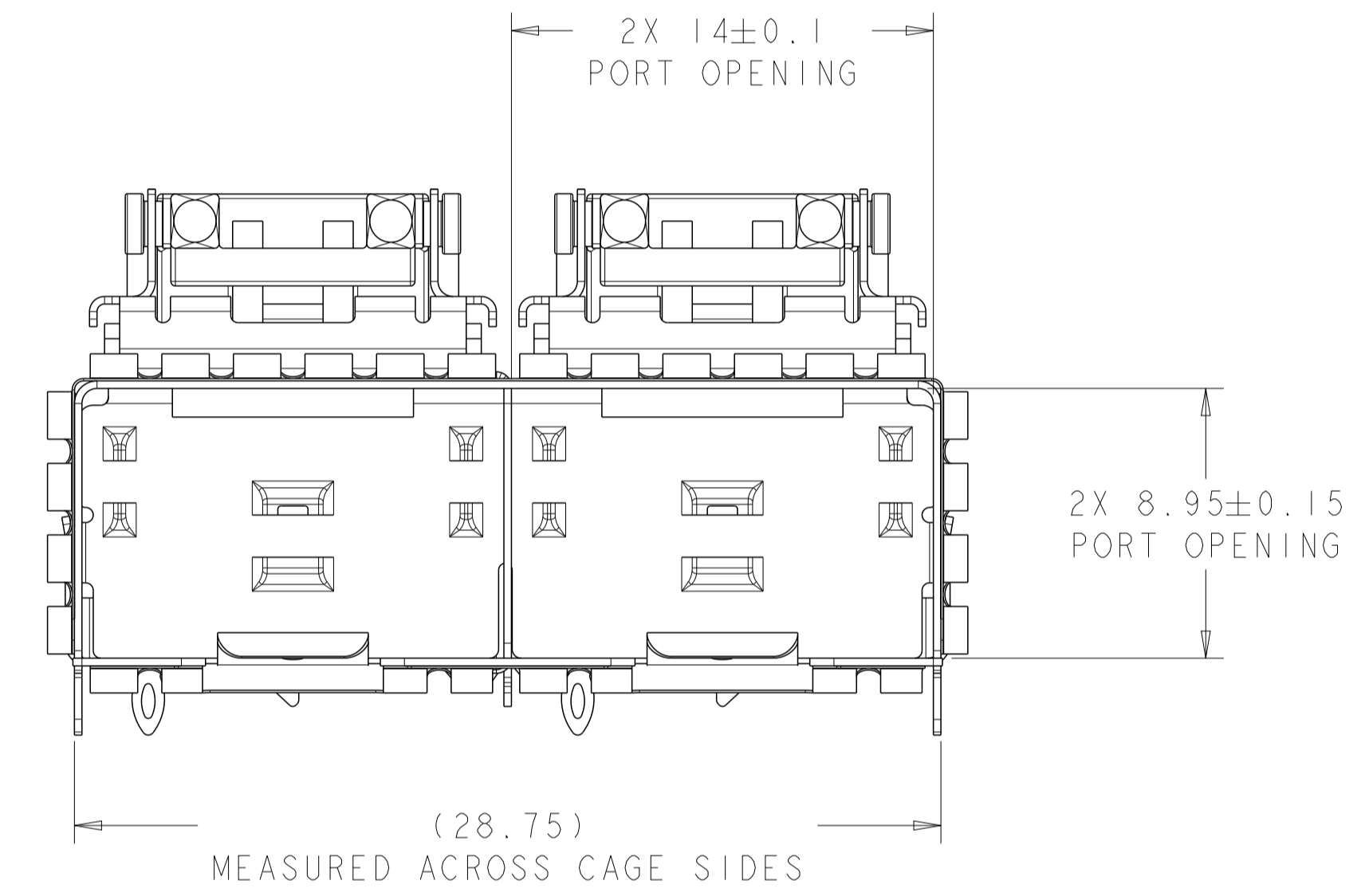
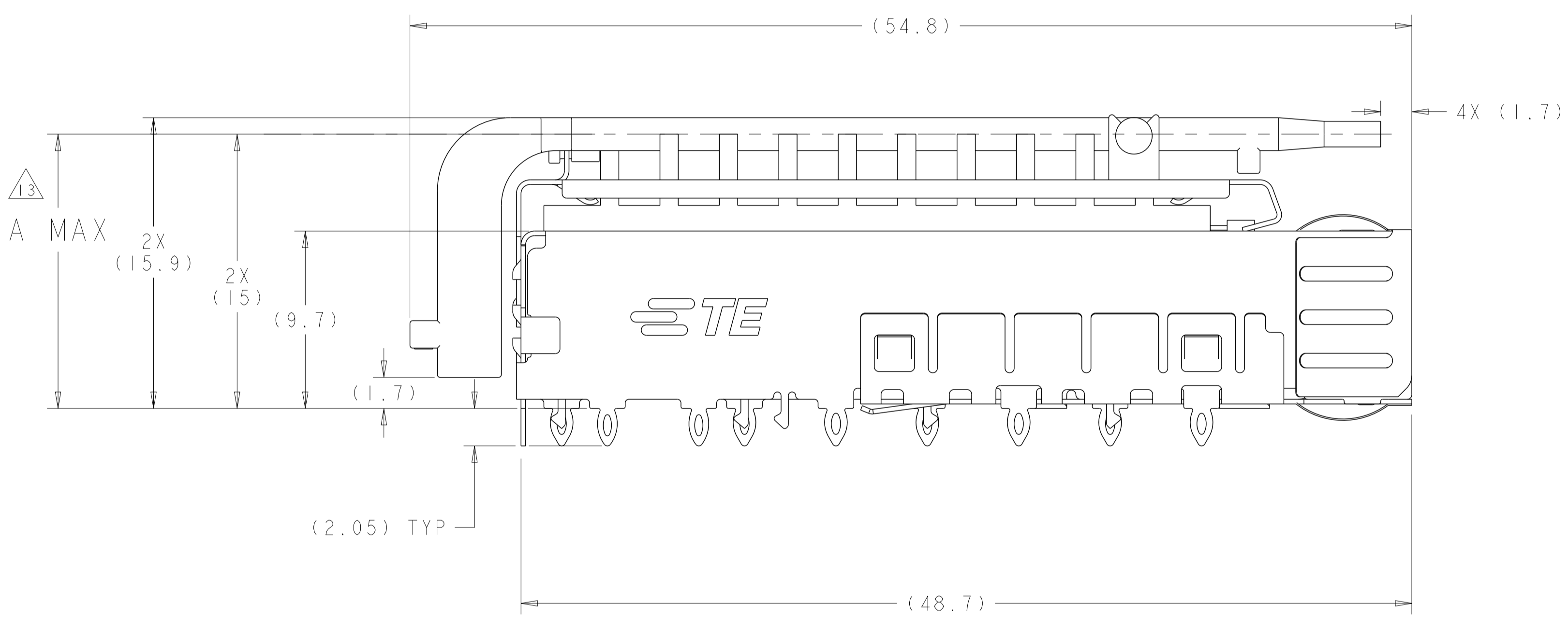
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GP	00	P	LTN	DESCRIPTION	DATE	DWN	APVD
		A		RELEASED PER ECO-12-013192	08OCT2012	BMM	MRS
		A1		RELEASED PER ECO-14-008488	06JUNE2014	PP	SH
		A2		RELEASED PER ECN-22-178209	08OCT2022	CZ	SZ
		A3		REVISED PER ECN-23-233023	27SEP2023	KH	SZ



2198232
 FINISHED ASSEMBLY
 SCALE 4:1

- 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
- 2 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.
- 3 DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- 4 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.
- 7 MINIMUM PC BOARD THICKNESS:
 SINGLE SIDED: 1.5mm
 DOUBLE SIDED: 2.25mm
- 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 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.
- 15 PACKAGED AS A COMPLETE ASSEMBLY.
- 16 WITH PAINTED LIGHT PIPE, FOUR SIDES BE PAINTED.



SCALE 4:1

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

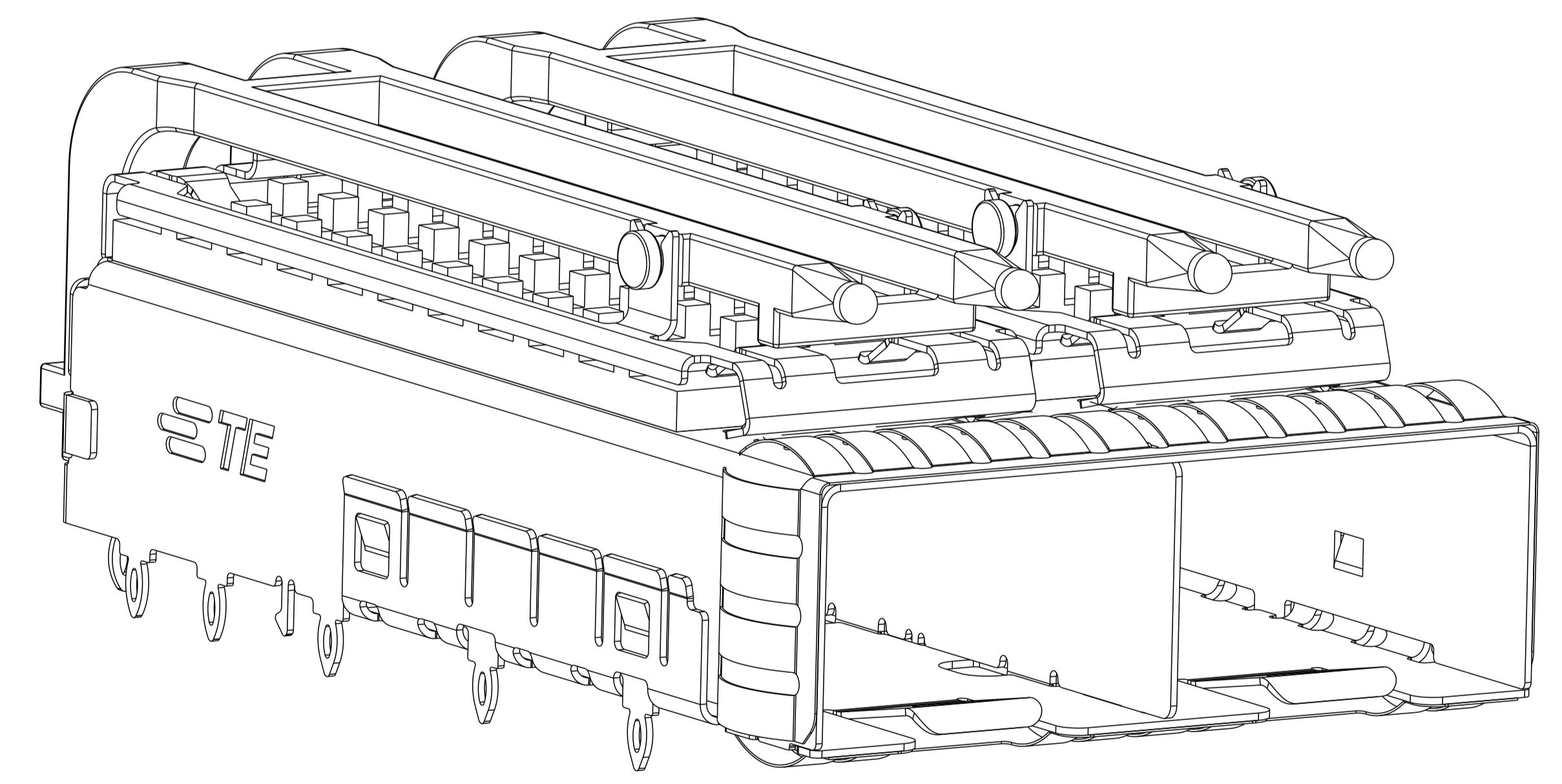
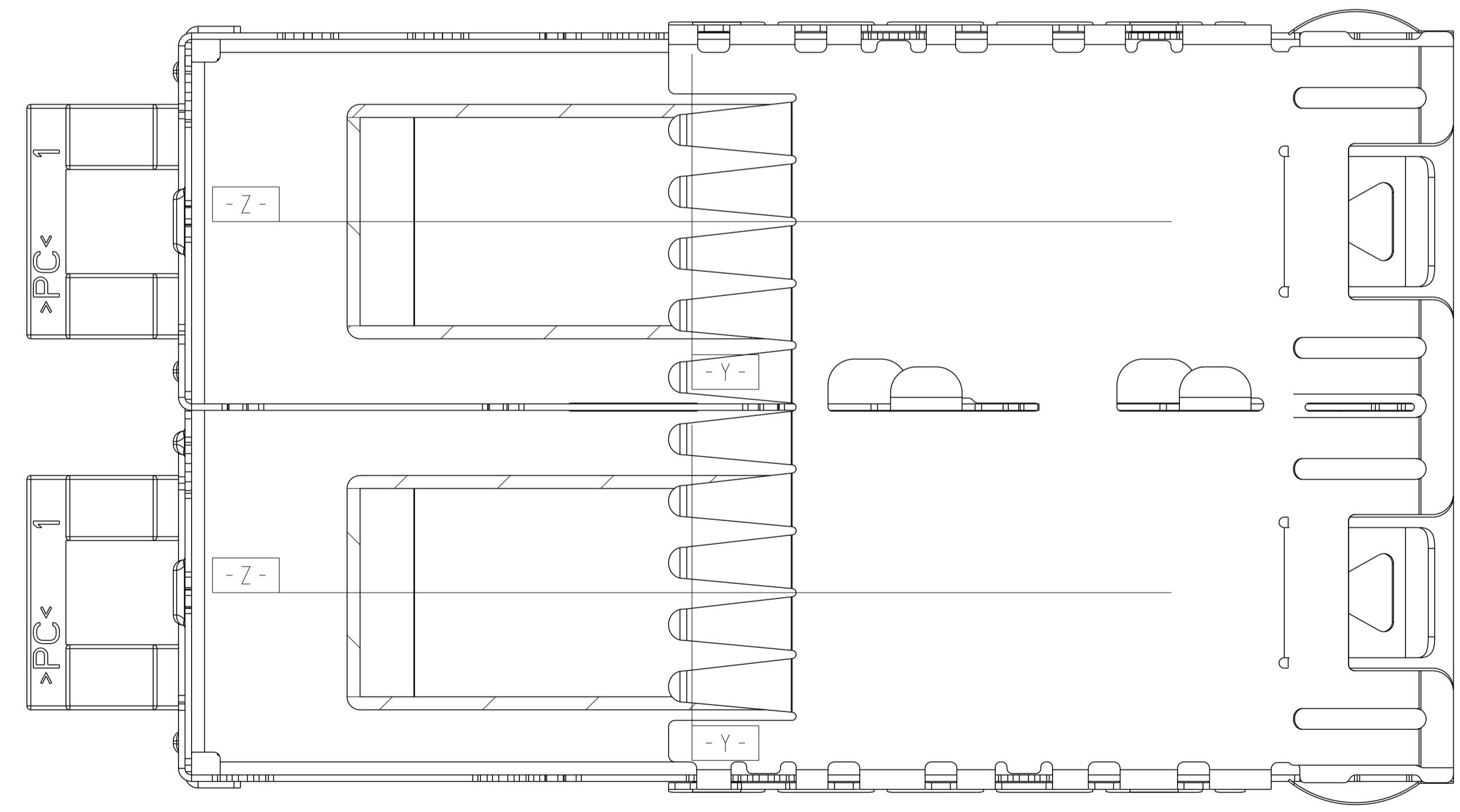
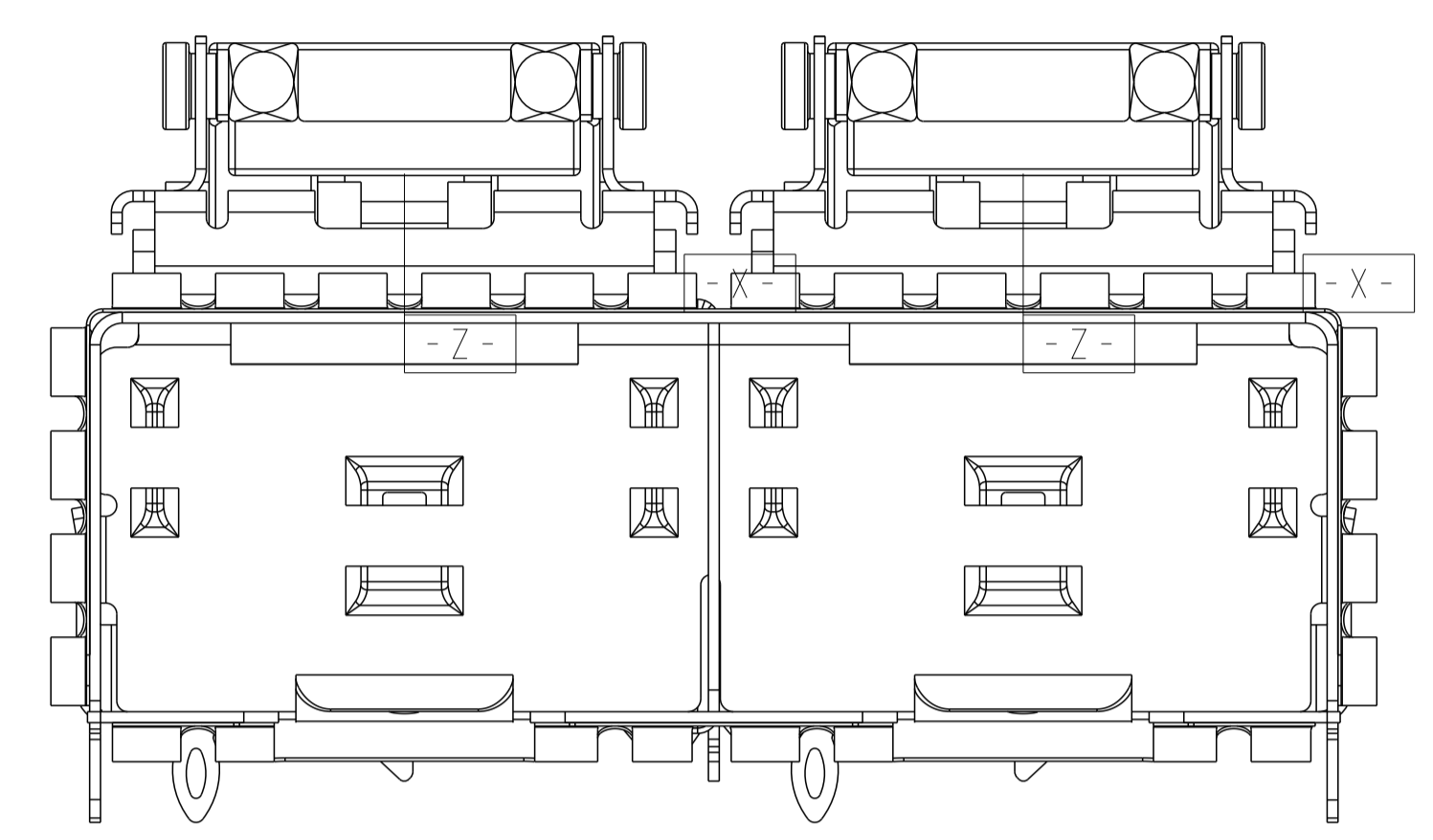
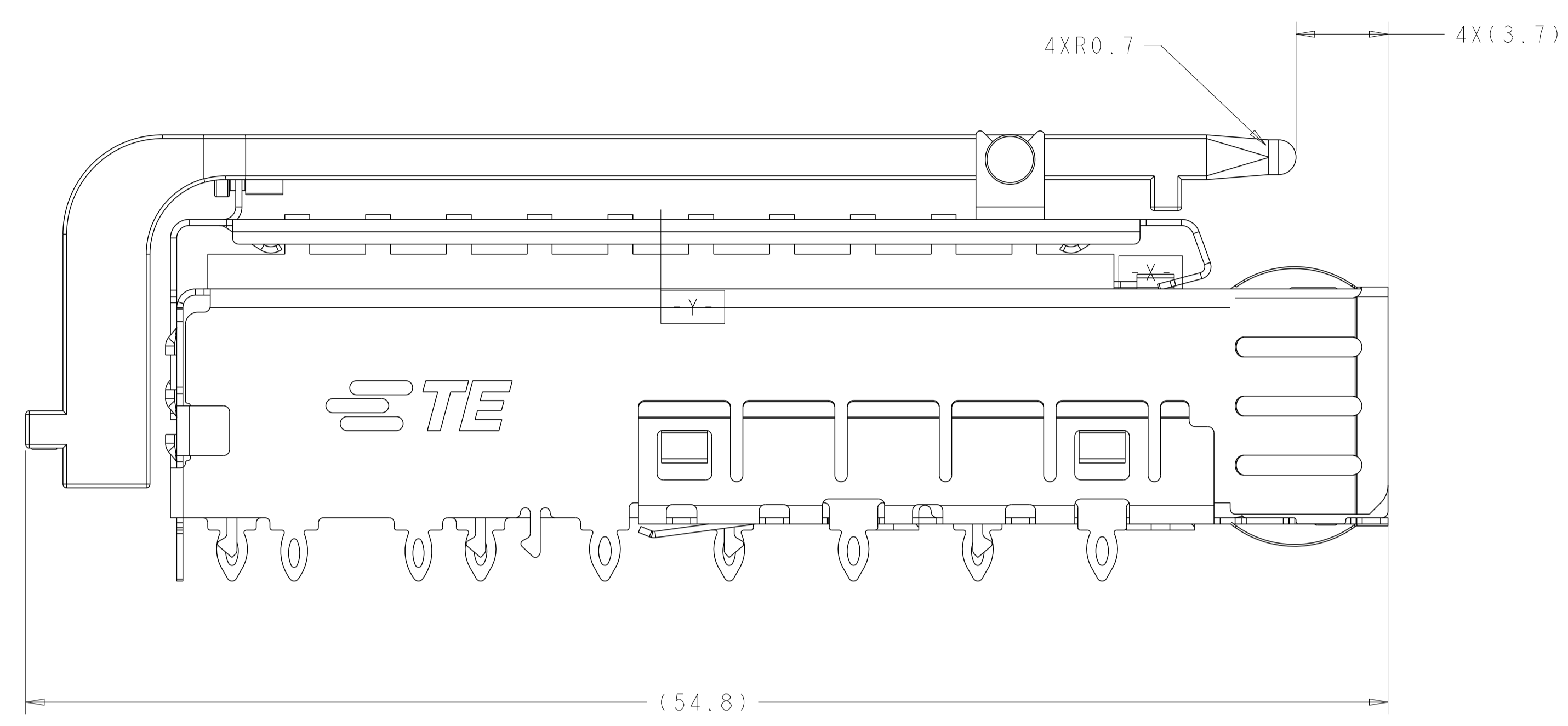
THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DWN B. MATTHEWS 01NOV2011	CHK M. SCHMITT 01NOV2011	NAME
mm	0 PLC ±0.13 1 PLC ±0.1 2 PLC ±0.08 3 PLC ±0.05 4 PLC ±0.05 ANGLES ±0.1	APVD M. SCHMITT 01NOV2011	PRODUCT SPEC	108-2364
MATERIAL	FINISH	APPLICATION SPEC	114-13120	SIZE CAGE CODE DRAWING NO
		WEIGHT		A100779C=2198232
		Customer Drawing	SCALE 6:1	SHEET 1 OF 5 REV A3

STE TE Connectivity

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

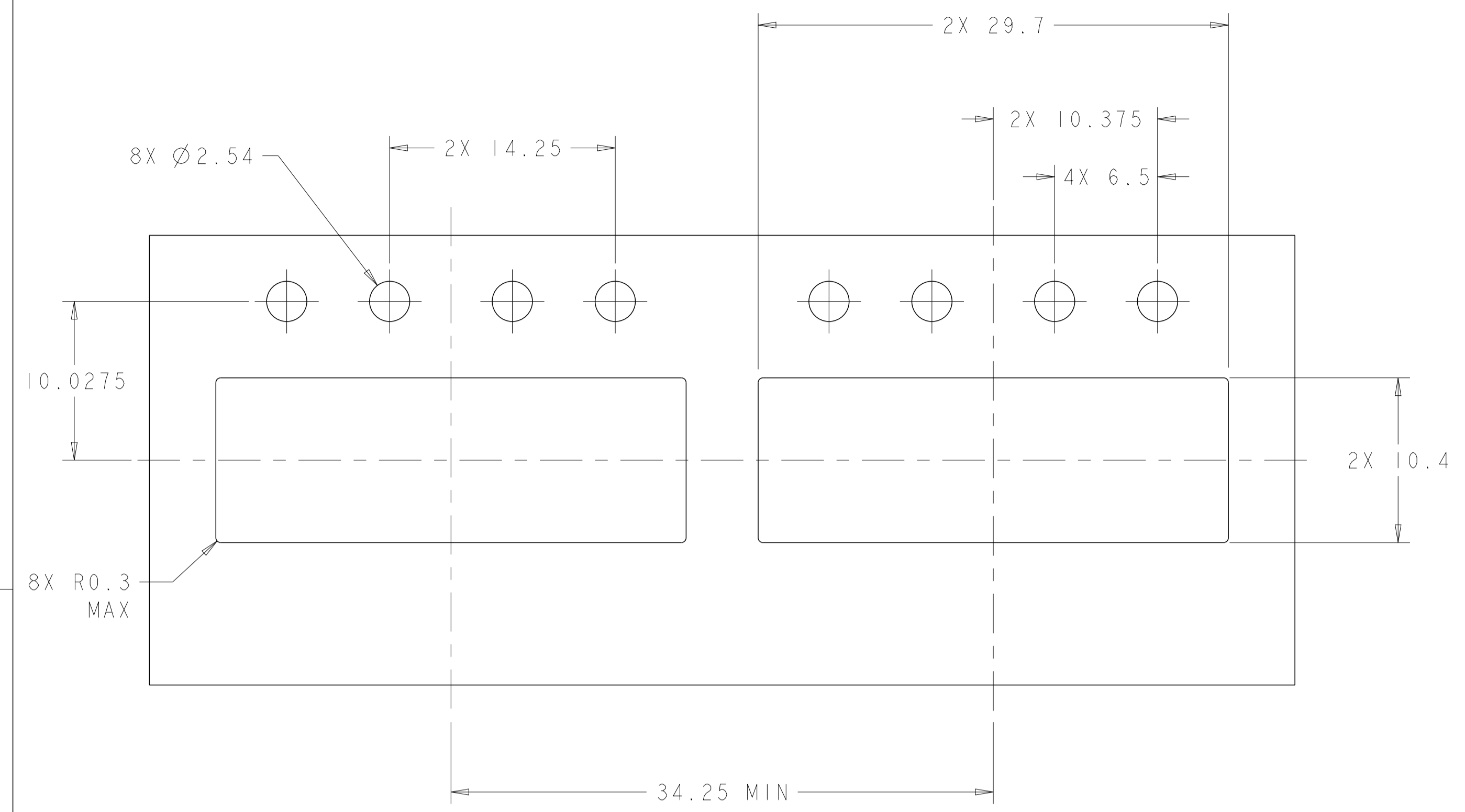
LOC	DIST	REVISIONS			
P	LTN	DESCRIPTION	DATE	DWN	APVD
-	-	SEE SHEET 1	-	-	-



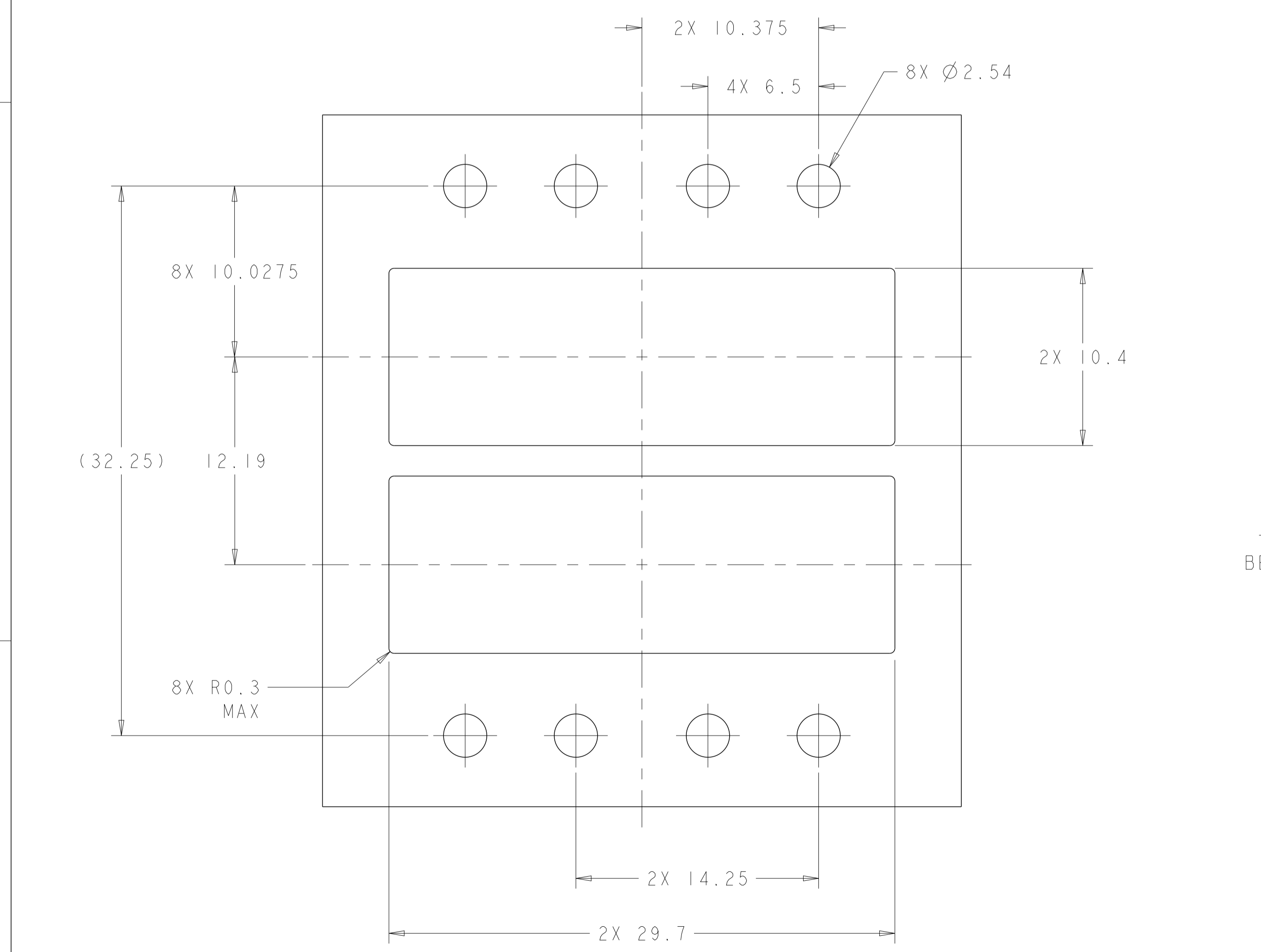
3-2198232-1
UNMARKED DIMENSIONS SAME AS 2198232-1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: 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 FINISH		APVD: M. SCHMITT 01NOV2011	NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EXTERNAL EMI SPRINGS WITH HEATSINK AND LIGHTPIPE
MATERIAL:		PRODUCT SPEC: 108-2364	RESTRICTED TO:
		APPLICATION SPEC: 114-13120	SIZE: A1
		WEIGHT: -	CAGE CODE: 00779
		Customer Drawing	SCALE: 6:1 SHEET 2 OF 5 REV: A3

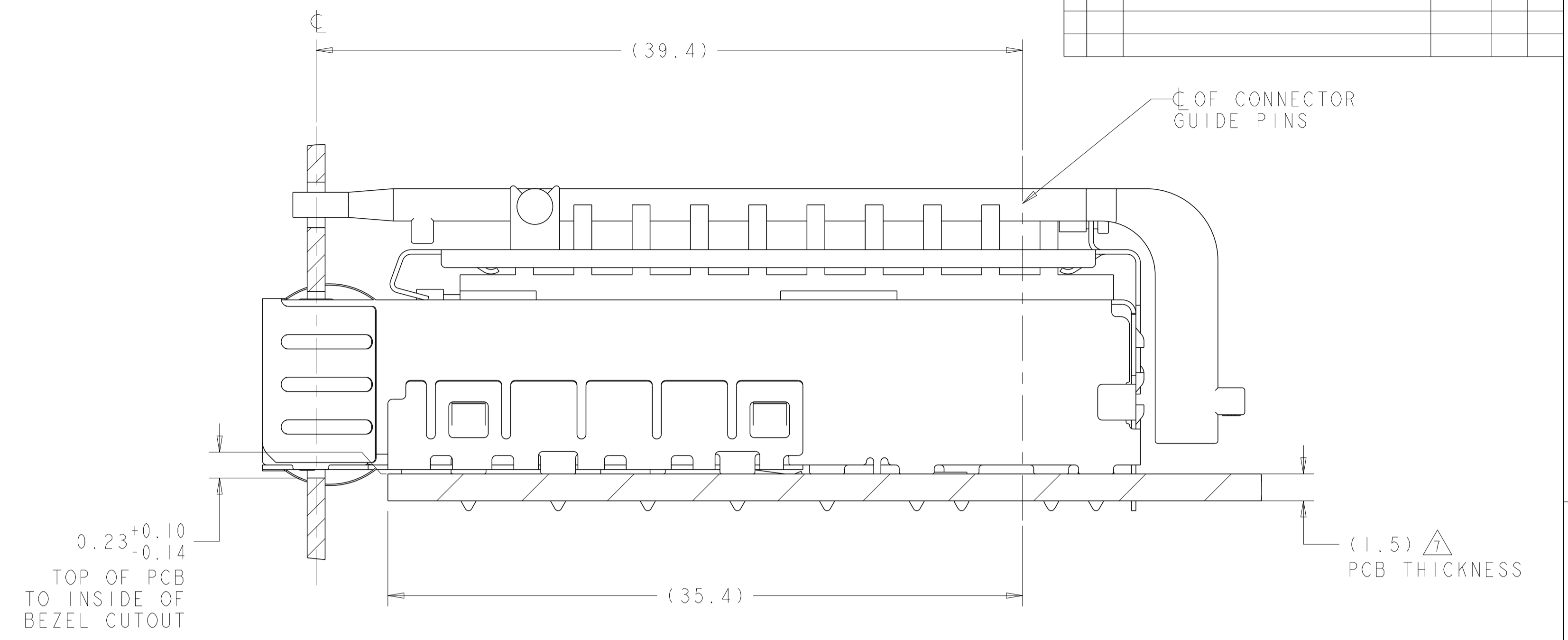
LOC	DIST	REVISIONS					
GP	00	P	LTN	DESCRIPTION	DATE	OWN	APVD
-	-	-	-	SEE SHEET 1	-	-	-



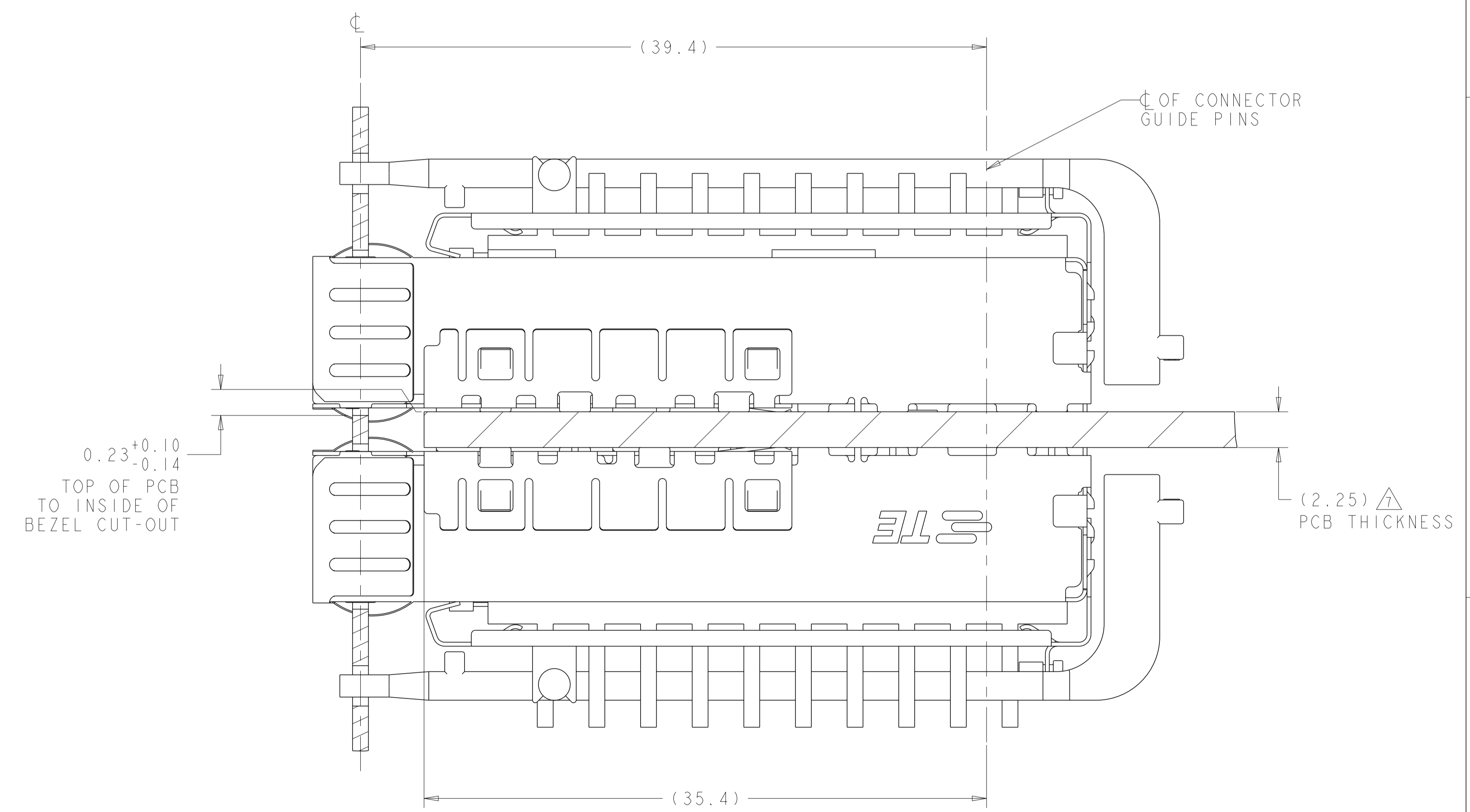
RECOMMENDED BEZEL CUT-OUT
 SINGLE SIDED APPLICATIONS
 SCALE 4:1



RECOMMENDED BEZEL CUT-OUT
 BELLY TO BELLY APPLICATIONS



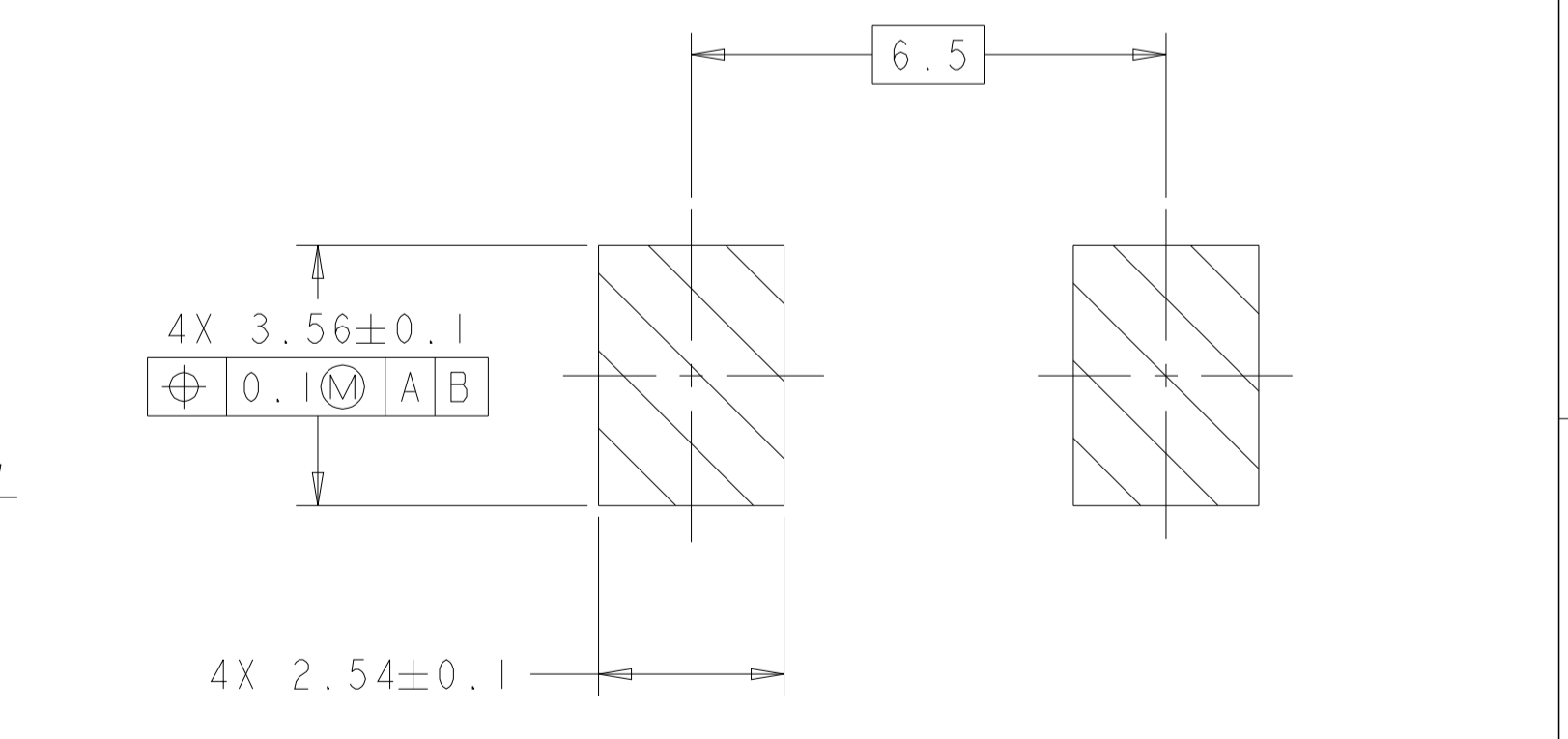
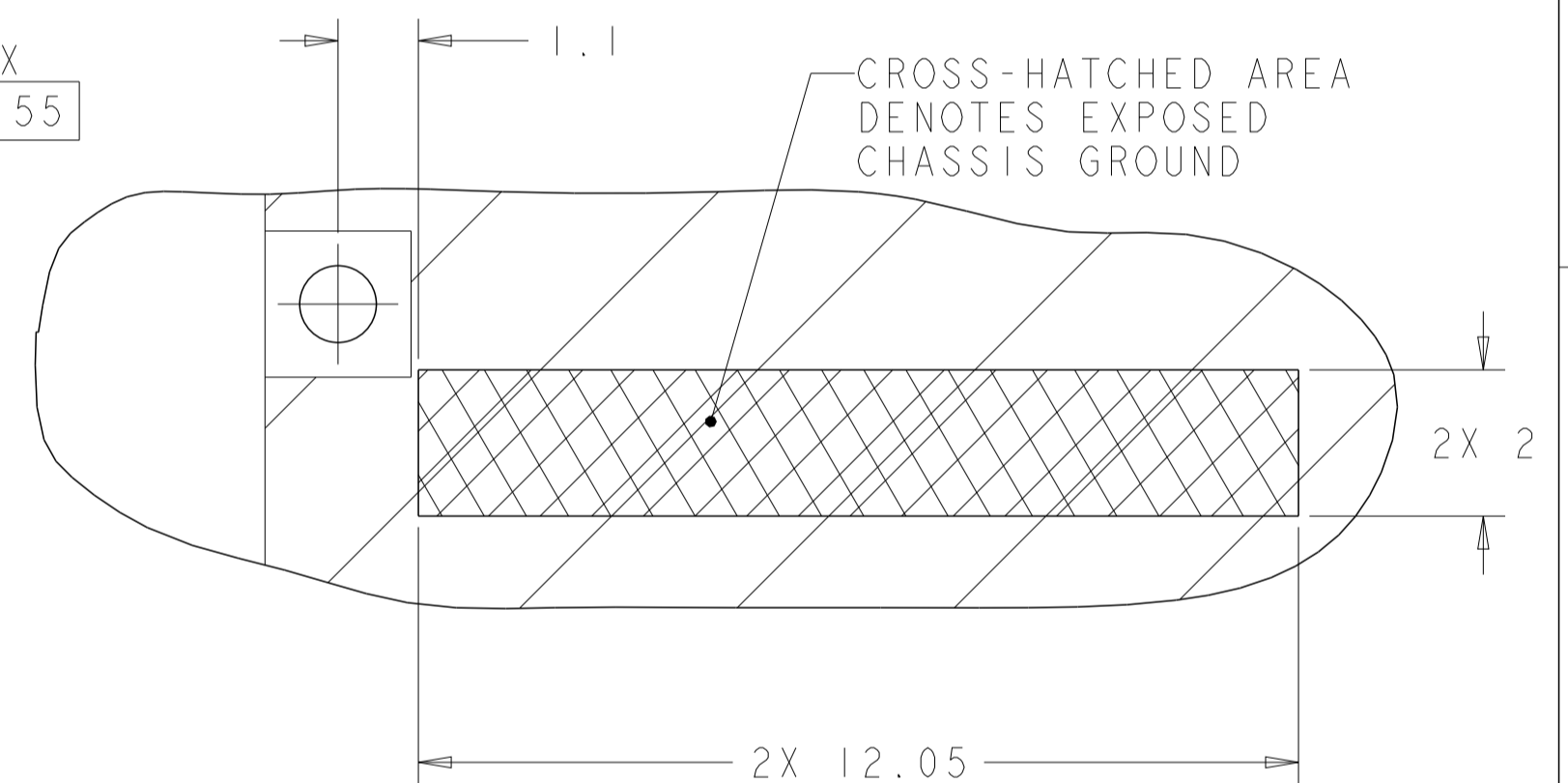
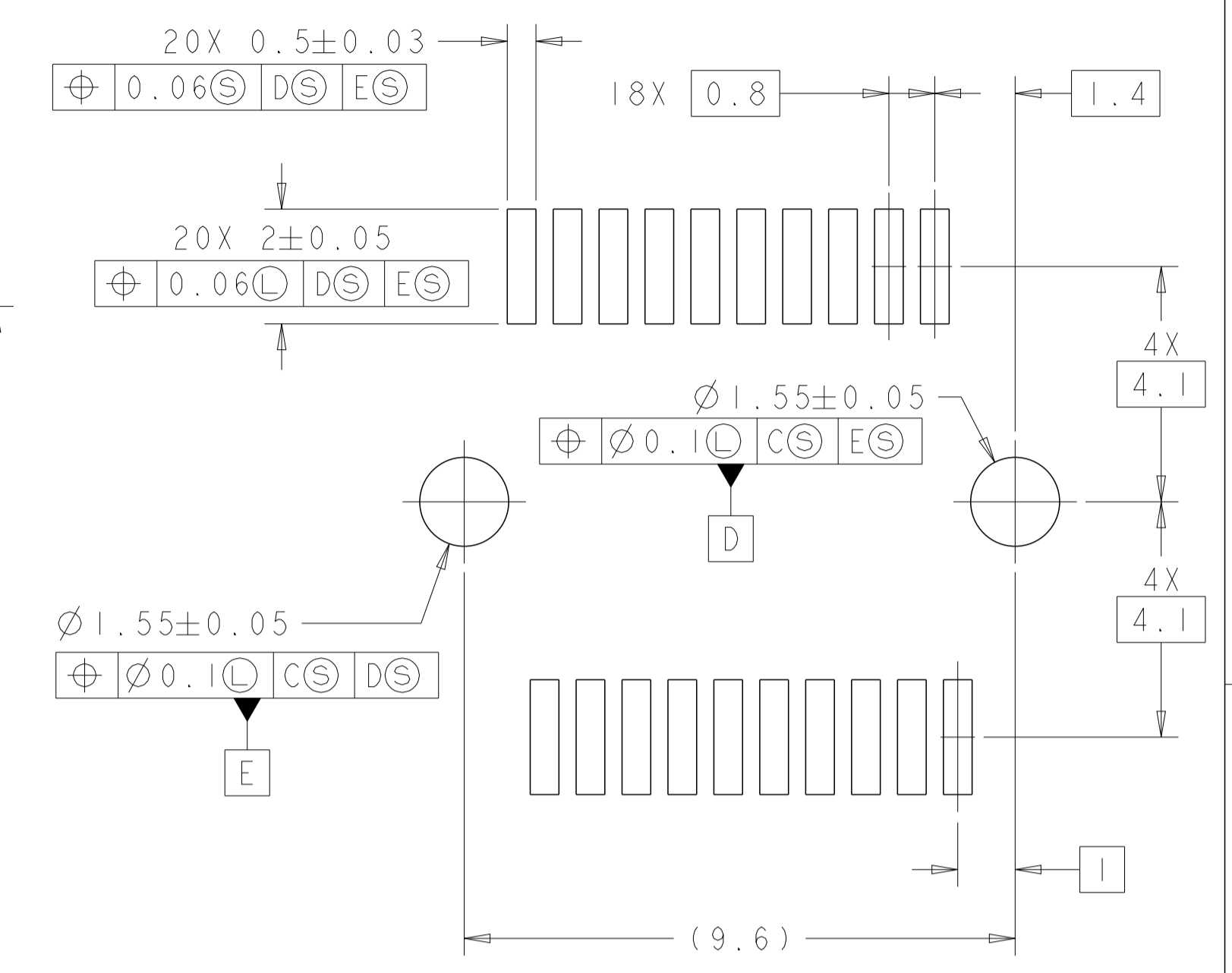
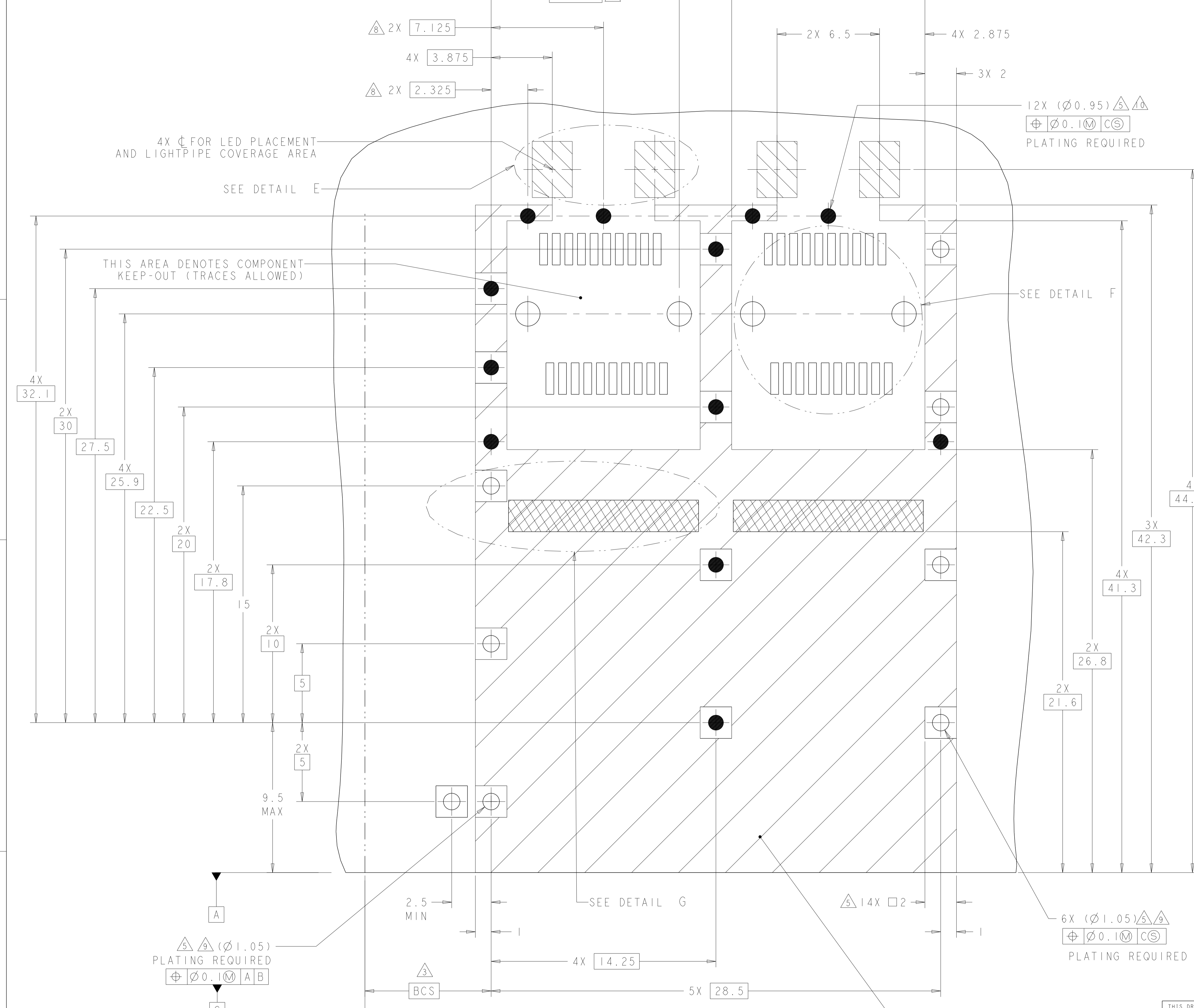
2198232
 MOUNTED ON PC BOARD
 SHOWN THRU RECOMMENDED BEZEL



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:		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
0 PLC ±0.13 1 PLC ±0.1 2 PLC ±0.08 3 PLC ±0.05 4 PLC ±0.05 ANGLES ±0.5		SIZE: A1 CAGE CODE: 100779 DRAWING NO: 2198232 WEIGHT: - FINISH: - MATERIAL: -	
MATERIAL:		RESTRICTED TO:	SCALE: 6:1 SHEET: 3 OF 5 REV: A3

LOC	DIST	REV	DATE	BY	APPV
GP	00				

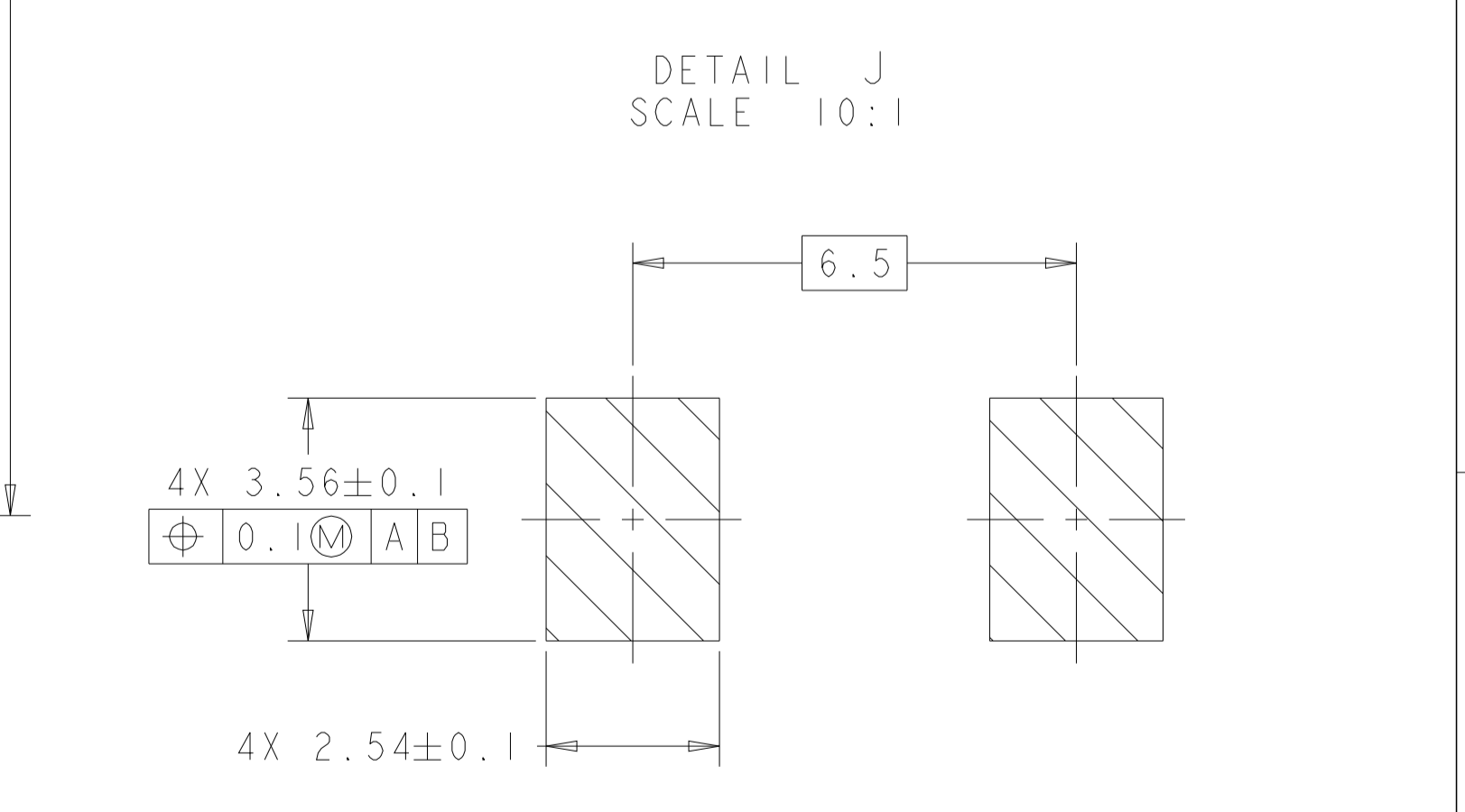
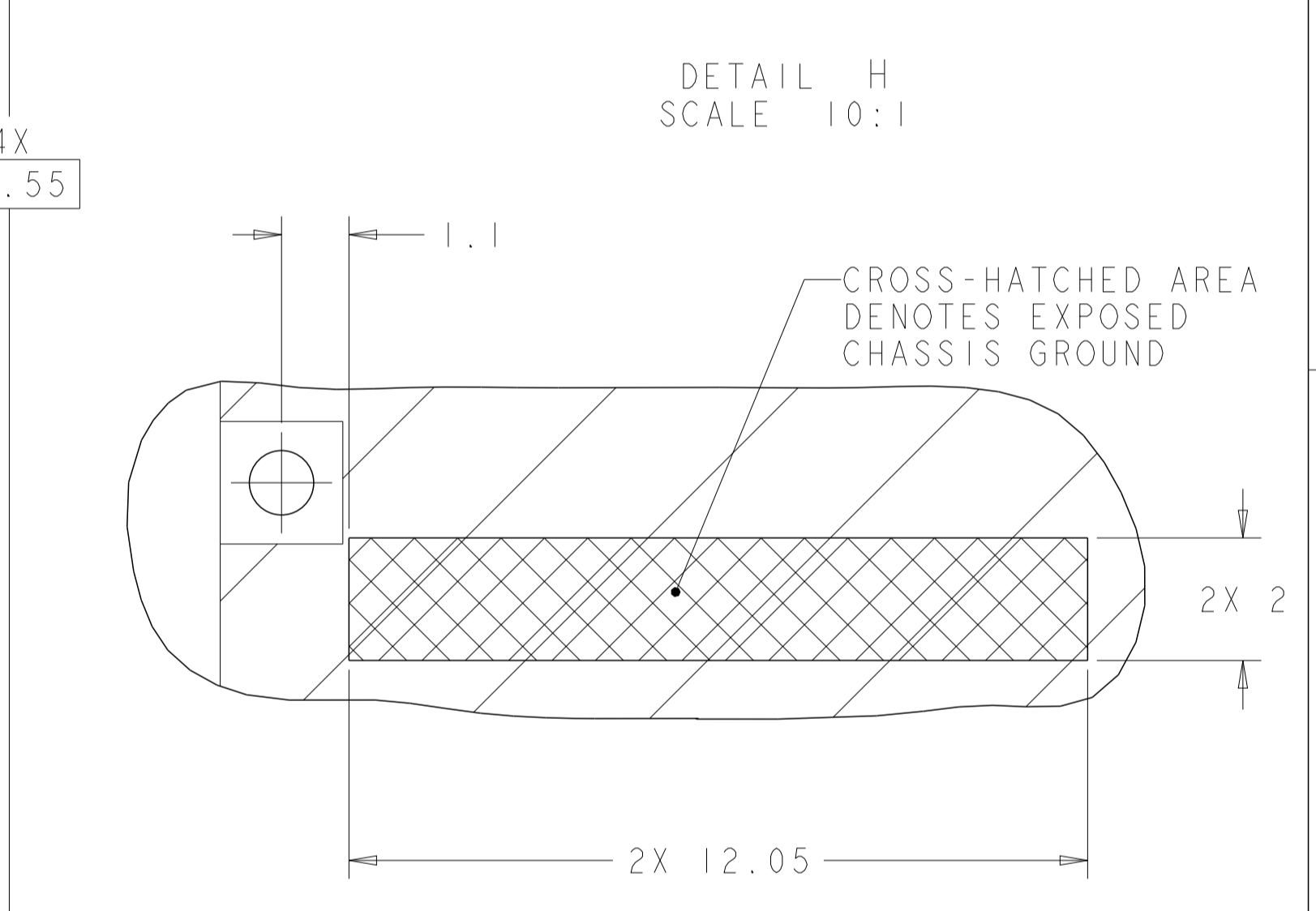
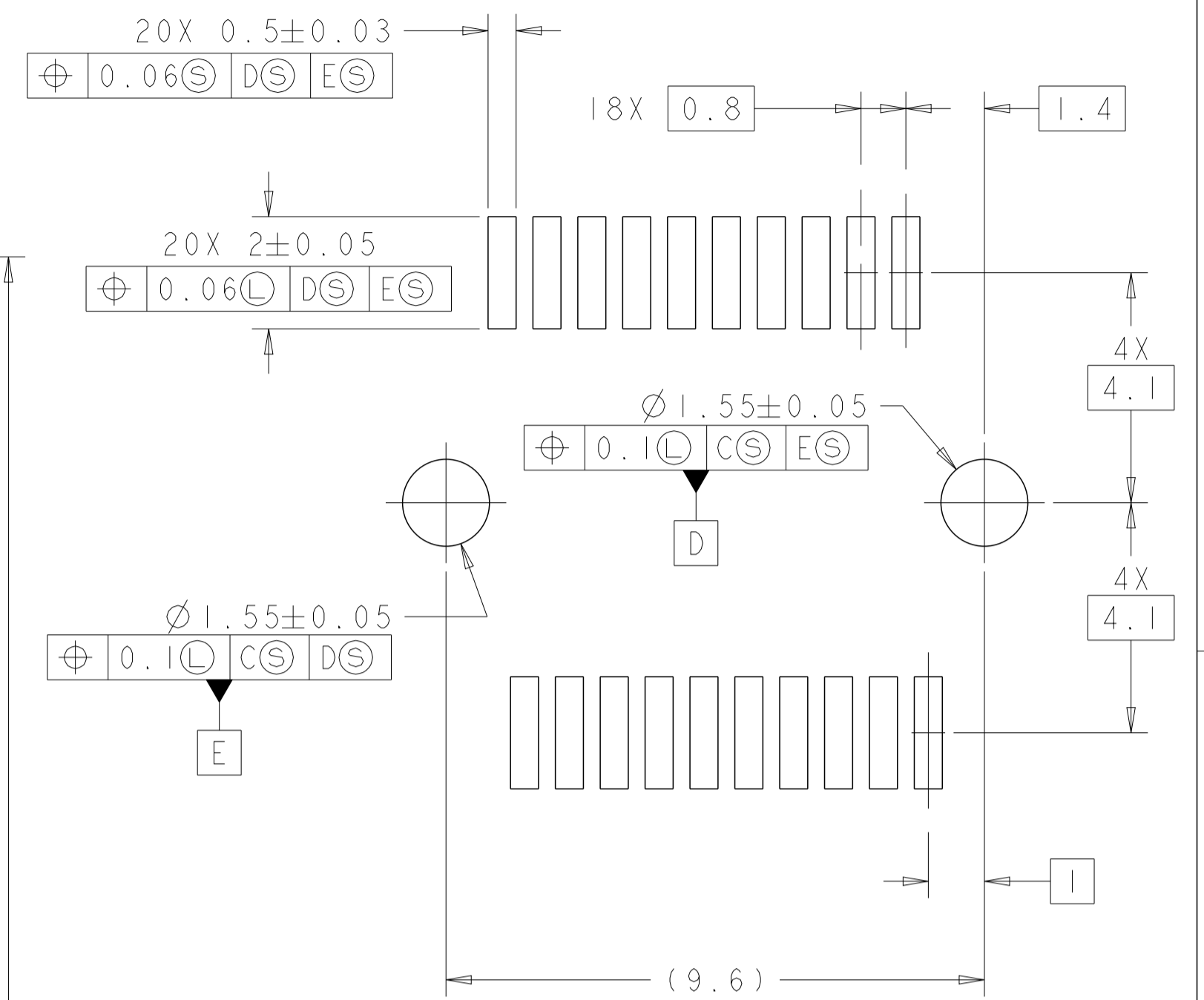
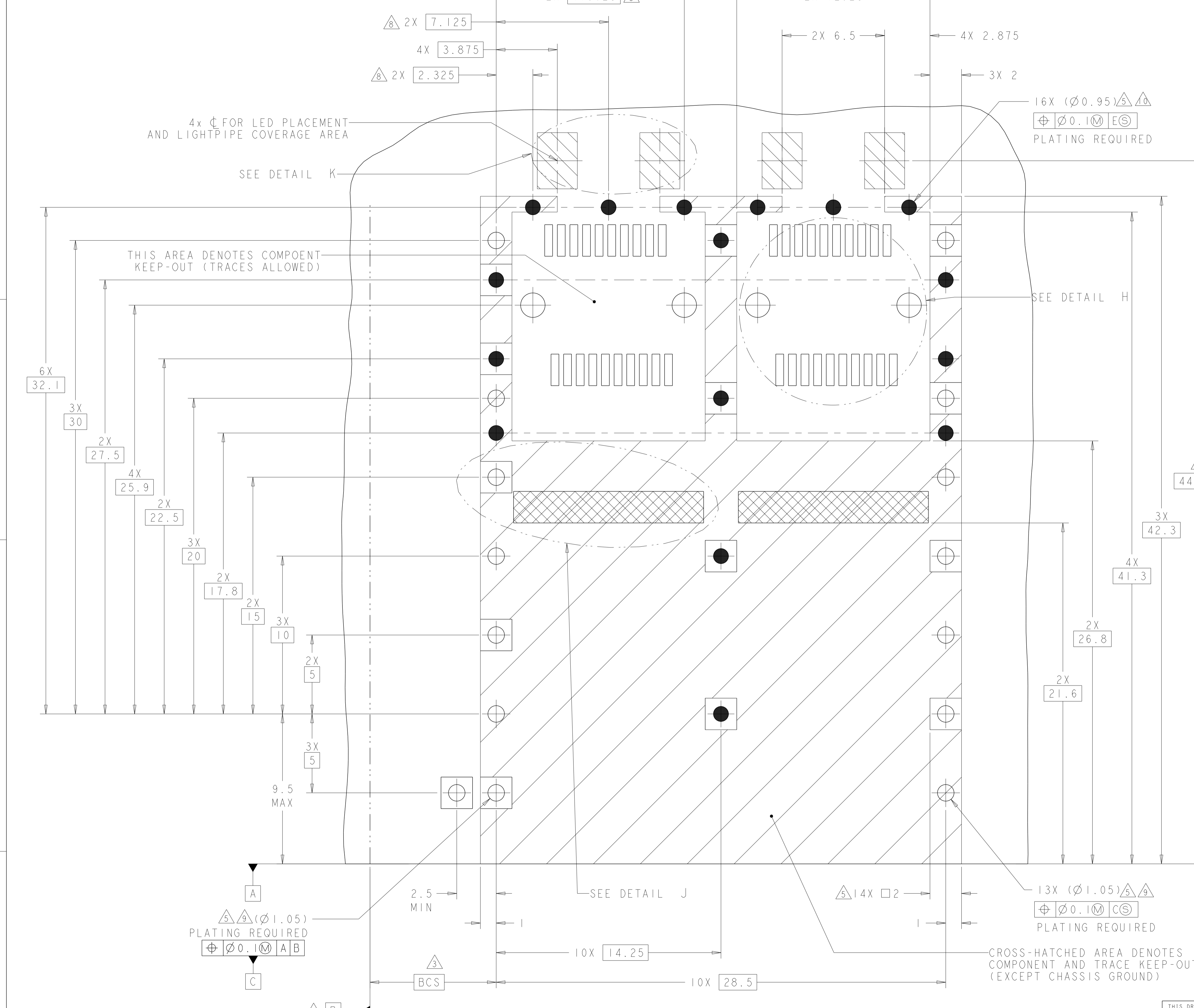


RECOMMENDED PCB CONFIGURATION WITH KEEP-OUT AREAS SINGLE SIDED APPLICATIONS SCALE 8:1

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	SIZE: A1 00779 C=2198232
2 PLC ±0.08		WEIGHT: -	
3 PLC ±0.05		Customer Drawing	SCALE: 6:1 SHEET: 4 OF 5 REV: A3
4 PLC ±0.05			
ANGLES ±1			
FINISH			

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
 CROSS-HATCHED AREA DENOTES COMPONENT AND TRACE KEEP-OUT (EXCEPT CHASSIS GROUND)
 CROSS-HATCHED AREA DENOTES EXPOSED 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 SIZE CAGE CODE DRAWING NO. RESTRICTED TO A100779C=2198232
0 PLC ±0.13 1 PLC ±0.1 2 PLC ±0.08 3 PLC ±0.05 4 PLC ±0.05 ANGLES ±1		WEIGHT - Customer Drawing	
MATERIAL FINISH		SCALE 6:1	SHEET 5 OF 5 REV A3