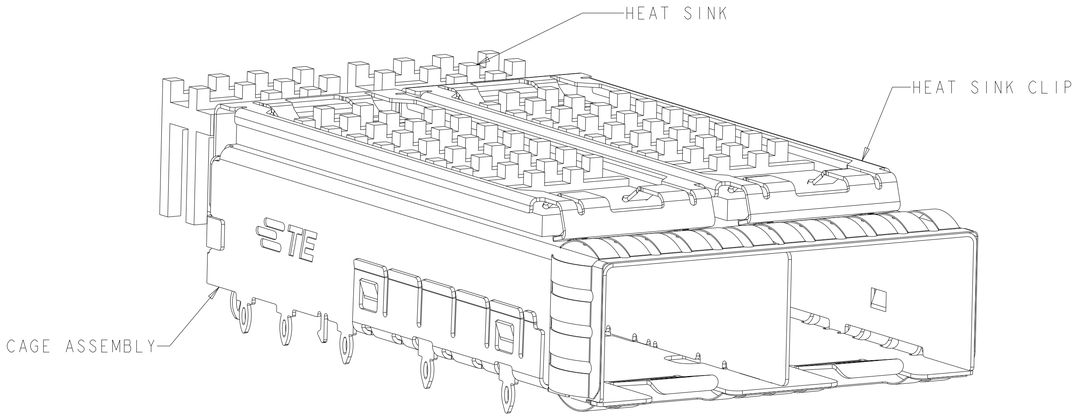
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LOC	DIST
GP	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A3	ADD PART #-5	27MAY2019	IT	SH
	A4	ADD PN 2170190-6	09JAN2020	IT	SH
	A5	ADD NEW DASH NUMBER 1--1	07JUN2021	SZ	SZ
	A6	CHANGE HS PIN NUMBER OF 1--1 PER REQ'	24JUN2021	SZ	SZ



2170190-1
SCALE 5:1

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.

5. 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.

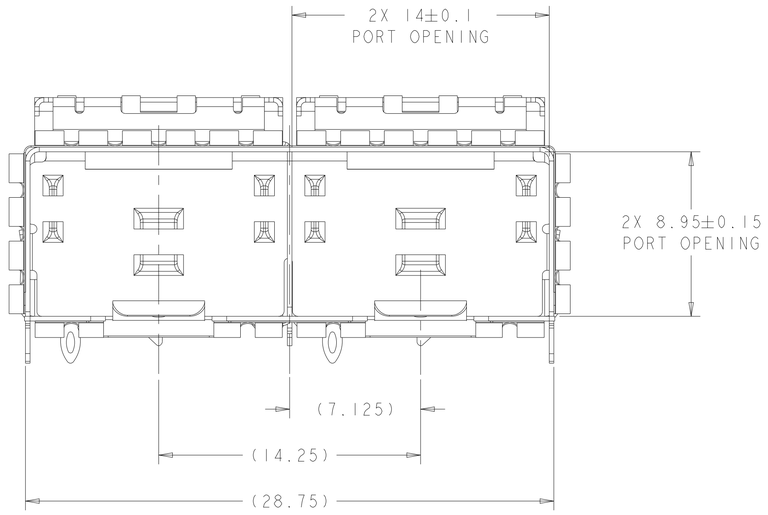
10. REFERENCE APPLICATION SPEC. 114-13120, HOLE B, FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.

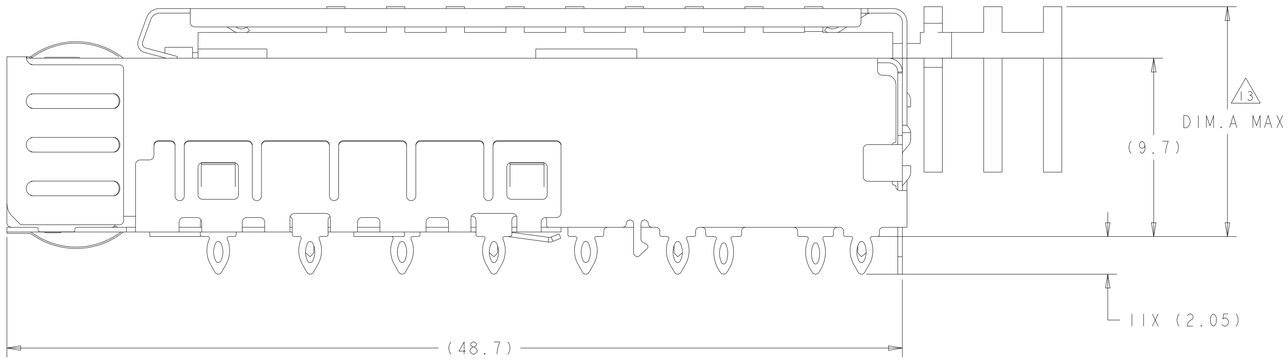
11. CERTAIN MATING TRANCEIVERS MAY REQUIRE ADDITIONAL PCB THICKNESS THAT WOULD NEED TO BE DETERMINED BY THE CUSTOMER.

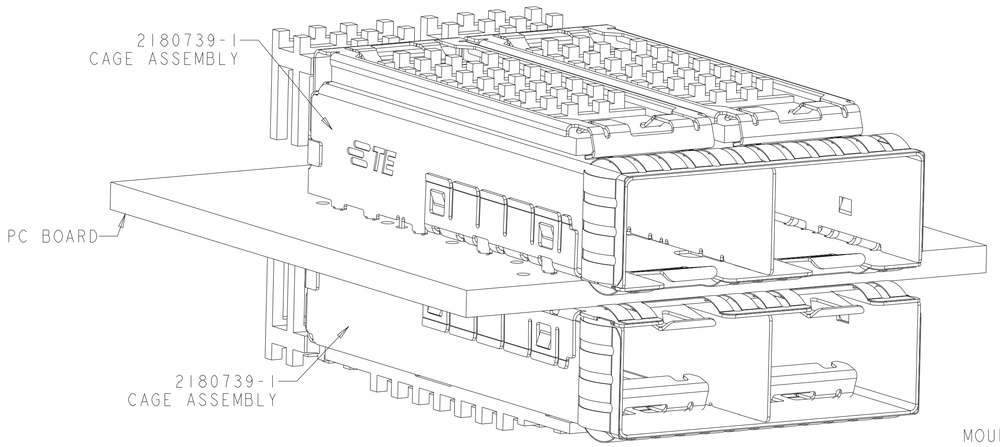
12. PRODUCT COMPLIES WITH SPECIFICATION SFF-8433 IMPROVED PLUGGABLE FORM FACTOR FOR SFP+ GANGED CAGES.

13. DIMENSION APPLIES PRIOR TO INSERTION OF SFP MODULE.

14. PRELIMINARY PART, NO RELEASED TO MASS PRODUCTION







2170190-1
MOUNTED BELLY TO BELLY
SCALE 4:1

PART NUMBER	DESCRIPTION
1-2170190-1	PIN TYPE HEAT SINK W/O THE FIRST 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	PIN TYPE HEAT SINK W/ THE FRIST ROW PIN
2170190-3	14 FIN TYPE HEAT SINK W/ THE FRIST ROW PIN
2170190-2	PIN TYPE HEAT SINK W/ THE FIRST ROW PIN
2170190-1	PIN TYPE HEAT SINK W/O THE FIRST ROW PIN

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 ±.05
4 PLC ±.05
ANGLES ±1

MATERIAL 1

FINISH 2

DWN TIM XUE 21NOV2011
CHK ALEX CAI 21NOV2011
APVD ALEX CAI 21NOV2011
PRODUCT SPEC 108-2364
APPLICATION SPEC 114-13120
WEIGHT -

TE Connectivity

NAME SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK

SIZE A1 | CAGE CODE 00779 | DRAWING NO C-2170190 | RESTRICTED TO -

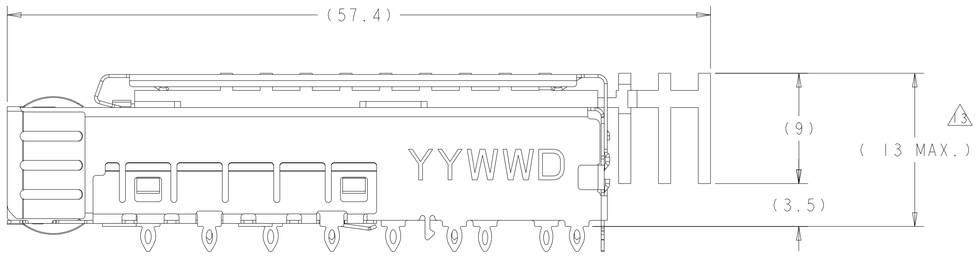
CUSTOMER DRAWING | SCALE 6:1 | SHEET 1 OF 6 | REV A6

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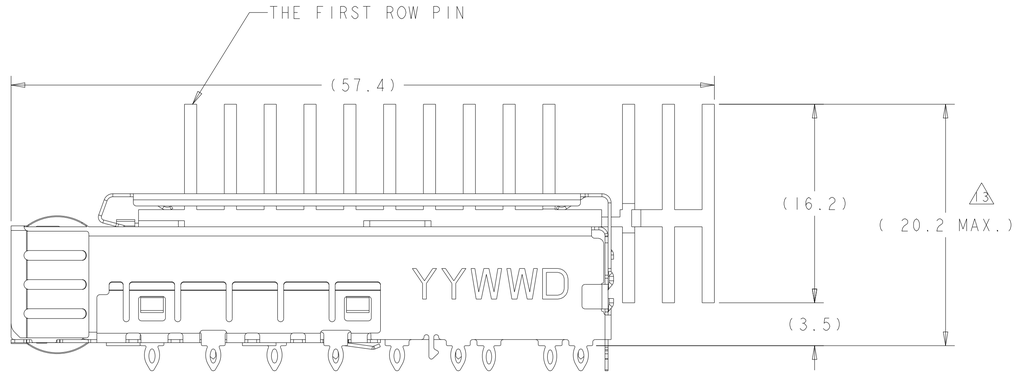
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GP	00

REVISIONS

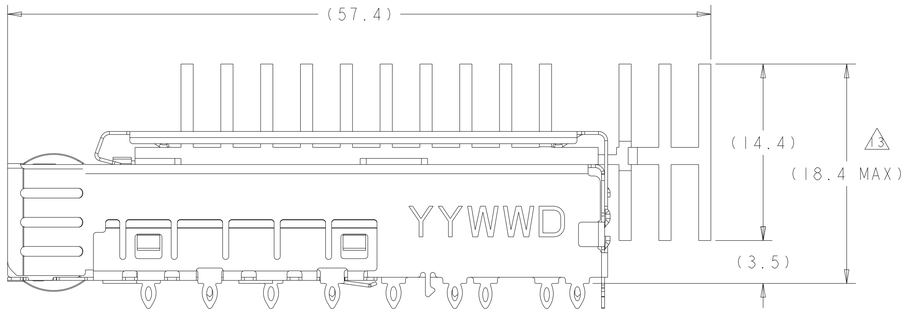
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	-	SEE SHEET 1	-	-	-



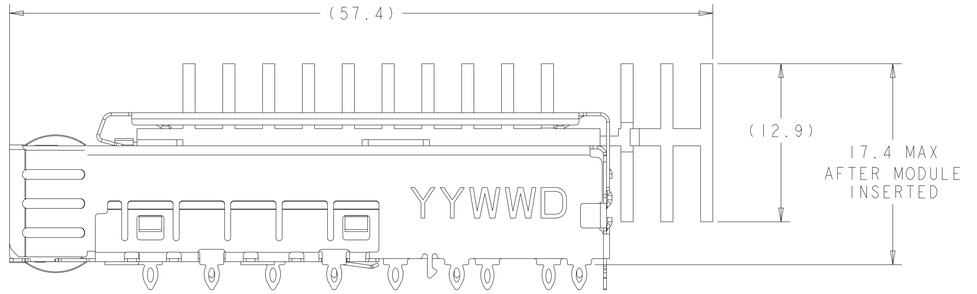
2170190-1 AS SHOWN
HEAT SINK W/O THE FIRST ROW PIN



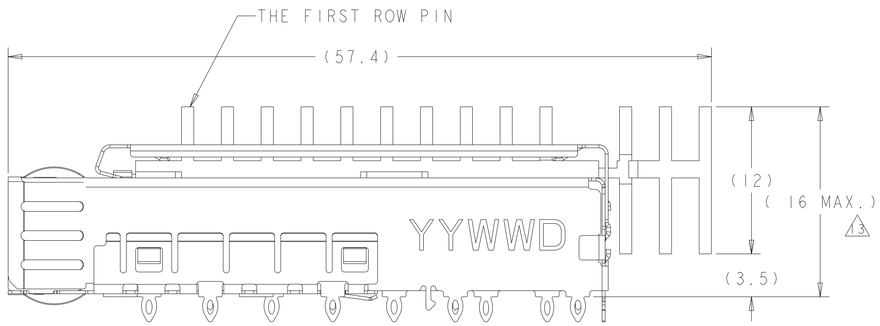
2170190-2 AS SHOWN



2170190-5 AS SHOWN
SCALE 4:1

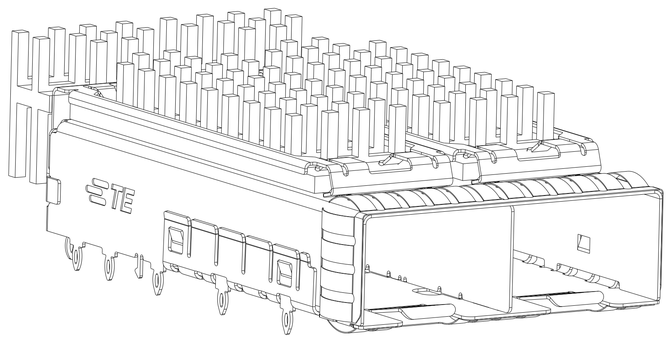


2170190-6 AS SHOWN
SCALE 4:1

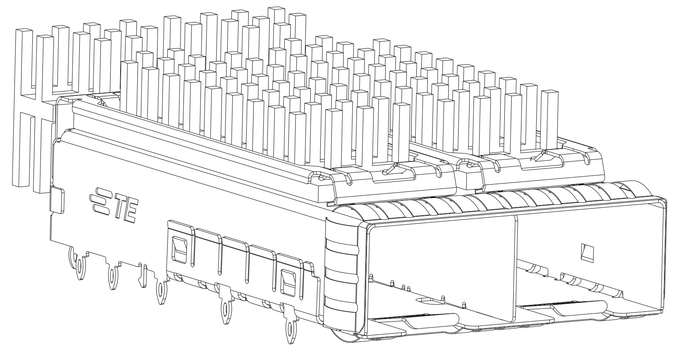


1-2170190-1 AS SHOWN

SCALE 4:1



1-2170190-1 AS SHOWN



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

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 ±.05
4 PLC ±.05
ANGLES ±1

MATERIAL
FINISH

DWN	21NOV2011 TIM XUE
CHK	21NOV2011 ALEX CAI
APVD	21NOV2011 ALEX CAI
PRODUCT SPEC	108-2364
APPLICATION SPEC	114-13120
WEIGHT	-

TE Connectivity

NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-2170190	-

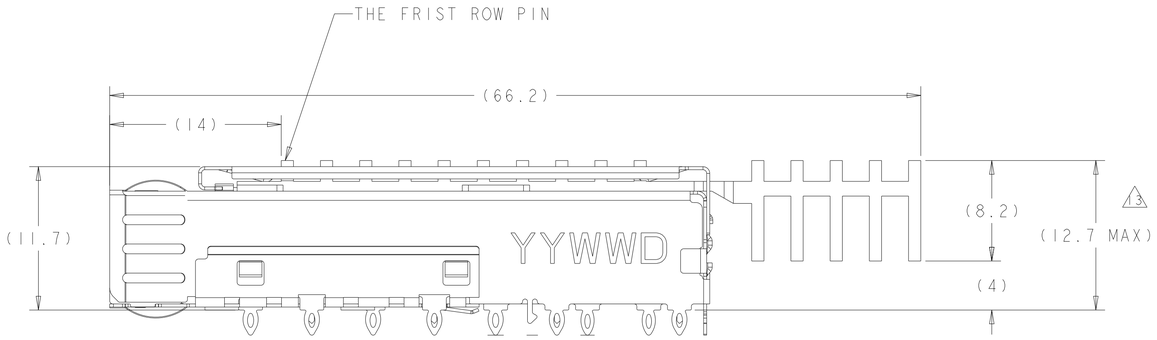
CUSTOMER DRAWING | SCALE 6:1 | SHEET 2 OF 6 | REV A6

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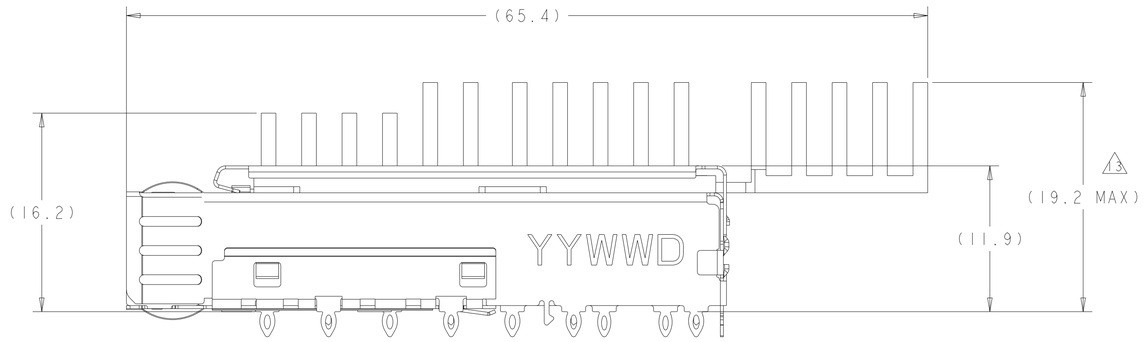
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REVISIONS

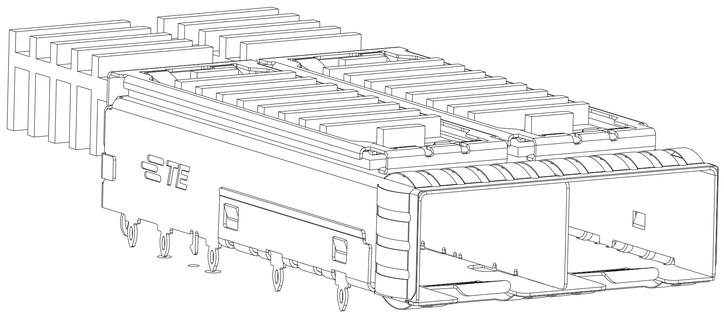
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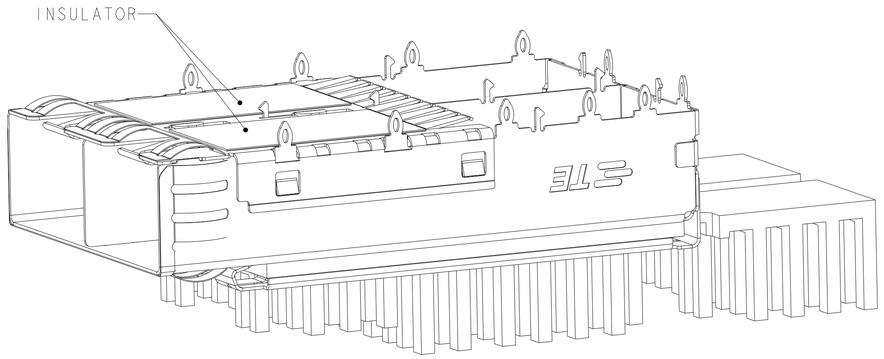
2170190-3 AS SHOWN



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.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±0.13
1 PLC ±0.1
2 PLC ±0.08
3 PLC ±.05
4 PLC ±.05
ANGLES ±1

MATERIAL
FINISH

DWN TIM XUE 21NOV2011
CHK ALEX CAI 21NOV2011
APVD ALEX CAI 21NOV2011
PRODUCT SPEC 108-2364
APPLICATION SPEC 114-13120
WEIGHT -

TE Connectivity

NAME SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-2170190	-

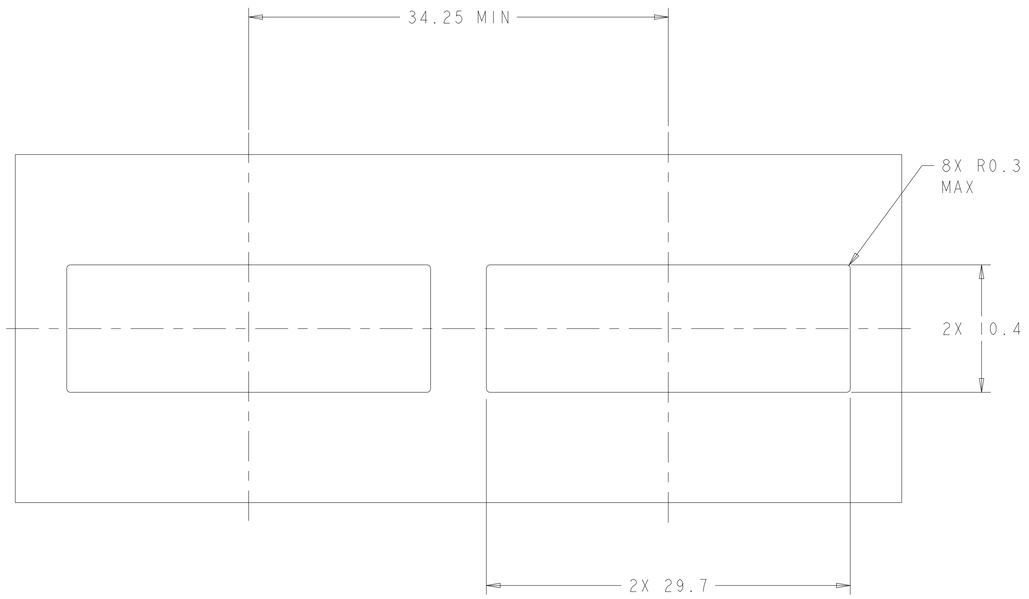
CUSTOMER DRAWING | SCALE 6:1 | SHEET 3 OF 6 | REV A6

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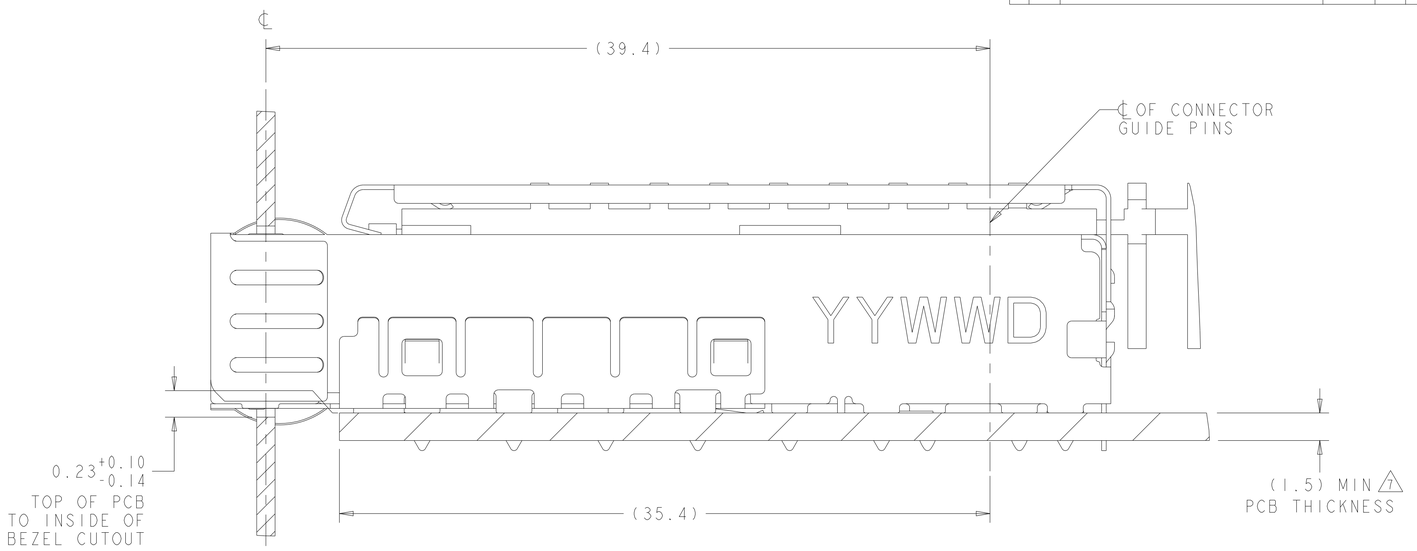
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REVISIONS

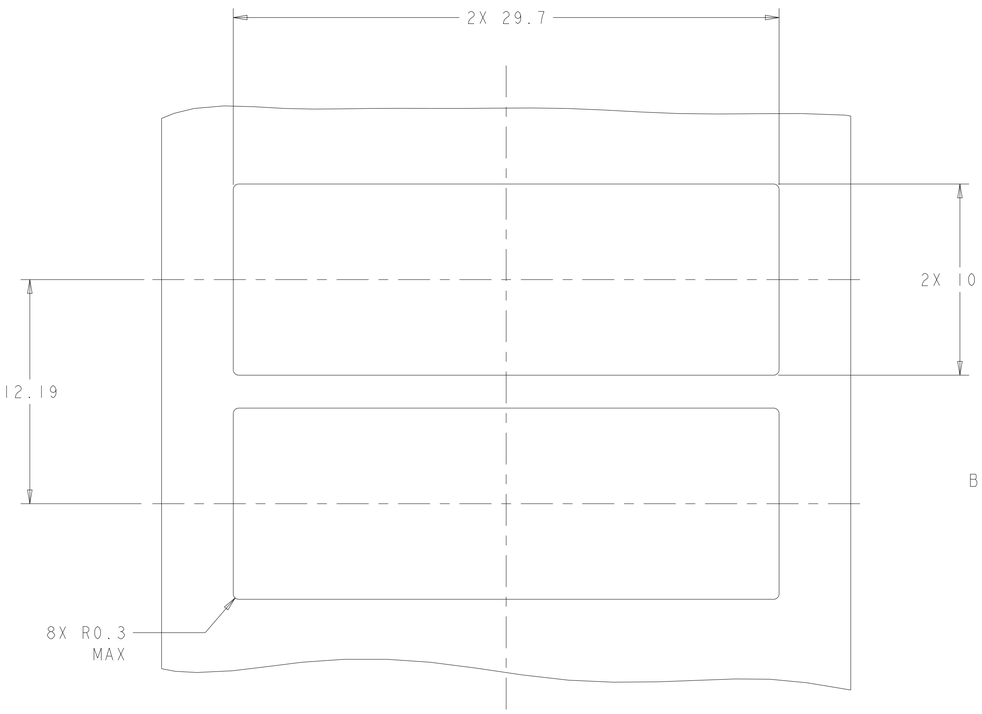
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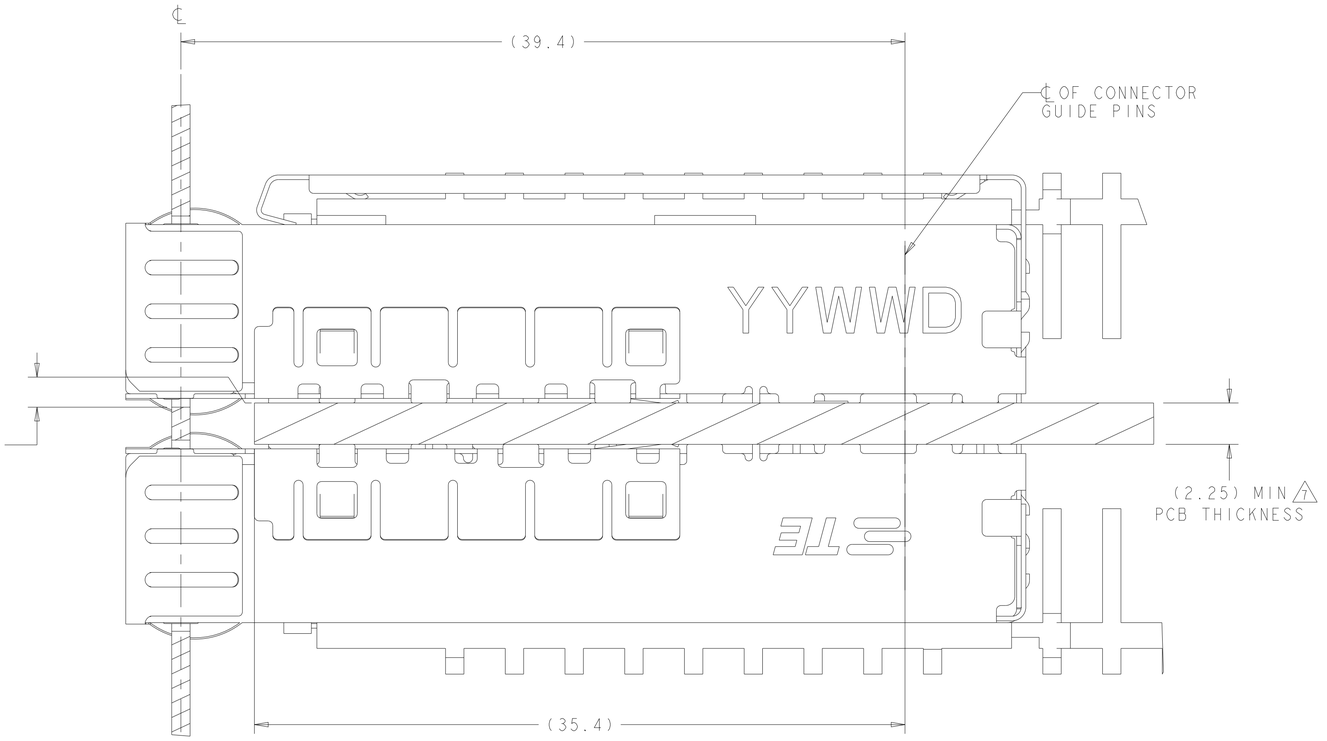
RECOMMENDED BEZEL CUT-OUT
SINGLE SIDED APPLICATIONS
SCALE 4:1



2170190-1
MOUNTED ON PC BOARD
SHOWN THRU RECOMMENDED BEZEL



RECOMMENDED BEZEL CUT-OUT
BELLY TO BELLY APPLICATIONS



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

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 ±.05
4 PLC ±.05
ANGLES ±1

MATERIAL

FINISH

DWN	TIM XUE 21NOV2011
CHK	ALEX CAI 21NOV2011
APVD	ALEX CAI 21NOV2011
PRODUCT SPEC	108-2364
APPLICATION SPEC	114-13120
WEIGHT	-

TE Connectivity

NAME: SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-2170190	-

CUSTOMER DRAWING | SCALE 2:1 | SHEET 4 OF 6 | REV A6

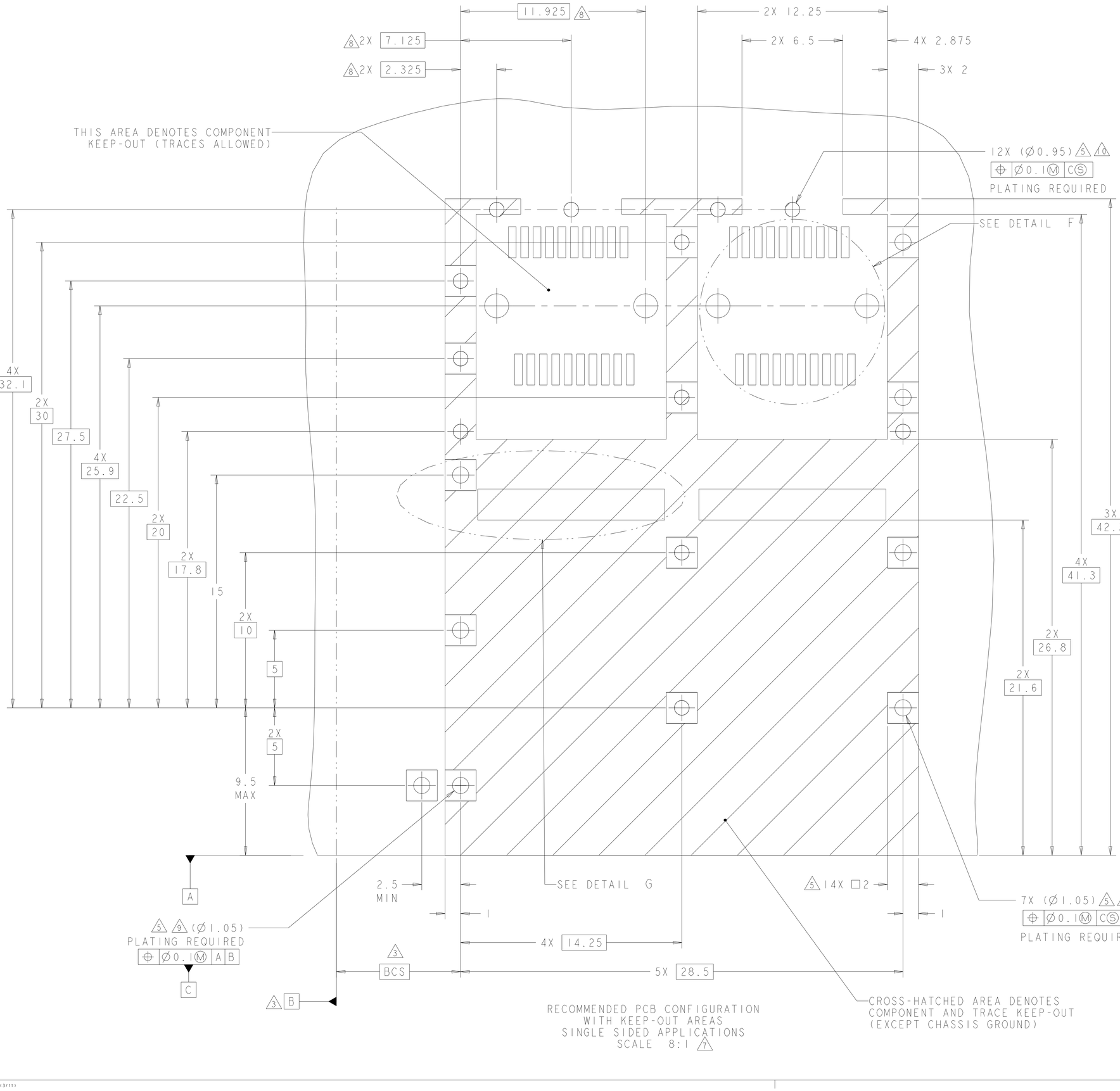
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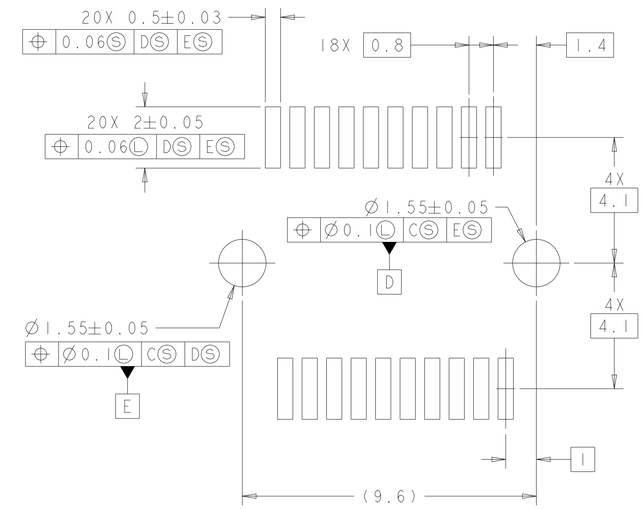
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REVISIONS

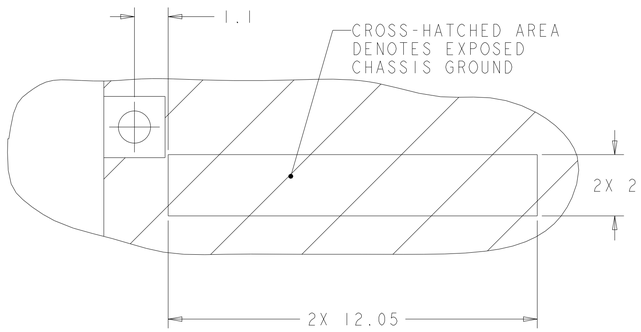
P	LTR	DESCRIPTION	DATE	DWN	APVD
	-	SEE SHEET 1	-	-	-



RECOMMENDED PCB CONFIGURATION
WITH KEEP-OUT AREAS
SINGLE SIDED APPLICATIONS
SCALE 8:1 (7)



DETAIL F
SCALE 10:1



DETAIL G
SCALE 10:1

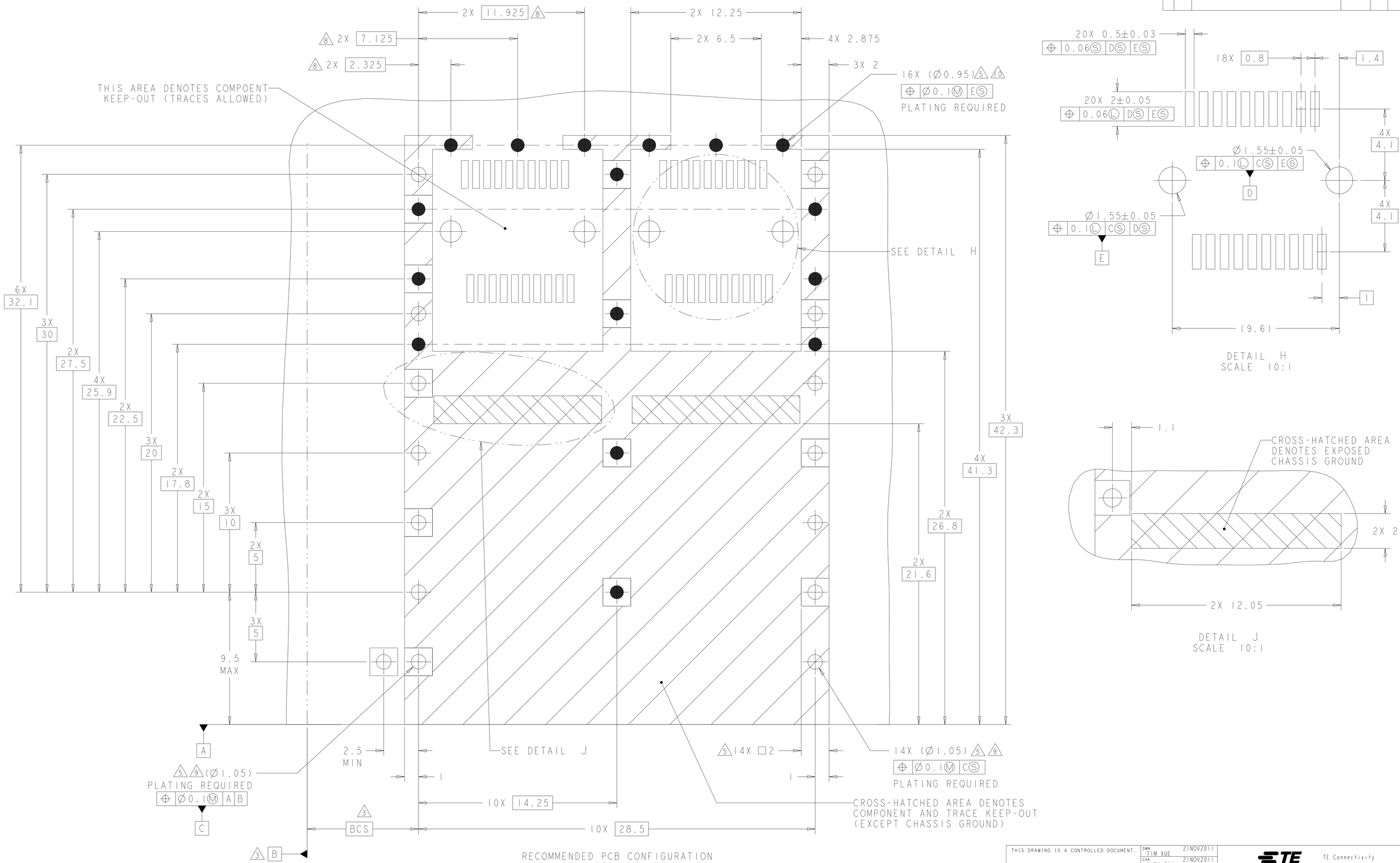
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN TIM XUE 21NOV2011	TE Connectivity
		CHK ALEX CAI 21NOV2011	
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.13, 1 PLC ±0.1, 2 PLC ±0.08, 3 PLC ±.05, 4 PLC ±.05, ANGLES ±1	APVD ALEX CAI 21NOV2011	NAME SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK
		PRODUCT SPEC 108-2364	
		APPLICATION SPEC 114-13120	SIZE A1 · CAGE CODE 00779 · DRAWING NO C-2170190 · RESTRICTED TO -
MATERIAL	FINISH	WEIGHT -	CUSTOMER DRAWING · SCALE 2:1 · SHEET 5 OF 6 · REV A6

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LOC	DIST
GP	00

REVISIONS

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



RECOMMENDED PCB CONFIGURATION
WITH KEEP-OUT AREAS
BELLY TO BELLY APPLICATIONS
SCALE 8:1 [7]

DETAIL H
SCALE 10:1

DETAIL J
SCALE 10:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN TIM XUE 21NOV2011	TE Connectivity
		CHK ALEX CAI 21NOV2011	
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.13, 1 PLC ±0.1, 2 PLC ±0.08, 3 PLC ±.05, 4 PLC ±.05, ANGLES ±1	APVD ALEX CAI 21NOV2011	NAME SFP+ ENHANCED 1X2 CAGE ASSEMBLY, PRESS-FIT, EMI SPRINGS, HEAT SINK
		PRODUCT SPEC 108-2364	
		APPLICATION SPEC 114-13120	SIZE A1 · CAGE CODE 00779 · DRAWING NO C-2170190 · RESTRICTED TO -
MATERIAL	FINISH	WEIGHT -	CUSTOMER DRAWING · SCALE 2:1 · SHEET 6 OF 6 · REV A6