

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

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"]

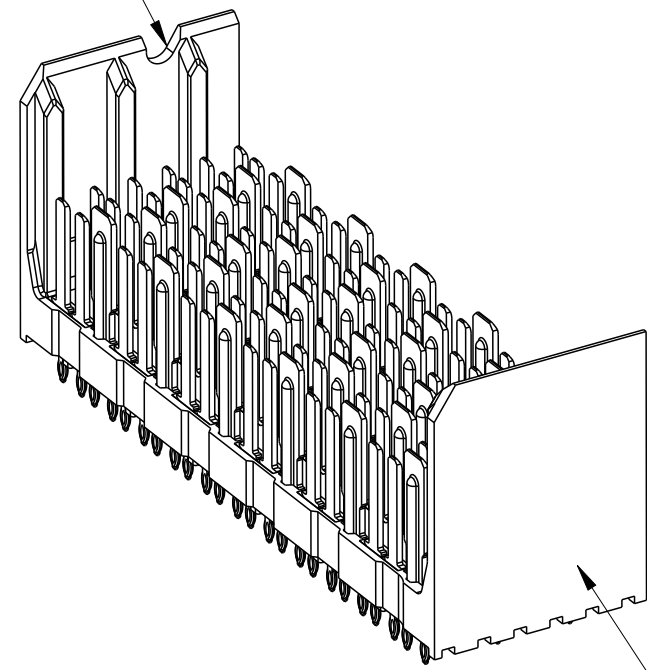
	GROUNDED	UNGROUNDED
FINISHED	Ø2.35-2.55	Ø2.35-2.55
PAD	Ø5.50	N/A
PLATED	YES	NO
DRILL (mm/in)	2.58 / .1015	2.44 / .096

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	Roger Ng	2011/10/06	chr	-	ecn no	ELX-S-006346-1	rel level	Released
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
ASME Y14.5	angular	0°	±°	www.fci.com		product family	XCode	cat. no.	SEE P/N TREE	Product - Customer Drw
FCj		MODULE ASSEMBLY		VERTICAL HEADER, 6-COLUMN, 6-PAIR		sig no	10104997	rev	D	sheet 1 of 8

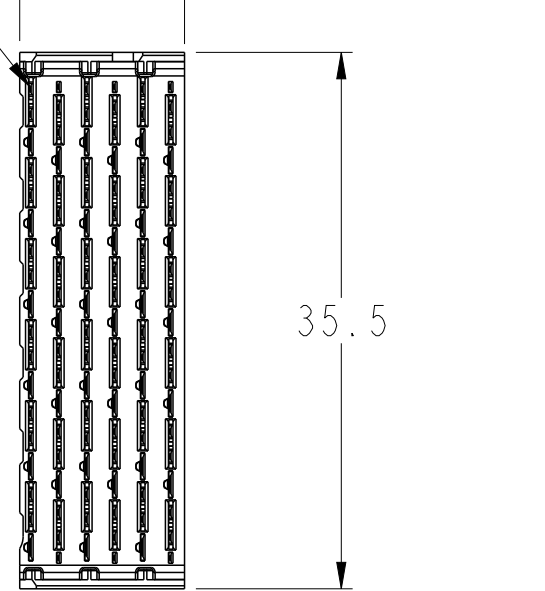
# OPEN (2-WALL) MODULE

SEE NOTE 8



SEE NOTE 5

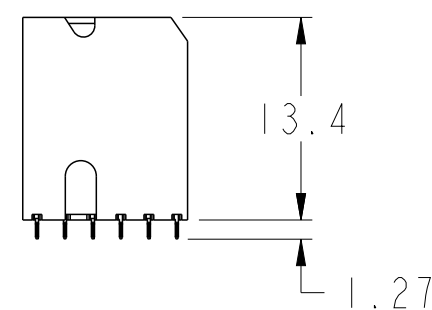
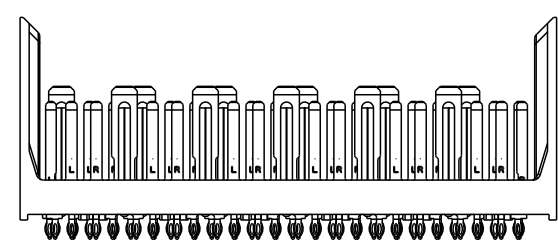
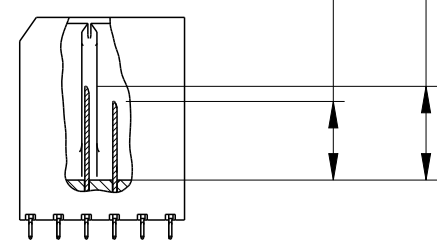
POSN A1 (11.05 MAX)  $\Delta$



35.5

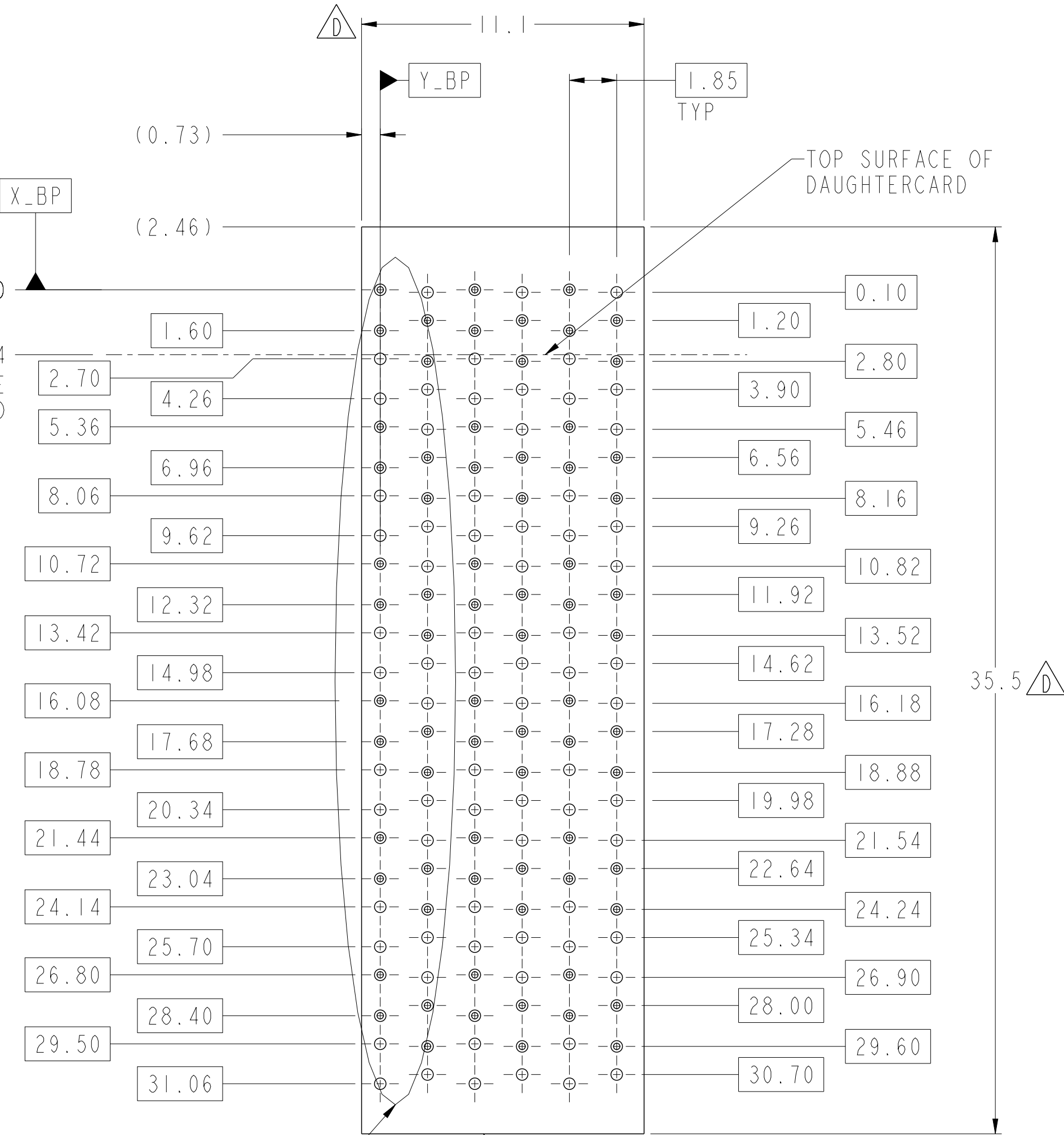
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



SEE DETAIL A (SHEET 8)

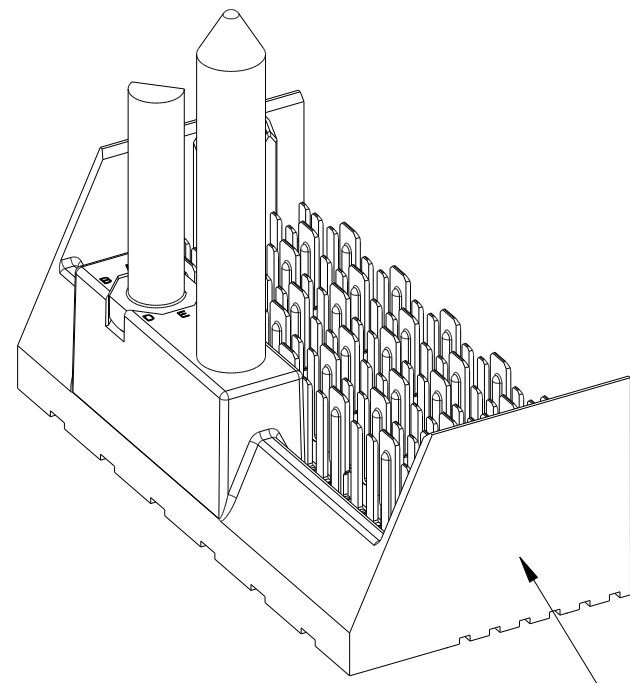
PCB HOLE PATTERN COMPONENT SIDE SCALE 6:1



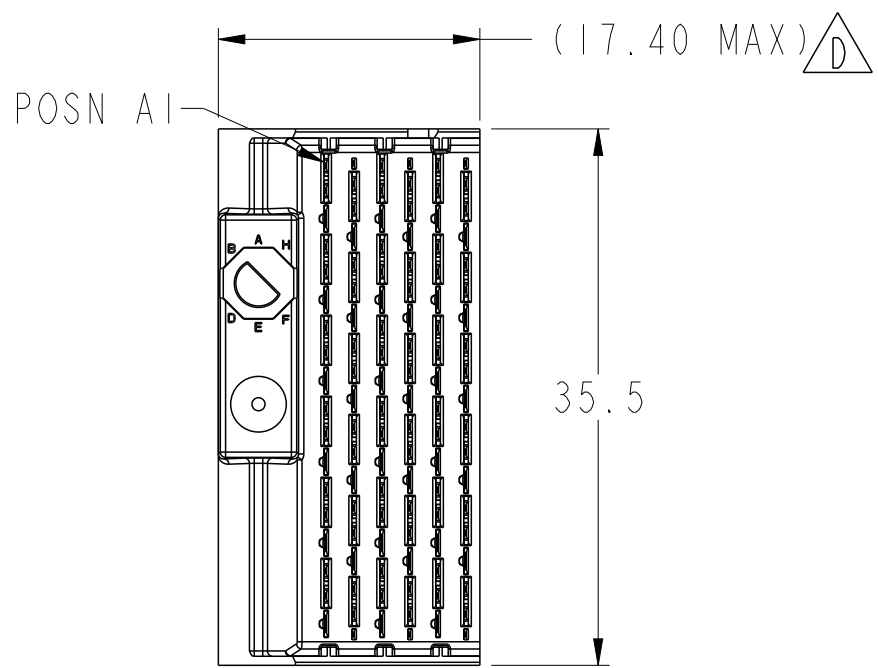
NOMINAL MODULE OUTLINE

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	2011/10/06			ecn no	ELX-S-006346-1	rel level	Released	
ASME Y14.5		chr		2011/10/06							product family
surface	linear	0.X	±0.2		TITLE MODULE ASSEMBLY VERTICAL HEADER, 6-COLUMN, 6-PAIR	dwg no 10104997	rev D				
		0.XX	±0.10					cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 2 of 8
ASME Y14.5	angular	0°	±								

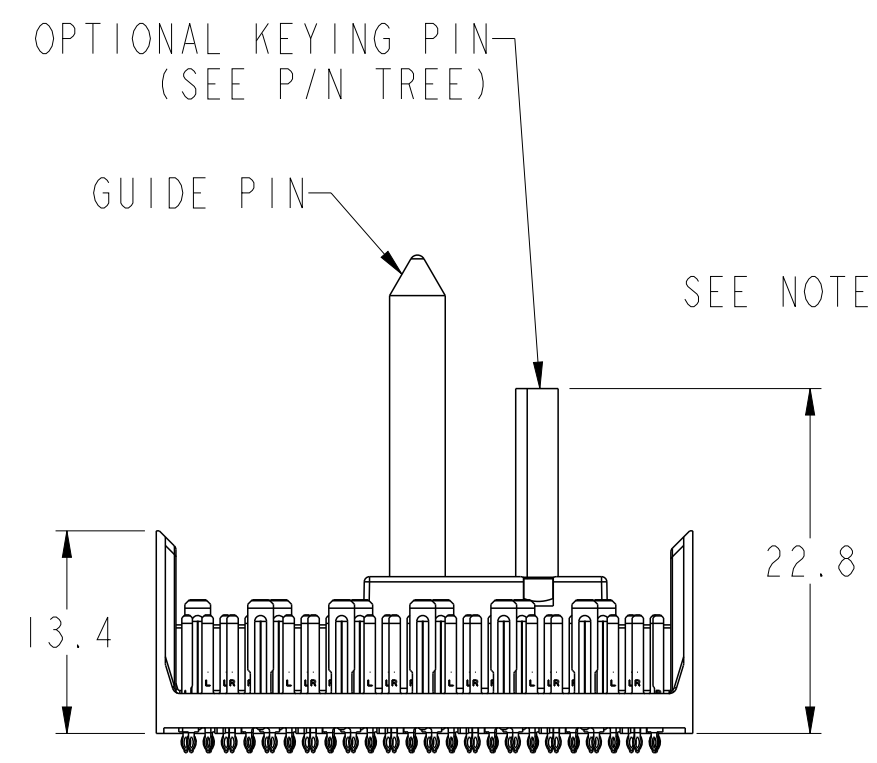
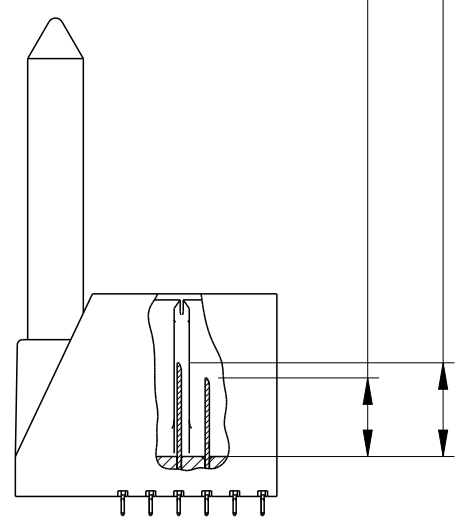
# LEFT POLARIZING/GUIDE MODULE



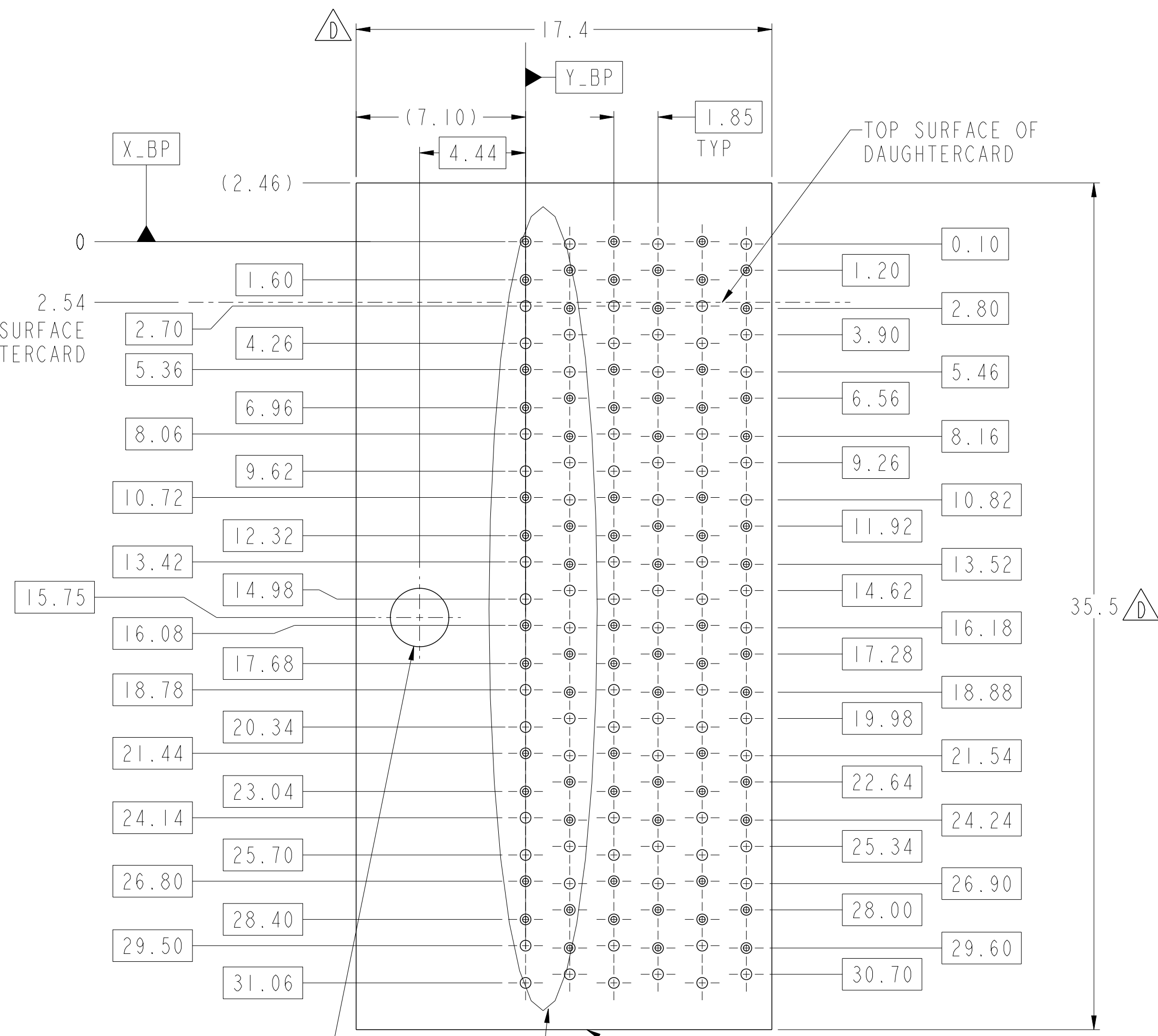
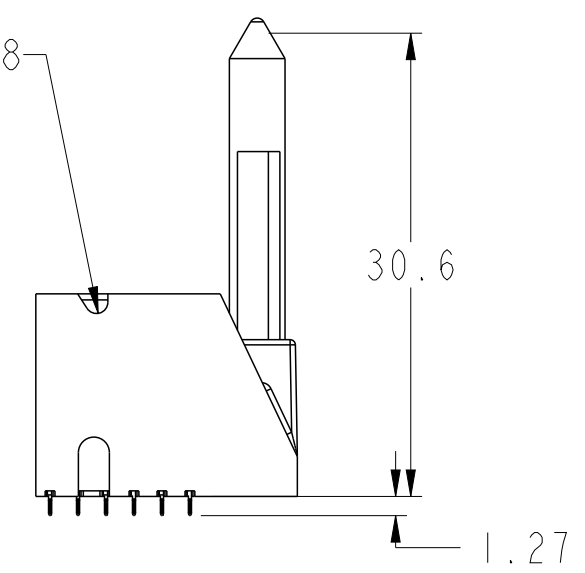
SEE NOTE 5



- 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



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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	2011/10/06	chr	-	ecn no	ELX-S-006346-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2011/10/06	product family	XCede	dwg no	10104997	rev	D
ASME Y14.5	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 3 of 8	

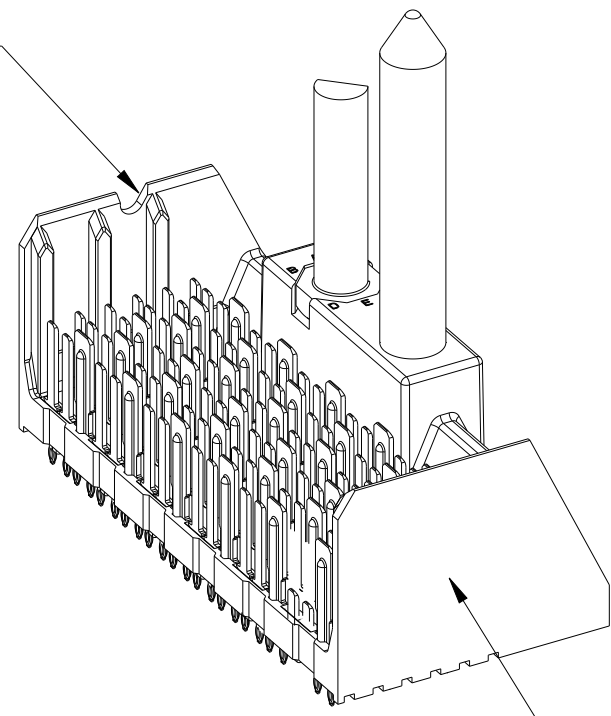
PDS: Rev :D

STATUS:Released

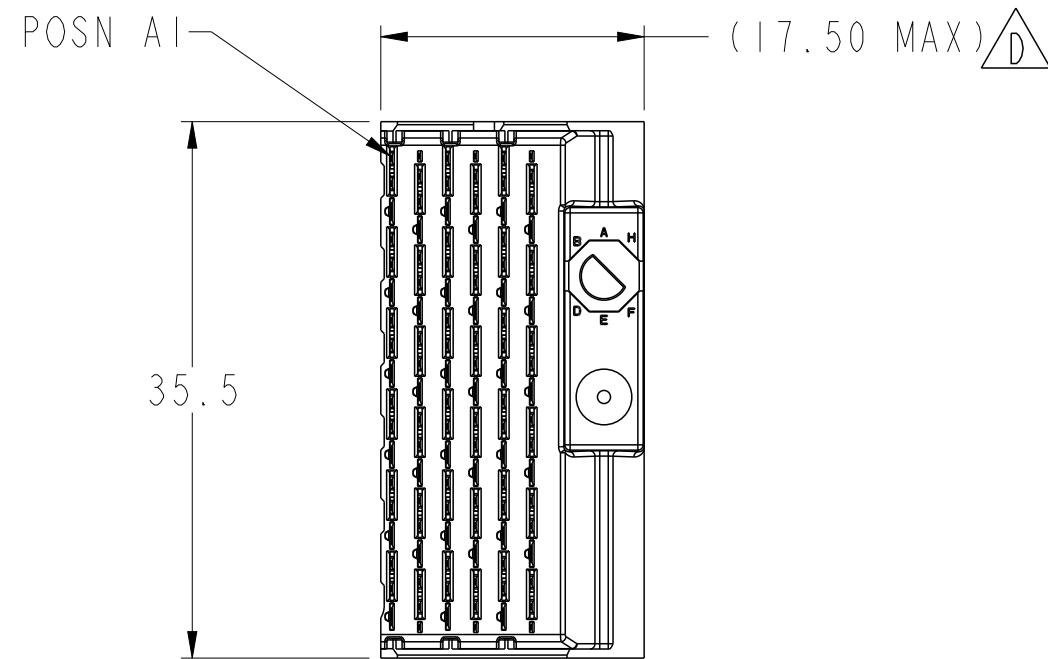
Printed: Oct 06, 2011

# RIGHT POLARIZING/GUIDE MODULE

SEE NOTE 8

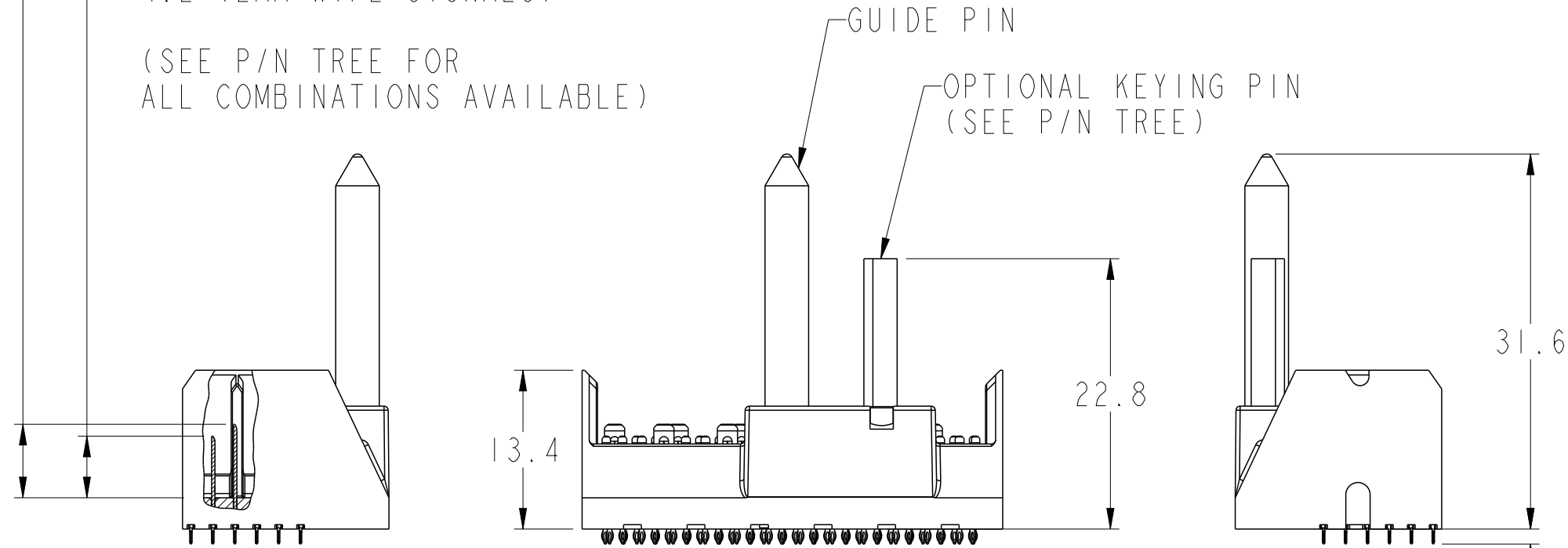


SEE NOTE 5

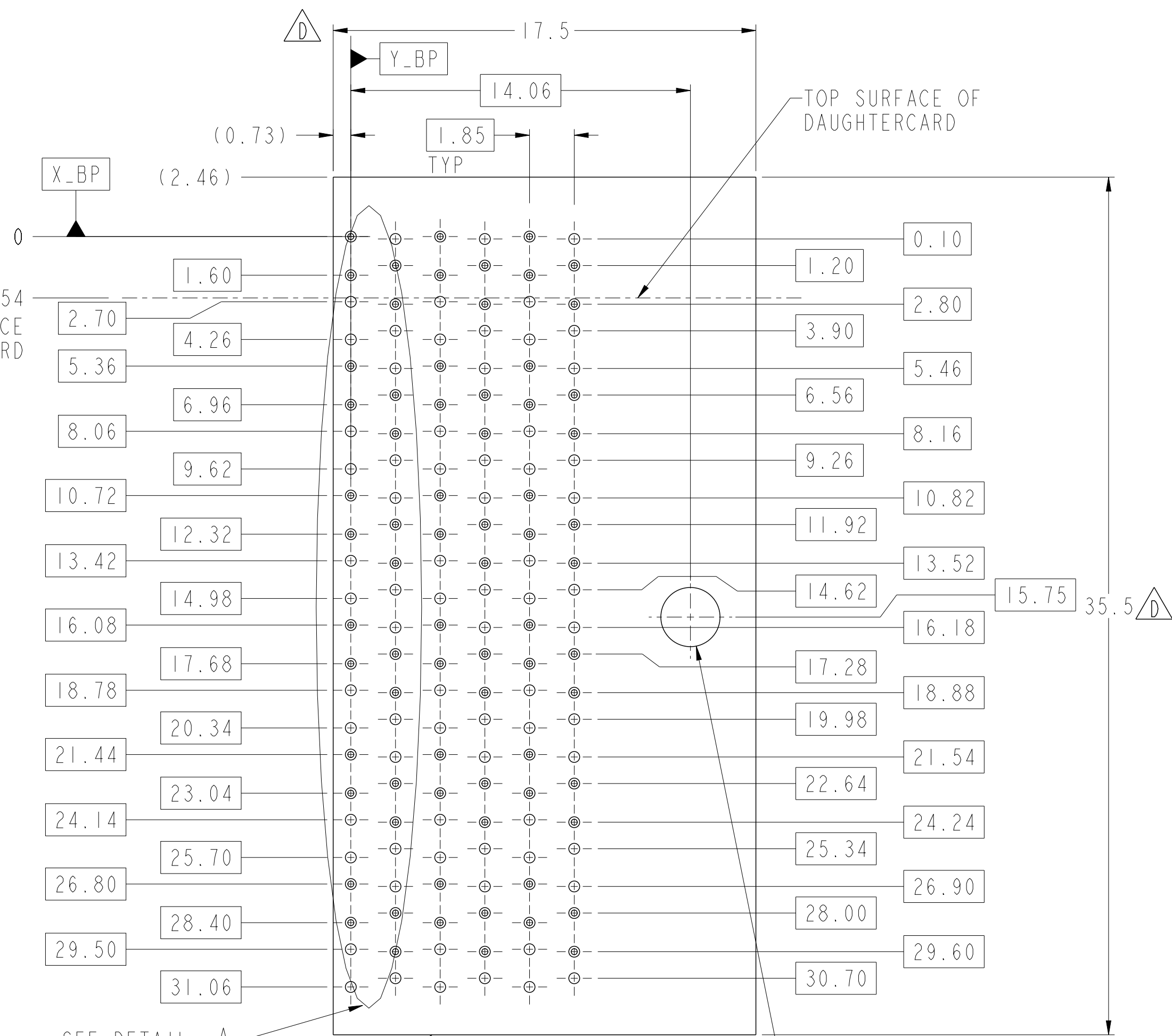


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



2.54  
TO TOP SURFACE  
OF DAUGHTERCARD



SEE DETAIL A  
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

Ø 2.55  
2.35  
⊕ Ø0.10 X\_BP Y\_BP  
SEE NOTE 11 & TABLE 1

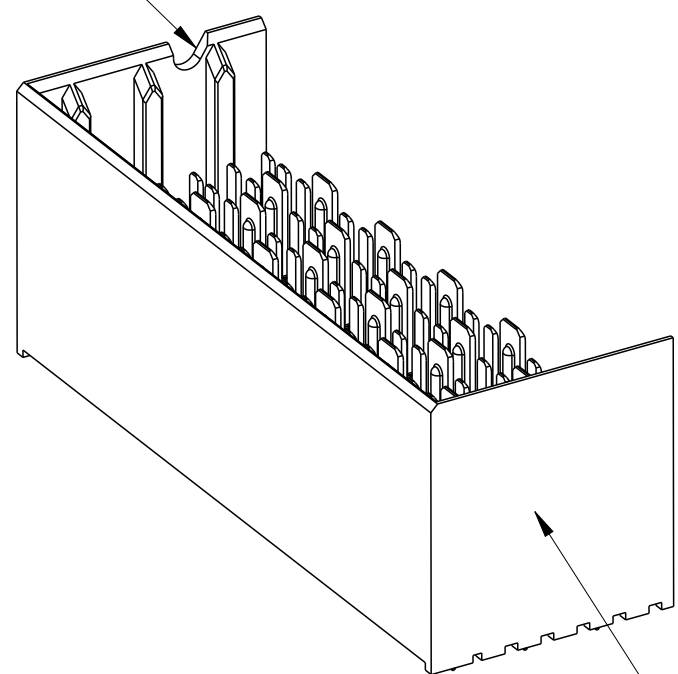
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Roger Ng	2011/10/06			ecn no	ELX-S-006346-1		
ASME Y14.5		chr		2011/10/06			product family	XCode	rel level	Released
surface	linear	0.X	±0.2		<b>MODULE ASSEMBLY</b> VERTICAL HEADER, 6-COLUMN, 6-PAIR		dwg no	10104997		
		0.XX	±0.10		www.fci.com	cat. no.	SEE P/N TREE	Product - Customer	Drw	
ASME Y14.5	angular	0°	±°		PDS: Rev :D	STATUS:Released	Printed: Oct 06, 2011	sheet 4 of 8	rev D	



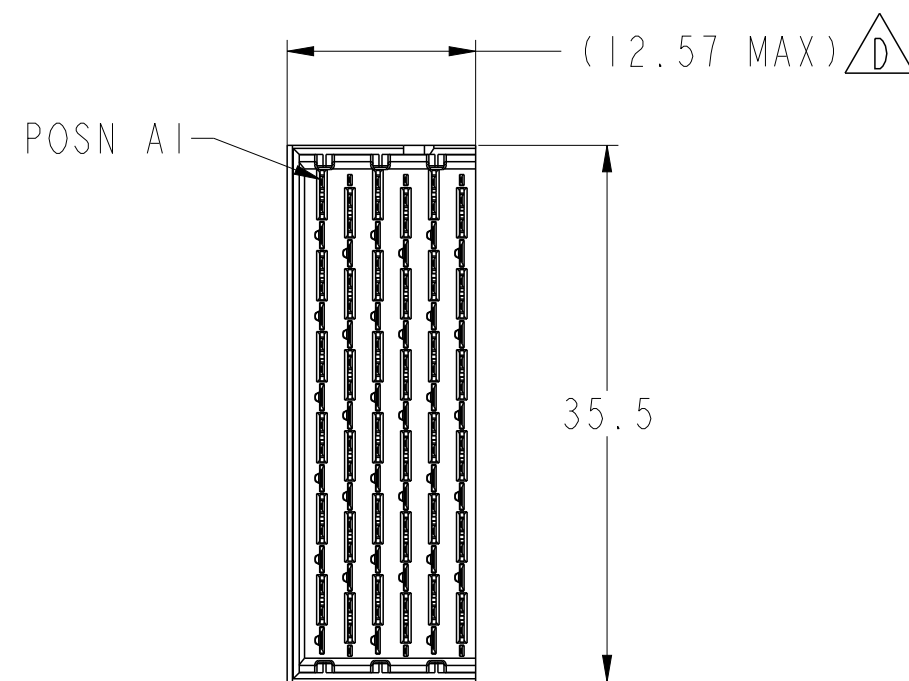


# LEFT WALL MODULE

SEE NOTE 8

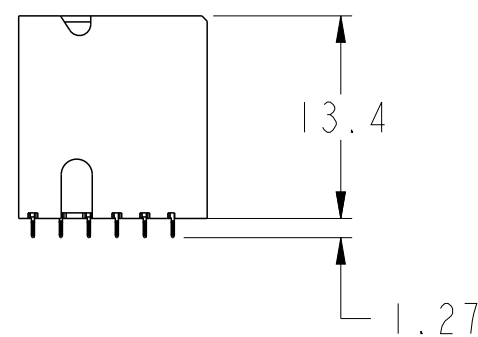
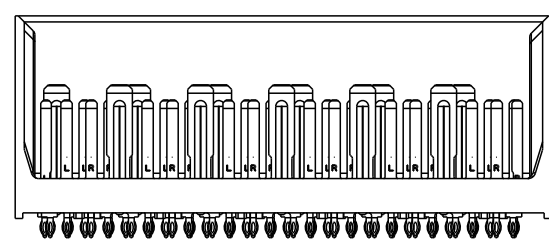
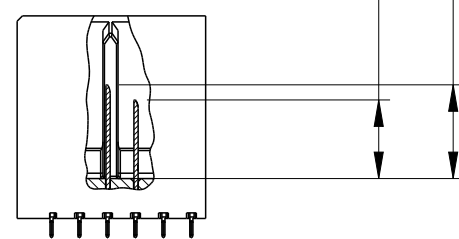


SEE NOTE 5

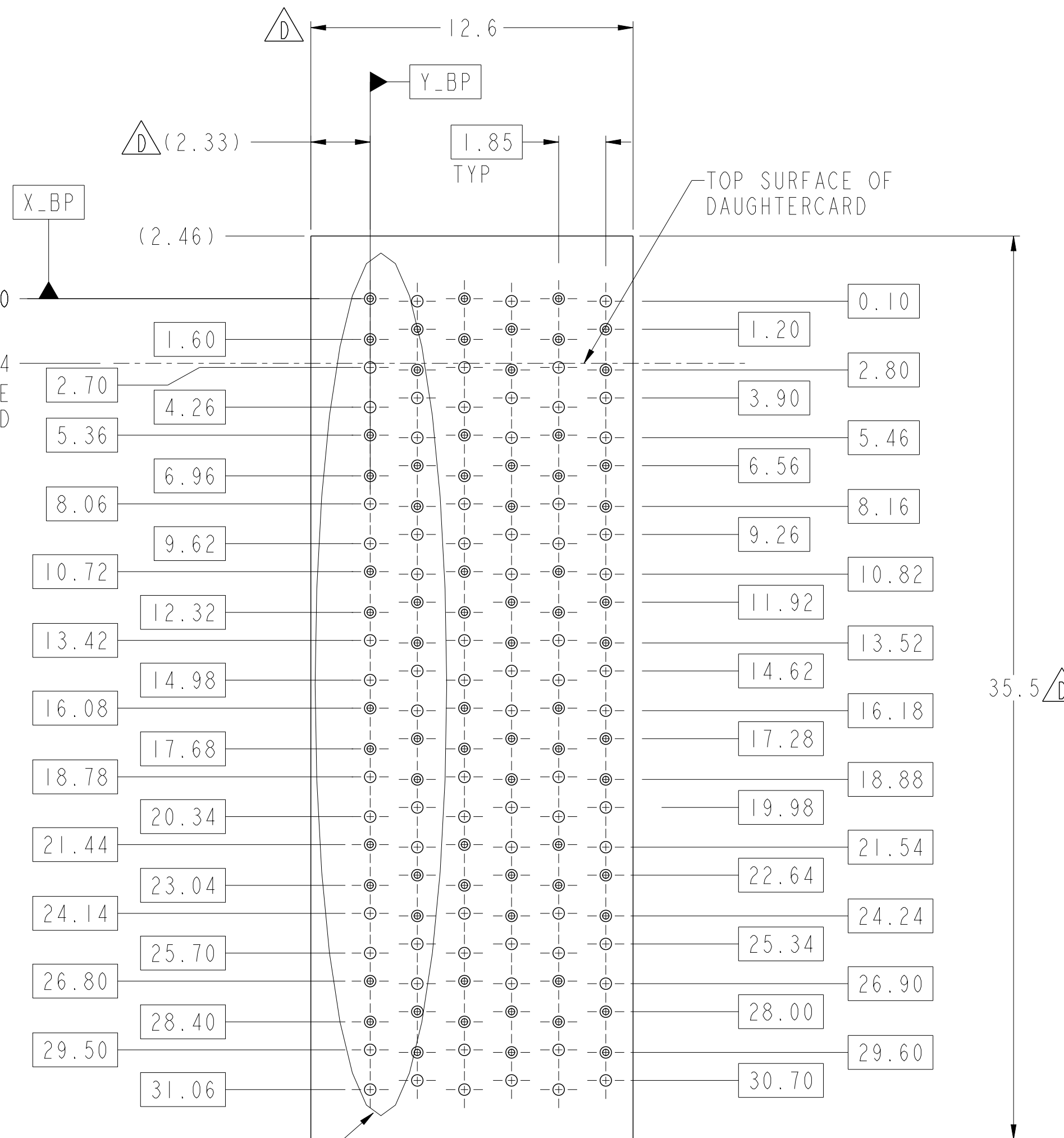


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



2.54  
TO TOP SURFACE  
OF DAUGHTERCARD



SEE DETAIL A  
(SHEET 8)

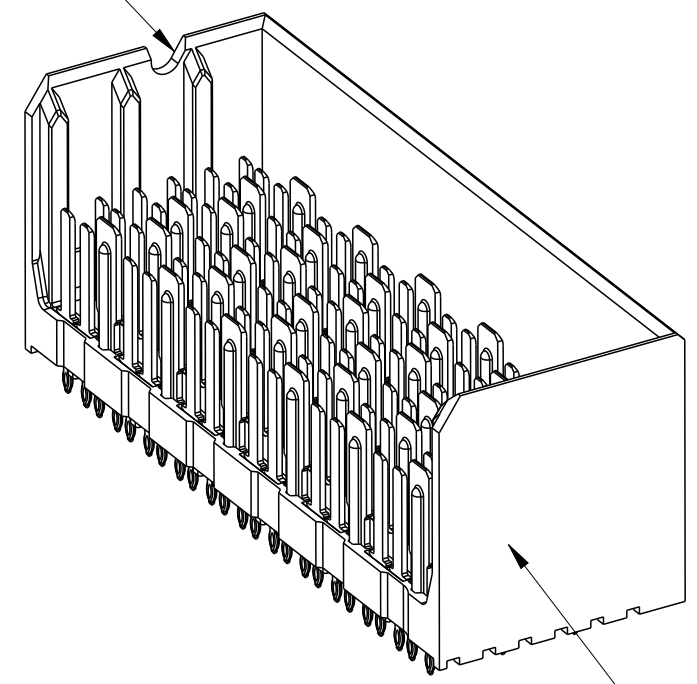
NOMINAL MODULE OUTLINE  
PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1	
tolerance std	ASME Y14.5	eng	Roger Ng	2011/10/06	chr	-	ecn no	ELX-S-006346-1	rel level	Released	
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°	
TOLERANCES UNLESS OTHERWISE SPECIFIED		FCI		MODULE ASSEMBLY		VERTICAL HEADER, 6-COLUMN, 6-PAIR		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 5 of 8
		www.fci.com		PDS: Rev :D		STATUS: Released		Printed: Oct 06, 2011			

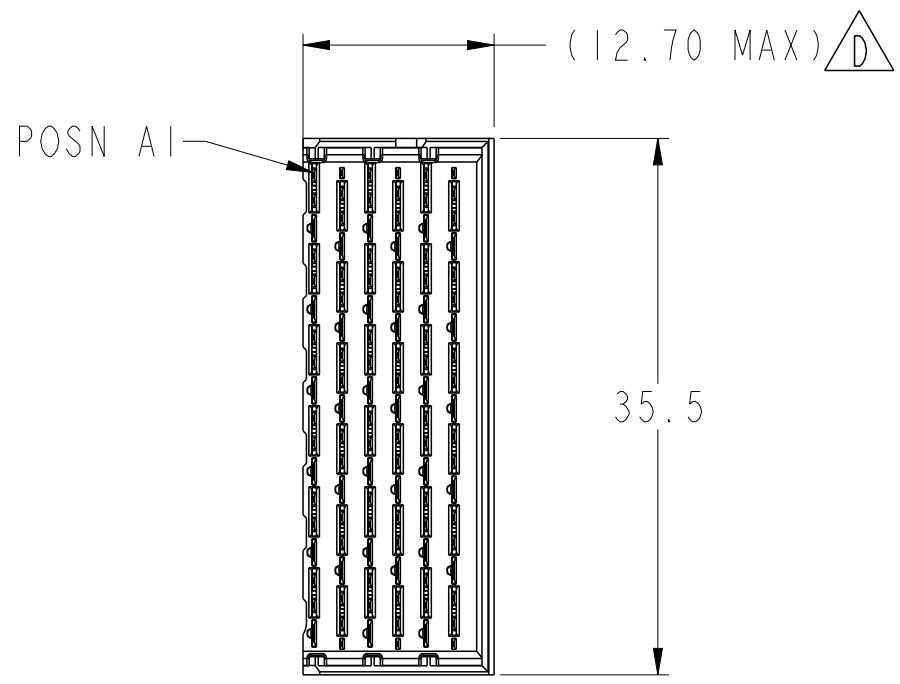
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# RIGHT WALL MODULE

SEE NOTE 8



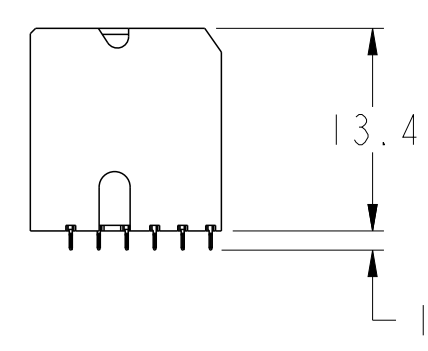
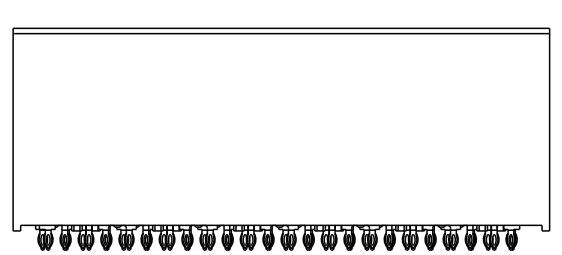
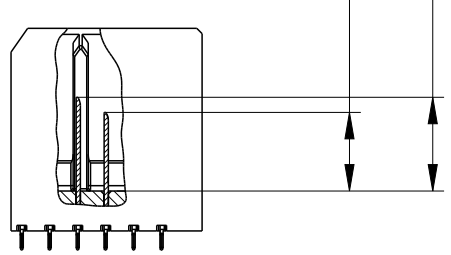
SEE NOTE 5



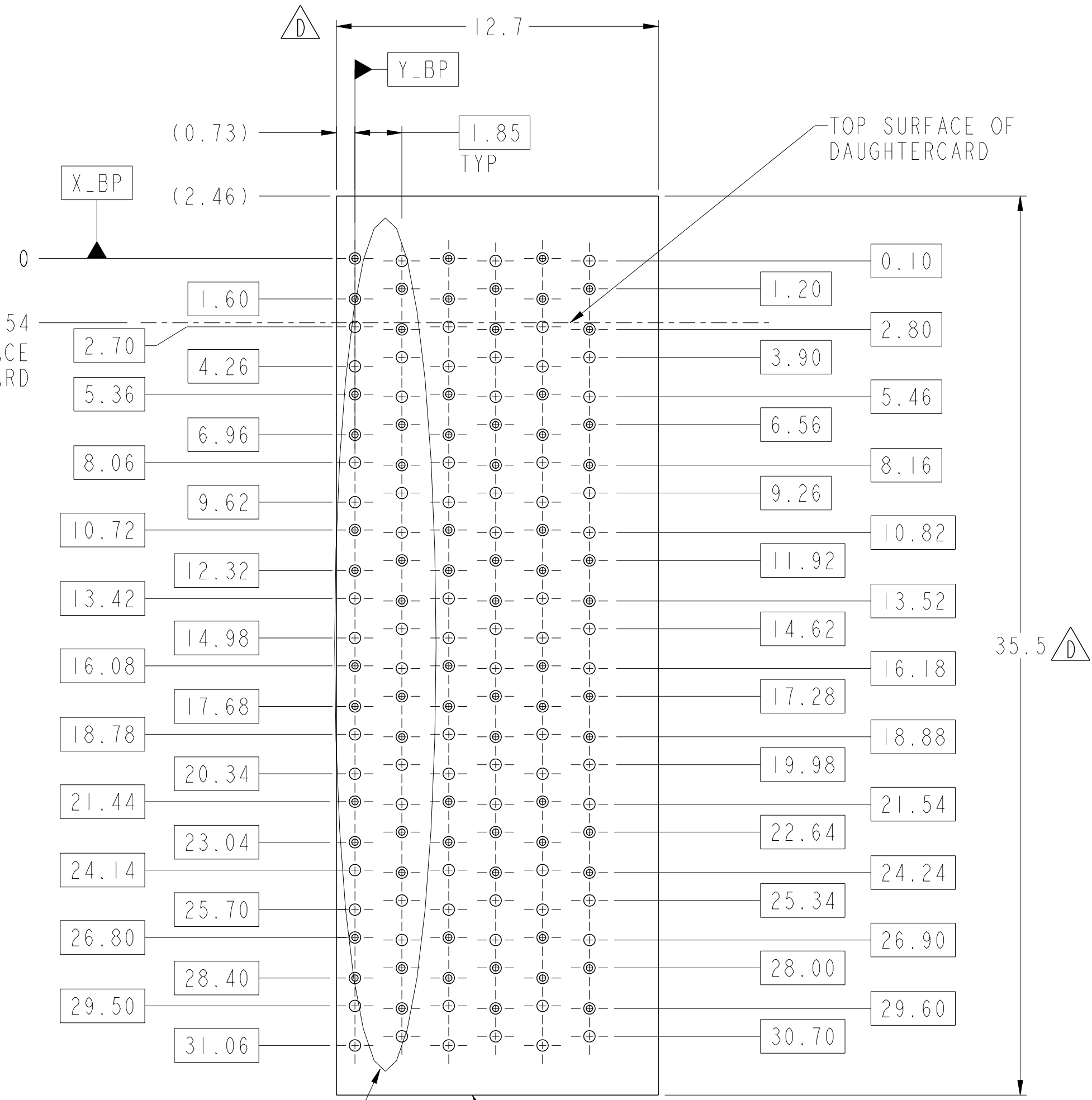
SCALE 2:1

- 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)



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	Roger Ng	2011/10/06			ecn no	ELX-S-006346-1	rel level	Released											
ASME Y14.5		chr		2011/10/06							product family	XCode									
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±0.2</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±0.10</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±0.050</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	linear	0.X	±0.2		0.XX	±0.10		0.XXX	±0.050	angular	0°	±°	appr	Chen-Hong Tan	2011/10/06	www.fci.com	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°	±°																			
ASME Y14.5		title	MODULE ASSEMBLY		dwg no	10104997	rev	D													

PDS: Rev :D

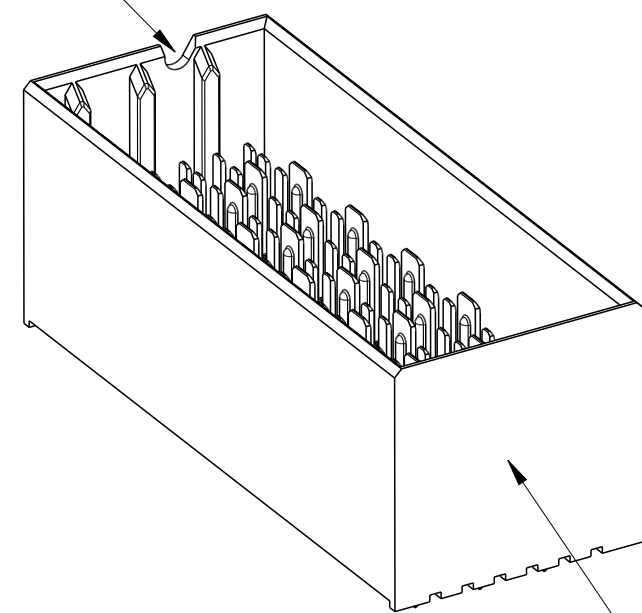
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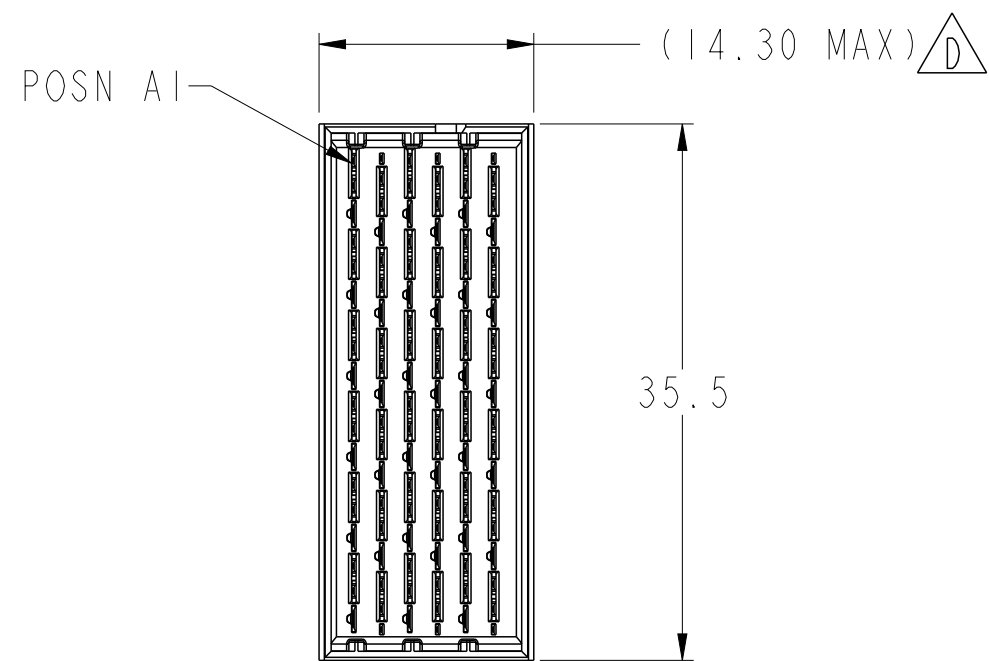
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# FOUR WALL MODULE

SEE NOTE 8

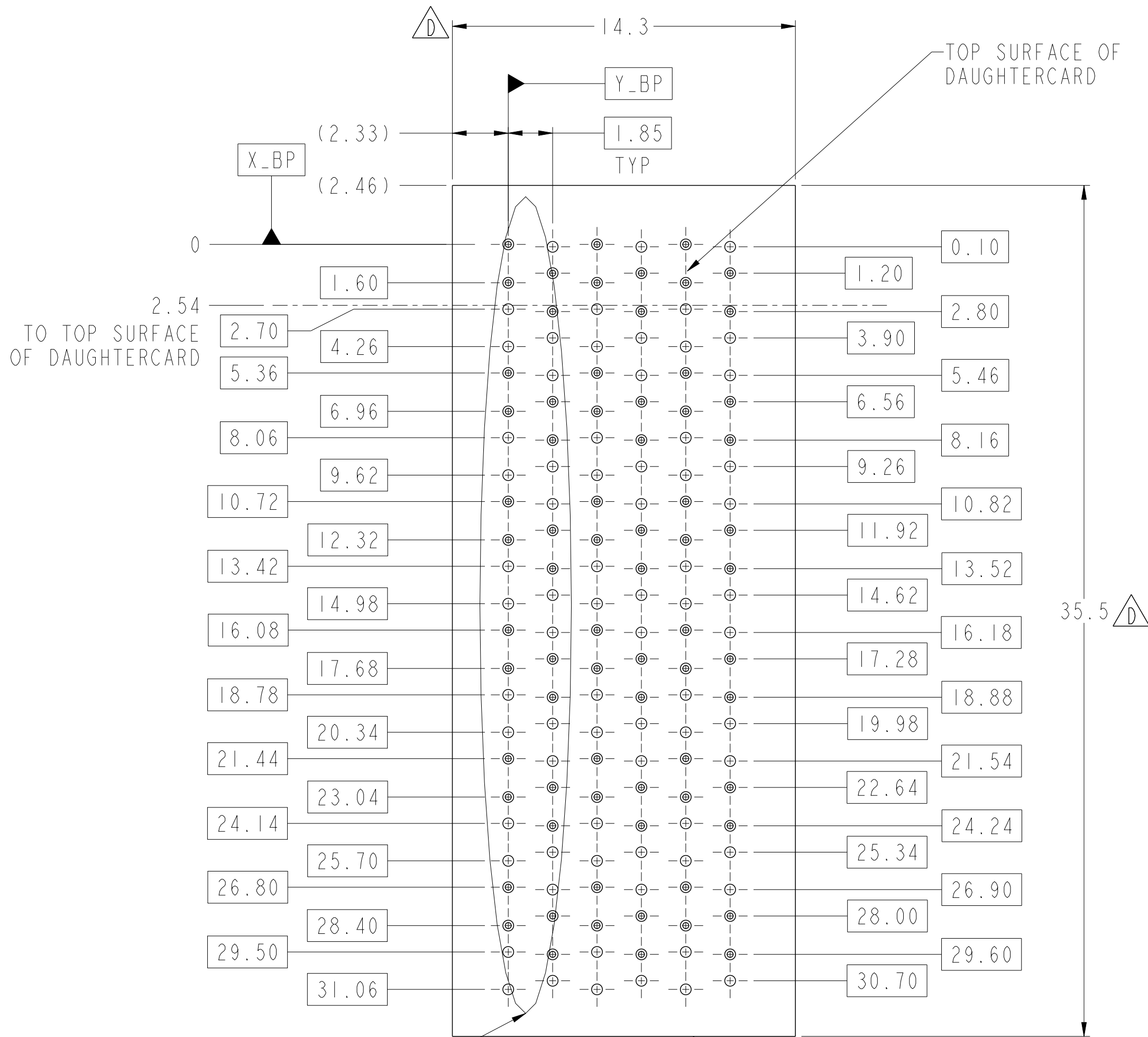
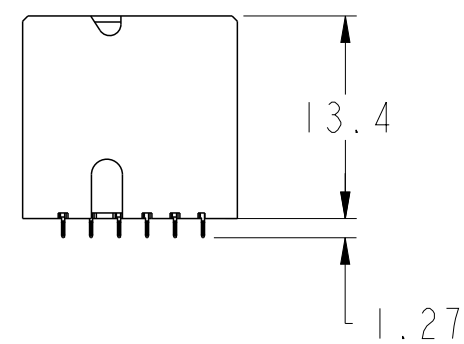
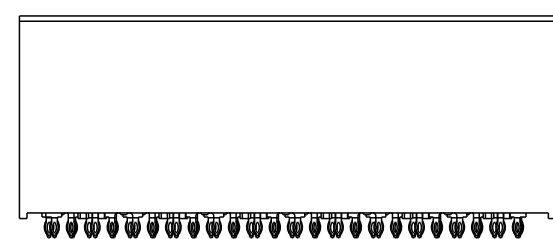
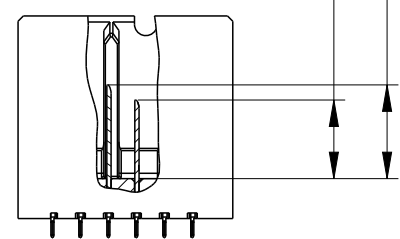


SEE NOTE 5



- 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)

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

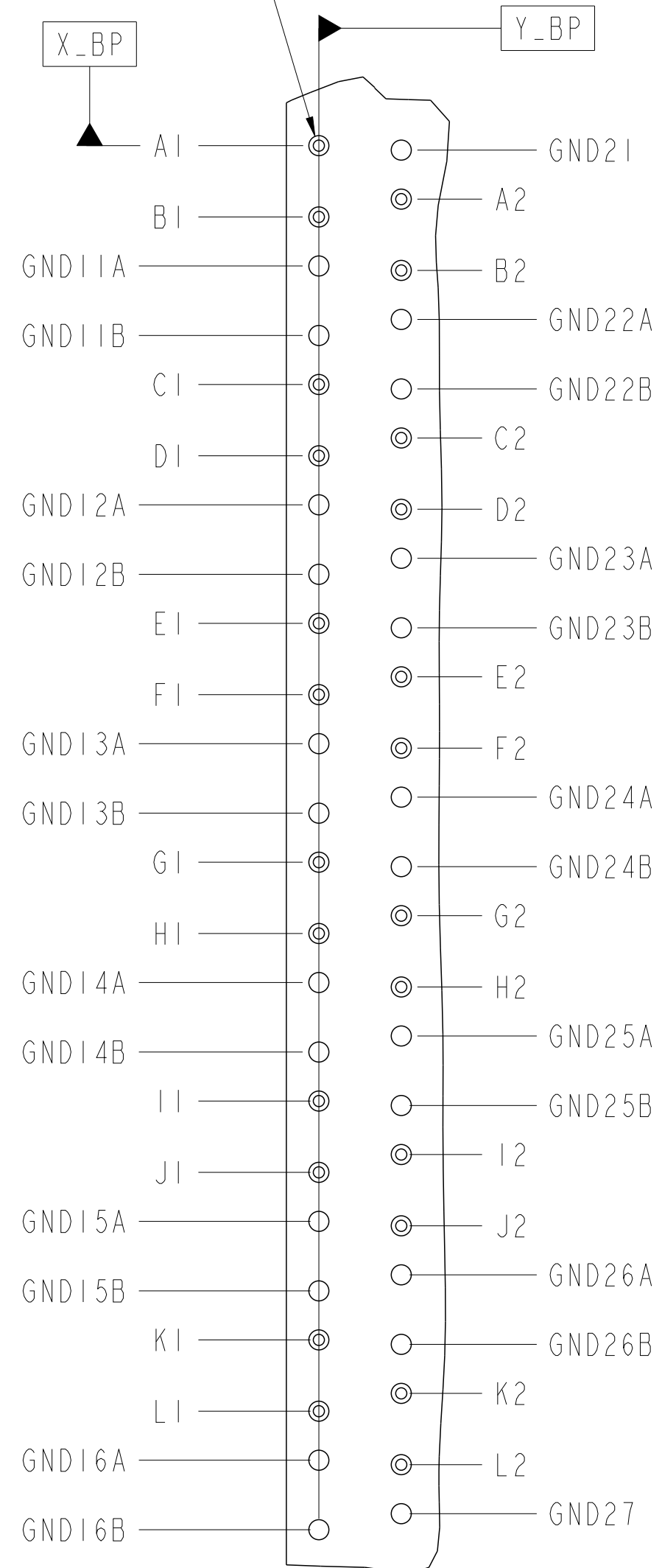
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spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1			
tolerance std	ASME Y14.5	eng	Roger Ng	2011/10/06			ecn no	ELX-S-006346-1	rel level	Released			
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	appr							Chen-Hong Tan	2011/10/06	product family
surface	✓	linear	0.X	±0.2			title	MODULE ASSEMBLY		dwg no	10104997	rev	D
			0.XX	±0.10	www.fci.com		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 7 of 8			
		angular	0°	±°									

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

REFER TABLE 3 FOR PTH, DRILL & PAD SIZES

⊕	Ø0.10	X_BP	Y_BP
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DETAIL A  
SCALE 8:1

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  $\triangle$  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

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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	2011/10/06			ecn no	ELX-S-006346-1					
ASME Y14.5		chr	-	apppr			Chen-Hong Tan	2011/10/06	product family	XCode	rel level	Released	
surface	linear	0.X	±0.2		<b>MODULE ASSEMBLY</b>		title VERTICAL HEADER, 6-COLUMN, 6-PAIR	drwg no 10104997	rev D				
		0.XX	±0.10		www.fci.com					cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 8 of 8
ASME Y14.5	angular	0°	±		PDS: Rev :D					STATUS:Released		Printed: Oct 06, 2011	