

1 0 1 0 4 9 9 9 - X 0 E - X X X L F

8-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"]

	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

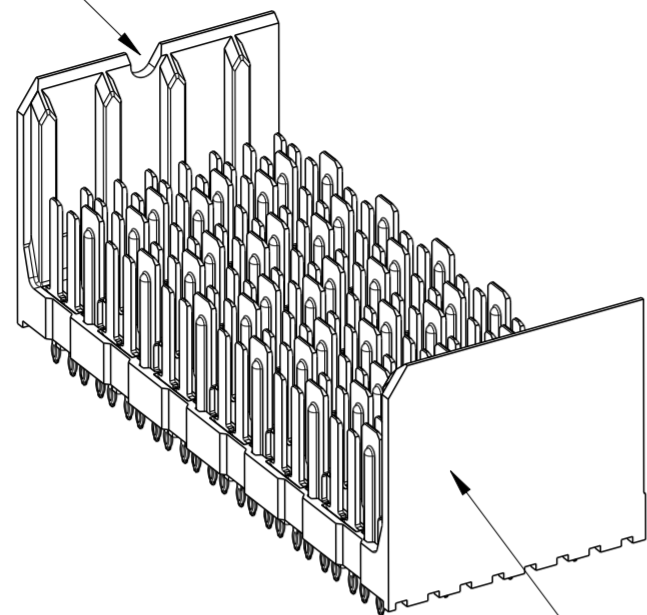
SCREW P/N	DESCRIPTION	BOARD THICKNESS
10091790-002LF	#2-56 X .375" PHILLIPS PANHEAD W/SQ CONICAL WASHER	1.60 - 5.00
10091790-003LF	#2-56 X .500" PHILLIPS PANHEAD W/SQ CONICAL WASHER	5.00 - 10.00

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1	
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released	
surface	linear	appr	Chen-Hong Tan	2014/12/10	product family	-	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 1 of 8	
ASME Y14.5	angular	0°	±°	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	www.fci.com	
		FCI		MODULE ASSEMBLY		VERTICAL HEADER, 8-COLUMN, 6-PAIR		10104999		rev	D

Copyright FCI.

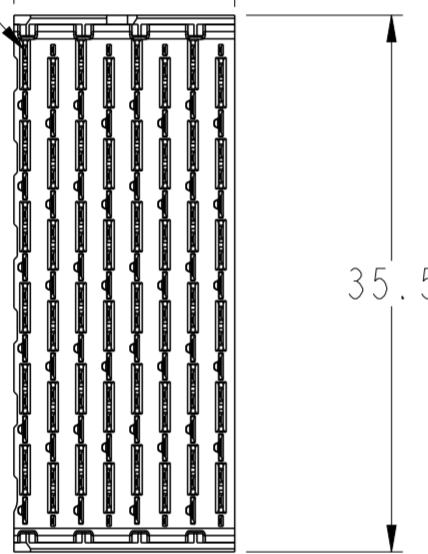
OPEN (2-WALL) MODULE

SEE NOTE 8



SEE NOTE 5

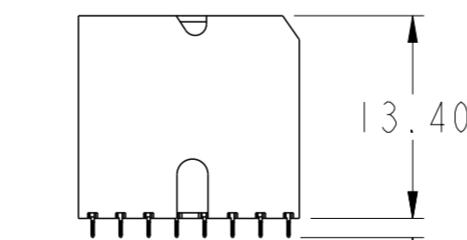
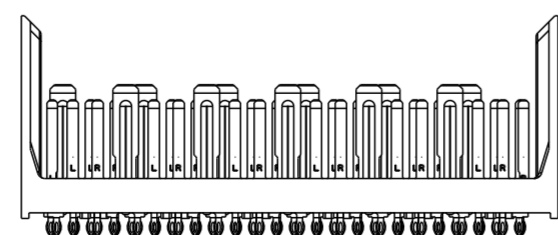
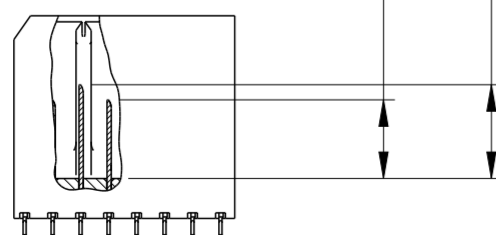
POSN A1 (14.75 MAX)



35.5

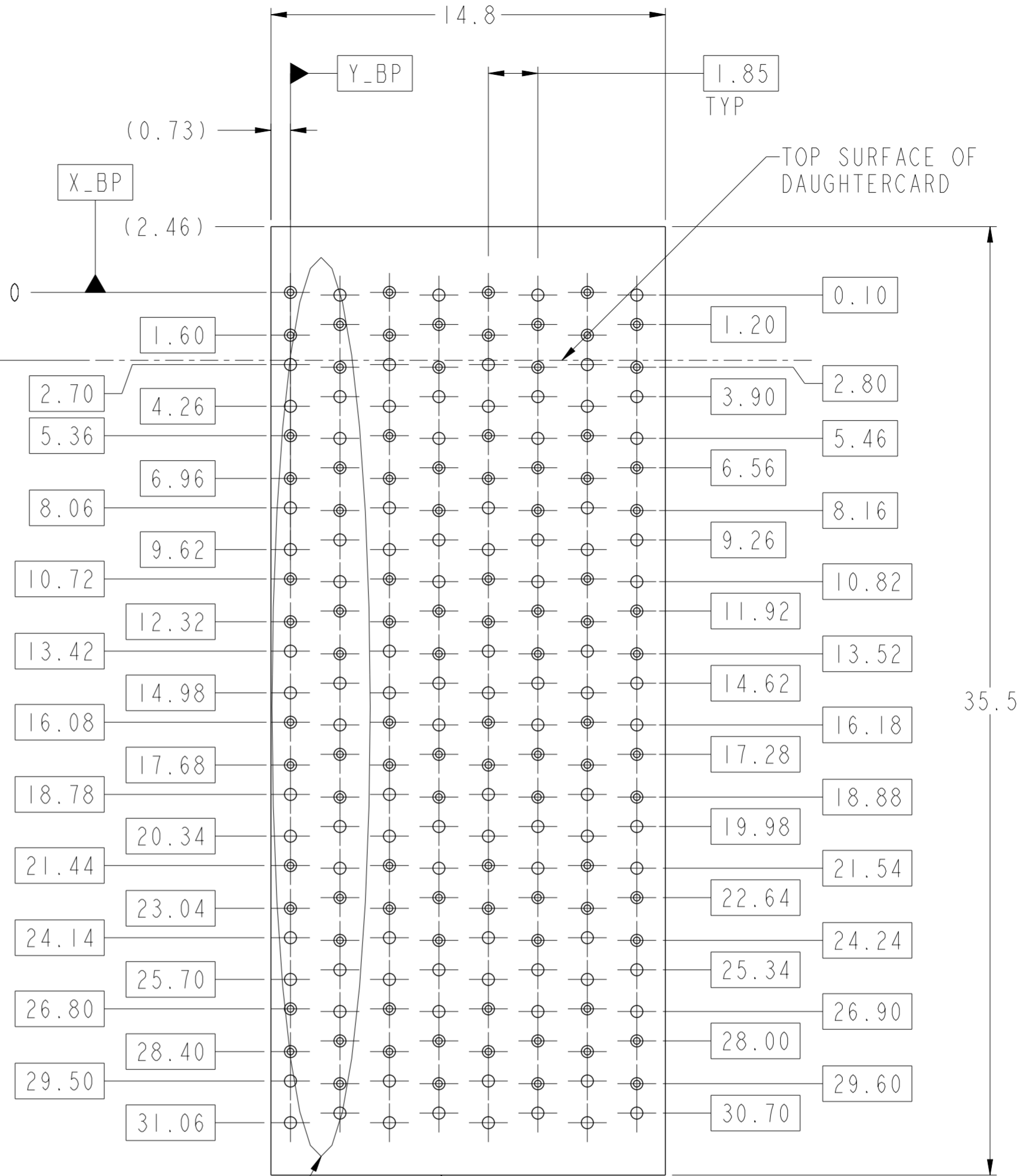
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH SEE NOTE 12

2.54 TO TOP SURFACE OF DAUGHTERCARD



SEE DETAIL A (SHEET 8)

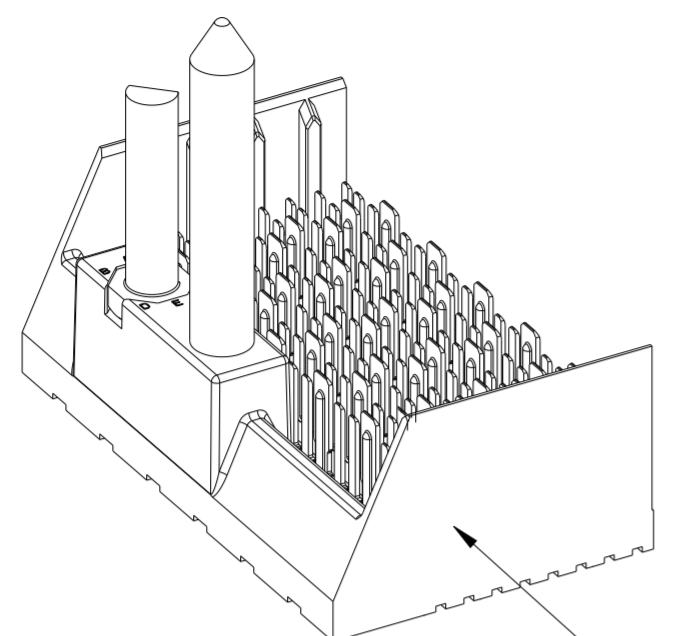
NOMINAL MODULE OUTLINE

PCB HOLE PATTERN COMPONENT SIDE SCALE 6:1

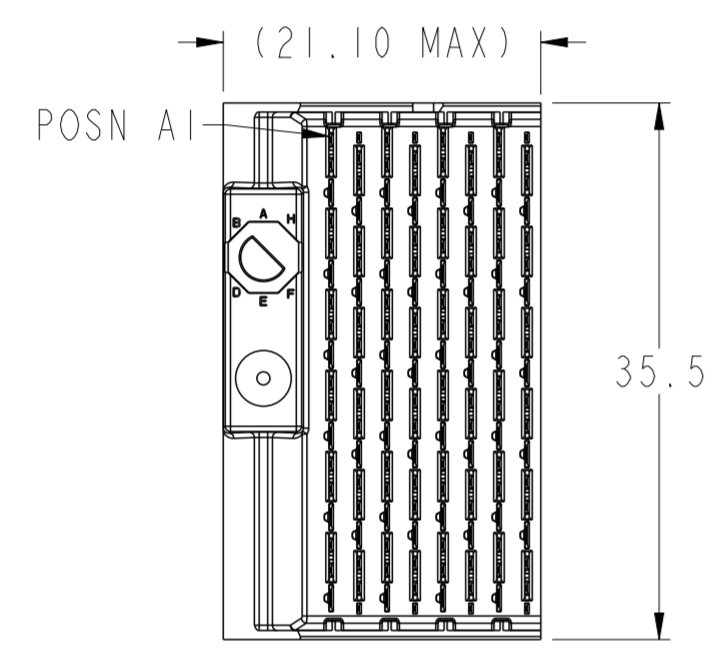
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	-	dwg no	10104999	rev	D
ASME Y14.5	linear	angular	0°	±°	0.X ±0.2	0.XX ±0.10	0.XXX ±0.050	www.fci.com	cat. no.	SEE P/N TREE
							Product - Customer Drw	sheet 2 of 8		



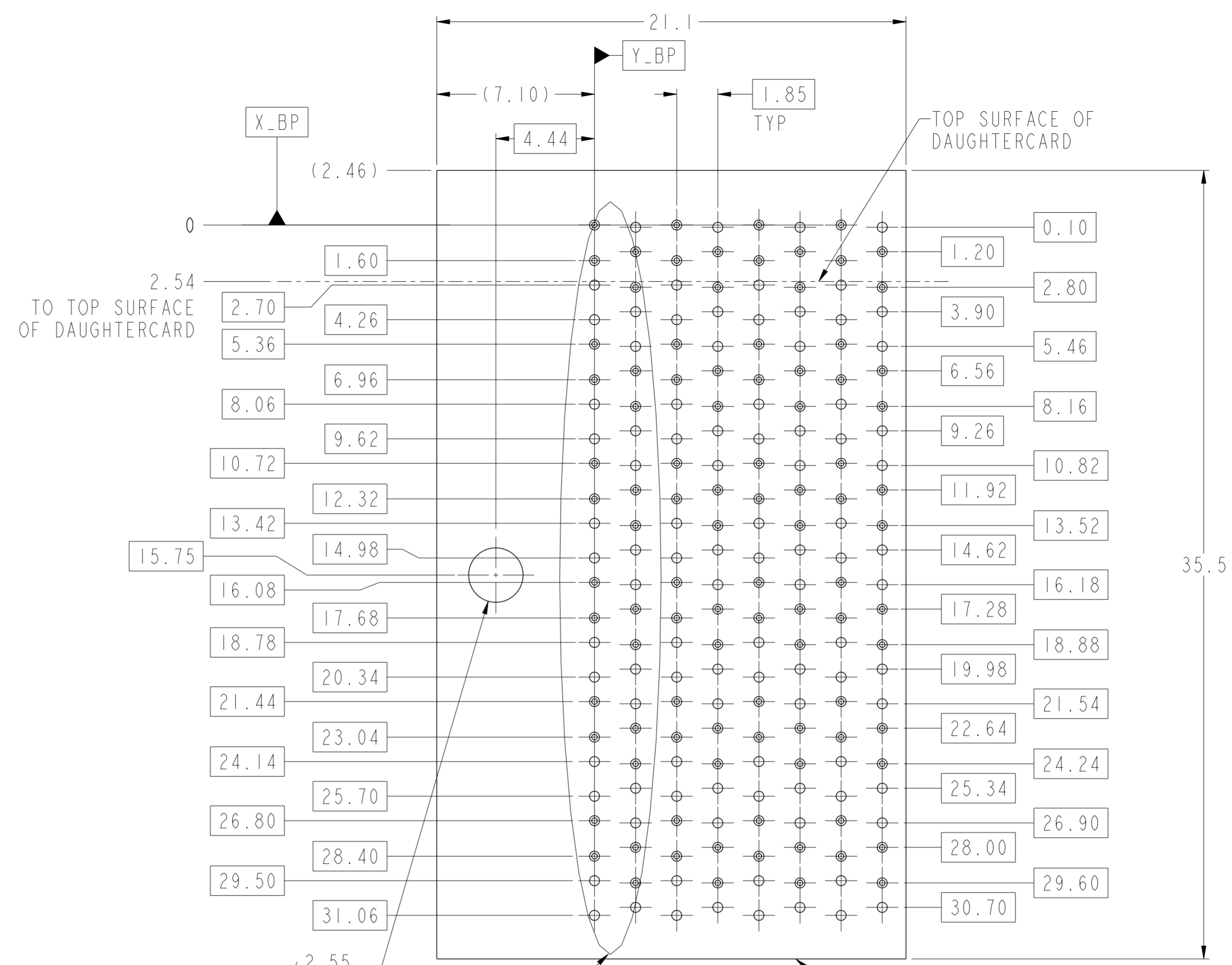
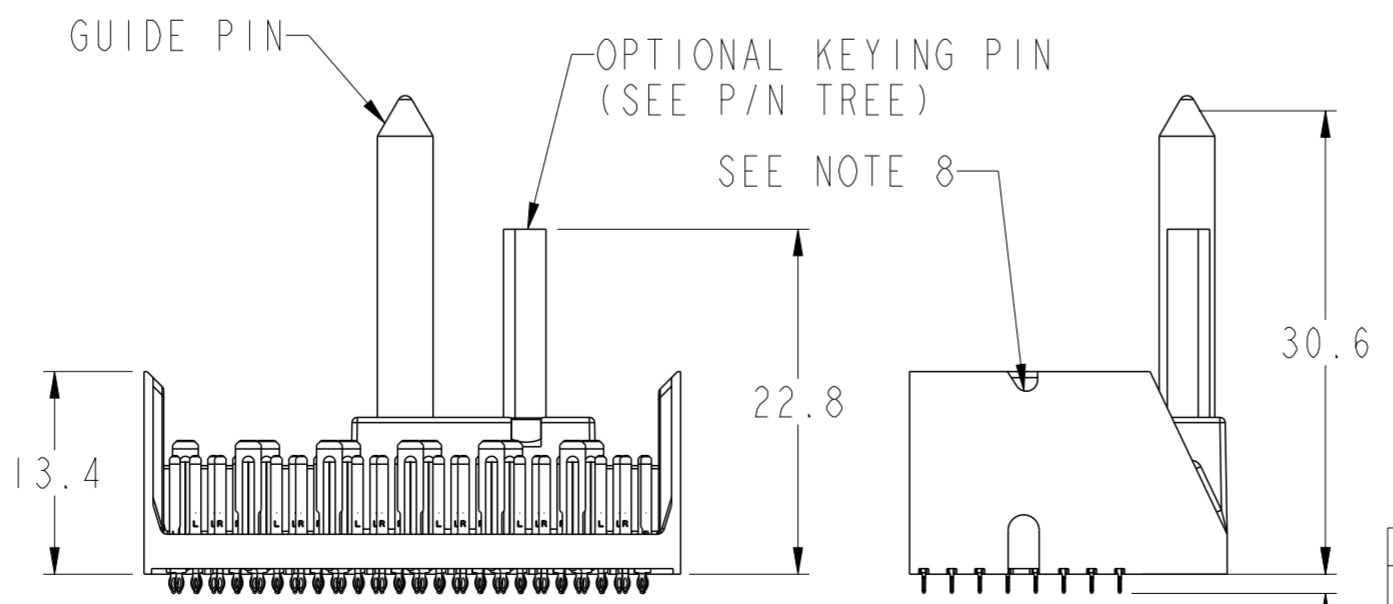
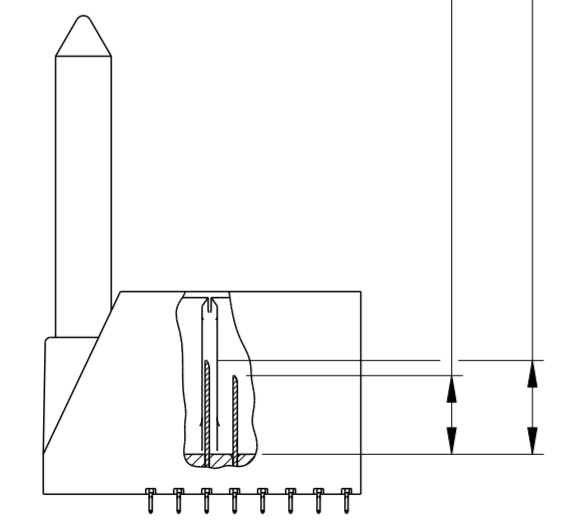
LEFT POLARIZING/GUIDE MODULE



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)



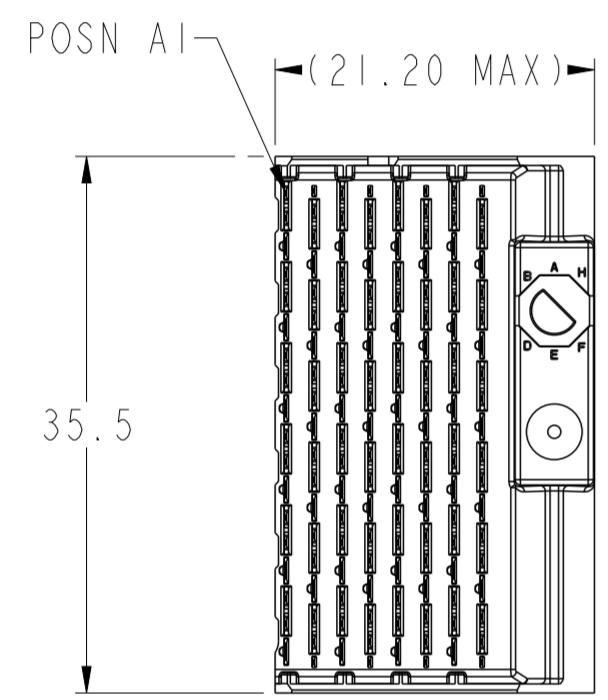
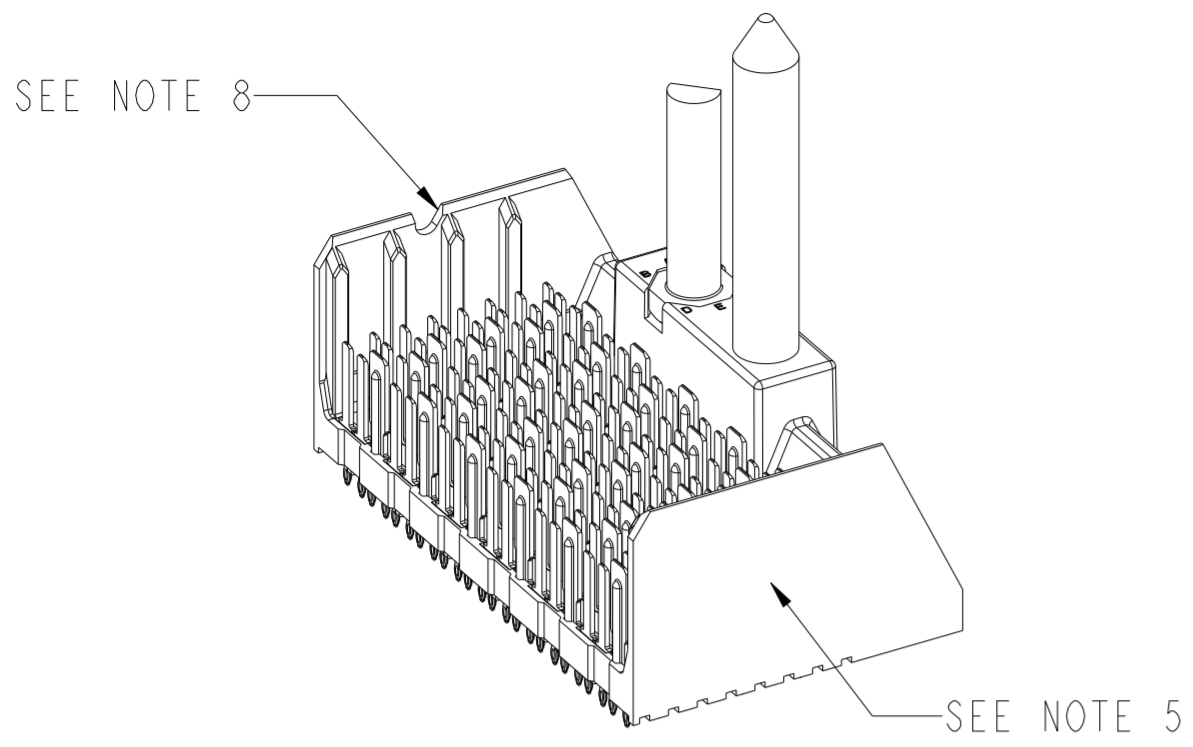
⊕ 0.10	X_BP	Y_BP
--------	------	------

SEE NOTE 11 & TABLE 1

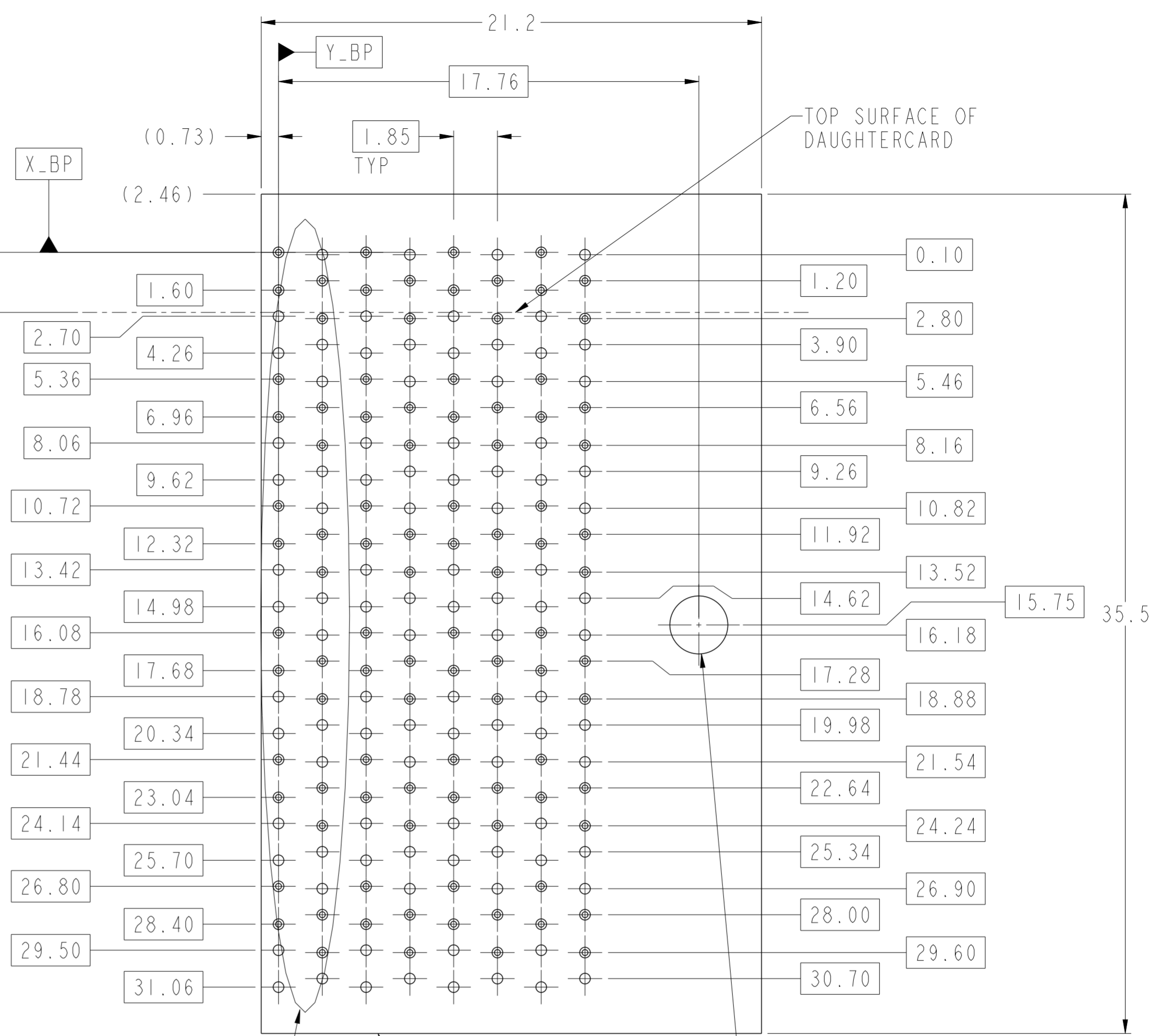
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	-	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 3 of 8
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	angular	0° ±			TITLE MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	dwg no 10104999	rev D		

Copyright FCI. FCI

RIGHT POLARIZING/GUIDE MODULE



2.54
TO TOP SURFACE
OF DAUGHTERCARD



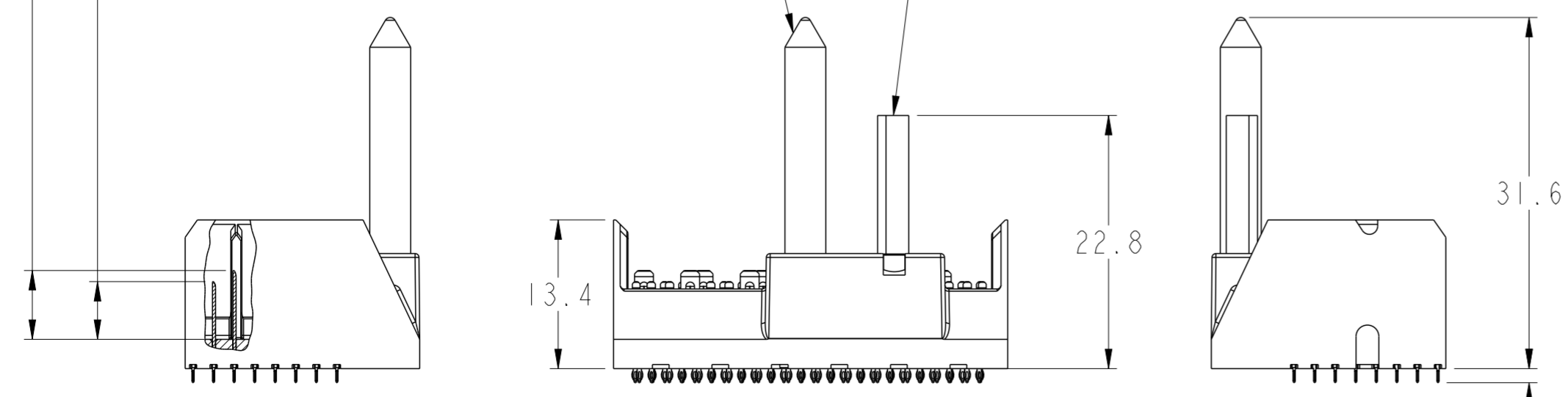
SEE DETAIL A
(SHEET 8)

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

Ø 2.55
2.35
⊕ Ø 0.10 X_BP Y_BP
SEE NOTE 11 & TABLE 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)

GUIDE PIN
OPTIONAL KEYING PIN
(SEE P/N TREE)

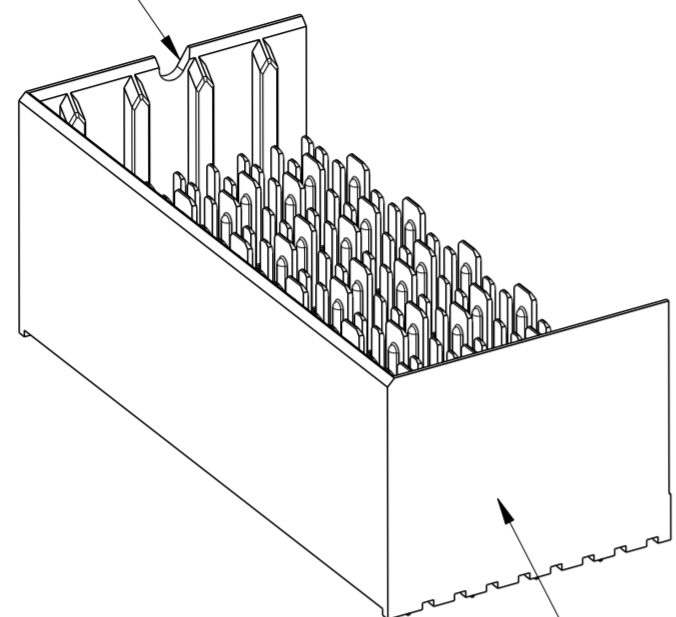


TAIL LENGTH
SEE NOTE 12

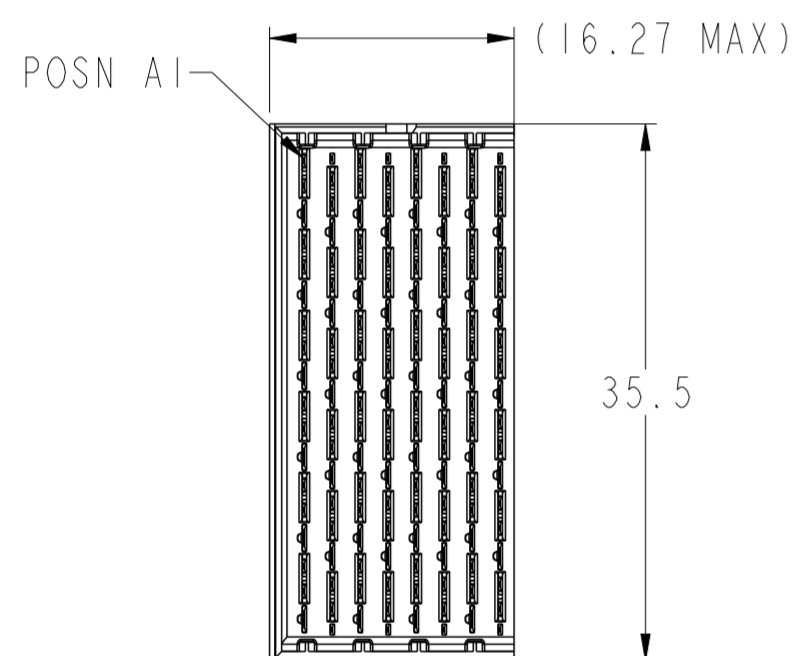
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1									
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02			ecn no	ELX-S-18843-1	rel level	Blue									
ASME Y14.5		chr	-	appr							Chen-Hong Tan	2014/12/10	product family	-					
surface	<table 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°	±°			MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR		title 10104999	rev D
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													

LEFT WALL MODULE

SEE NOTE 8



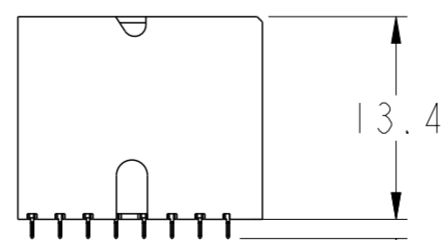
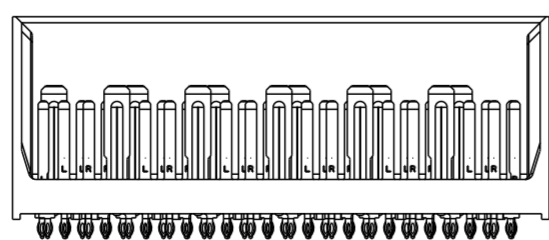
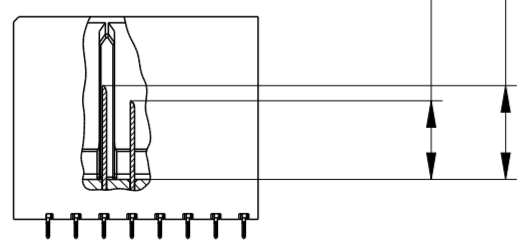
SEE NOTE 5



SCALE 2:1

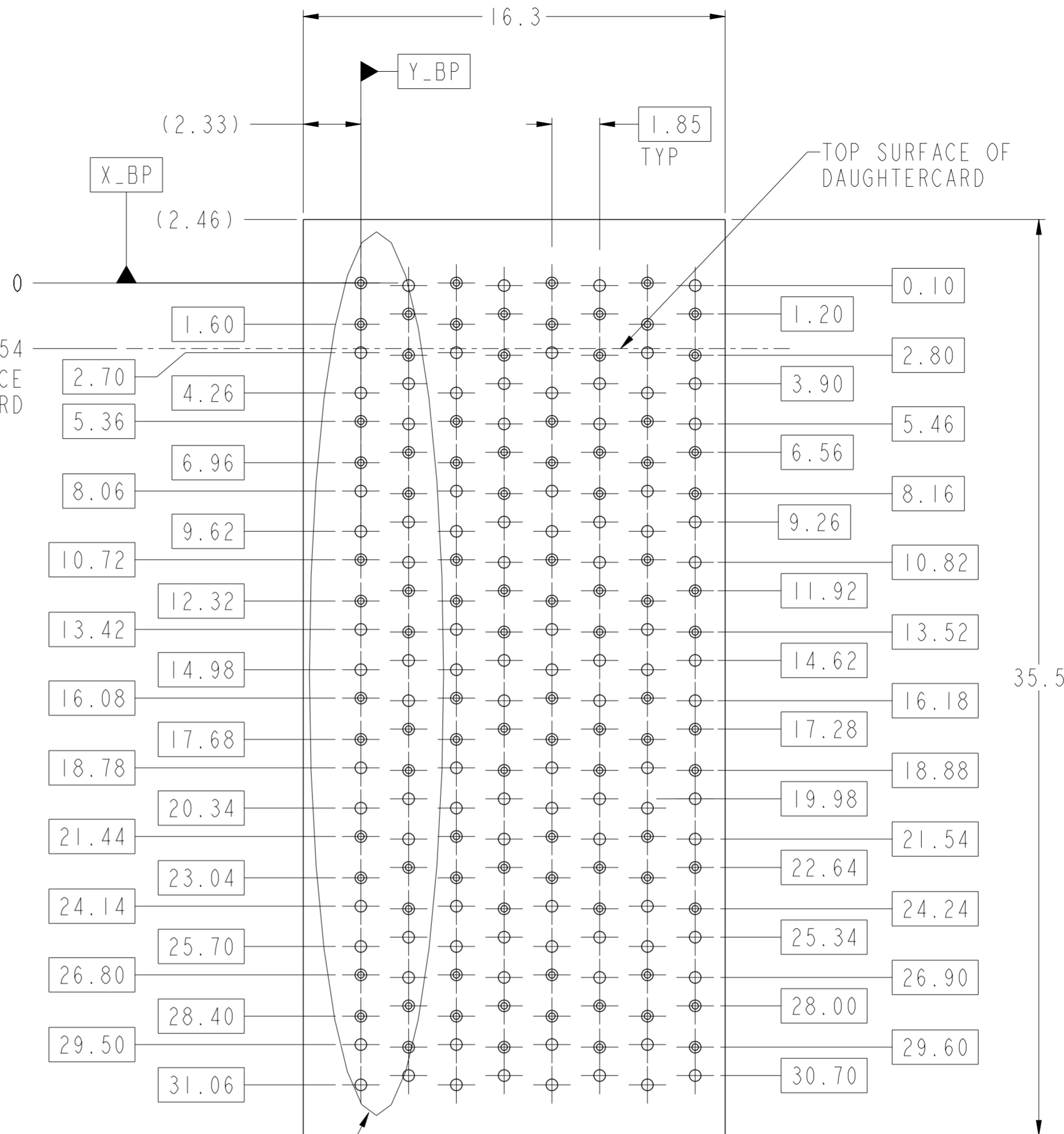
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



△ TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD



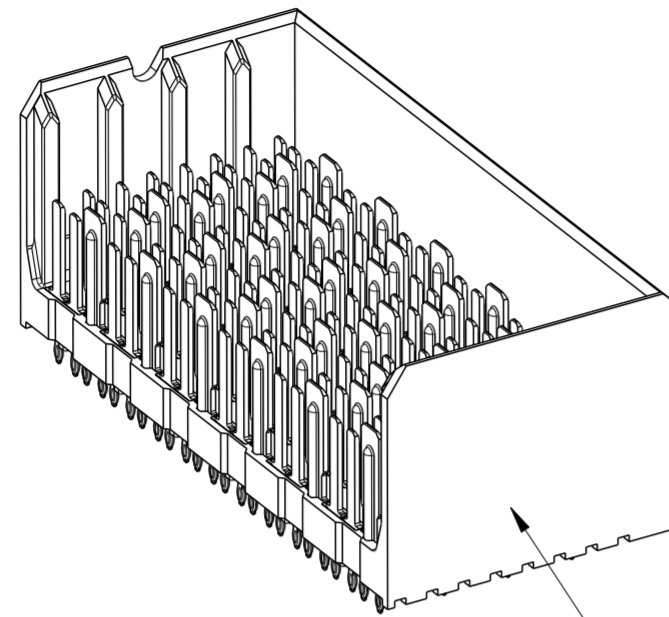
SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

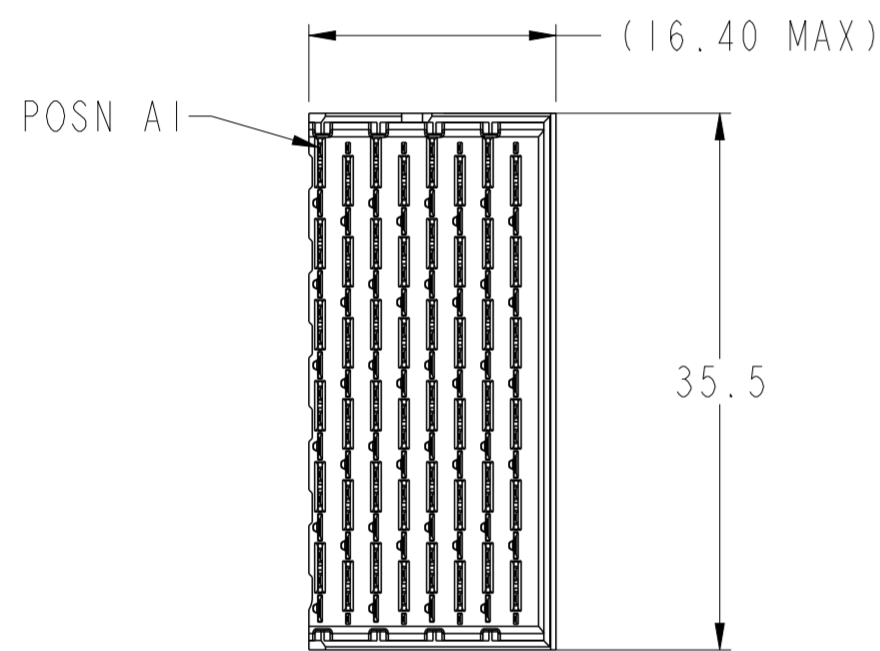
PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02			ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		chr								
surface	linear	0.X	±0.2		product family		title MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	dwg no 10104999	rev D	
		0.XX	±0.10		SEE P/N TREE					Product - Customer Drw
ASME Y14.5	angular	0°	±°		cat. no.	Product - Customer Drw				

RIGHT WALL MODULE



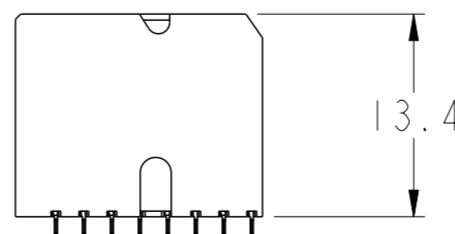
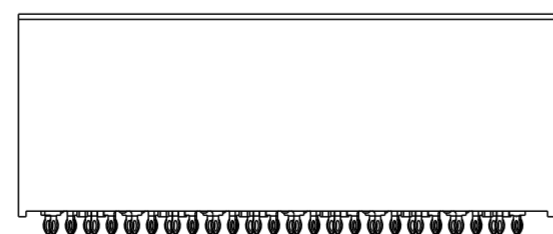
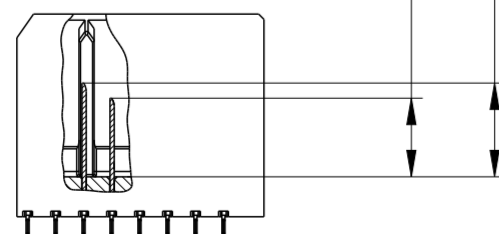
SEE NOTE 5



SCALE 2:1

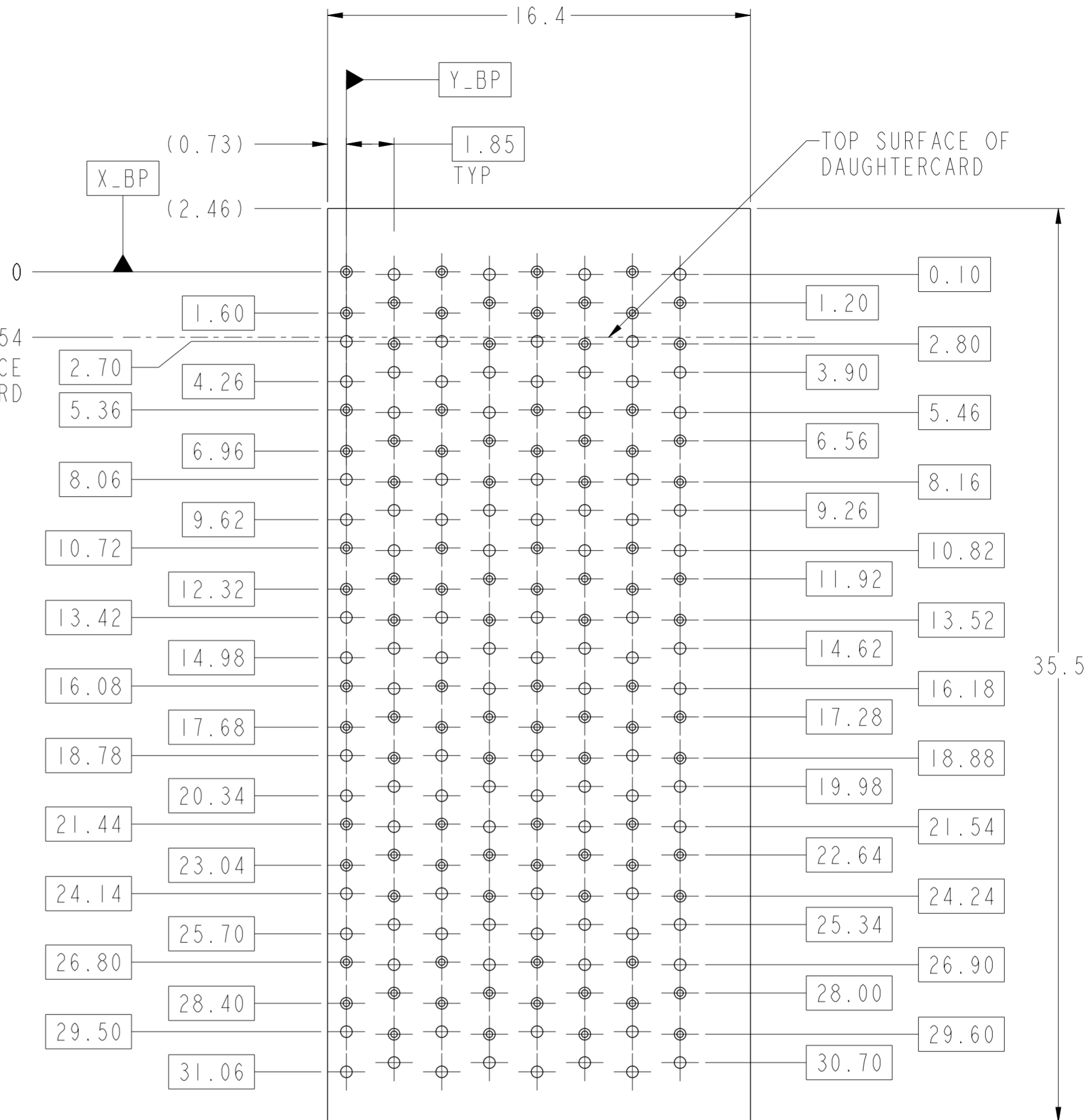
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD



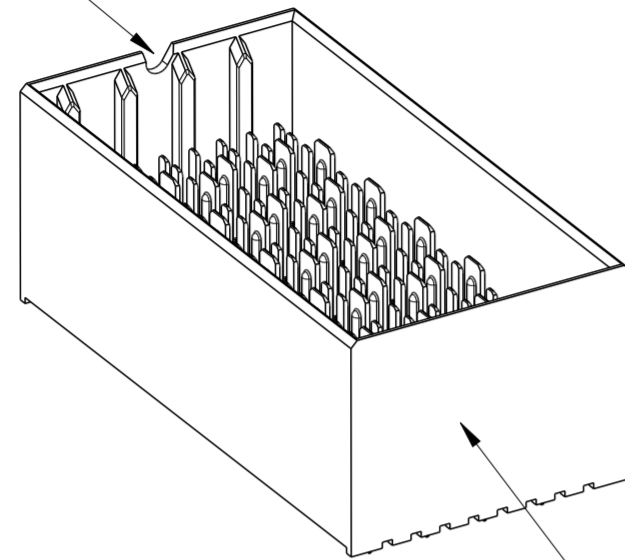
NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

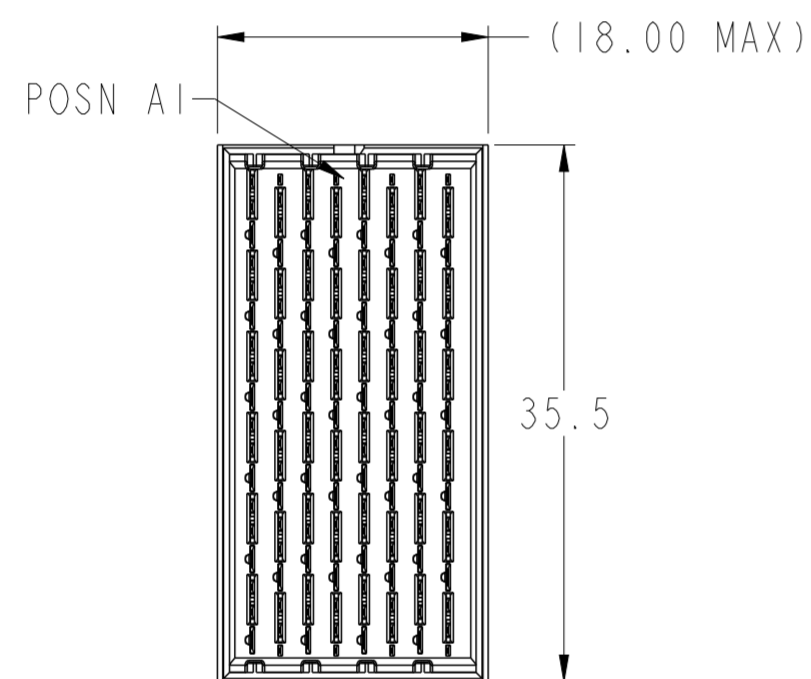
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02			ecn no	ELX-S-18843-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	appr			Chen-Hong Tan	2014/12/10	product family	-
surface	linear	0.X	±0.2		FCI MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR		dwg no	10104999		
		0.XX	±0.10		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8	rev	D
	angular	0°	±		www.fci.com					

FOUR WALL MODULE

SEE NOTE 8

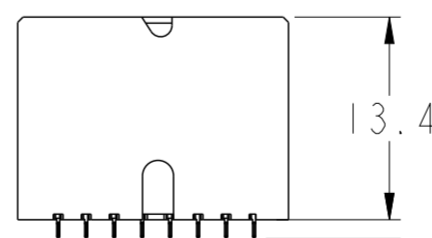
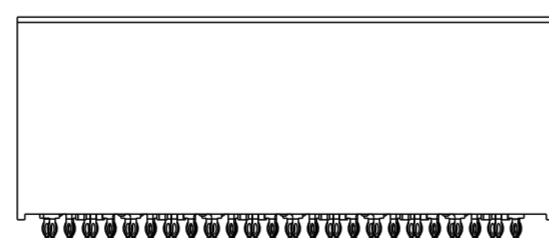
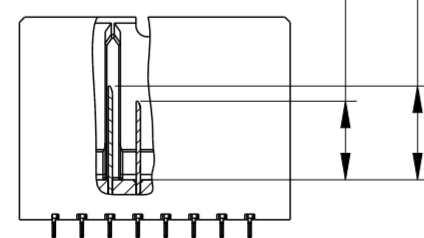


SEE NOTE 5

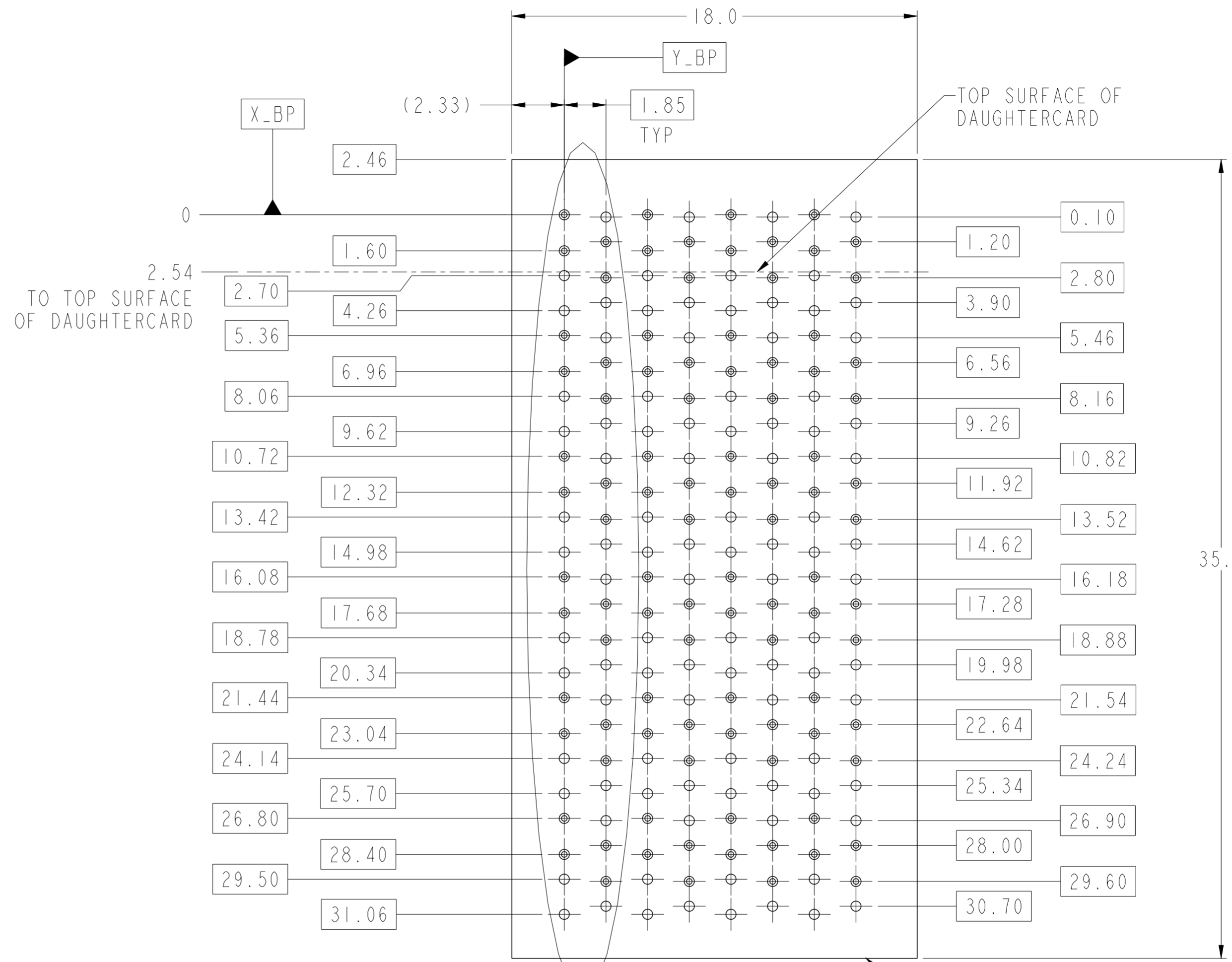


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



△ TAIL LENGTH SEE NOTE 12



SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 6:1

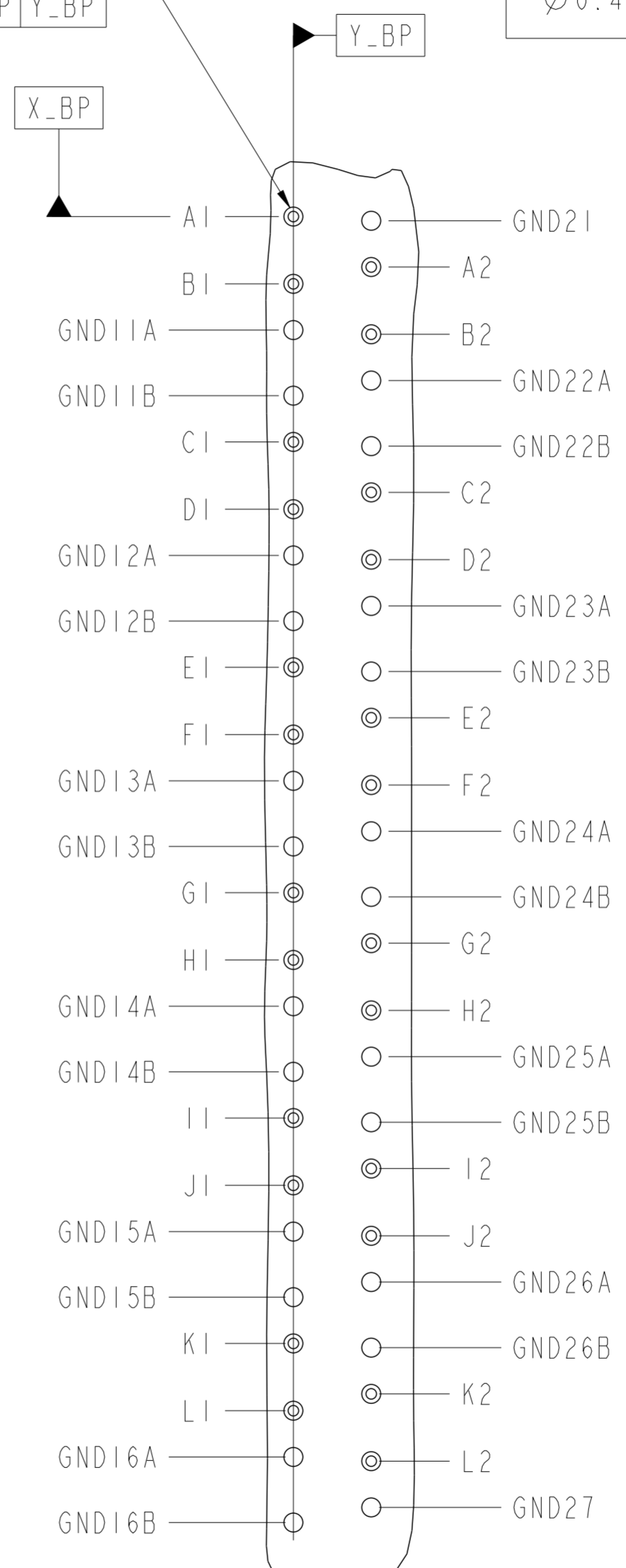
NOMINAL MODULE OUTLINE

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02			ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		chr								
surface	linear	0.X	±0.2		TITLE MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 7 of 8	rev D	
		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 7 of 8	rev	D

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
---	-------	------	------



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

DETAIL A
SCALE 8:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sander Soe	2014/10/02			ecn no	ELX-S-18843-1		
ASME Y14.5		chr		rel level			Released			
		appr	Chen-Hong Tan	2014/12/10			product family			
surface	linear	0.X	±0.2		MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR			diag no	10104999	
		0.XX	±0.10					rev	D	
ASME Y14.5	angular	0°	±					cat. no.	SEE P/N TREE	

Copyright FCI. FCI