

1 0 1 1 4 5 0 8 - X 0 J - X 0 X L F

4-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	B	C	D	E	F	G	H		
RIGHT POLARIZING GUIDANCE MODULE (SEE SHEET 4)	Y	P	Q	R	S	T	U	V	W		
OPEN MODULE (TWO WALL) (SEE SHEET 2)	0 (ZERO)										
LEFT WALL MODULE (SEE SHEET 5)	L										
RIGHT WALL MODULE (SEE SHEET 6)	M										
FOUR WALL MODULE (SEE SHEET 7)	1										

NUMBER	CONTACT MATING WIPE LENGTH		COMPLIANT PIN DRILL SIZE
	SIGNAL	WIDE GROUND	
1	2	4	Ø0.55 [0.0217"]
2	3	4	Ø0.55 [0.0217"]
3	2	4	Ø0.45 [0.0177"]
4	3	4	Ø0.45 [0.0177"]
5	2	3	Ø0.55 [0.0217"]
6	3	3	Ø0.55 [0.0217"]
7	2	3	Ø0.45 [0.0177"]
8	3	3	Ø0.45 [0.0177"]

TABLE 1: OPTIONAL PCB HOLE SIZE (SEE NOTE 11)

	GROUNDED	UNGROUNDED
FINISHED	Ø2.35-2.55	Ø2.35-2.55
PAD	Ø5.50	N/A
PLATED	YES	NO
DRILL (mm/in)	2.58 / .1015	2.44 / .096

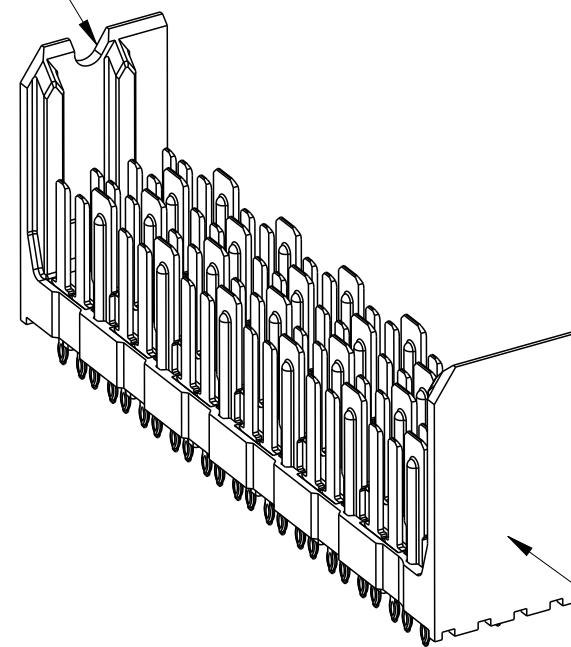
TABLE 2: OPTIONAL SCREW TYPE (SEE NOTE 10)

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

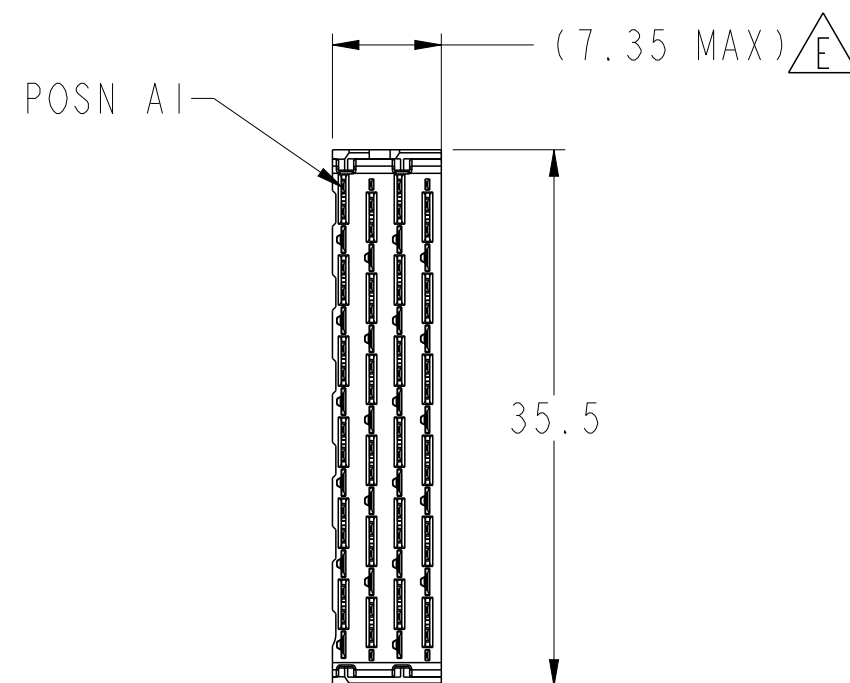
spec ref	SEE NOTES			dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Roger Ng	2011/10/20			ecn no			ELX-S-006560-1
ASME Y14.5				chr	-	-			rel level			Released
surface	linear	0.X	±0.2	appr	Chen-Hong Tan	2011/11/23			product family			XCode
ASME Y14.5	angular	0°	±°				title	MODULE ASSEMBLY			cat. no.	SEE P/N TREE
									Product - Customer Drw			sheet 1 of 8
									rev			E

OPEN (2-WALL) MODULE

SEE NOTE 8



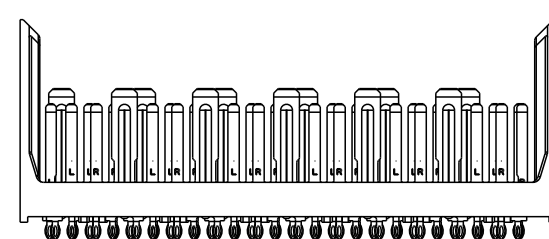
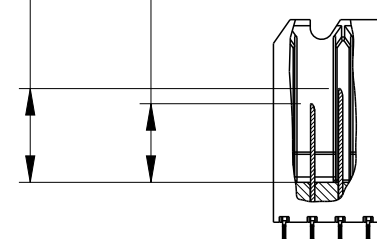
SEE NOTE 5



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)



2.54
TO TOP SURFACE
OF DAUGHTERCARD

X_BP

(0.73)

(2.46)

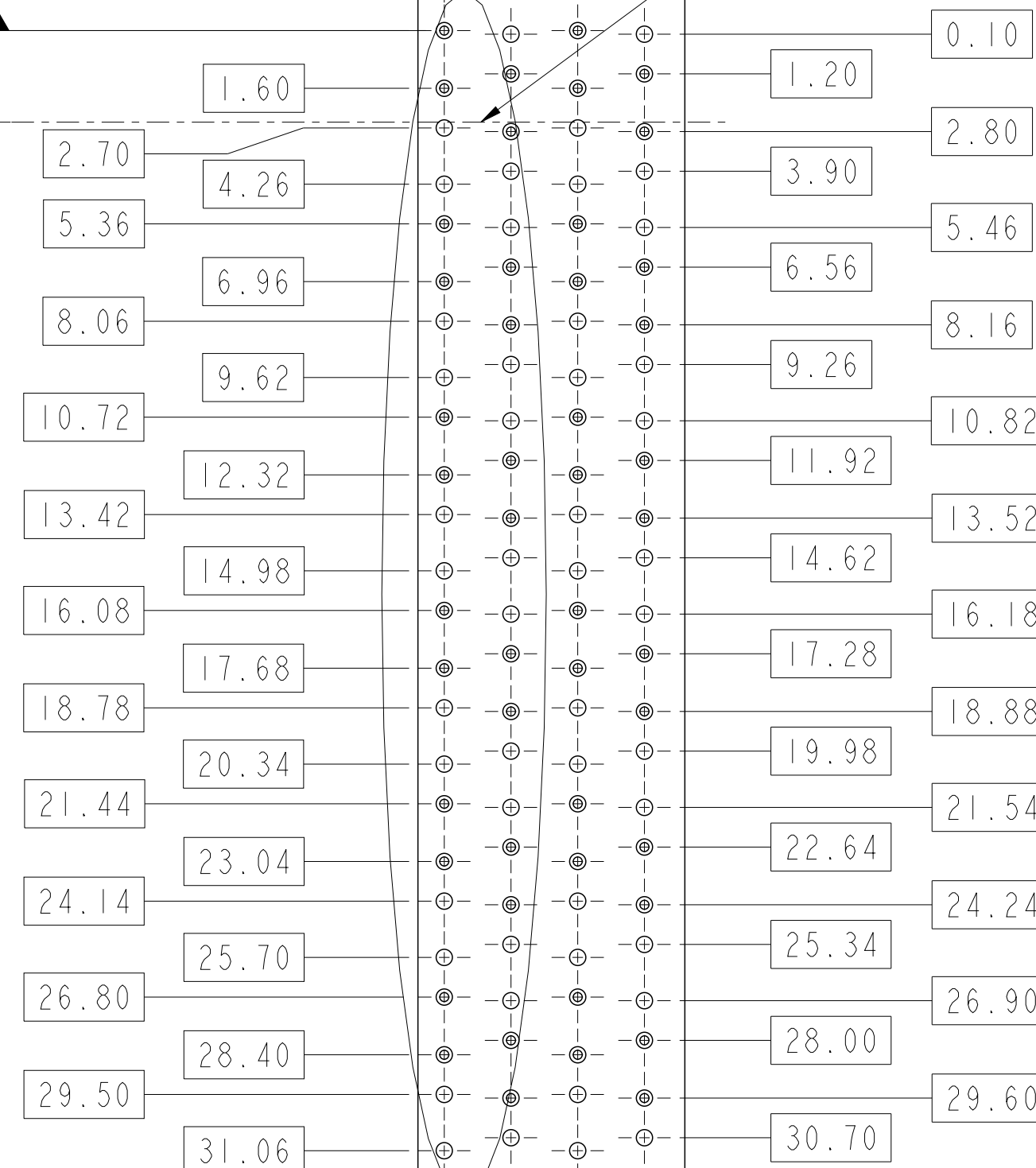
E

7.4

Y_BP

1.85
TYP

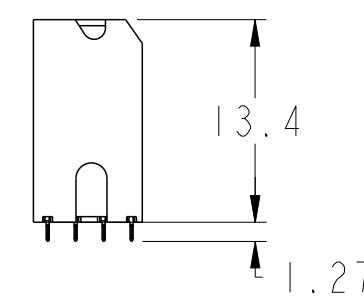
TOP SURFACE OF
DAUGHTERCARD



SEE DETAIL A
(SHEET 8)

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

NOMINAL MODULE OUTLINE



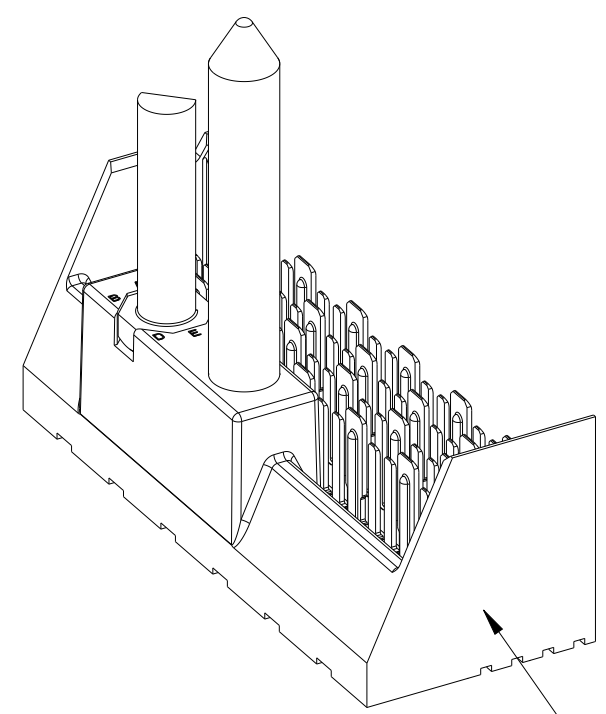
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Roger Ng	2011/10/20	chr	-	ecn no	ELX-S-006560-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2011/11/23	product family	XCede	rel level	Released	rev	E
surface	linear	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

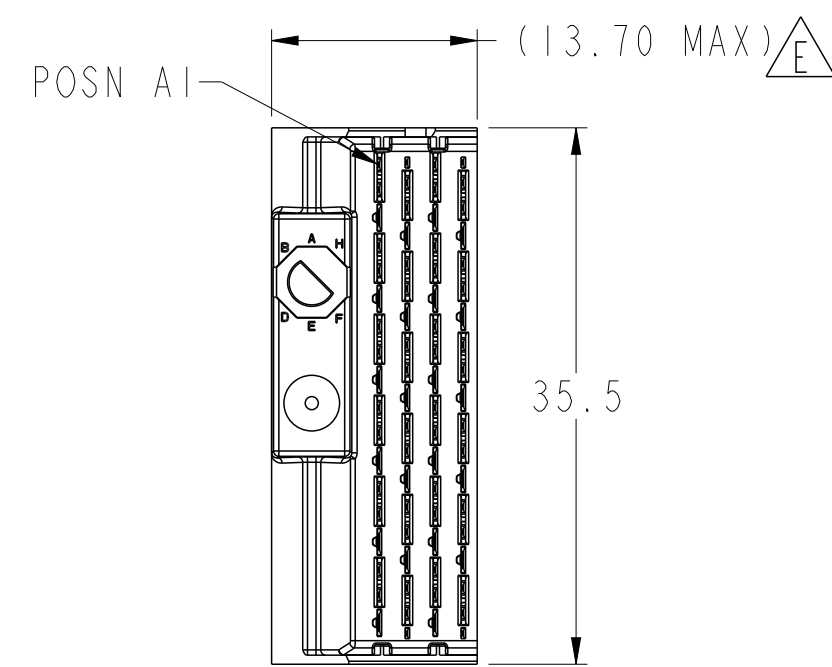
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Printed: Nov 23, 2011

LEFT POLARIZING/GUIDE MODULE

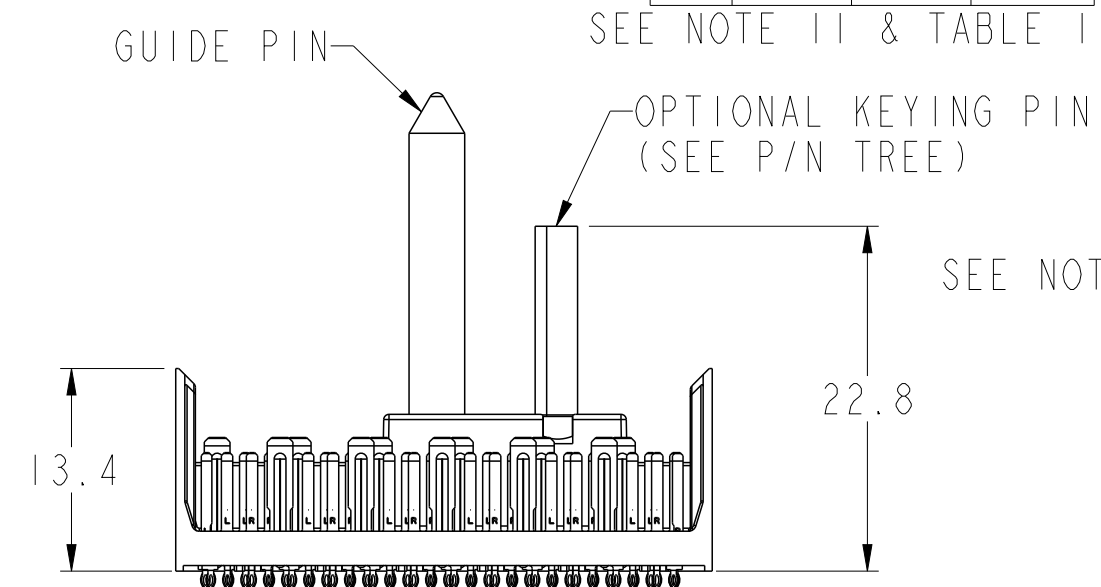
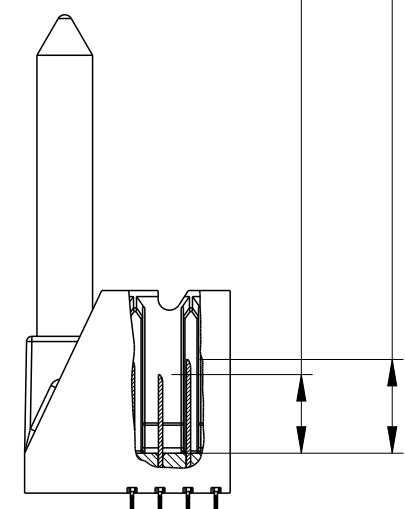


SEE NOTE 5

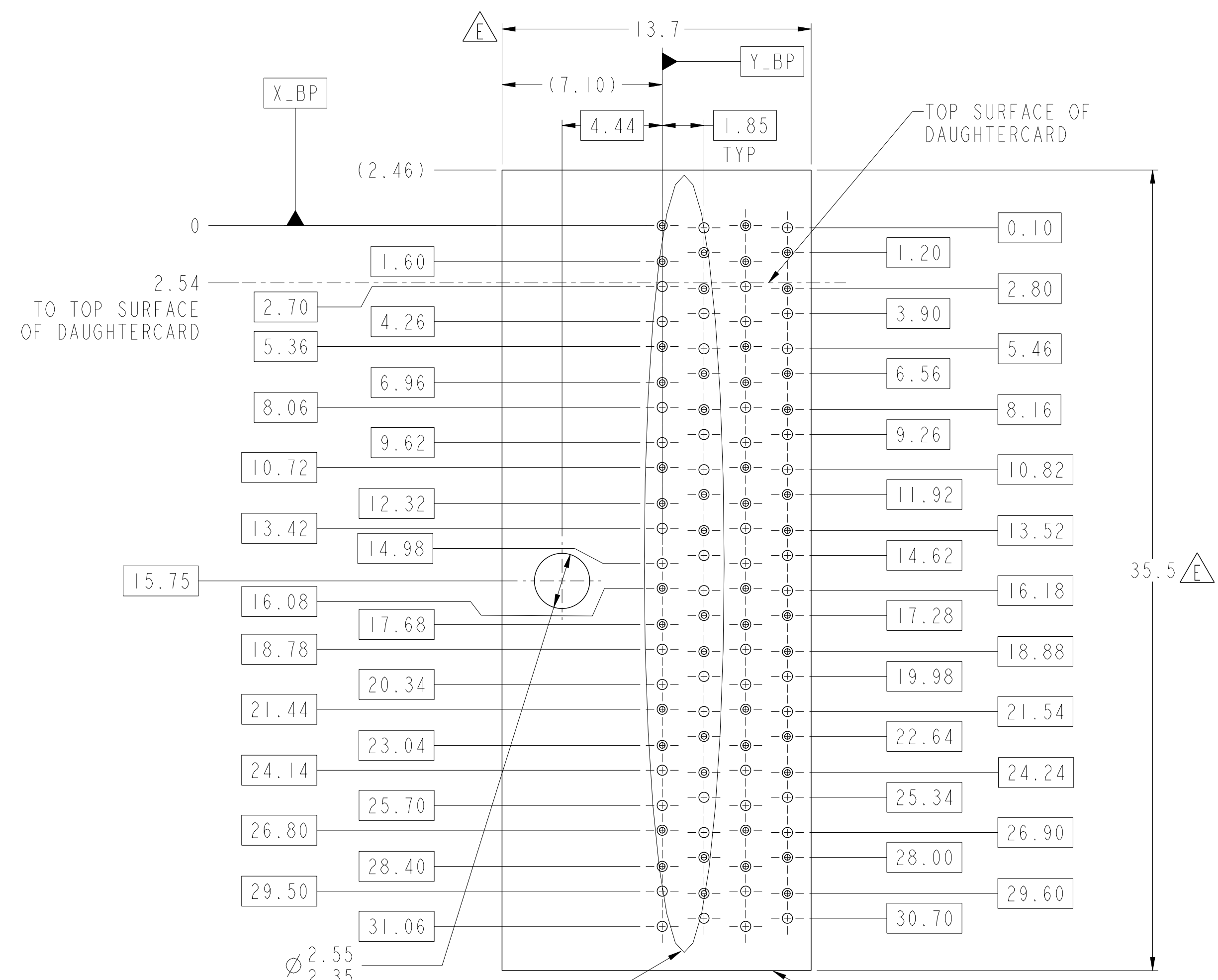
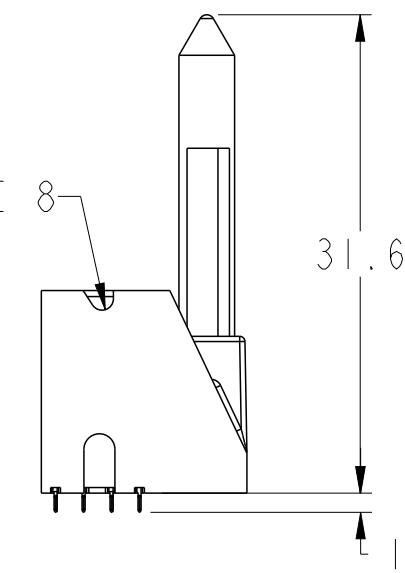


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



SEE NOTE 8



0.10	X_BP	Y_BP
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SEE NOTE 11 & TABLE 1

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	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Roger Ng	2011/10/20	chr	-	ecm no	ELX-S-006560-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2011/11/23	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				

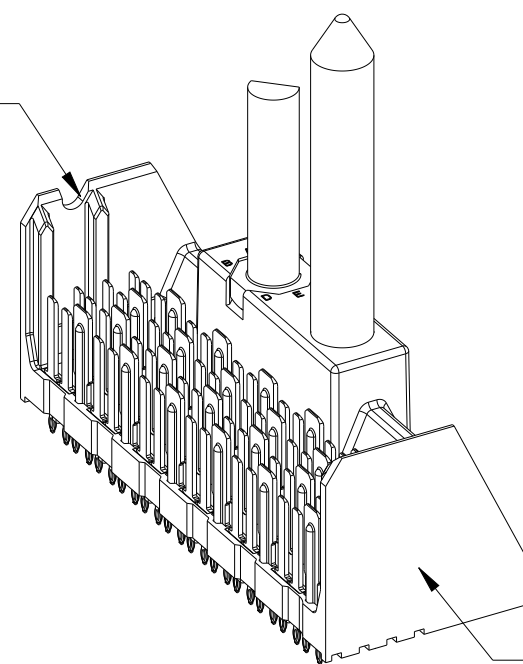
PDS: Rev :E

STATUS:Released

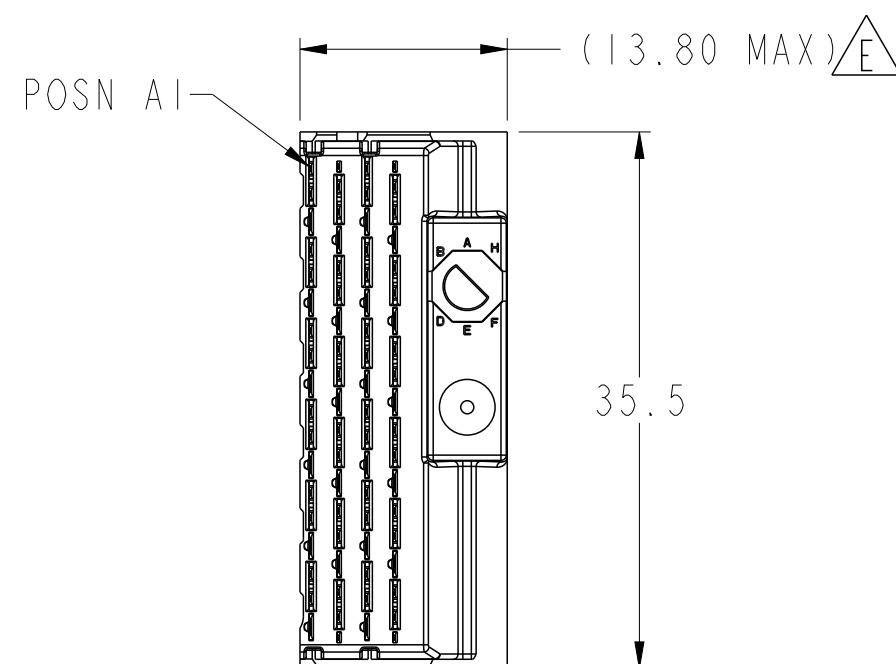
Printed: Nov 23, 2011

RIGHT POLARIZING/GUIDE MODULE

SEE NOTE 8



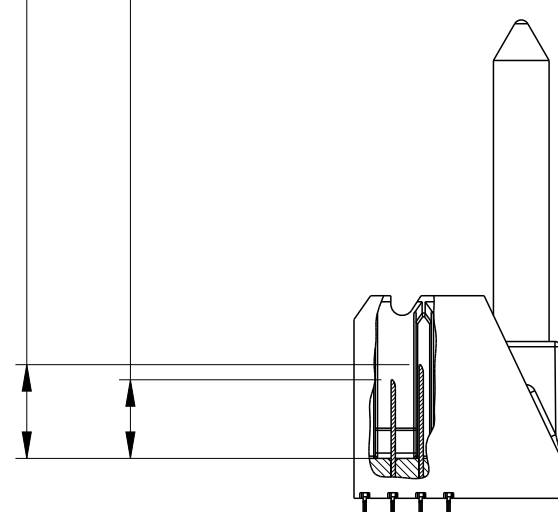
SEE NOTE 5



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

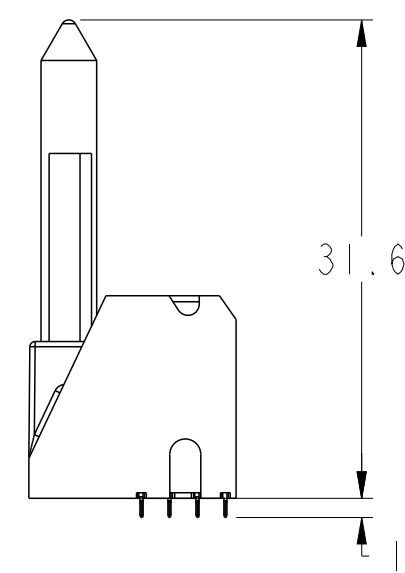
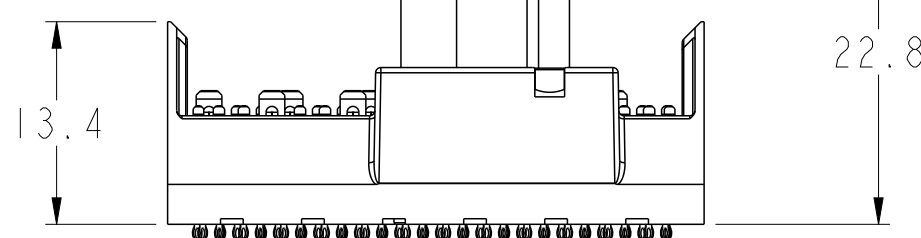
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR
ALL COMBINATIONS AVAILABLE)



GUIDE PIN

OPTIONAL KEYING PIN
(SEE P/N TREE)



X_BP

(0.73)

(2.46)

0

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

31.06

1.60

4.26

6.96

9.62

12.32

14.98

17.68

20.34

23.04

25.70

28.40

30.70

E

Y_BP

1.85 TYP

10.36

13.8

TOP SURFACE OF
DAUGHTERCARD

0.10

1.20

2.80

5.46

8.16

10.82

13.52

16.18

18.88

21.54

24.24

26.90

29.60

35.5 E

SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

Ø 2.55
2.35

Ø 0.10 X_BP Y_BP
SEE NOTE 11 & TABLE 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	Roger Ng	2011/10/20	chr	-	ecn no	ELX-S-006560-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2011/11/23	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				

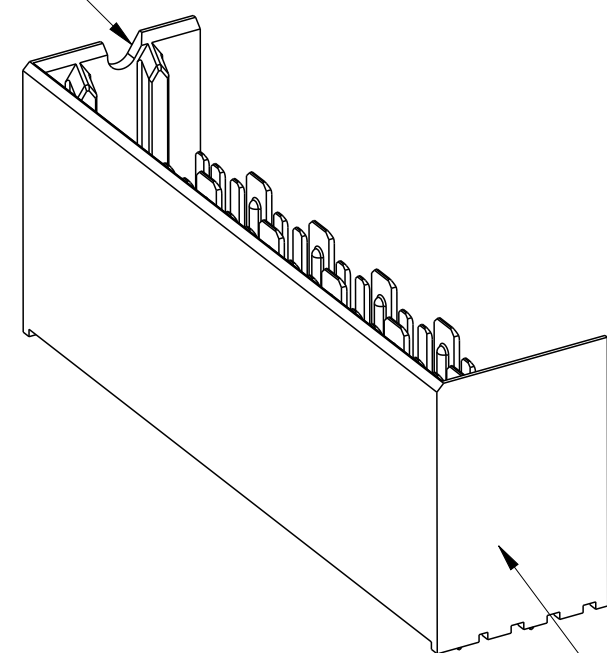
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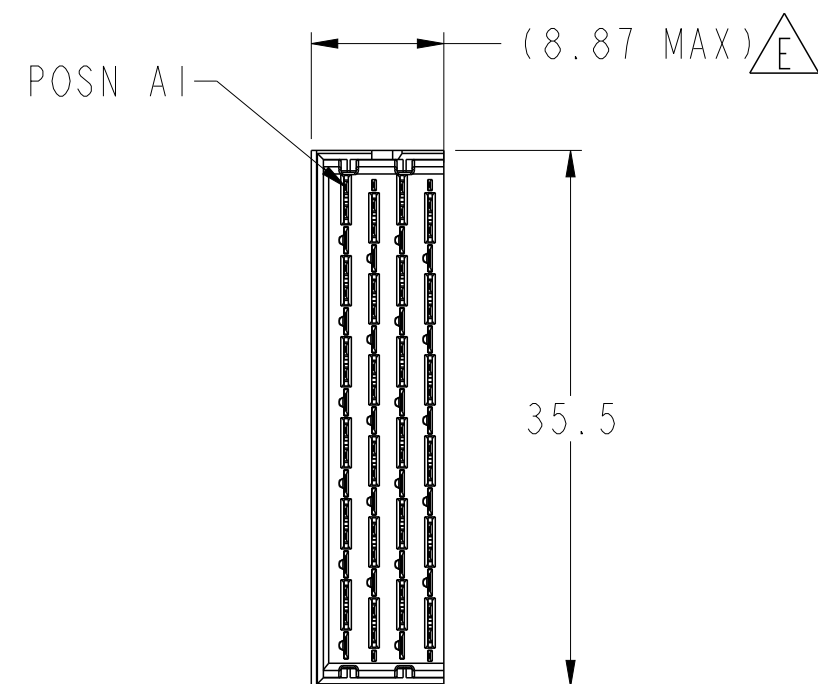
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LEFT WALL MODULE

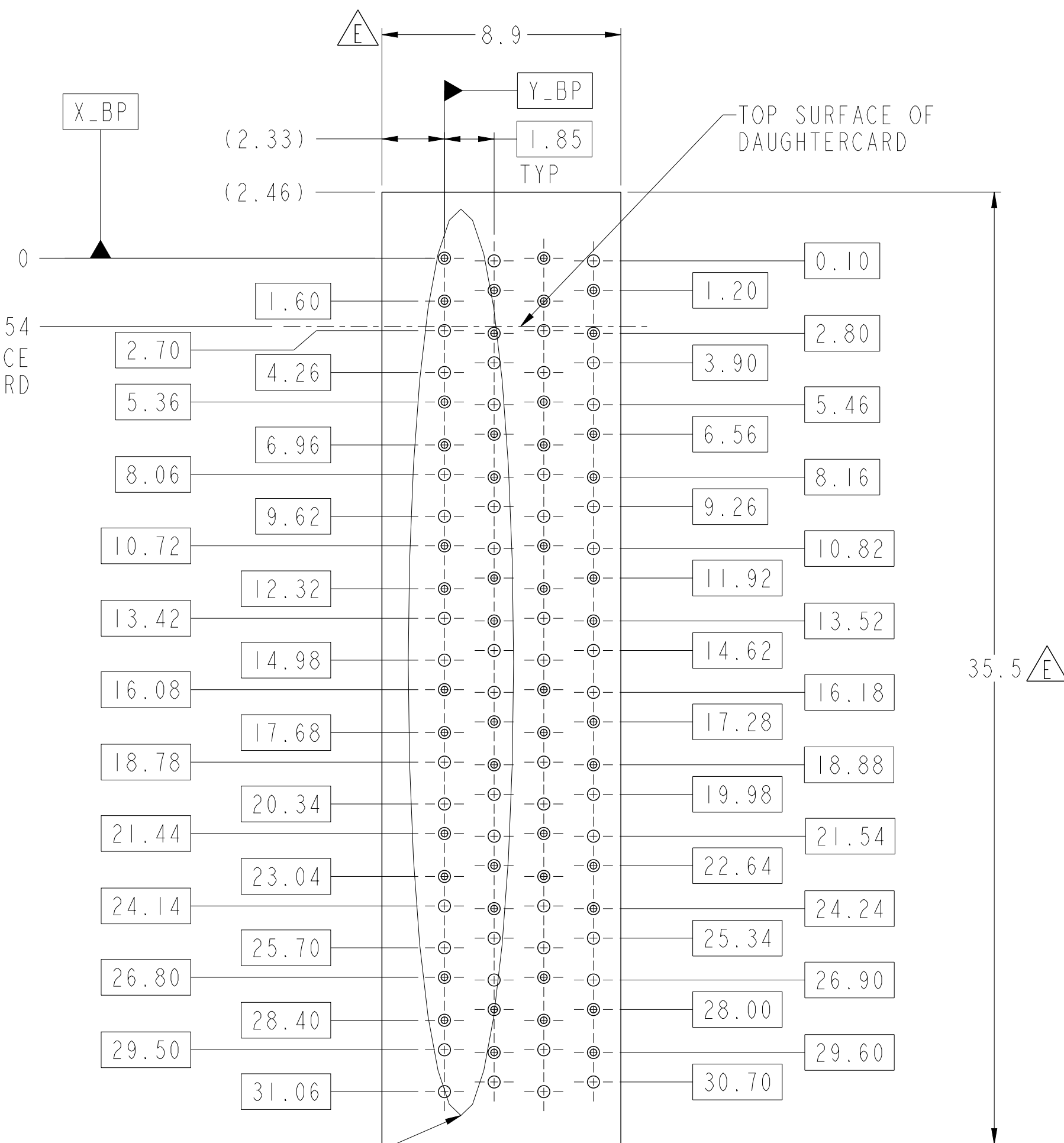
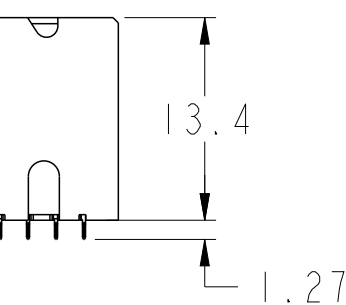
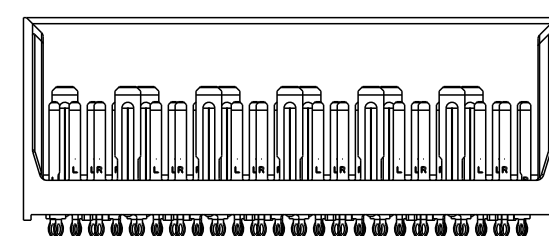
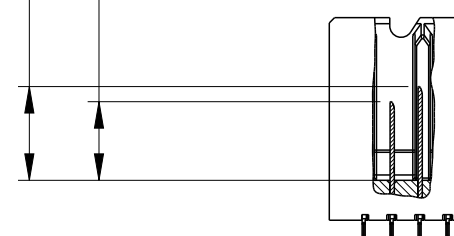
SEE NOTE 8



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)



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	Roger Ng	2011/10/20	chr	-	ecn no	ELX-S-006560-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2011/11/23	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		

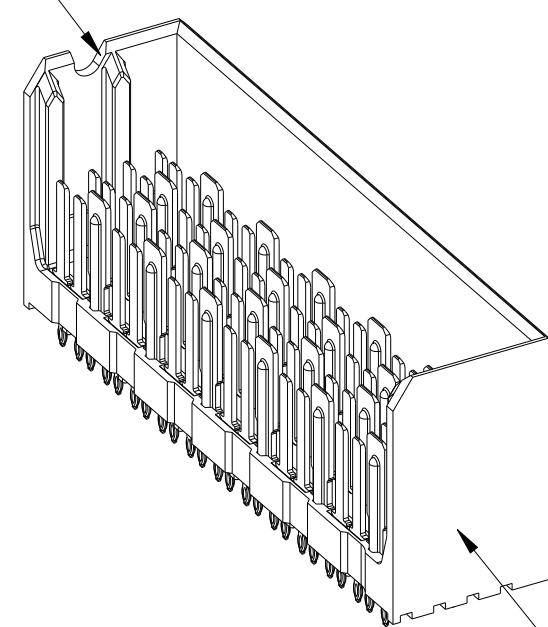
PDS: Rev :E

STATUS:Released

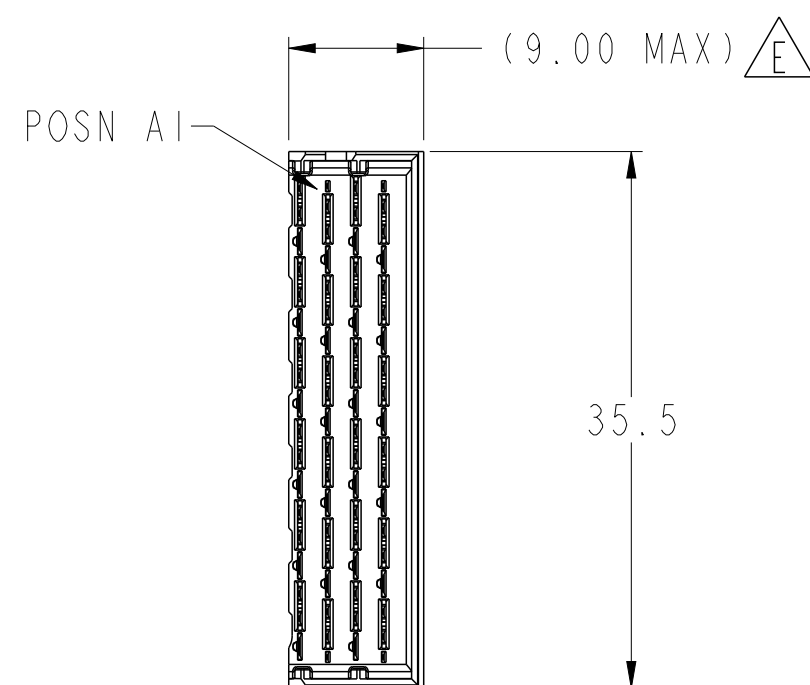
Printed: Nov 23, 2011

RIGHT WALL MODULE

SEE NOTE 8

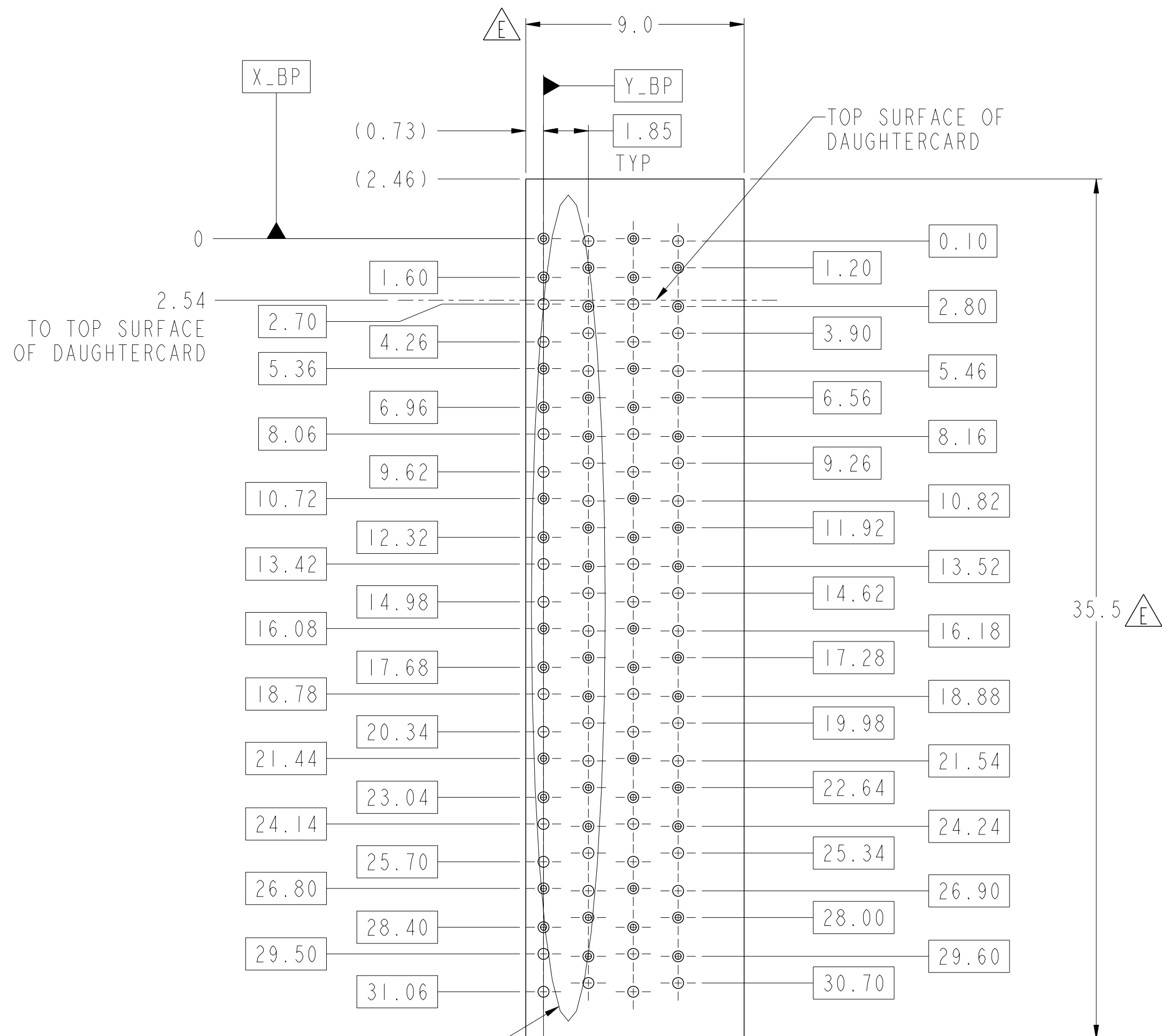
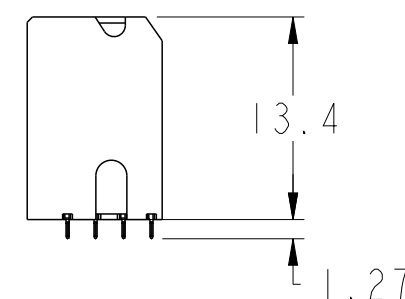
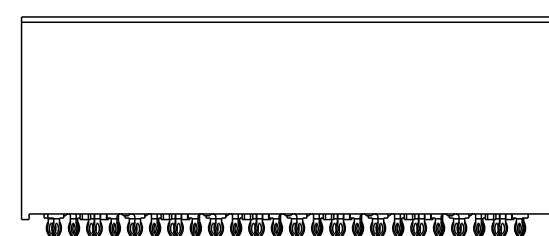
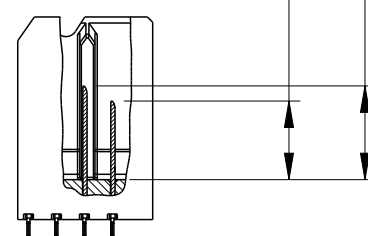


SEE NOTE 5



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)



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	Roger Ng	2011/10/20	chr	-	ecn no	ELX-S-006560-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2011/11/23	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 6 of 8				

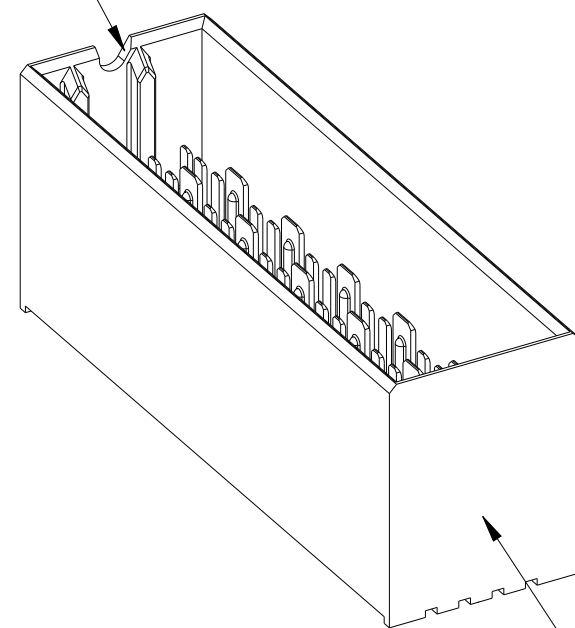
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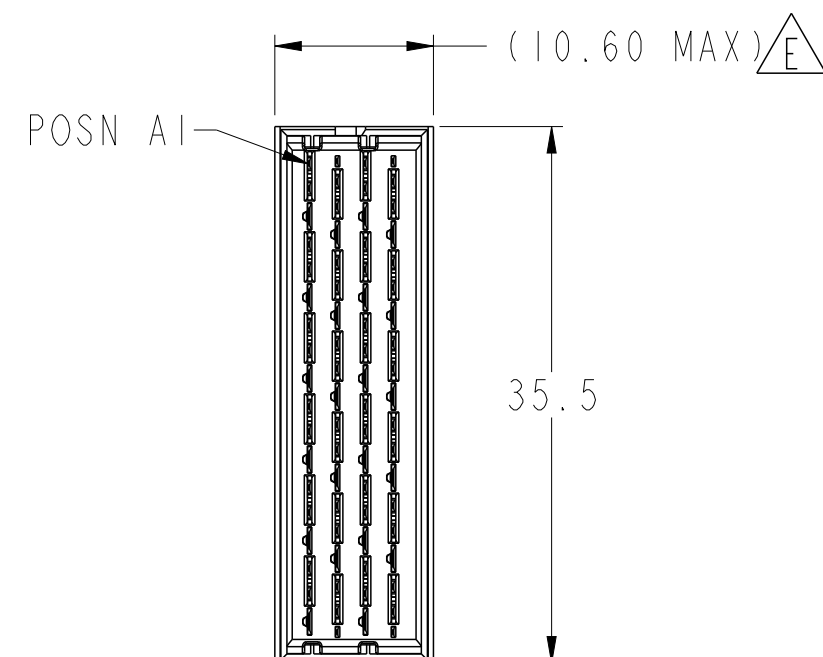
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FOUR WALL MODULE

SEE NOTE 8

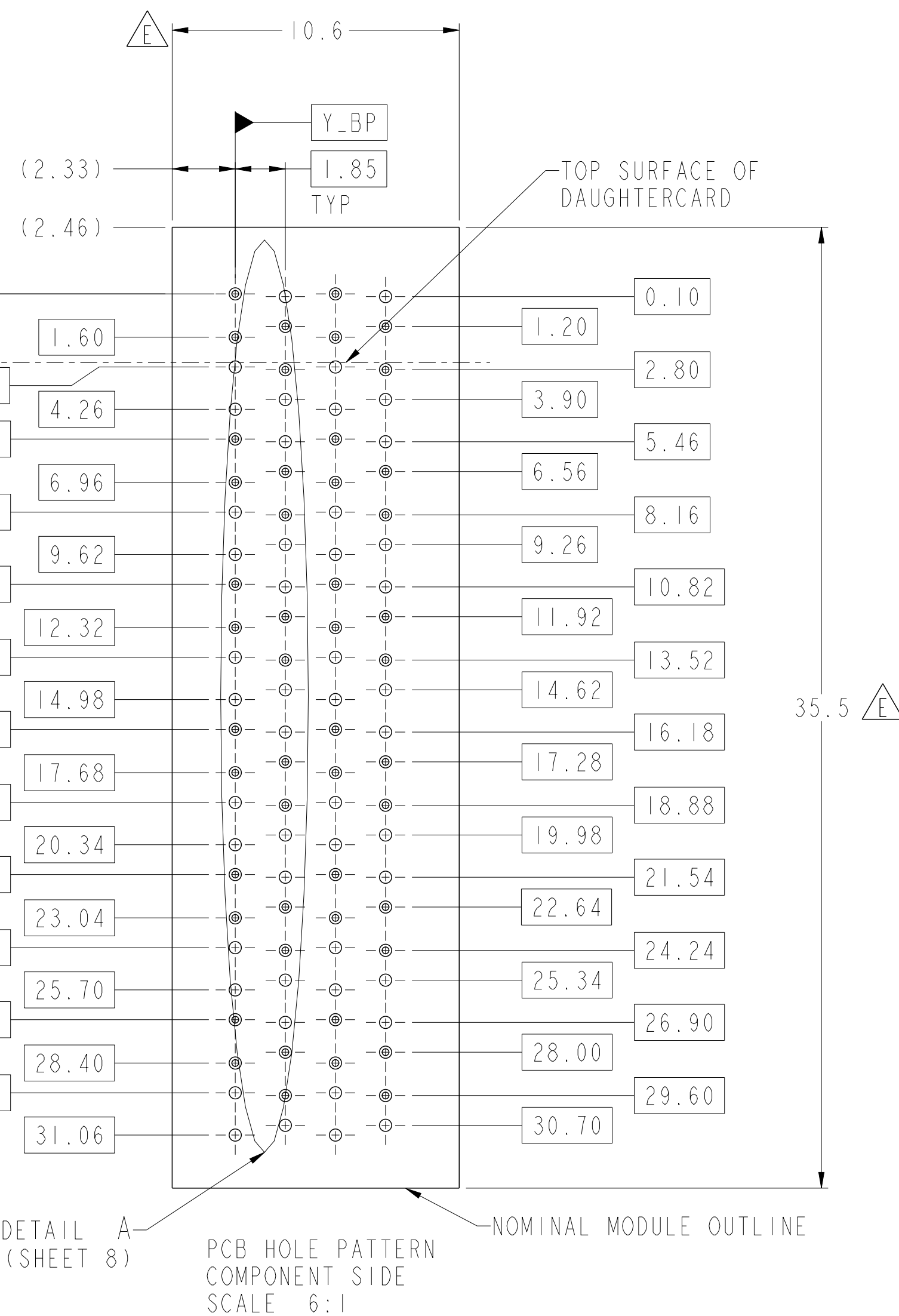
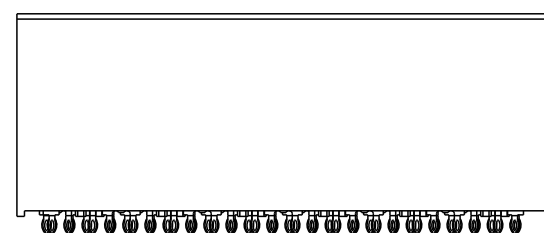
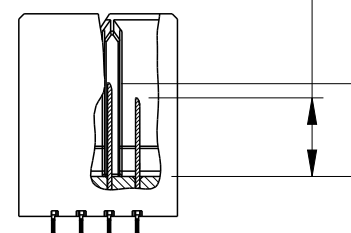


SEE NOTE 5

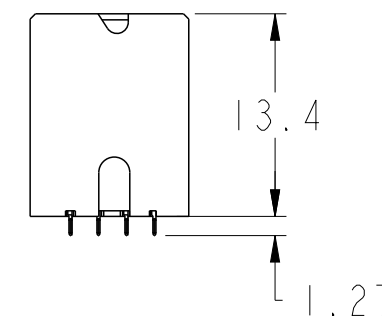


6.1 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



SEE DETAIL A (SHEET 8)



spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Roger Ng	2011/10/20	chr	-	ecn no	ELX-S-006560-1	rel level	Released
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
ASME Y14.5										
www.fci.com		PDS: Rev :E		STATUS:Released		Printed: Nov 23, 2011				

NOTES:

- CONNECTOR MATERIALS
SHROUD: HIGH-TEMP THERMOPLASTIC, GRAY, UL94V-0
CONTACTS: HIGH PERFORMANCE COPPER ALLOY
- 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.
- PRODUCT SPECIFICATION: GS-12-588
- APPLICATION SPECIFICATION: GS-20-121
- PRODUCT MARKING (PART NUMBER AND LOT CODE) ON THESE SURFACES.
- HOUSING MUST WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 40 SECONDS IN A CONVECTION, INFRA-RED, OR VAPOR-PHASE REFLOW OVEN.
- PACKAGING MEETS GS-14-920 LEAD-FREE LABELING SPECIFICATION.
- NOTCH INDICATES "ROW A" SIDE OF CONNECTOR.
- SEE APPLICATION SPECIFICATION FOR ROUTING GUIDELINES, ADDITIONAL PTH GUIDELINES, MATED DIMENSIONS, GUIDE PN SELECTION, ETC.
- SCREW IS OPTIONAL AND ENGAGES WITH BOTTOM OF GUIDE-PIN FROM BENEATH THE PCB FOR ADDITIONAL GUIDE-PIN SUPPORT.
- OPTIONAL HOLE LOCATION FOR GROUNDED PIN OR ADDITIONAL GUIDE-PIN SUPPORT. SEE TABLE 1 ON SHEET 1 FOR ADDITIONAL DETAILS.
- A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

REFER TABLE 3
FOR PTH, DRILL & PAD SIZES

	0.10	X_BP	Y_BP
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X_BP

Y_BP

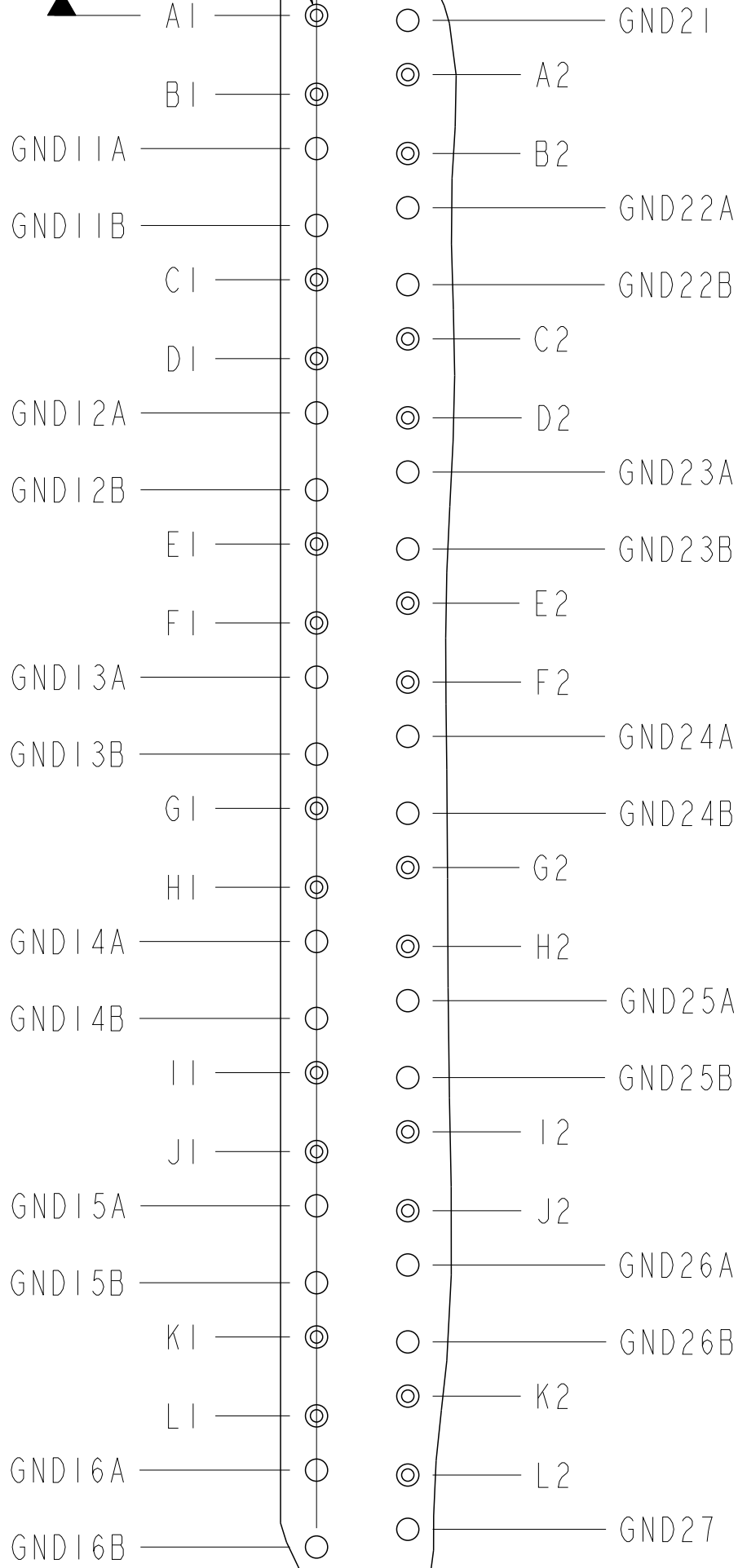
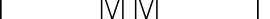


TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL

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

DETAIL A
SCALE 8:1

spec ref	SEE NOTES				dr	Kok-Hoe Lee	2010/06/23	projection		size	A2	scale	4:1				
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED				eng	Roger Ng	2011/10/20			ecn no	ELX-S-006560-1						
ASME Y14.5					chr	-	-										
					appr	Chen-Hong Tan	2011/11/23				product family			XCede		rel level	
surface		linear	0.X	±0.2		title	MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 6-PAIR				dwg no	10114508		rev	E		
			0.XX	±0.10													
			0.XXX	±0.050													
ASME Y14.5		angular	0°	±°	www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw				sheet 8 of 8					