

10104997 - X 0 C - X 0 X L F

6-COLUMN DIFFERENTIAL SIGNAL

LEAD-FREE DESIGNATION ONLY WITH APPLICABLE PLATING CODES

LETTER	PERFORMANCE-BASED PLATING (SEE NOTE 2)	
	TARGET APPLICATION	LEAD FREE (LF)
B	TELCORDIA CO	NO
C	TELCORDIA UE	NO
D	TELCORDIA CO	YES
E	TELCORDIA UE	YES

NUMBER	PIN STYLE, HEIGHT
0	STANDARD GUIDE PIN MACHINED, 31.6mm

MODULE DESCRIPTION	LETTER DESIGNATION REPRESENTED IN DASH NUMBER	BASE MODULE
LEFT POLARIZING GUIDANCE MODULE (SEE SHEET 3)	J 	
	A 	
RIGHT POLARIZING GUIDANCE MODULE (SEE SHEET 4)	B 	
	C 	
OPEN MODULE (TWO WALL) (SEE SHEET 2)	D 	
	E 	
LEFT WALL MODULE (SEE SHEET 5)	F 	
	G 	
RIGHT WALL MODULE (SEE SHEET 6)	H 	
	I 	
FOUR WALL MODULE (SEE SHEET 7)	J 	
	K 	

TABLE 1: OPTIONAL PCB HOLE SIZE (SEE NOTE 11)		
	GROUNDED	UNGROUNDED
FINISHED	Ø 2.35-2.55	Ø 2.35-2.55
PAD	Ø 5.50	N/A
PLATED	YES	NO
DRILL (mm/in)	2.58 /.1015	2.44 /.096

TABLE 2: OPTIONAL SCREW TYPE (SEE NOTE 10)		
SCREW P/N	DESCRIPTION	BOARD THICKNESS
10091790-002LF	#2-56 X .375" PHILLIPS PANHEAD W/SQ CONICAL WASHER	1.60 - 5.00
10091790-003LF	#2-56 X .500" PHILLIPS PANHEAD W/SQ CONICAL WASHER	5.00 - 10.00

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ec n no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	XCede	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 1 of 8

linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
surface	✓								

MODULE ASSEMBLY

VERTICAL HEADER, 6-COLUMN, 6-PAIR

10104997

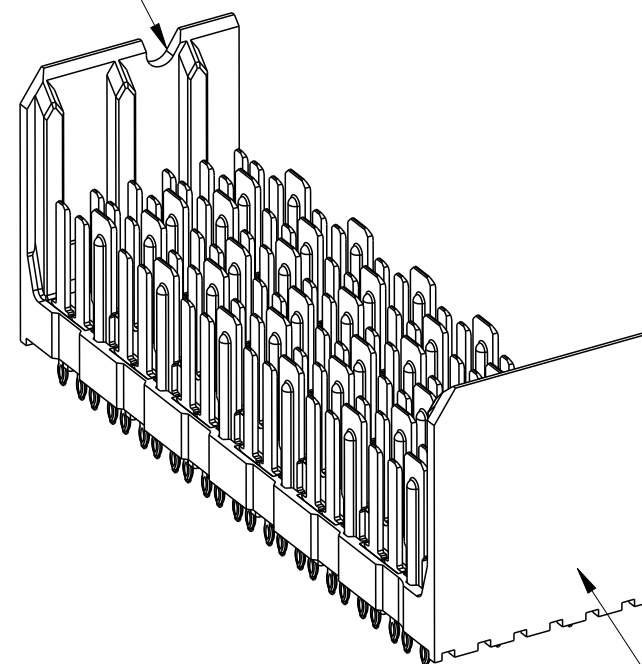
E

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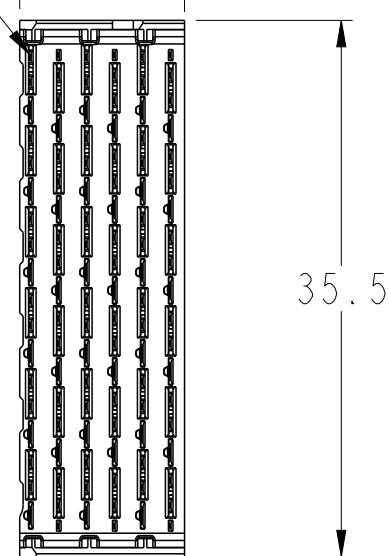
OPEN (2-WALL) MODULE

SEE NOTE 8



SEE NOTE 5

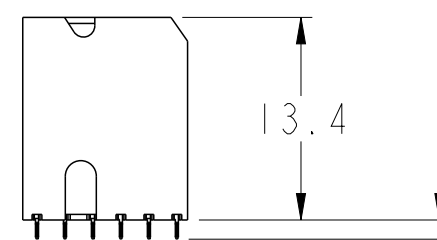
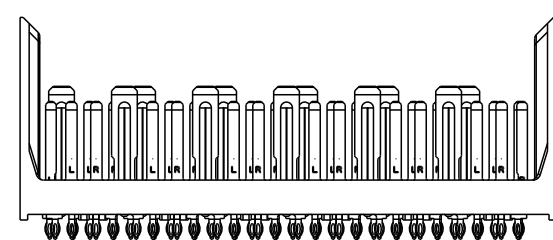
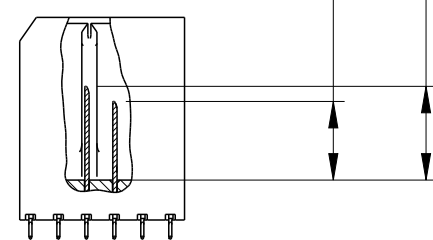
POSN A1 (11.05 MAX)



35.5

6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12

X_BP

(0.73)

(2.46)

2.54

TO TOP SURFACE
OF DAUGHTERCARD

2.70

5.36

8.06

10.72

13.42

16.08

18.78

21.44

24.14

26.80

29.50

1.60

4.26

6.96

9.62

12.32

14.98

17.68

20.34

23.04

25.70

28.40

31.06

Y_BP

1.85

TYP

TOP SURFACE OF
DAUGHTERCARD

0.10

2.80

5.46

8.16

10.82

13.52

16.18

18.88

21.54

24.24

26.90

29.60

35.5

SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

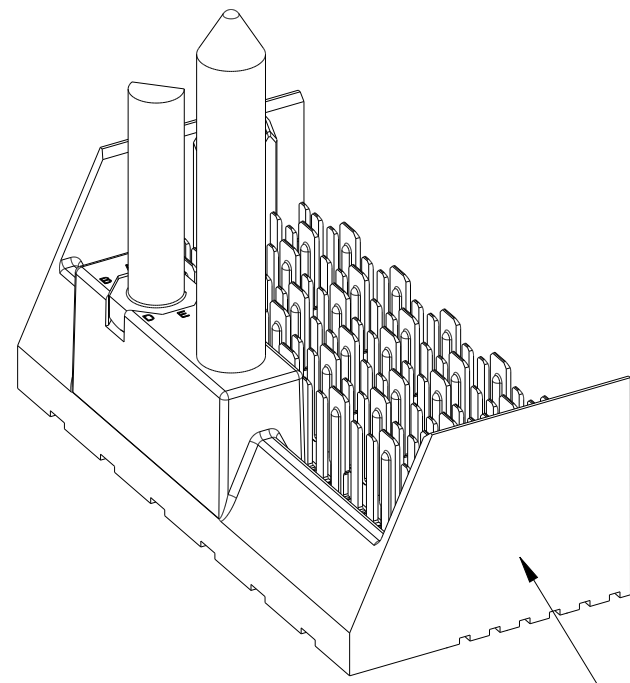
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tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
ASME Y14.5		www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 2 of 8				

PDS: Rev :E

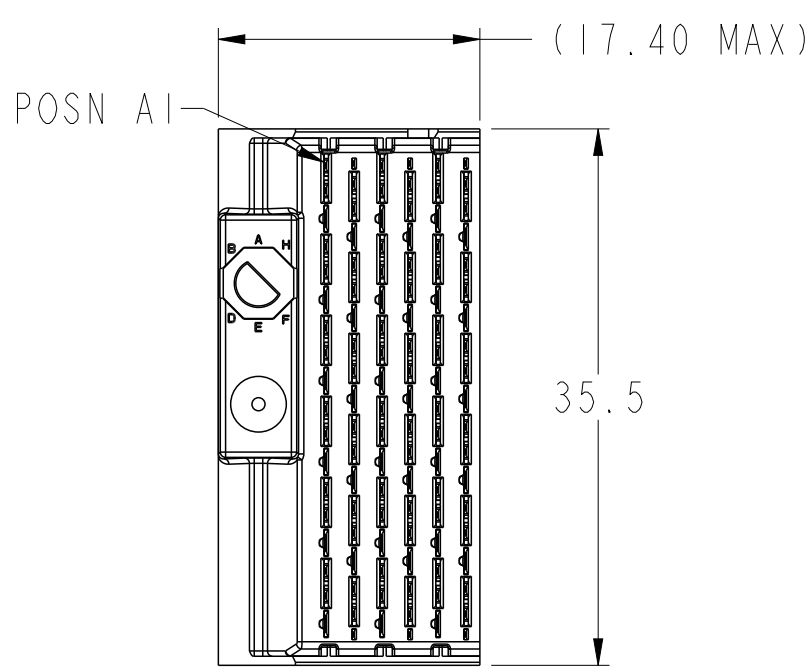
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Printed: Dec 10, 2014

LEFT POLARIZING/GUIDE MODULE



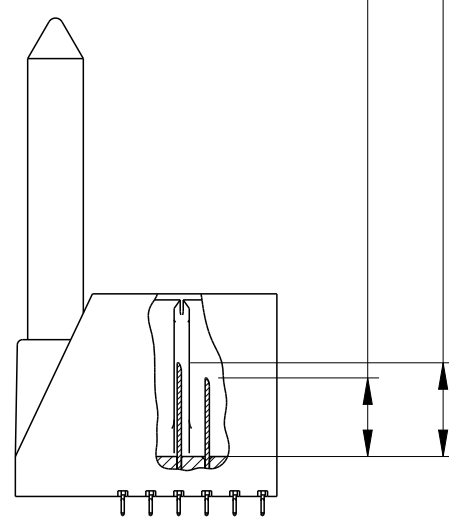
SEE NOTE 5



6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

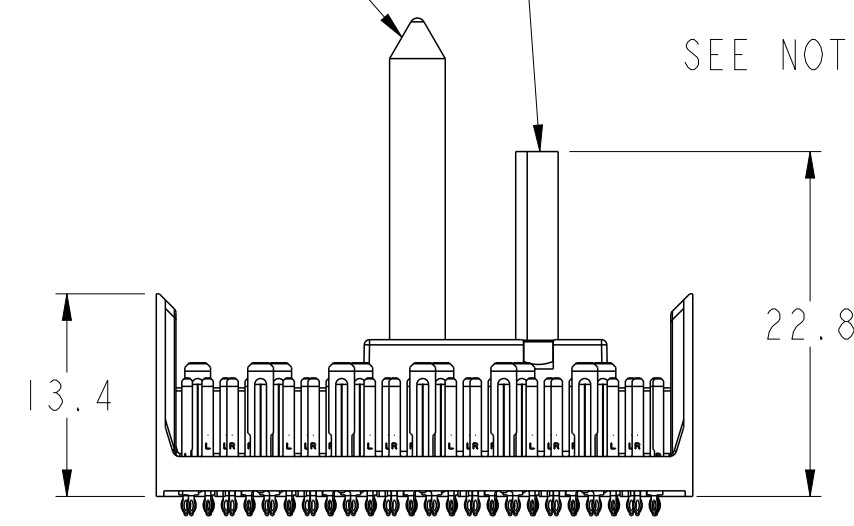
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)

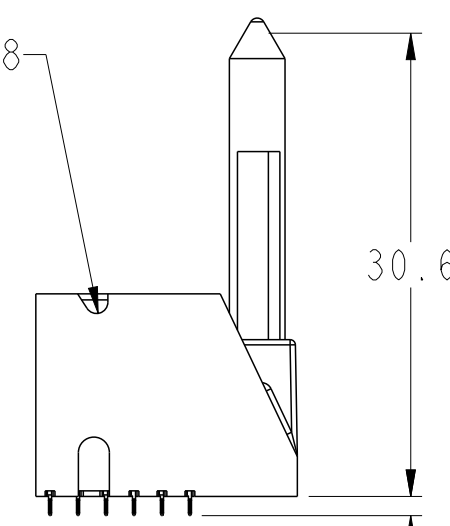


OPTIONAL KEYING PIN
(SEE P/N TREE)

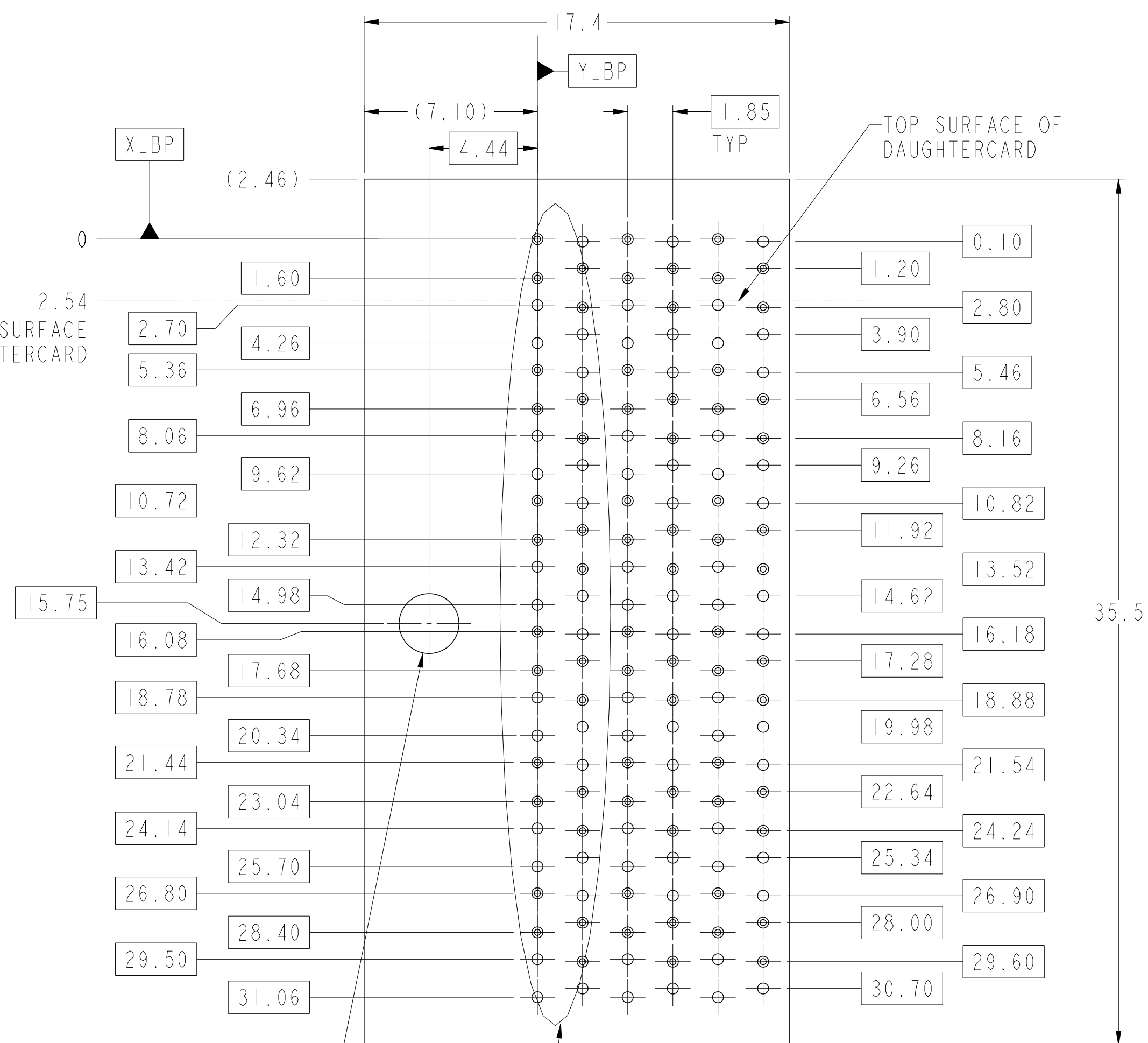
GUIDE PIN



SEE NOTE 8



TAIL LENGTH
SEE NOTE 12



SEE NOTE 11 & TABLE 1

SEE DETAIL A
(SHEET 8)

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
ASME Y14.5		www.fci.com	cat. no.	SEE P/N TREE	Product	- Customer Drw	sheet 3 of 8			

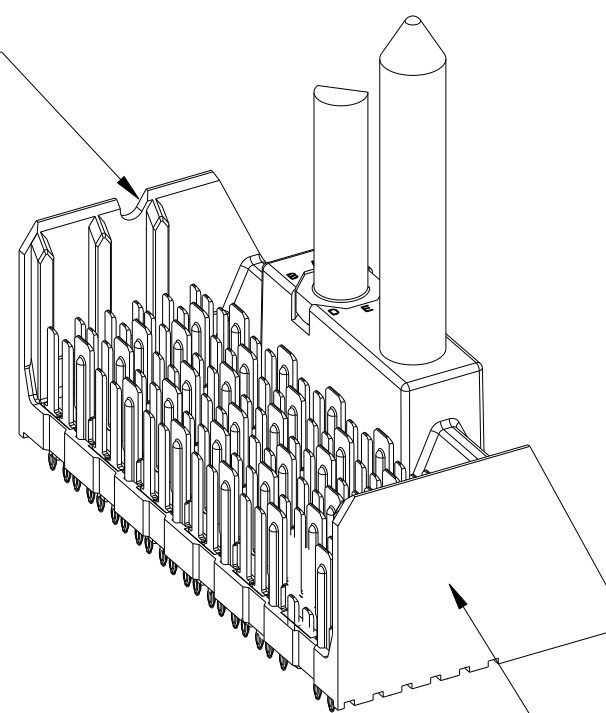
PDS: Rev :E

STATUS:Released

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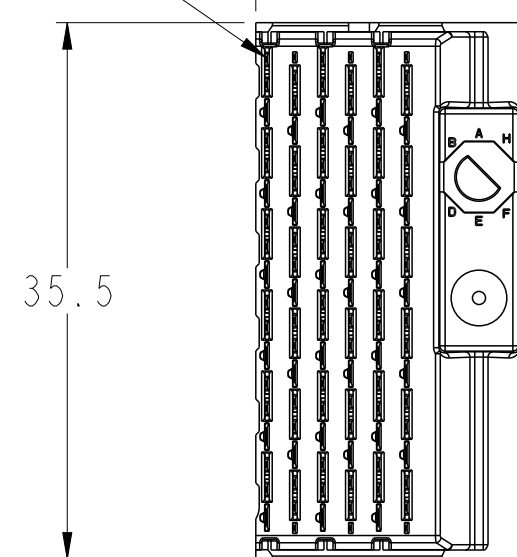
RIGHT POLARIZING/GUIDE MODULE

SEE NOTE 8



SEE NOTE 5

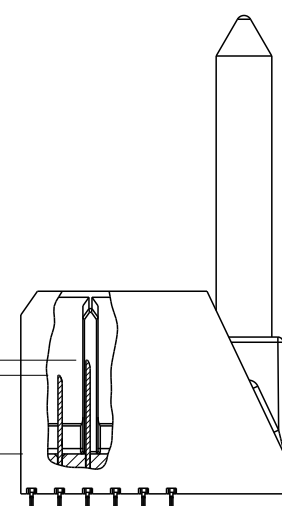
POSN A1 (17.50 MAX)



6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

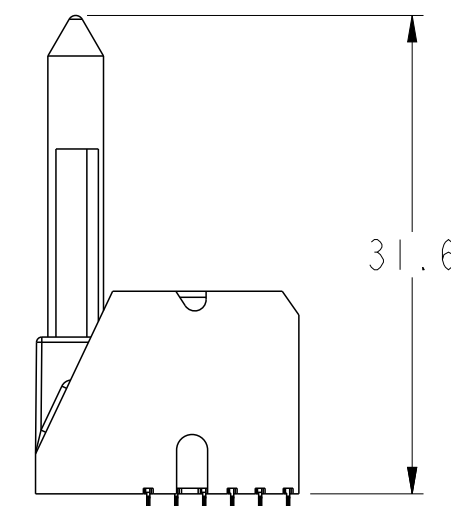
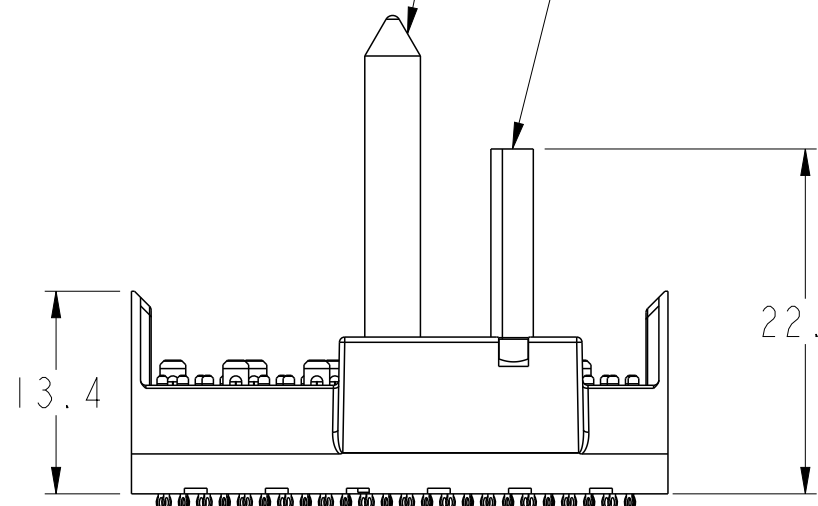
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



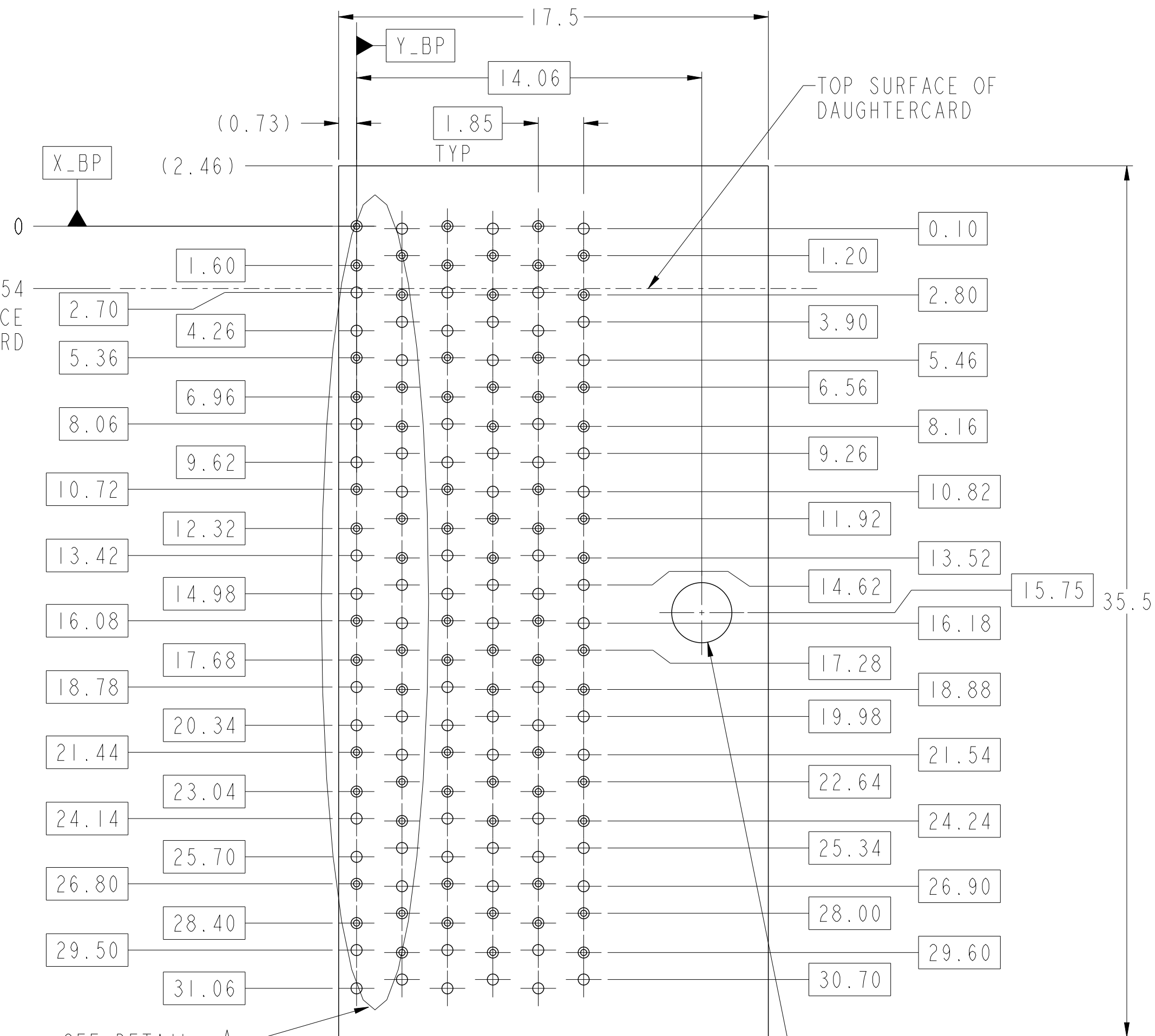
GUIDE PIN

OPTIONAL KEYING PIN
(SEE P/N TREE)



TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD



SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
ASME Y14.5		www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 4 of 8				

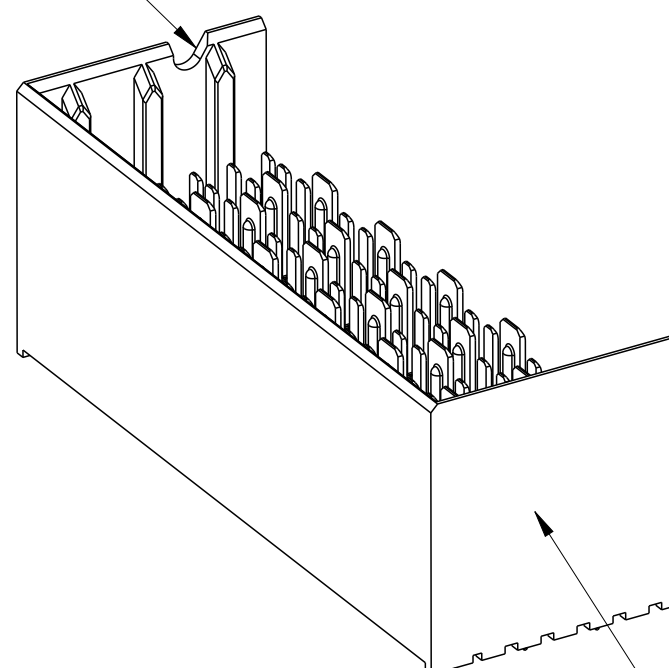
PDS: Rev :E

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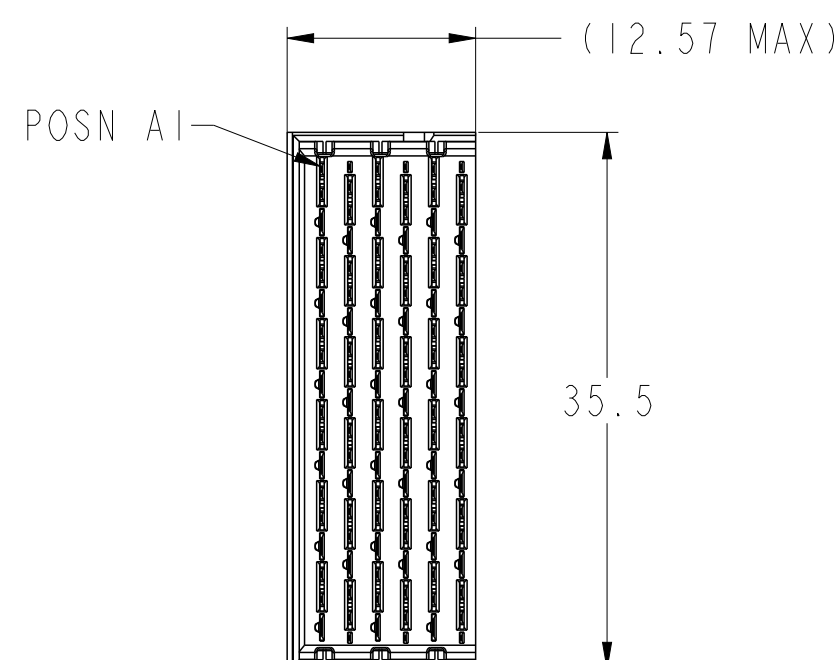
Printed: Dec 10, 2014

LEFT WALL MODULE

SEE NOTE 8

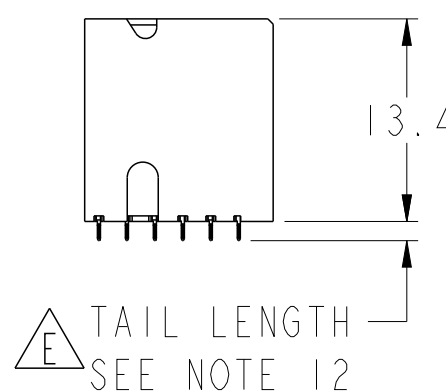
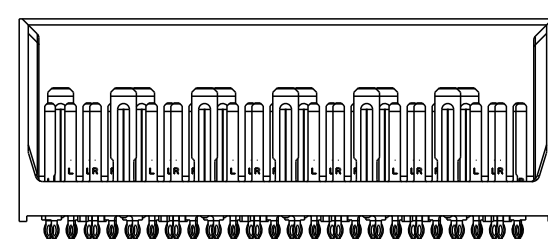
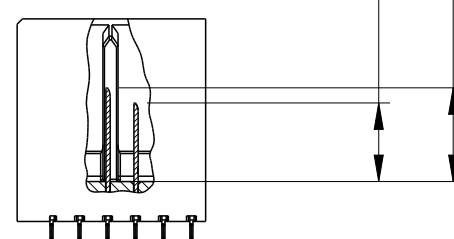


SEE NOTE 5

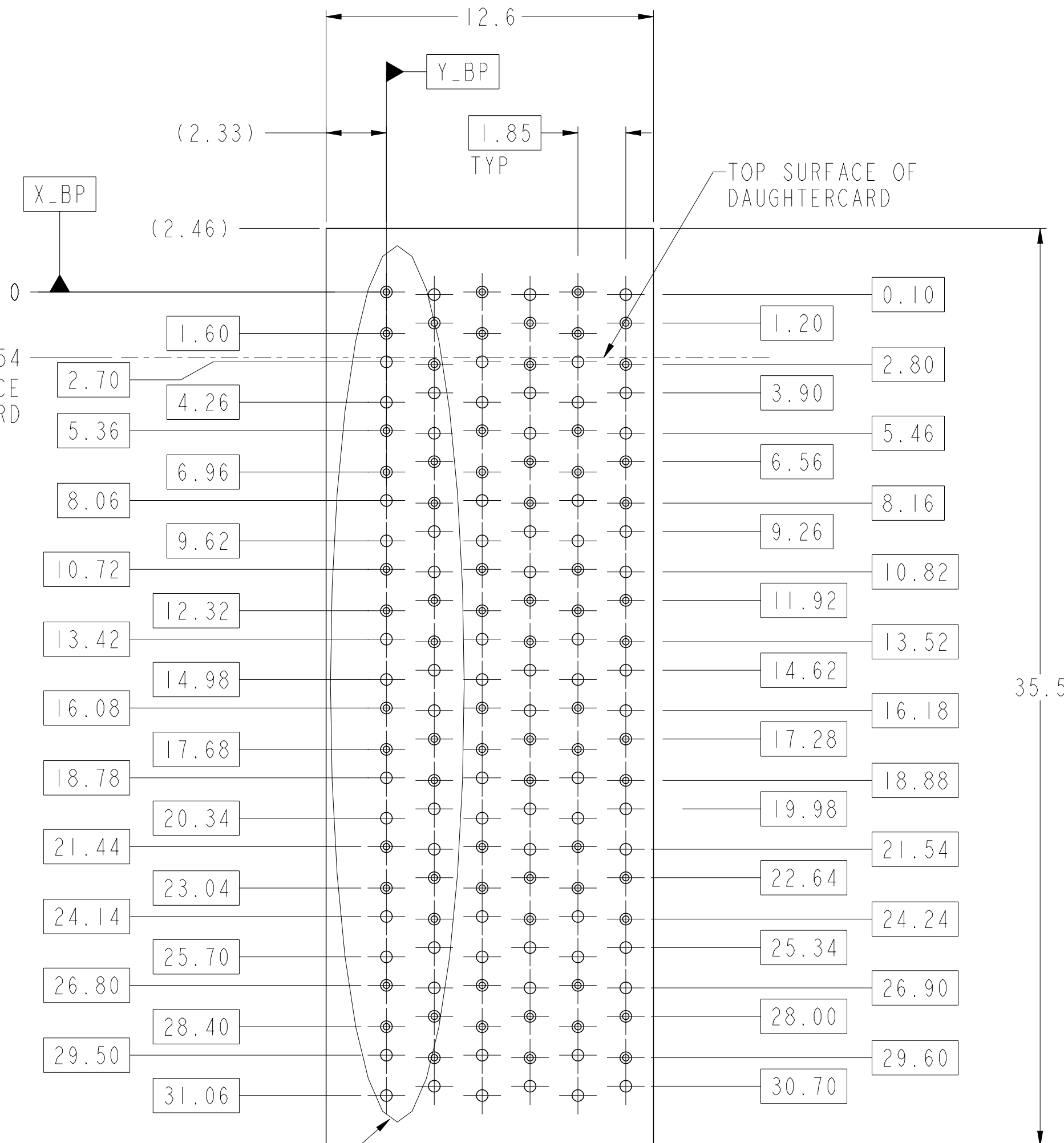


6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12



SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE
PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	angular	0° ±°	www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 5 of 8		

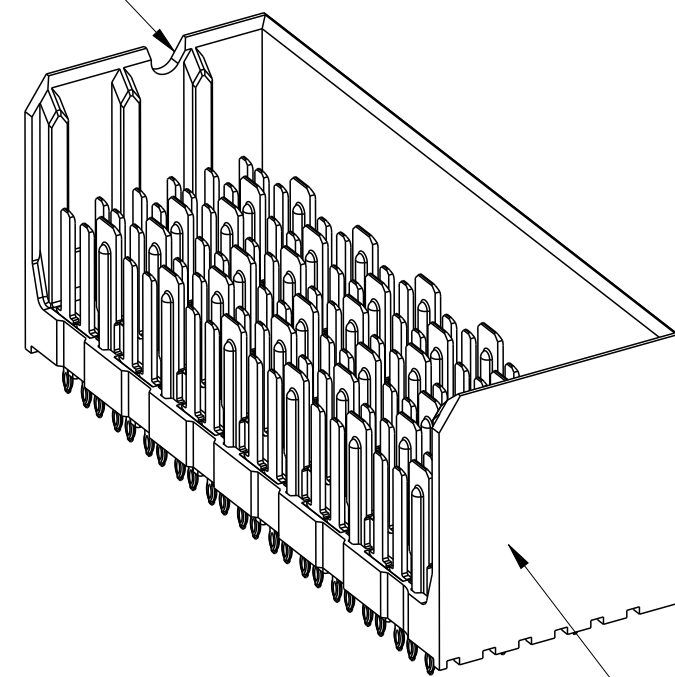
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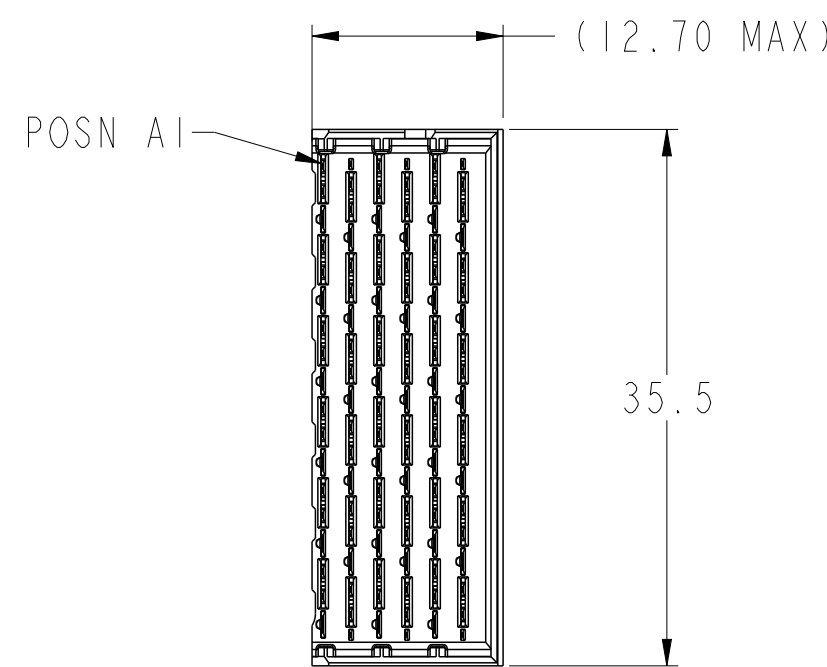
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RIGHT WALL MODULE

SEE NOTE 8



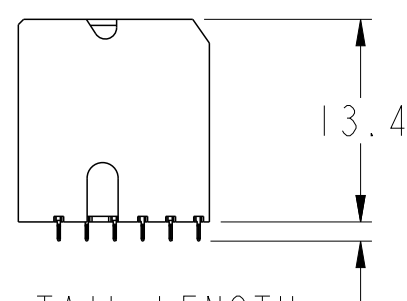
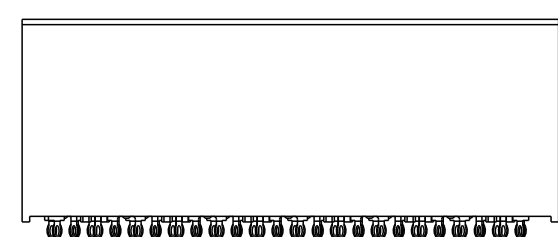
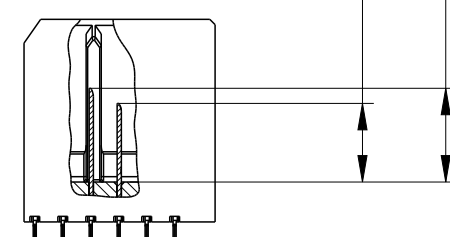
SEE NOTE 5



SCALE 2:1

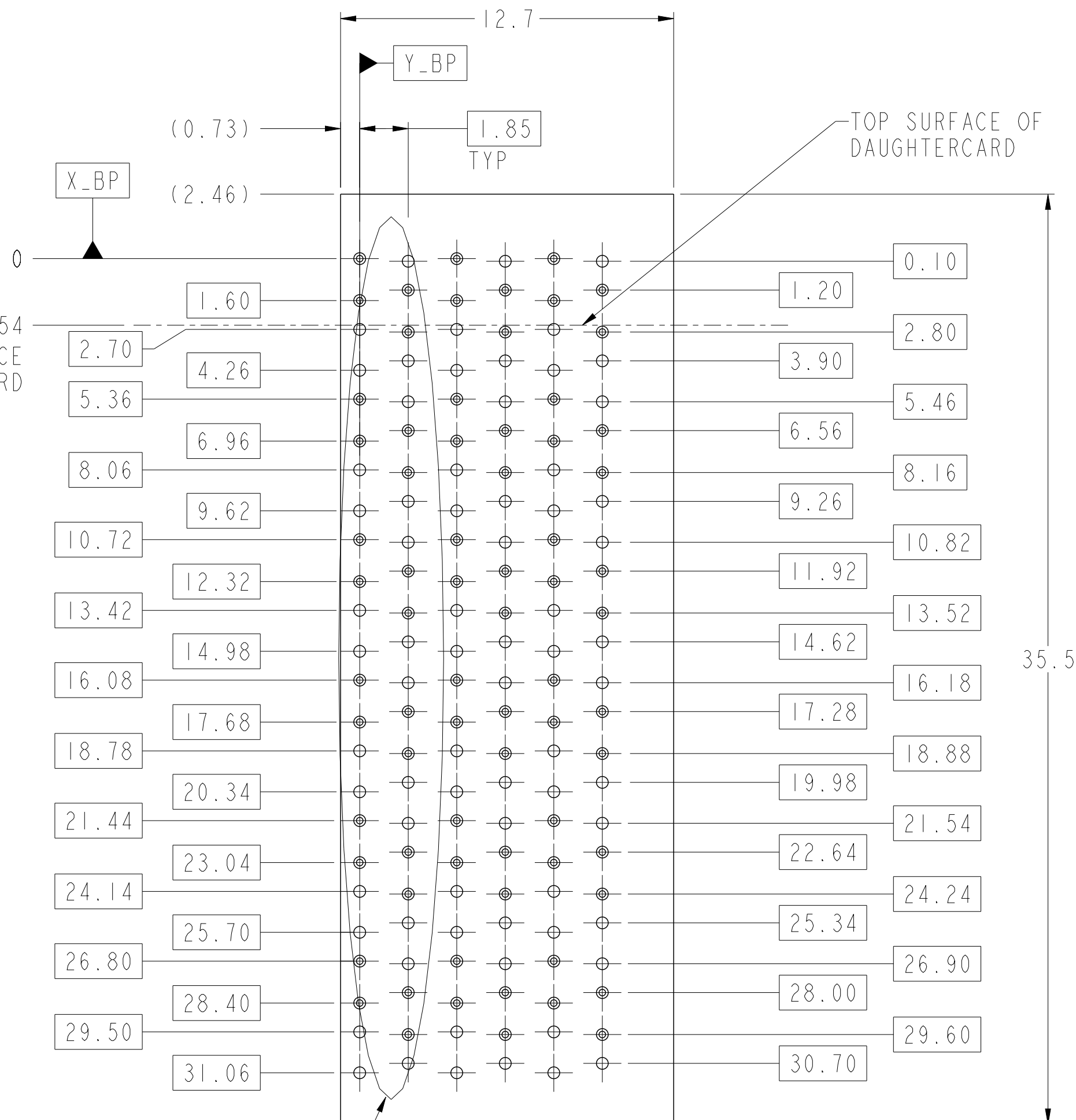
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD



SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	XCede	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	angular	0° ±°	www.fci.com	title	MODULE ASSEMBLY VERTICAL HEADER, 6-COLUMN, 6-PAIR	dwg no	10104997	rev	E

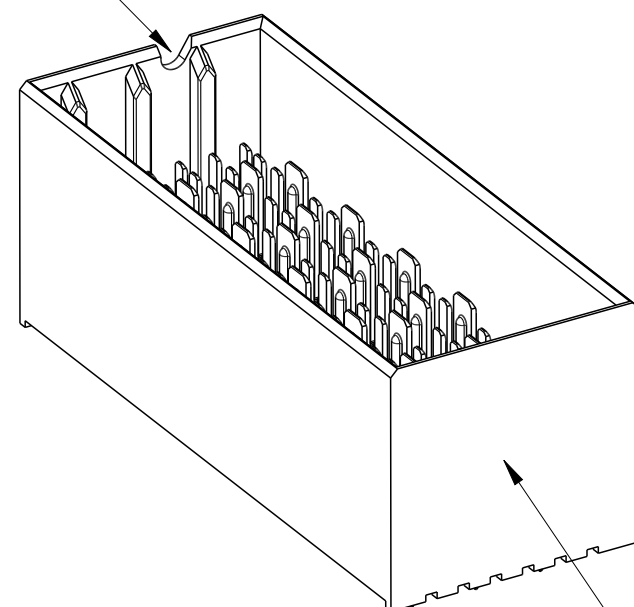
PDS: Rev :E

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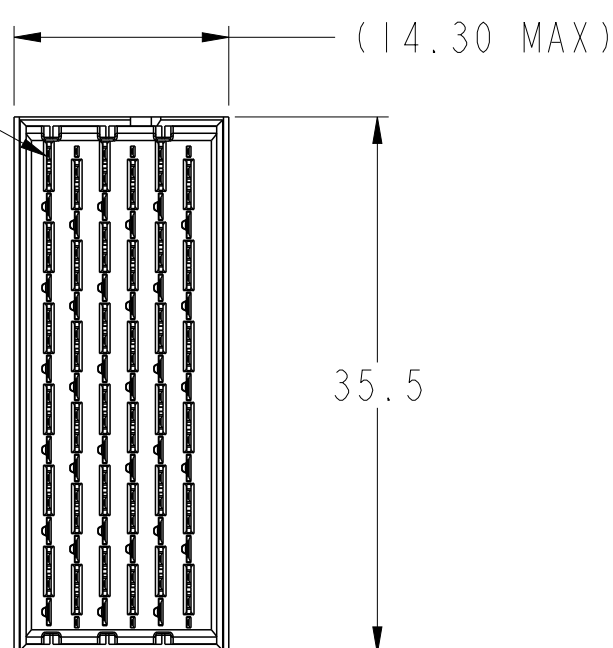
FOUR WALL MODULE

SEE NOTE 8



SEE NOTE 5

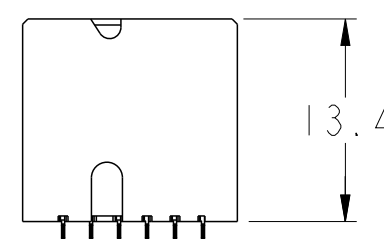
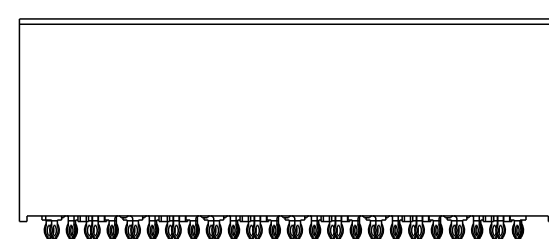
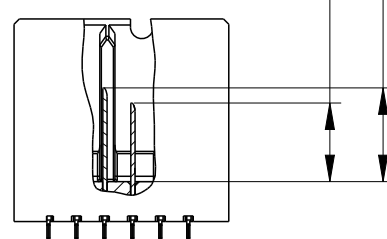
POSN A1



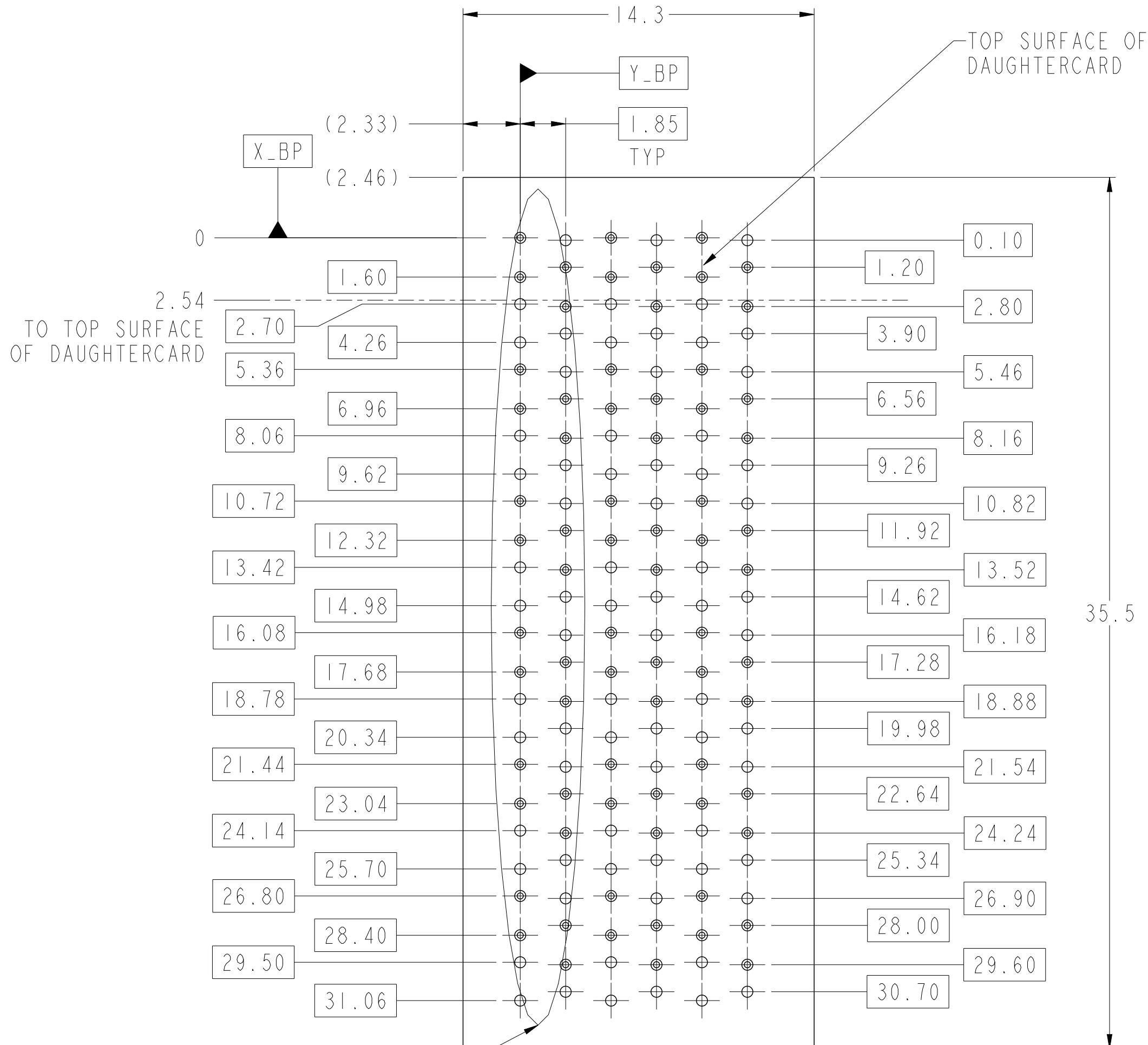
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR
ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12



SEE DETAIL A
(SHEET 8)

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

NOMINAL MODULE OUTLINE

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	angular	0° ±°	www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 7 of 8		

PDS: Rev :E

STATUS:Released

Printed: Dec 10, 2014

NOTES:

1. CONNECTOR MATERIALS
SHROUD: HIGH-TEMP THERMOPLASTIC, GRAY, UL94V-0
CONTACTS: HIGH PERFORMANCE COPPER ALLOY
2. CONTACT PLATING:

SEPARABLE INTERFACE: PERFORMANCE-BASED PLATING, QUALIFIED TO MEET THE REQUIREMENTS OF FCI PRODUCT SPECIFICATION GS-12-588, INCLUDING TELCORDIA GR-1217-CORE (NOVEMBER 1995) CENTRAL OFFICE (CO) OR UNCONTROLLED ENVIRONMENT (UE) TEST SEQUENCE AS NOTED IN P/N TREE.

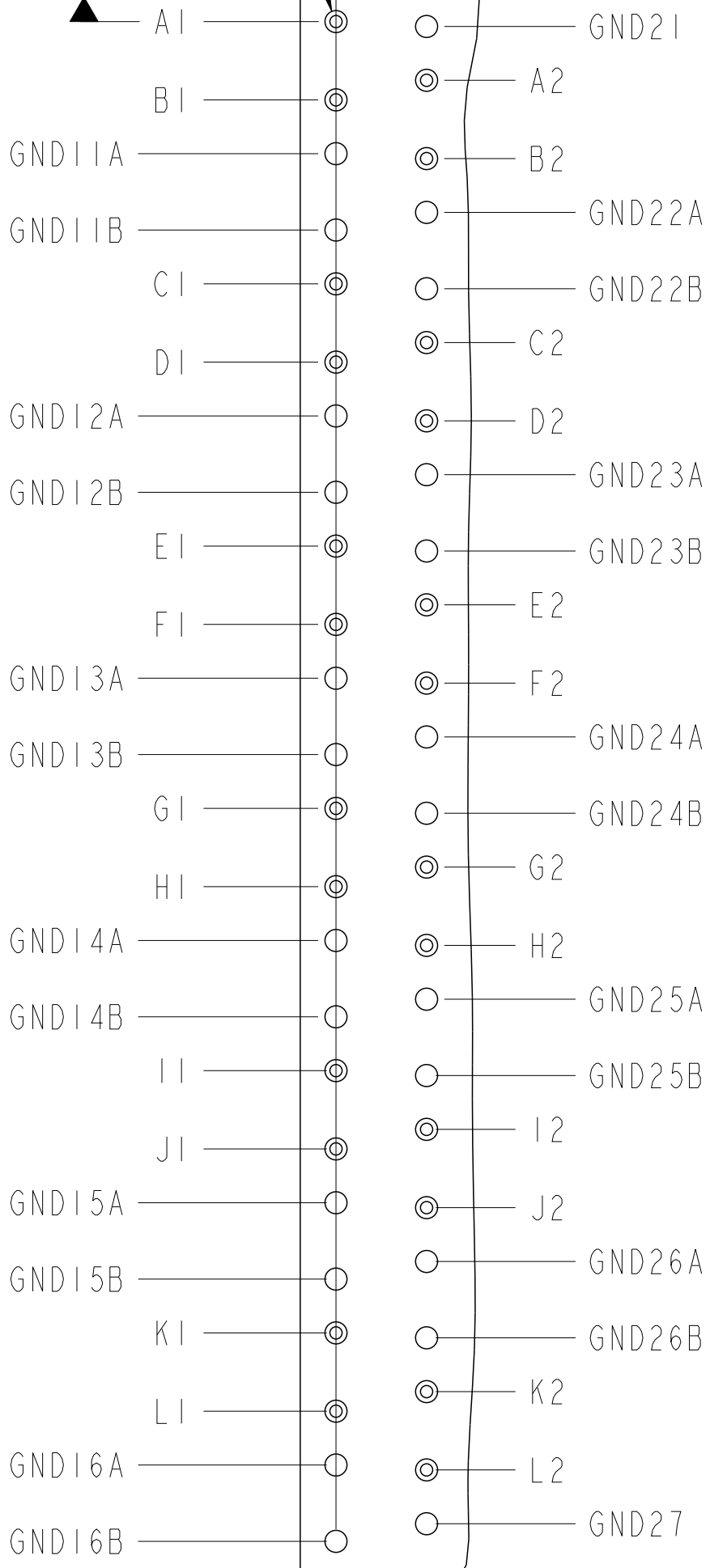
PRESS-FIT TAILS: TIN OVER NICKEL, OR TIN-LEAD ALLOY OVER NICKEL. SEE P/N TREE.
3. PRODUCT SPECIFICATION: GS-12-588
4. APPLICATION SPECIFICATION: GS-20-121
5. PRODUCT MARKING (PART NUMBER AND LOT CODE) ON THESE SURFACES.
6. HOUSING MUST WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 40 SECONDS IN A CONVECTION, INFRA-RED, OR VAPOR-PHASE REFLOW OVEN.
7. PACKAGING MEETS GS-14-920 LEAD-FREE LABELING SPECIFICATION.
8. NOTCH INDICATES "ROW A" SIDE OF CONNECTOR.
9. SEE APPLICATION SPECIFICATION FOR ROUTING GUIDELINES, ADDITIONAL PTH GUIDELINES, MATED DIMENSIONS, GUIDE PN SELECTION, ETC.
10. SCREW IS OPTIONAL AND ENGAGES WITH BOTTOM OF GUIDE-PIN FROM BENEATH THE PCB FOR ADDITIONAL GUIDE-PIN SUPPORT.
11. OPTIONAL HOLE LOCATION FOR GROUNDED PIN OR ADDITIONAL GUIDE-PIN SUPPORT. SEE TABLE 1 ON SHEET 1 FOR ADDITIONAL DETAILS.
- E 12. TAIL LENGTH=1.3mm FOR Ø0.55[0.0217"]COMPLIANT PIN DRILL
TAIL LENGTH=1.5mm FOR Ø0.45[0.0177"]COMPLIANT PIN DRILL
13. A E SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW OR NOTE THAT HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

REFER TABLE 3
FOR PTH, DRILL & PAD SIZES

⊕	Ø0.10	X_BP	Y_BP
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X_BP

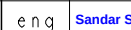
Y_BP



DETAIL A
SCALE 8:1

TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL

COMPLIANT PIN DRILL	PTH	PAD
Ø0.55 [0.0217"]	Ø0.45±0.05	Ø0.85
Ø0.45 [0.0177"]	Ø0.36±0.05	Ø0.75

spec ref		SEE NOTES		dr		Kok-Hoe Lee		2010/06/23		projection		MM		size		A2		scale		4:1			
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng		Sandar Soe		2014/10/02						ecn no		ELX-S-18843-1		Released					
ASME Y14.5				chr		-		-															
				appr		Chen-Hong Tan		2014/12/10												product family		XCede	
surface				linear				title		MODULE ASSEMBLY		dwg no		10104997		rev		E					
																				0.X		±0.2	
																				0.XX		±0.10	
ASME Y14.5				angular		0°		±°															
						www.fci.com		cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 8 of 8									