

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)	<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

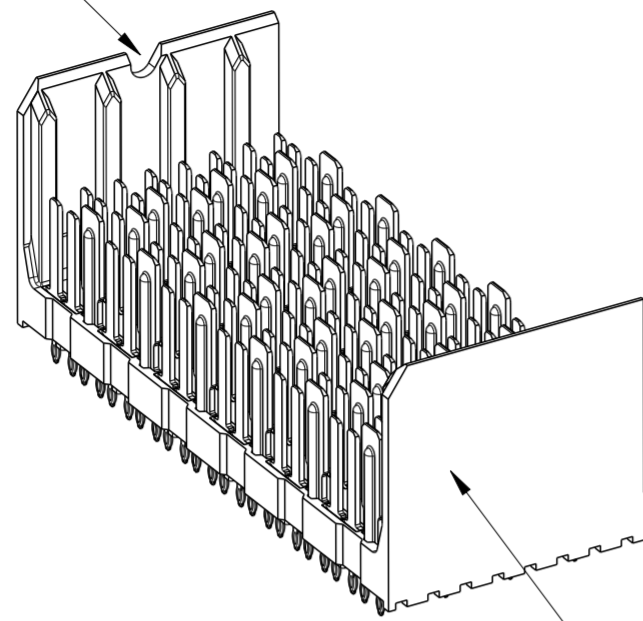
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	4:1	
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/06	chr	Heaven Cen	2016/06/08	ecn no	ELX-DG-24191-1	rel level	Released
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	product family	XCode	cat. no.	SEE P/N TREE
ASME Y14.5	angular	0°	±°	Amphenol FCI	MODULE ASSEMBLY	VERTICAL HEADER, 8-COLUMN, 6-PAIR	10104999	Product - Customer Drw	sheet 1 of 8		

Amphenol FCI

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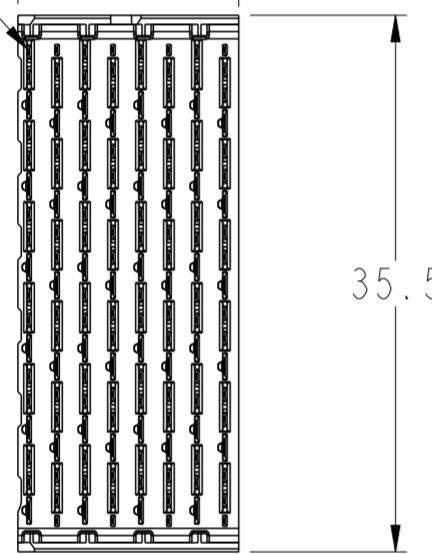
# OPEN (2-WALL) MODULE

SEE NOTE 8



SEE NOTE 5

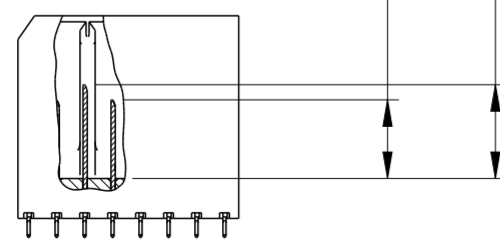
POSN A1 (14.75 MAX)



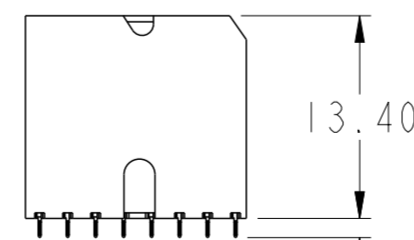
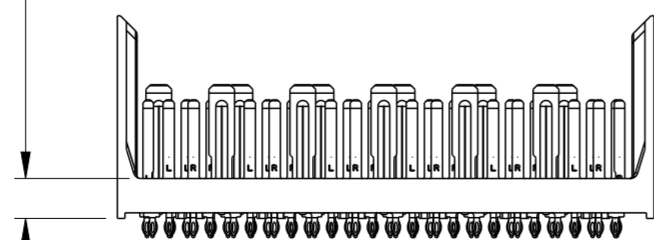
35.5

- 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)

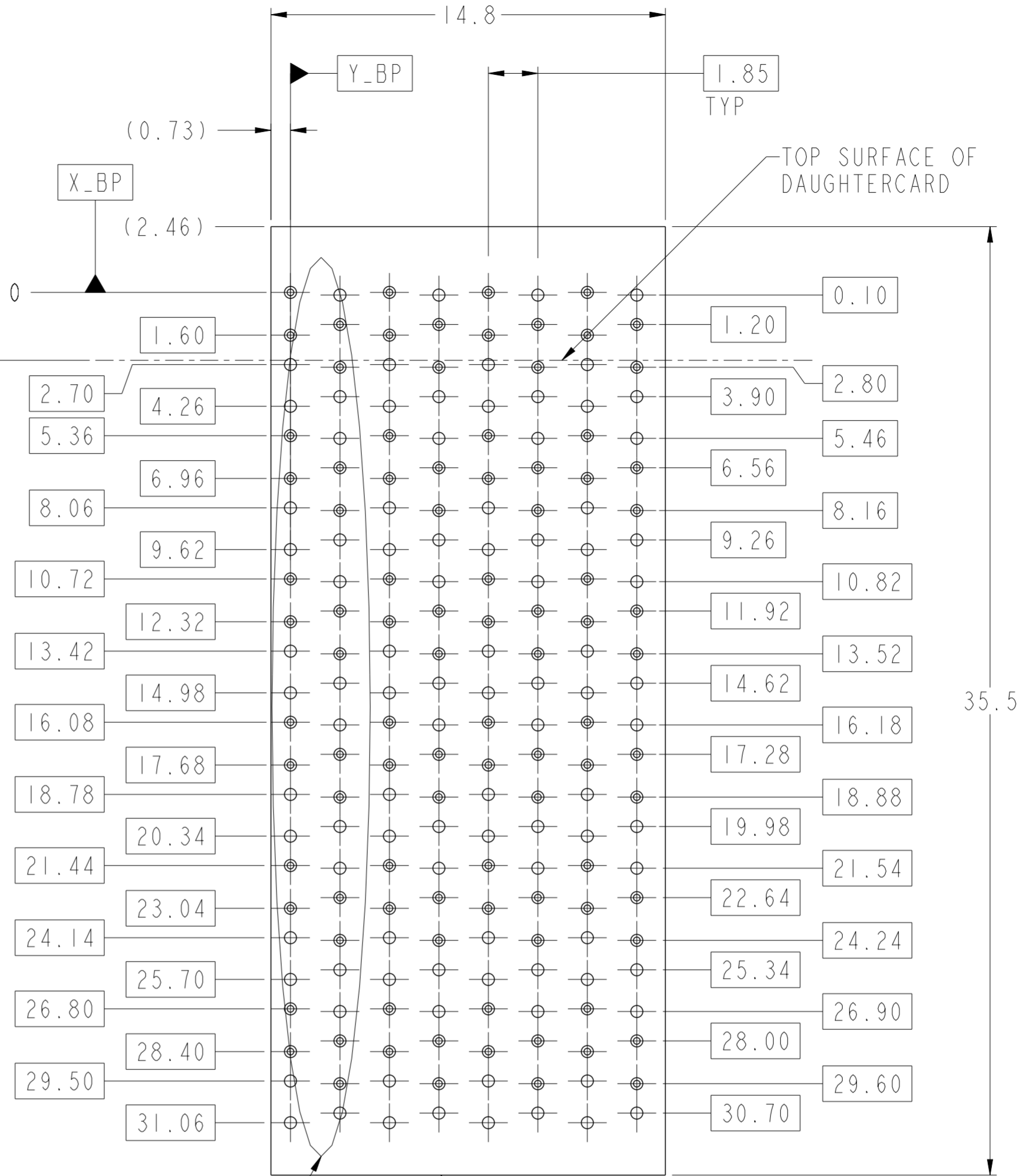


2.64±0.10 FROM STANDOFF SURFACE TO MATING SURFACE



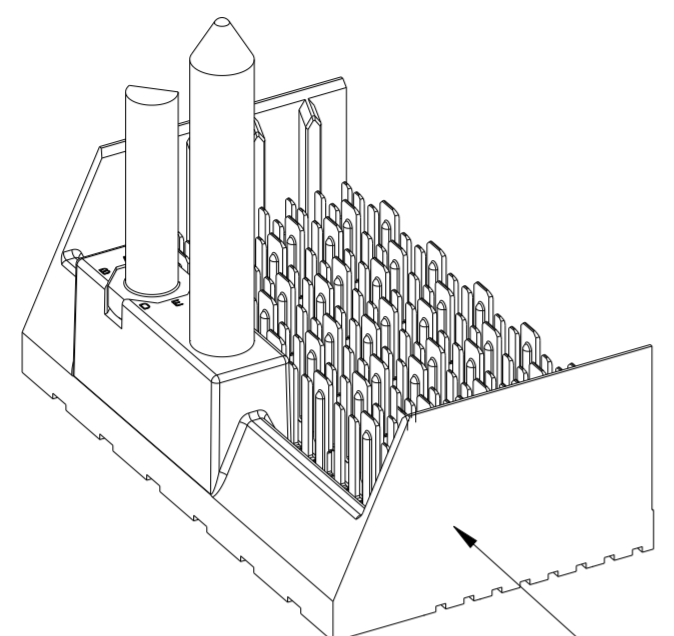
TAIL LENGTH SEE NOTE 12

2.54 TO TOP SURFACE OF DAUGHTERCARD

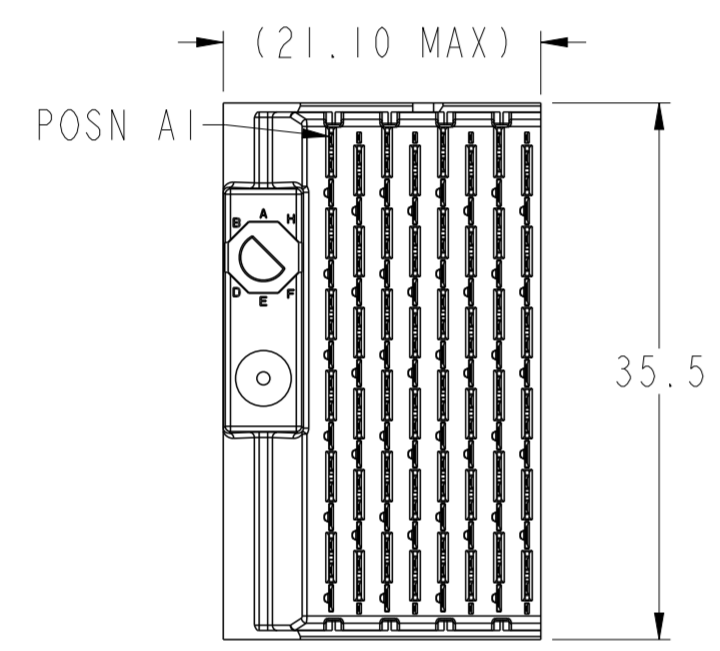


spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level	Released	
ASME Y14.5		chr	Heaven Cen	2016/06/08							
		appr	Pai-Ming Zheng	2016/06/15							
surface	linear	0.X	±0.2		product family XCode	title MODULE ASSEMBLY	dwg no 10104999	rev E	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 2 of 8
		0.XX	±0.10								
		0.XXX	±0.050								
ASME Y14.5	angular	0°	±°								

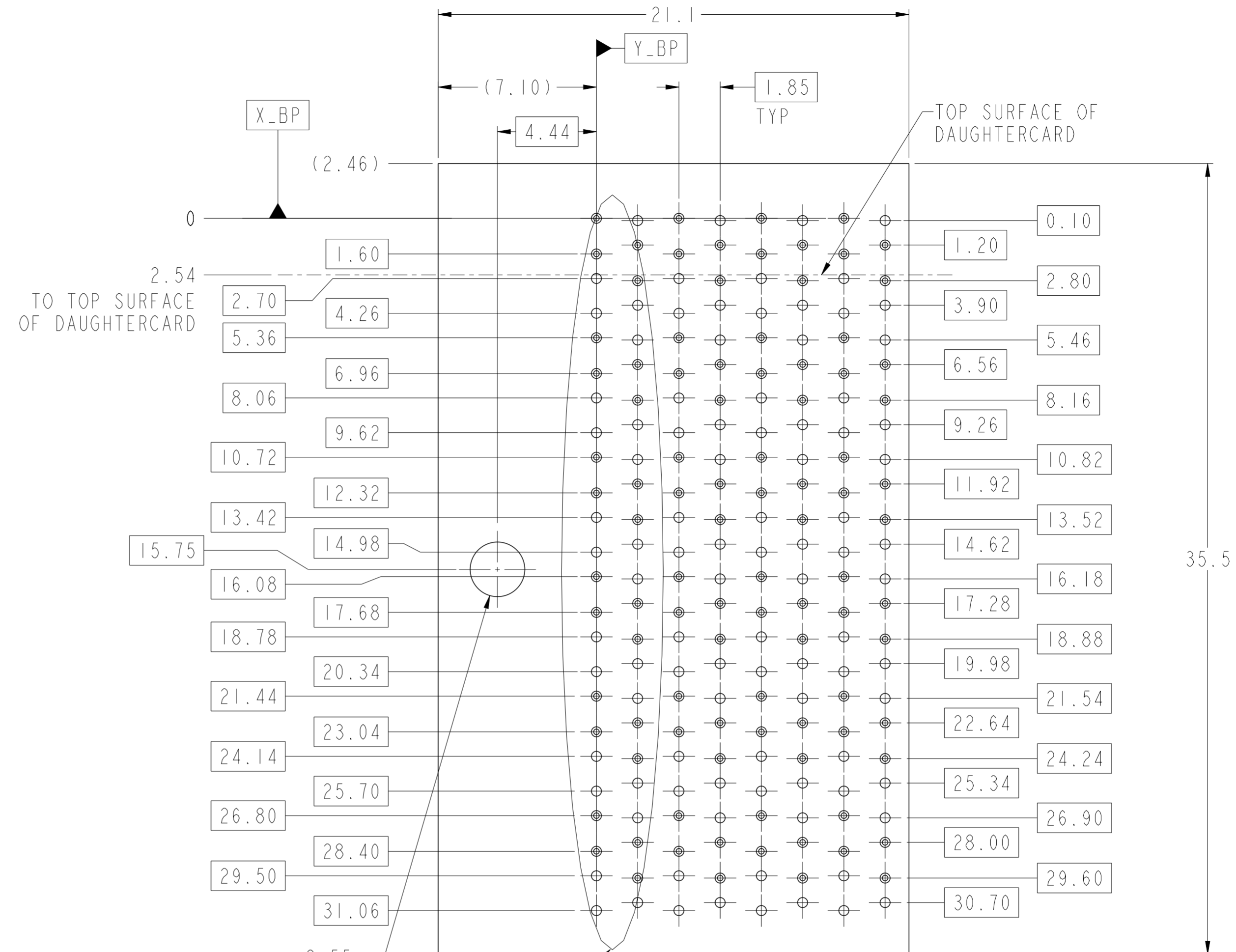
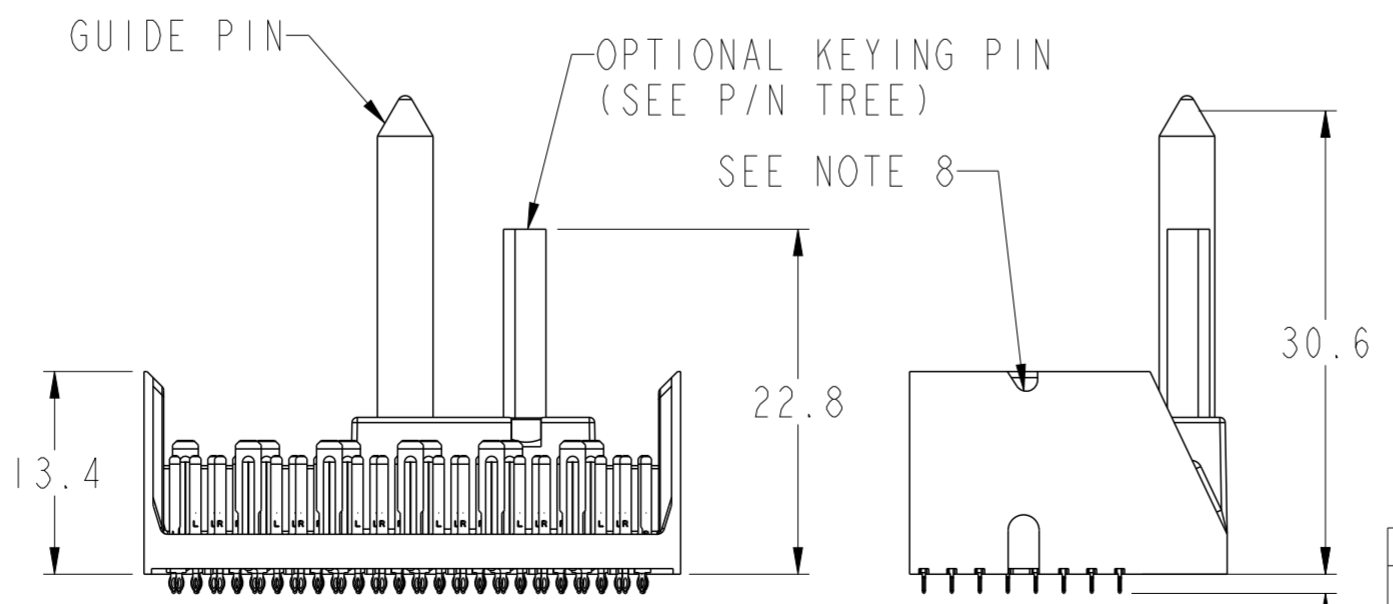
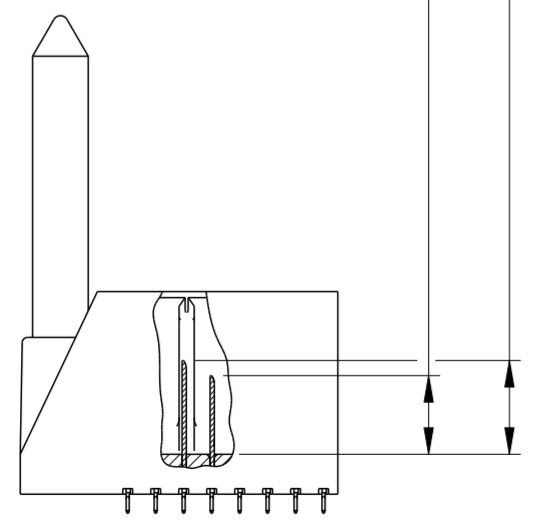
# LEFT POLARIZING/GUIDE MODULE



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)



$\varnothing$ 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	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		chr	Heaven Cen	2016/06/08						
surface	linear	0.X	±0.2		MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 3 of 8	rev E	
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±							

PDS: Rev :E

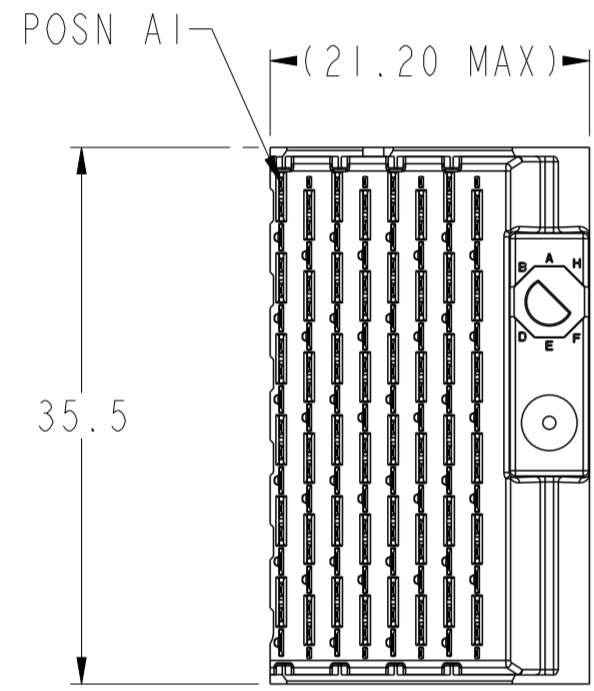
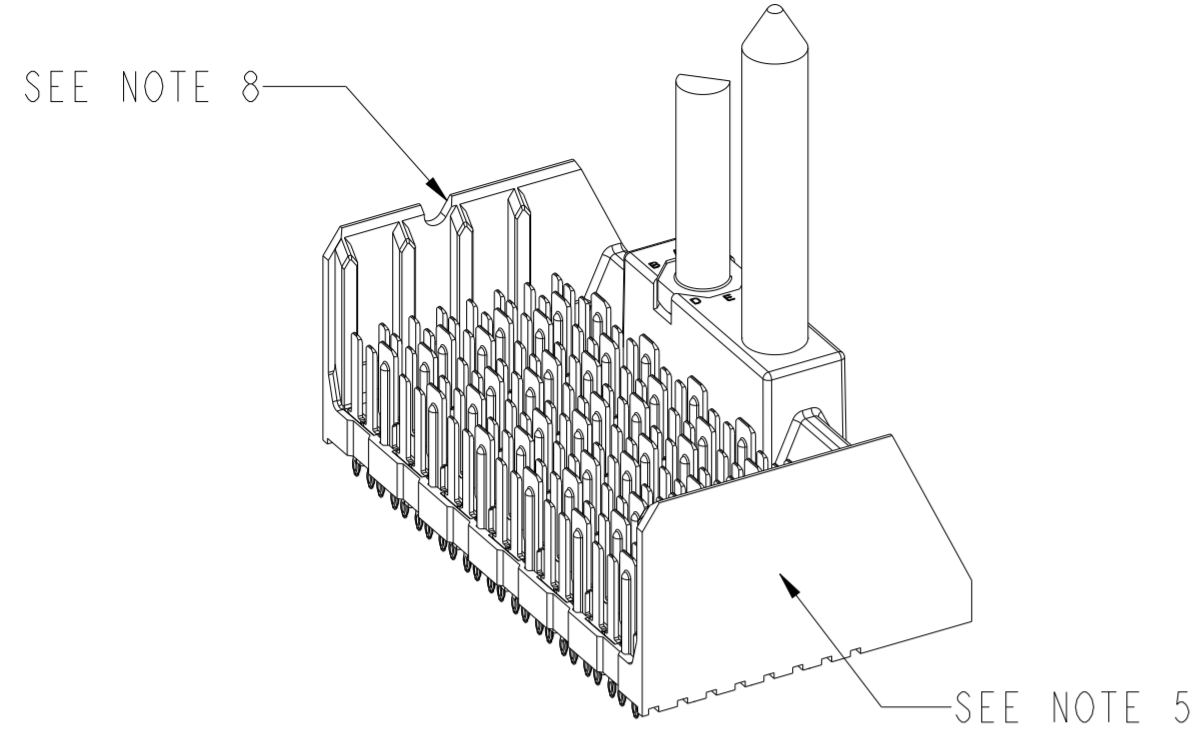
STATUS:Released

Printed: Jun 15, 2016

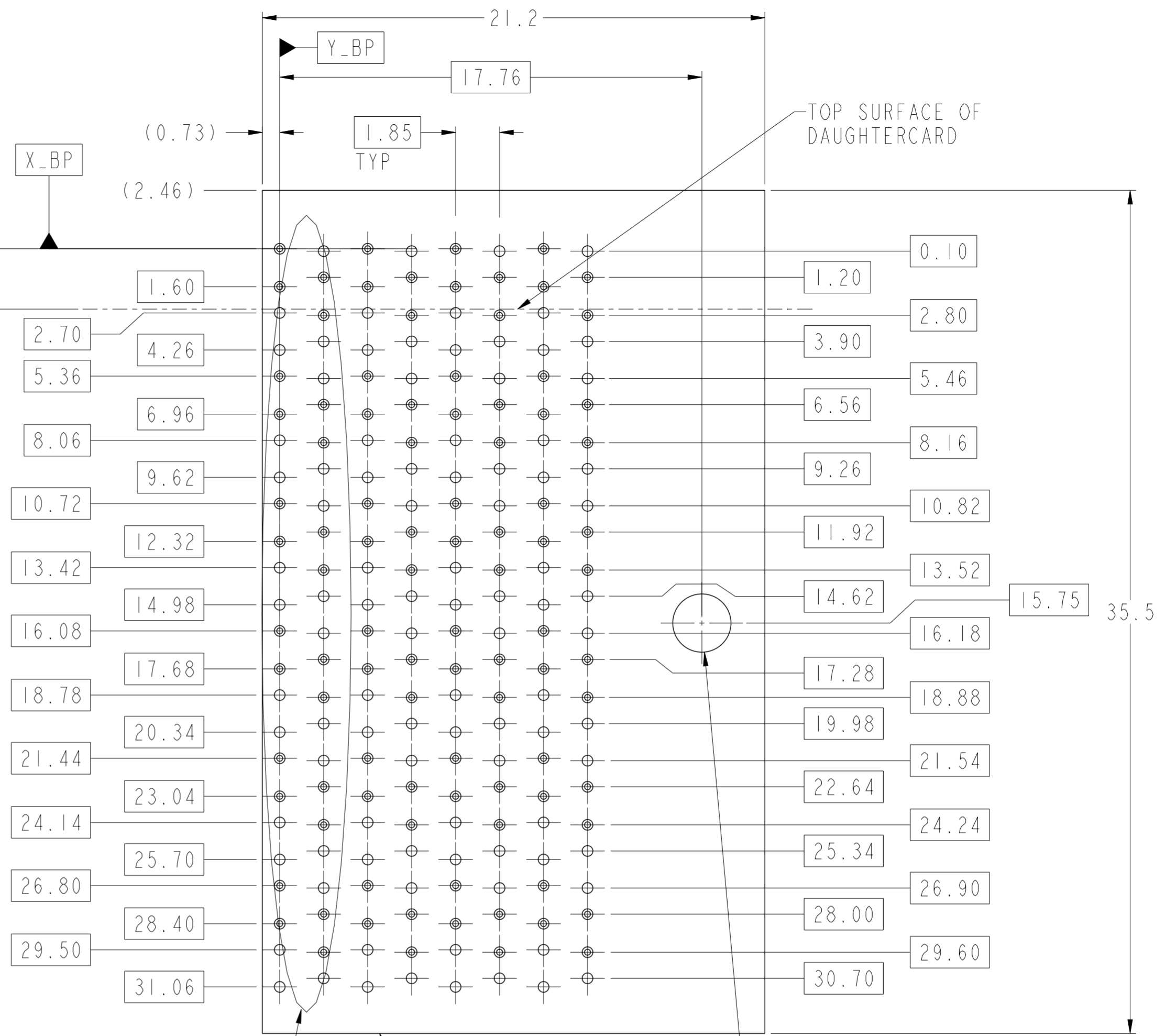
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# RIGHT POLARIZING/GUIDE MODULE



2.54  
TO TOP SURFACE  
OF DAUGHTERCARD



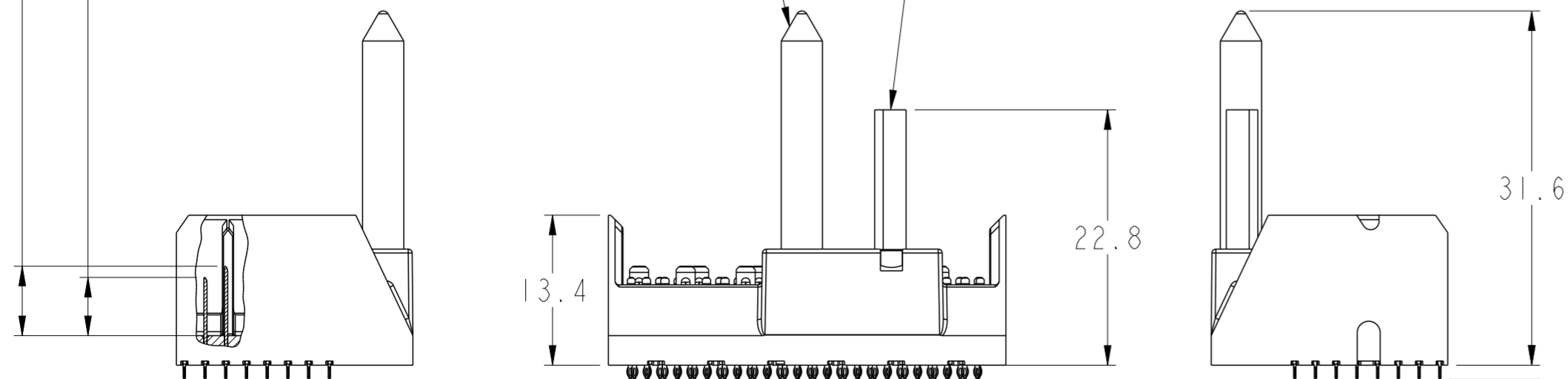
SEE DETAIL A  
(SHEET 8)

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

Ø 2.55  
Ø 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)

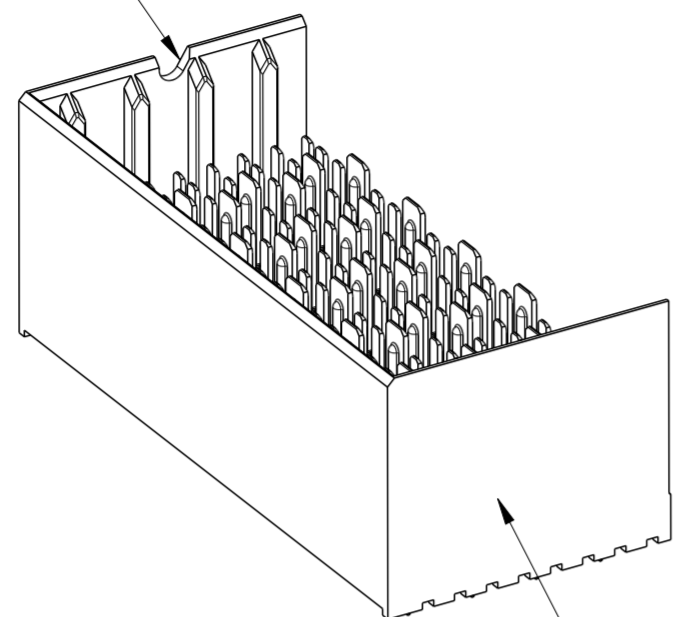
GUIDE PIN  
OPTIONAL KEYING PIN  
(SEE P/N TREE)



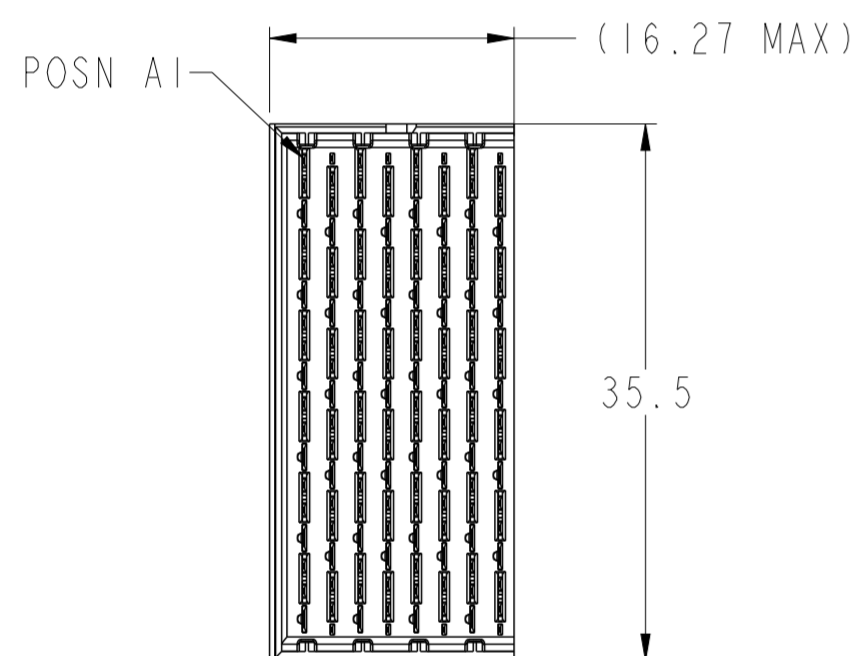
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level	Released	
ASME Y14.5		chr	Heaven Cen	2016/06/08							product family
surface	linear	0.X	±0.2		MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 4 of 8	rev E		
	0.XX	±0.10	angular							0°	±°
ASME Y14.5	0.XXX	±0.050									

# LEFT WALL MODULE

SEE NOTE 8



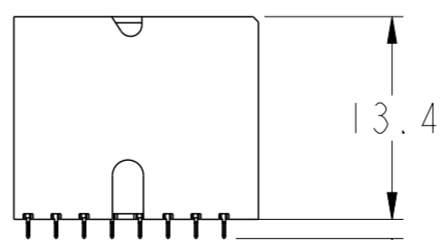
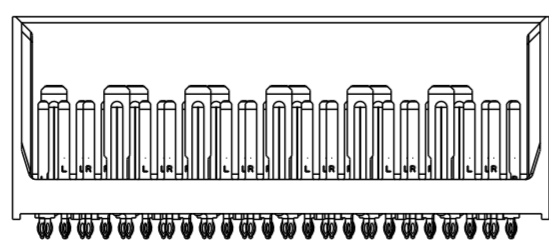
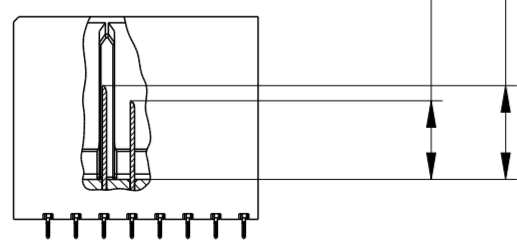
SEE NOTE 5



SCALE 2:1

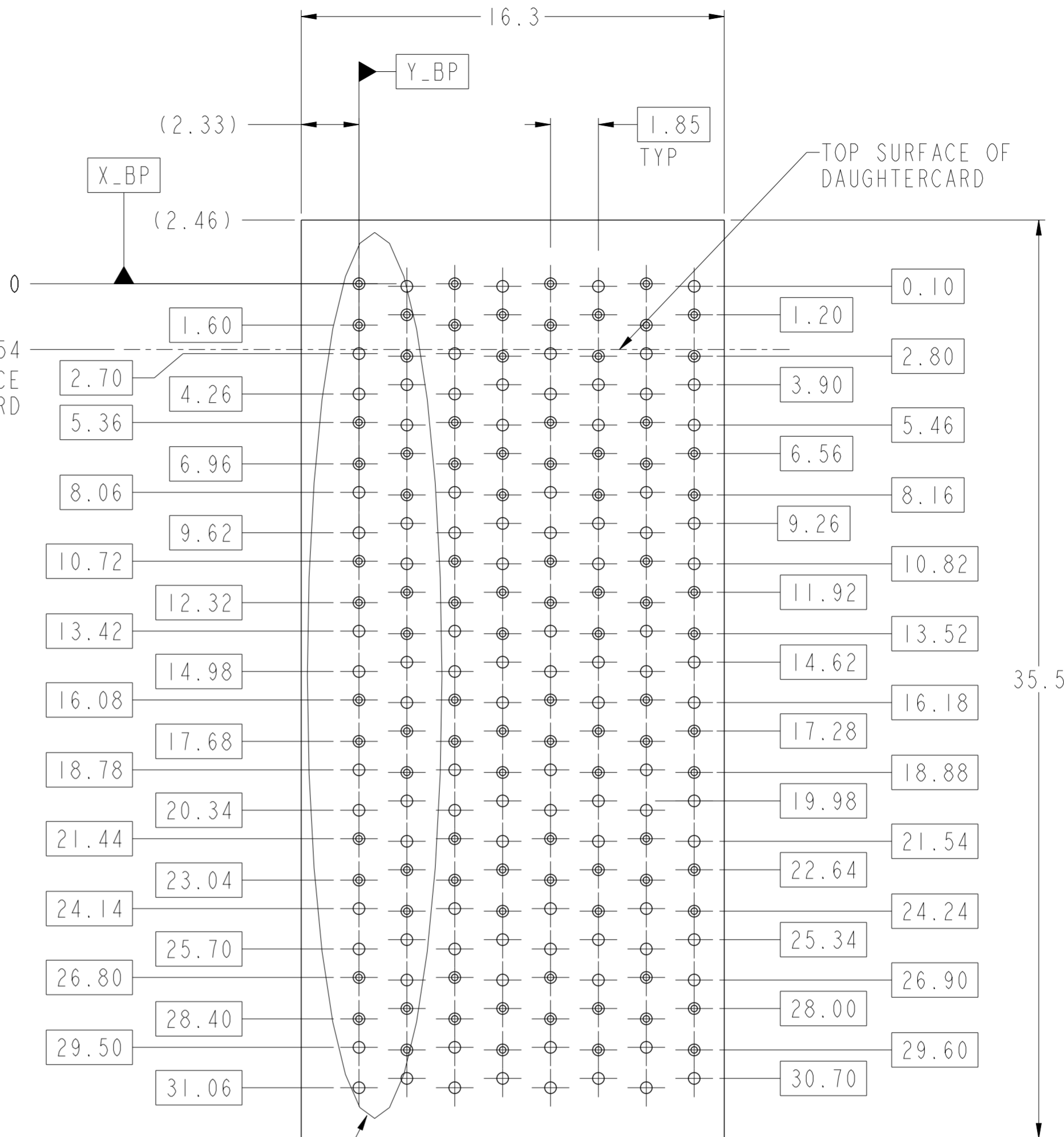
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH  
SEE NOTE 12

2.54  
TO TOP SURFACE  
OF DAUGHTERCARD



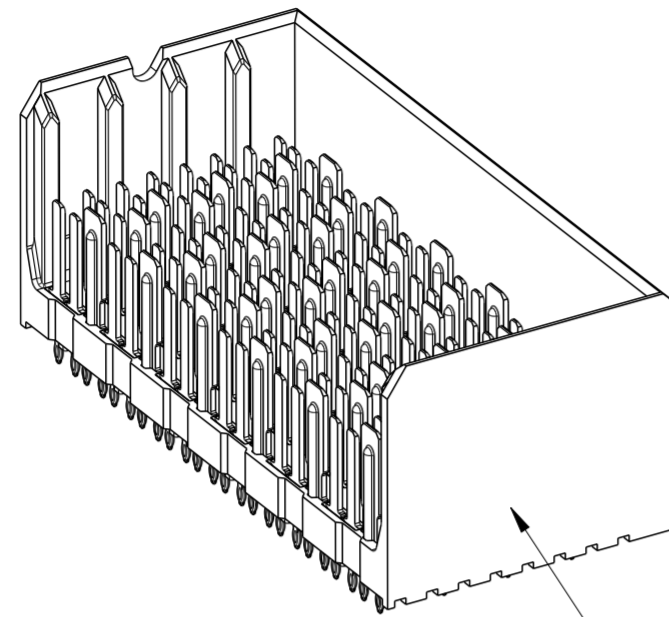
SEE DETAIL A  
(SHEET 8)

NOMINAL MODULE OUTLINE

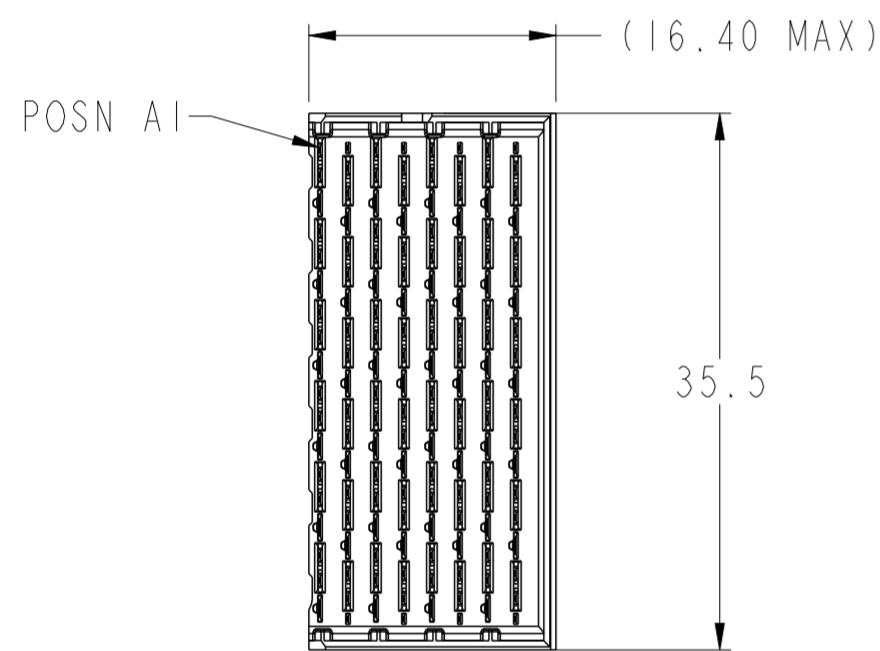
PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

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	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		chr	Heaven Cen	2016/06/08						
		appr	Pai-Ming Zheng	2016/06/15						
surface	linear	0.X	±0.2		product family XCede	title MODULE ASSEMBLY	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 5 of 8	
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±°				rev no 10104999		rev E	

# RIGHT WALL MODULE



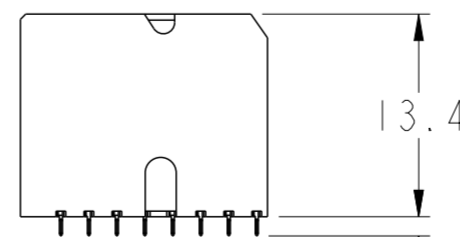
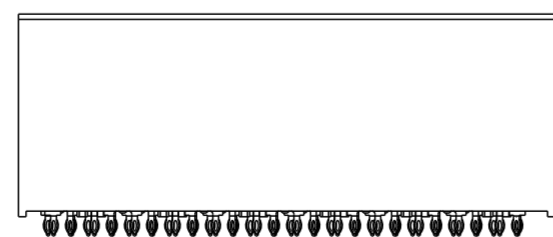
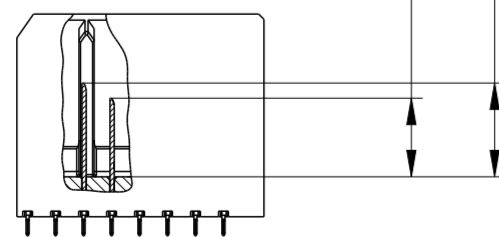
SEE NOTE 5



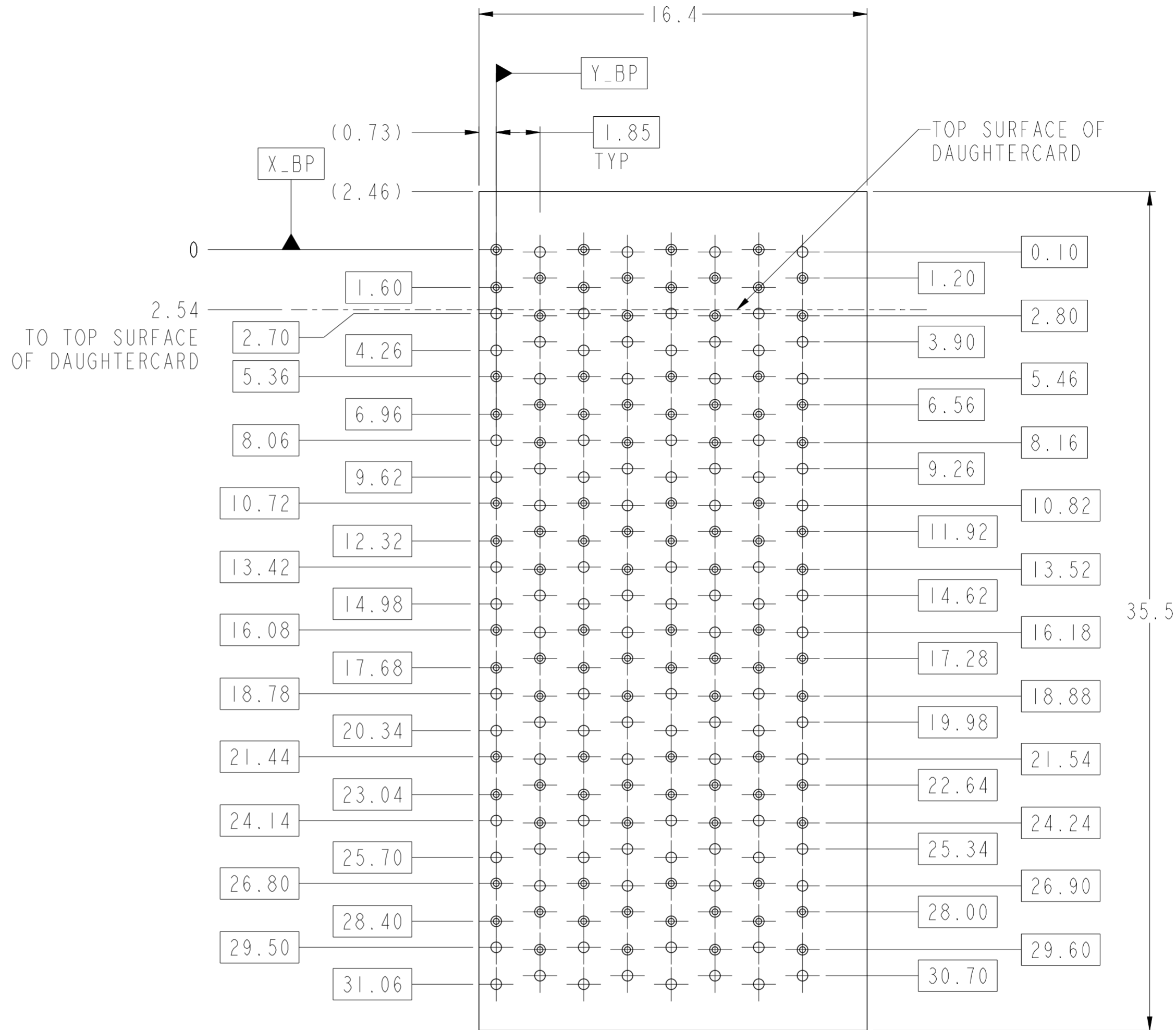
SCALE 2:1

- 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



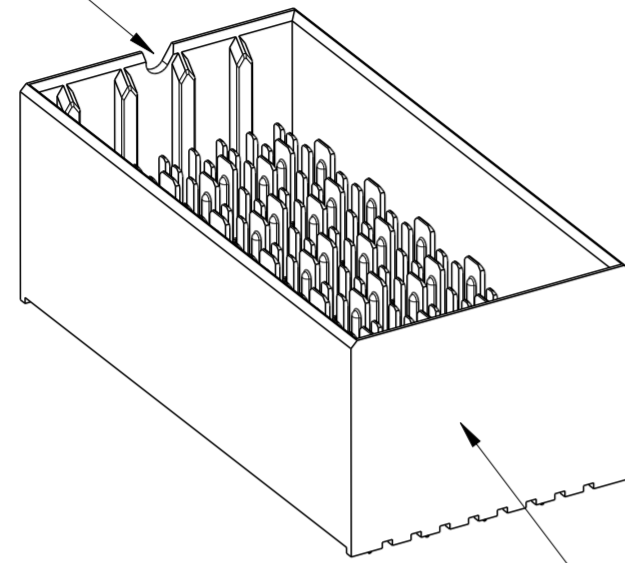
PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

NOMINAL MODULE OUTLINE

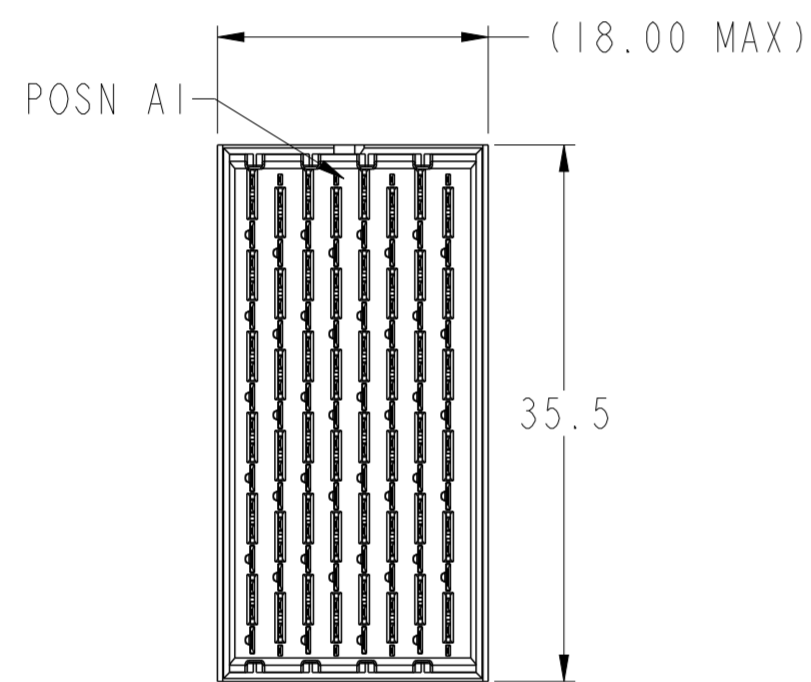
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08			product family	XCede		
surface	linear	0.X	±0.2	apppr	Pai-Ming Zheng	2016/06/15	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8
	angular	0°	±°			MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	dwg no 10104999	rev E		

# FOUR WALL MODULE

SEE NOTE 8

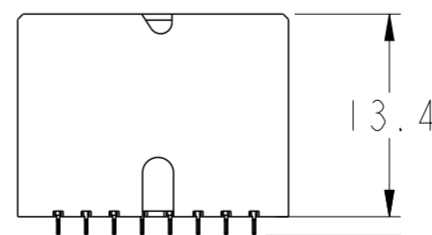
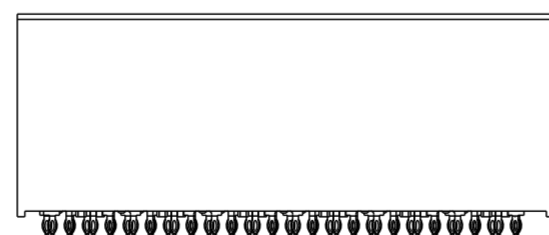
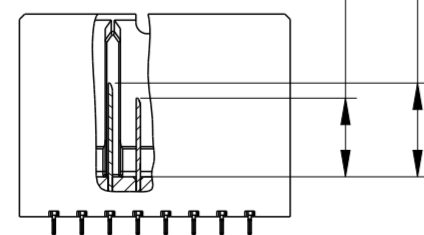


SEE NOTE 5

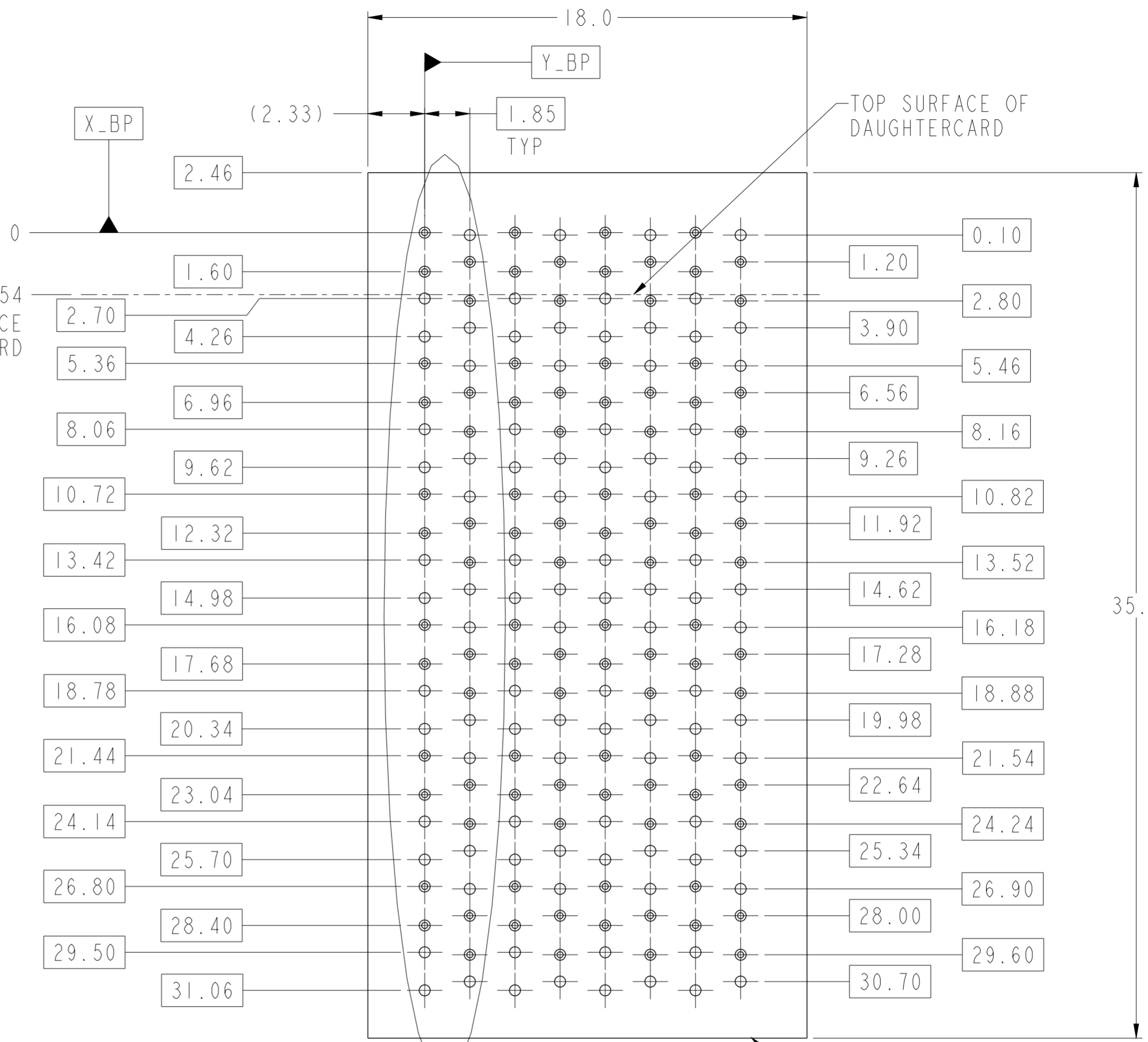


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH  
SEE NOTE 12



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	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		chr	Heaven Cen	2016/06/08						
		appr	Pai-Ming Zheng	2016/06/15						
surface	linear	0.X	±0.2		MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 7 of 8	rev E	
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±							

PDS: Rev :E

STATUS:Released

Printed: Jun 15, 2016

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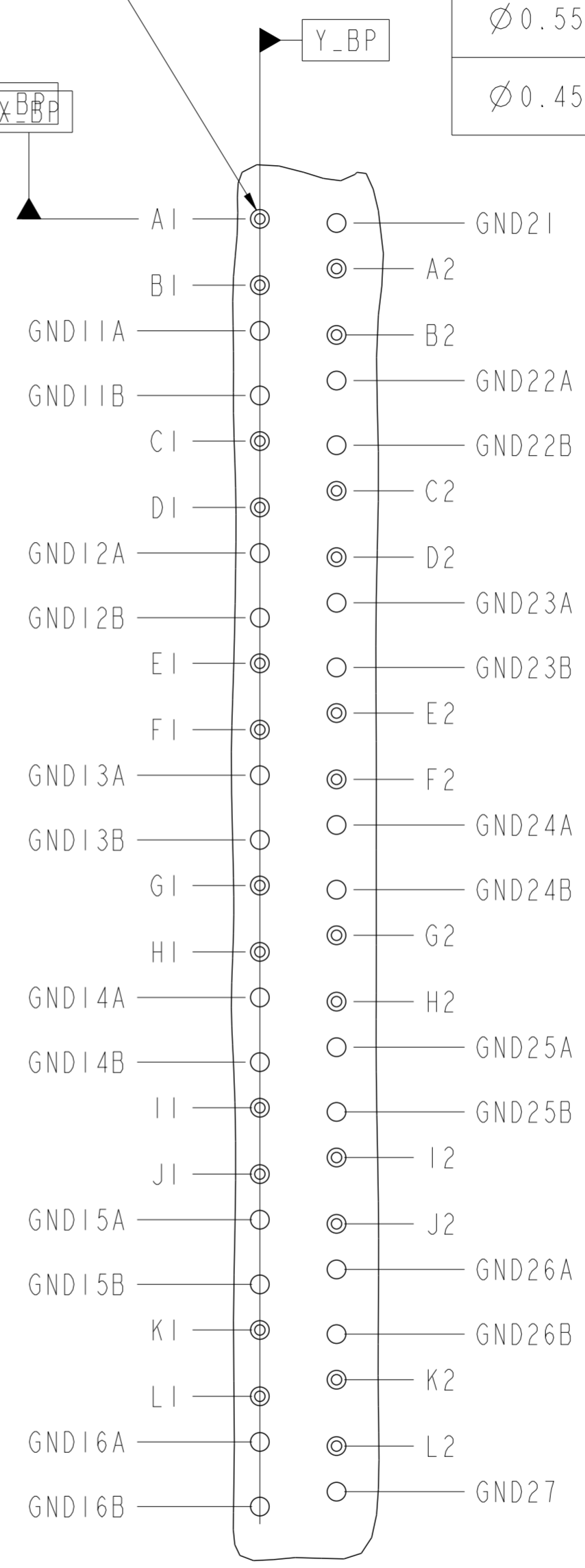
TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL		
COMPLIANT PIN DRILL	PTH	PAD
Ø0.55 [0.0217"]	Ø0.45±0.05	Ø0.85
Ø0.45 [0.0177"]	Ø0.36±0.05	Ø0.75

REFER TABLE 3 FOR PTH, DRILL & PAD SIZES



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.
- TAIL LENGTH=1.3mm FOR Ø0.55[0.0217"]COMPLIANT PIN DRILL  
TAIL LENGTH=1.5mm FOR Ø0.45[0.0177"]COMPLIANT PIN DRILL



DETAIL A  
SCALE 8:1

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spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1	rel level <b>Released</b>	
ASME Y14.5		chr	Heaven Cen	2016/06/08			product family			
		appr	Pai-Ming Zheng	2016/06/15						
surface	linear	0.X	±0.2	<b>Amphenol FCI</b>	MODULE ASSEMBLY		dwg no	10104999	rev	E
		0.XX	±0.10		VERTICAL HEADER, 8-COLUMN, 6-PAIR					
ASME Y14.5	angular	0.XXX	±0.050		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 8 of 8		