

10114508 - X0J - X0XL 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
	J	A	B	C	D	E	F	G	H		
LEFT POLARIZING GUIDANCE MODULE (SEE SHEET 3)											
RIGHT POLARIZING GUIDANCE MODULE (SEE SHEET 4)											
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

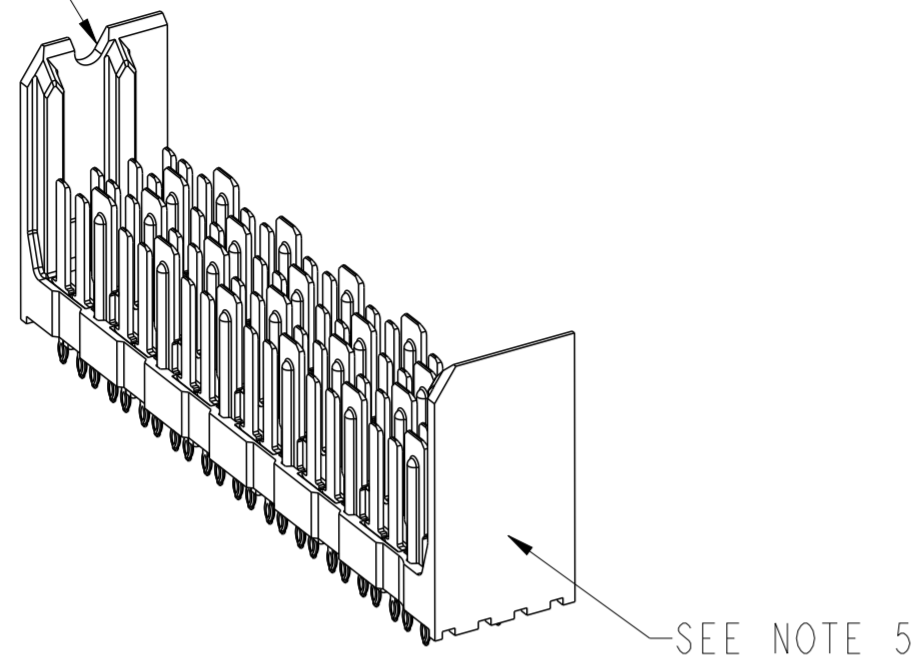
Amphenol FCI

© 2016 AFCI

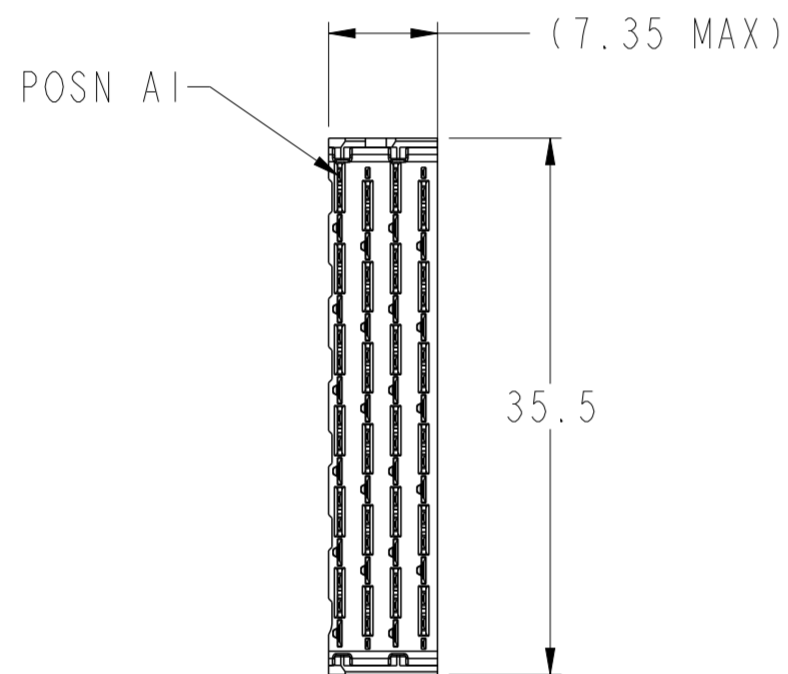
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/03	chr	Heaven Cen	ecn no	ELX-DG-24191-1	rel level	Released
surface	linear	appr	Pai-Ming Zheng	2016/06/15	product family		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 1 of 8
ASME Y14.5	angular									

OPEN (2-WALL) MODULE

SEE NOTE 8



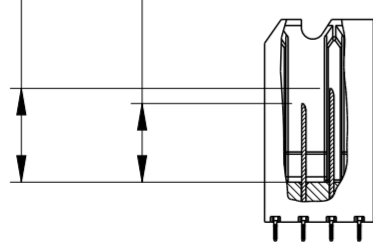
SEE NOTE 5



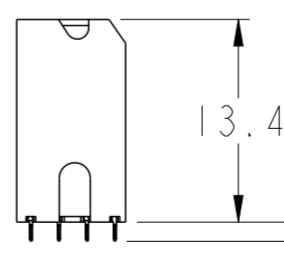
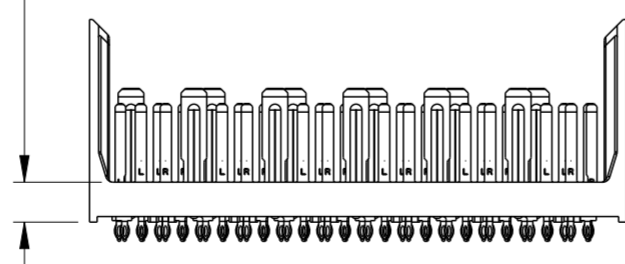
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

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

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)

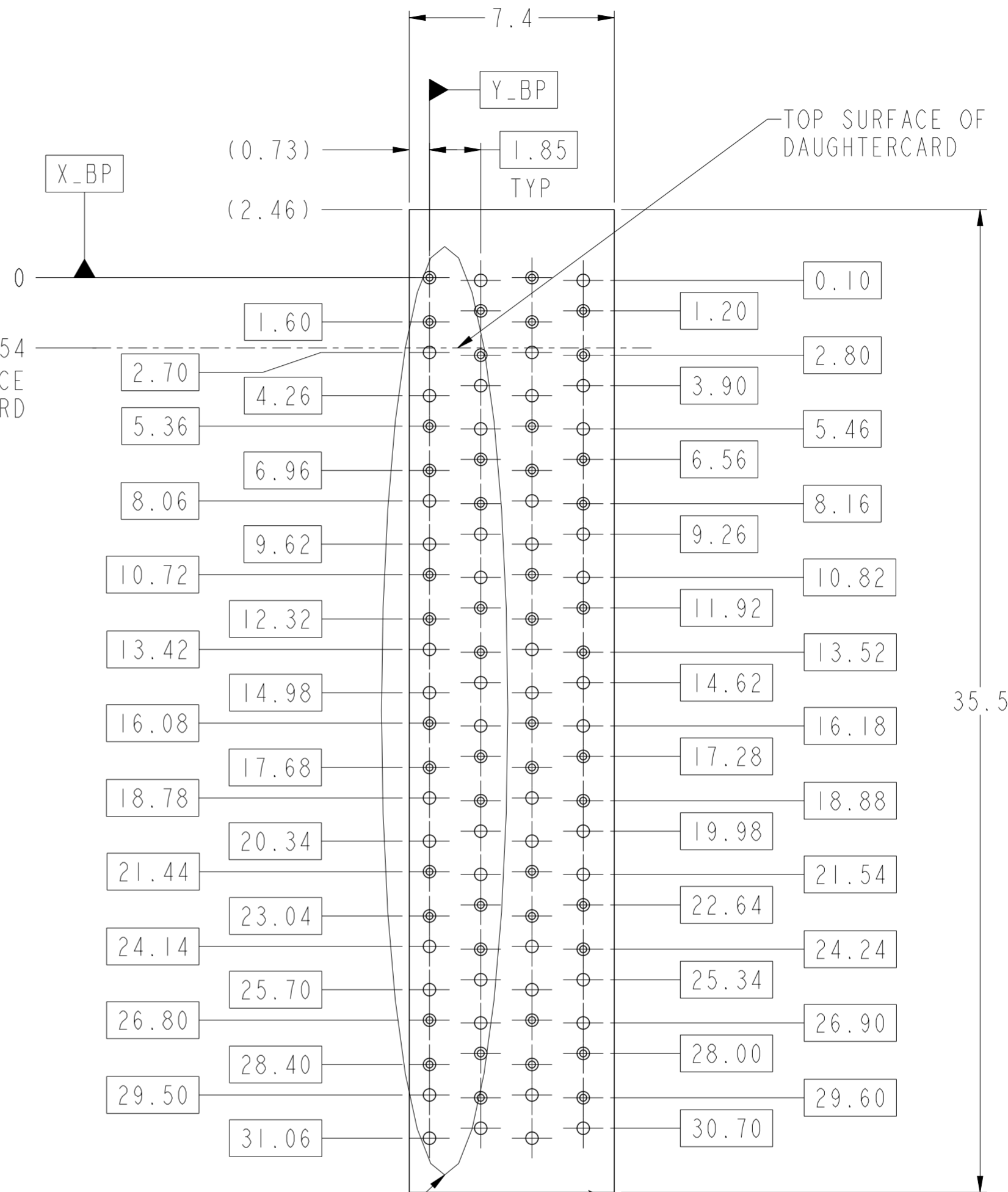


2.64±0.10 FROM STANDOFF SURFACE TO MATING SURFACE



TAIL LENGTH
SEE NOTE 12

2.54
TO 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	Michael Song	2016/06/03			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		cat. no. SEE P/N TREE	Product - Customer Drw	sheet 2 of 8	
		0.XX	±0.10		title VERTICAL HEADER, 4-COLUMN, 6-PAIR	drg no 10114508				rev G
ASME Y14.5	angular	0.XXX	±0.050							

PDS: Rev:G

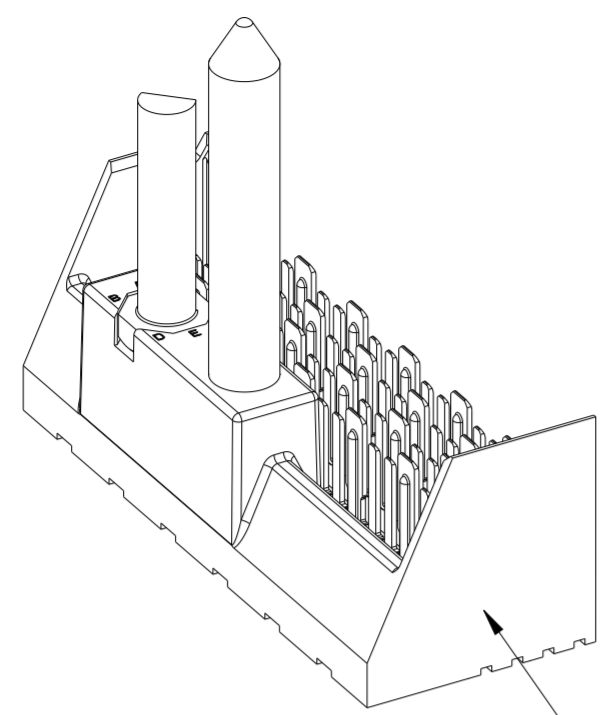
STATUS:Released

Printed: Jun 15, 2016

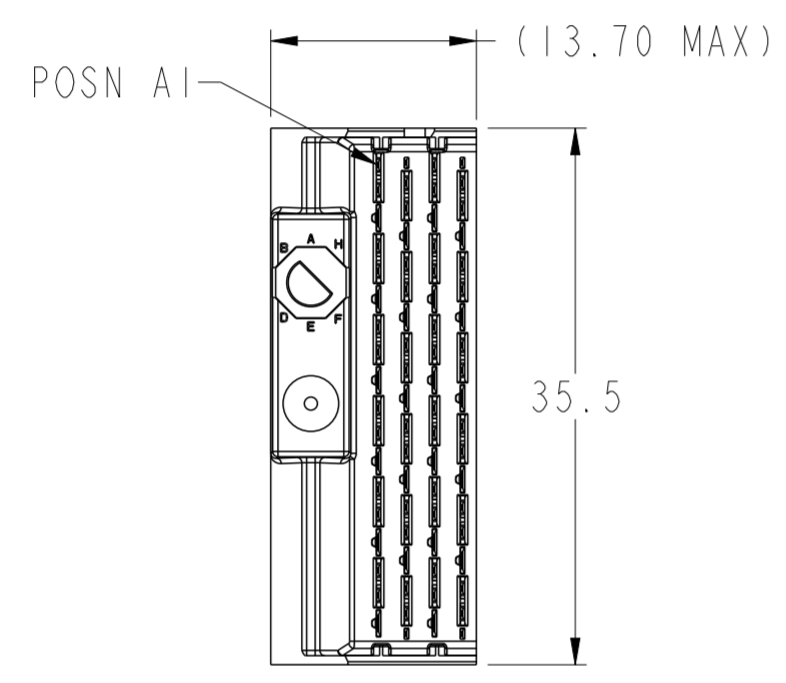
Amphenol
FCI

© 2016 AFCI

LEFT POLARIZING/GUIDE MODULE

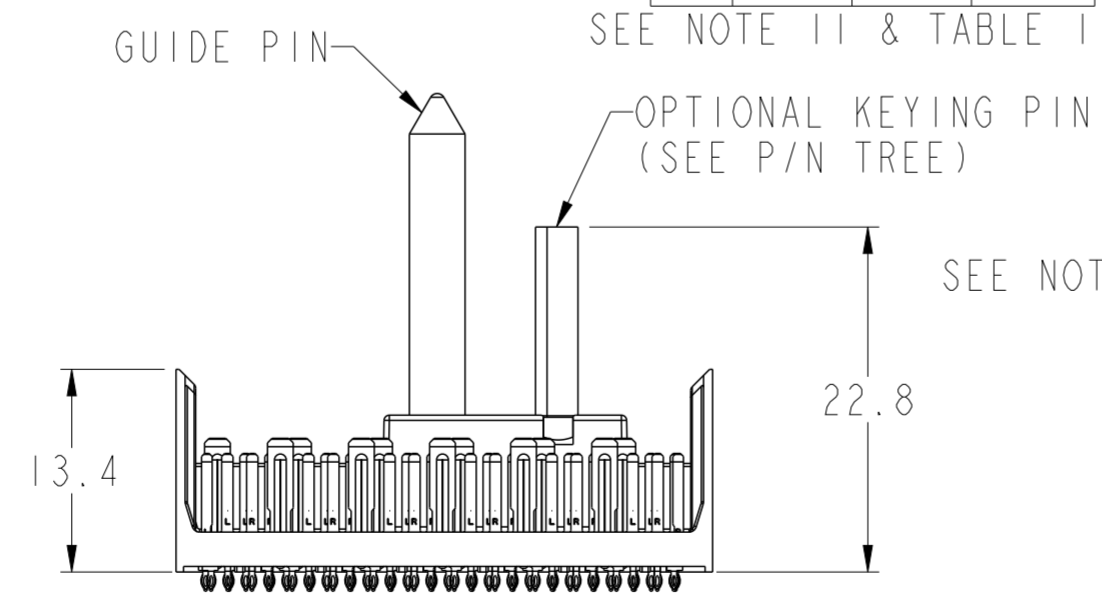
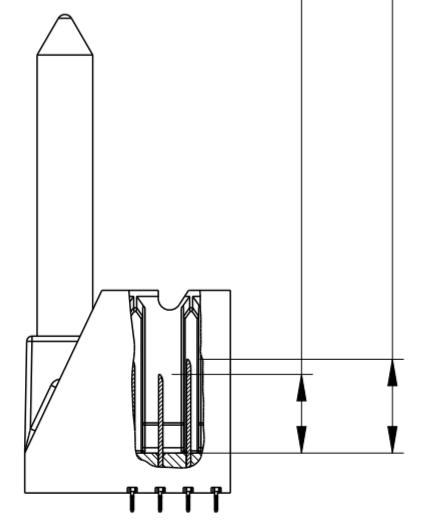


SEE NOTE 5

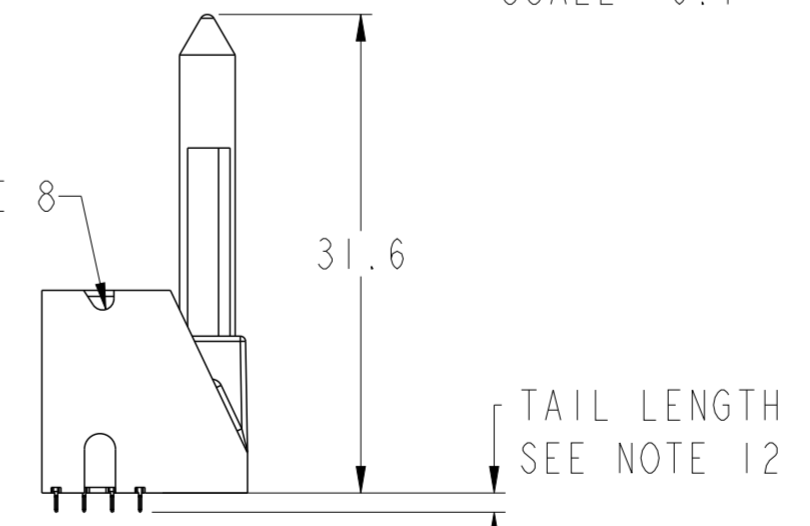


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

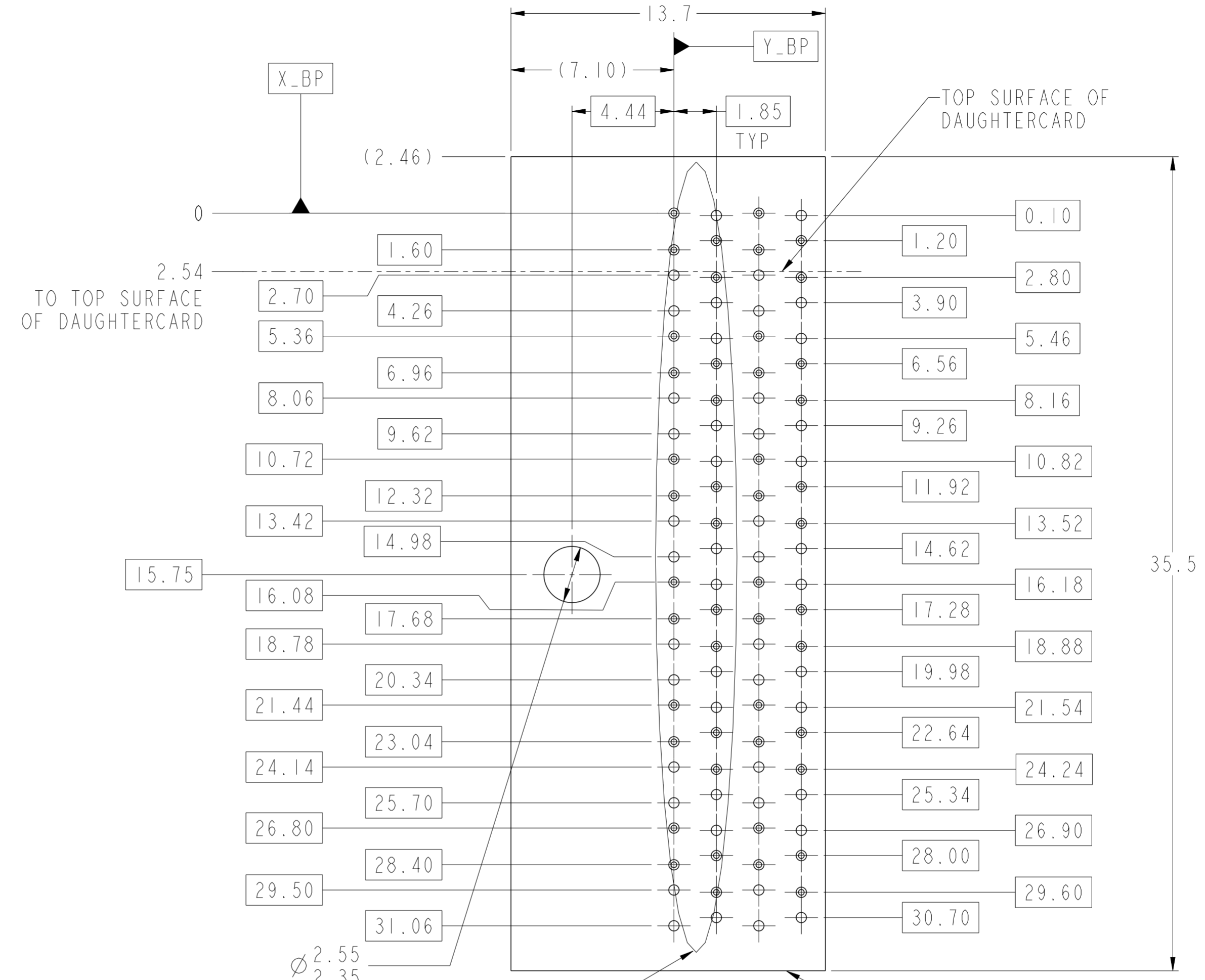
(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



SEE NOTE 8



TAIL LENGTH SEE NOTE 12



\varnothing 0.10	X_BP	Y_BP
--------------------	------	------

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	8:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03			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	Amphenol FCI	MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 6-PAIR	cat. no. SEE P/N TREE	Product - Customer Drw	sheet 3 of 8	rev G	
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±							

PDS: Rev: G

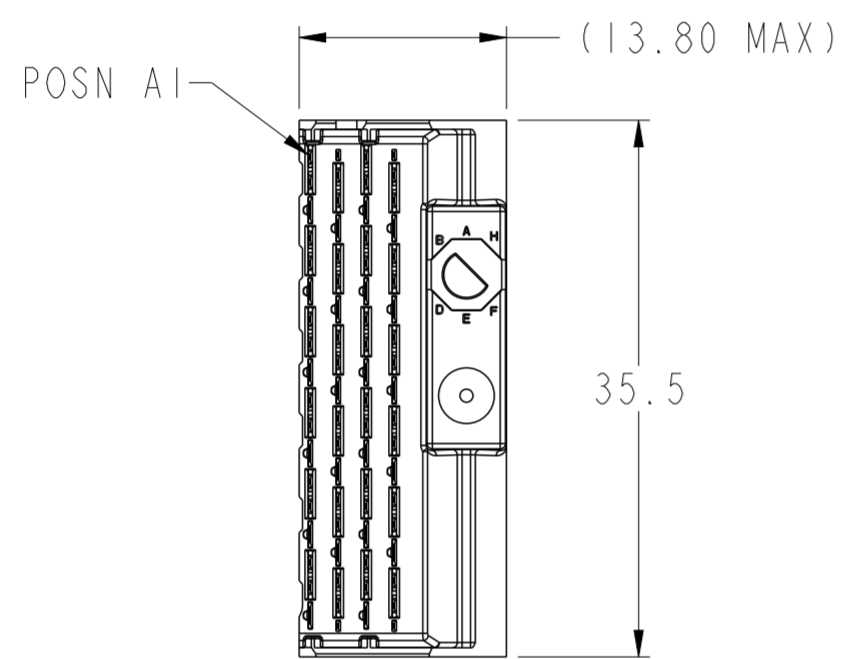
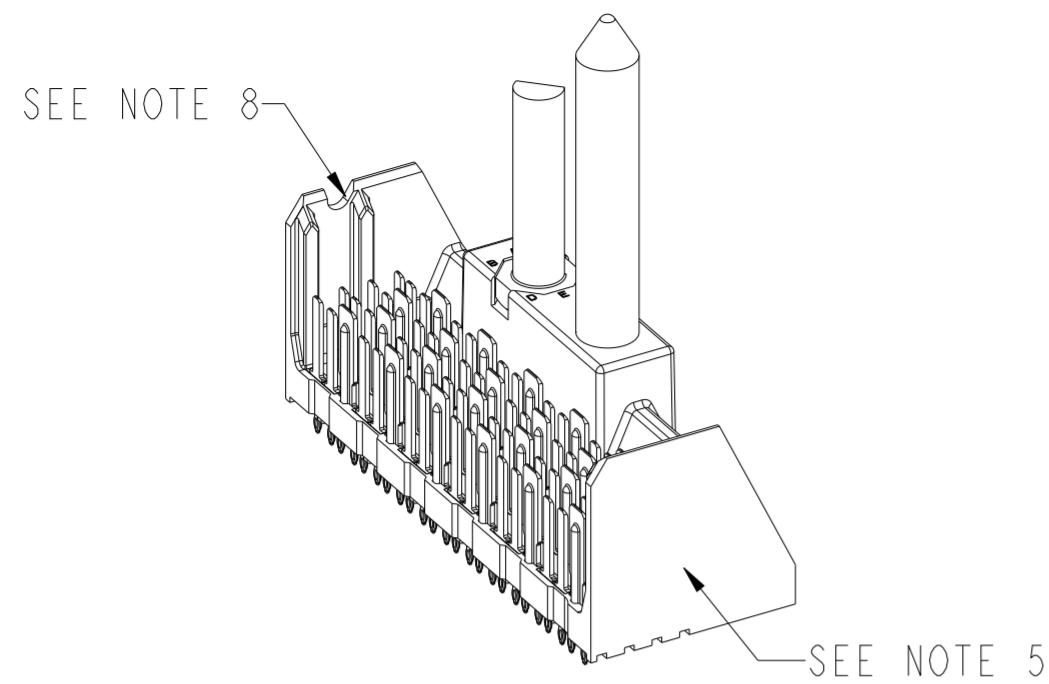
STATUS: Released

Printed: Jun 15, 2016

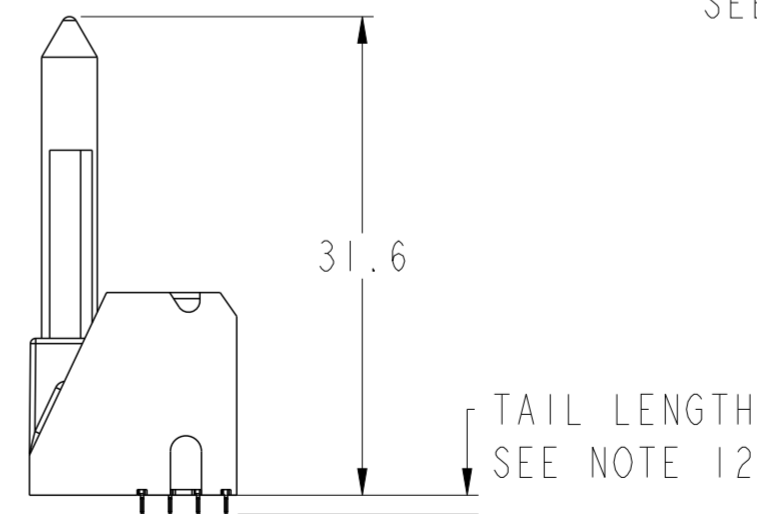
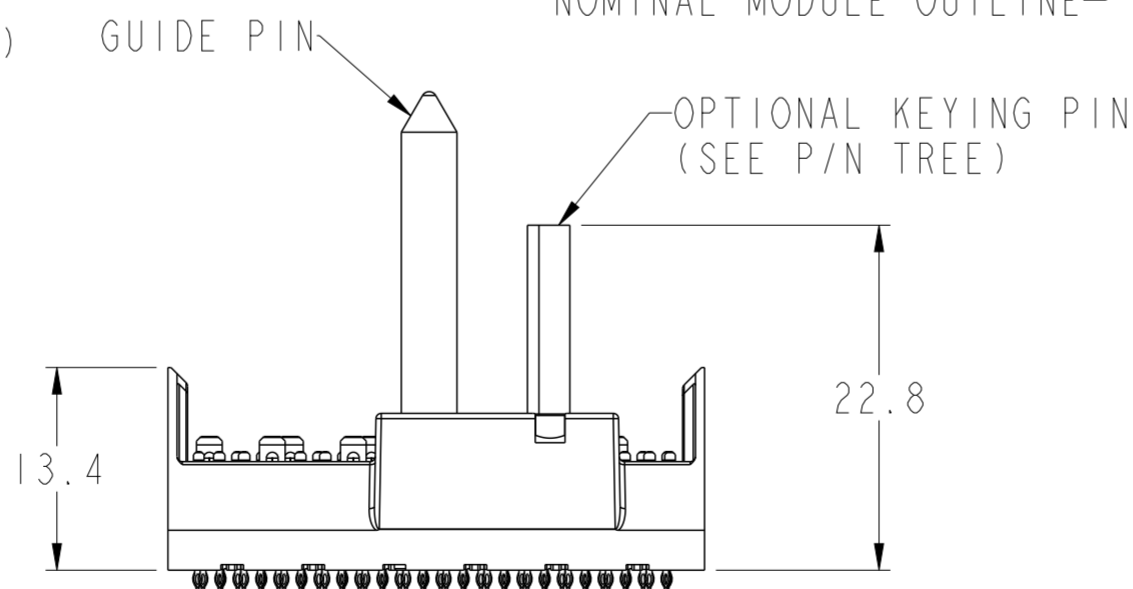
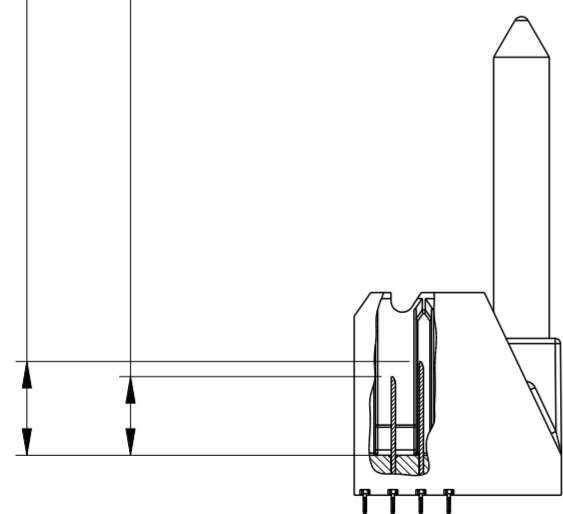
Amphenol FCI

© 2016 AFCI

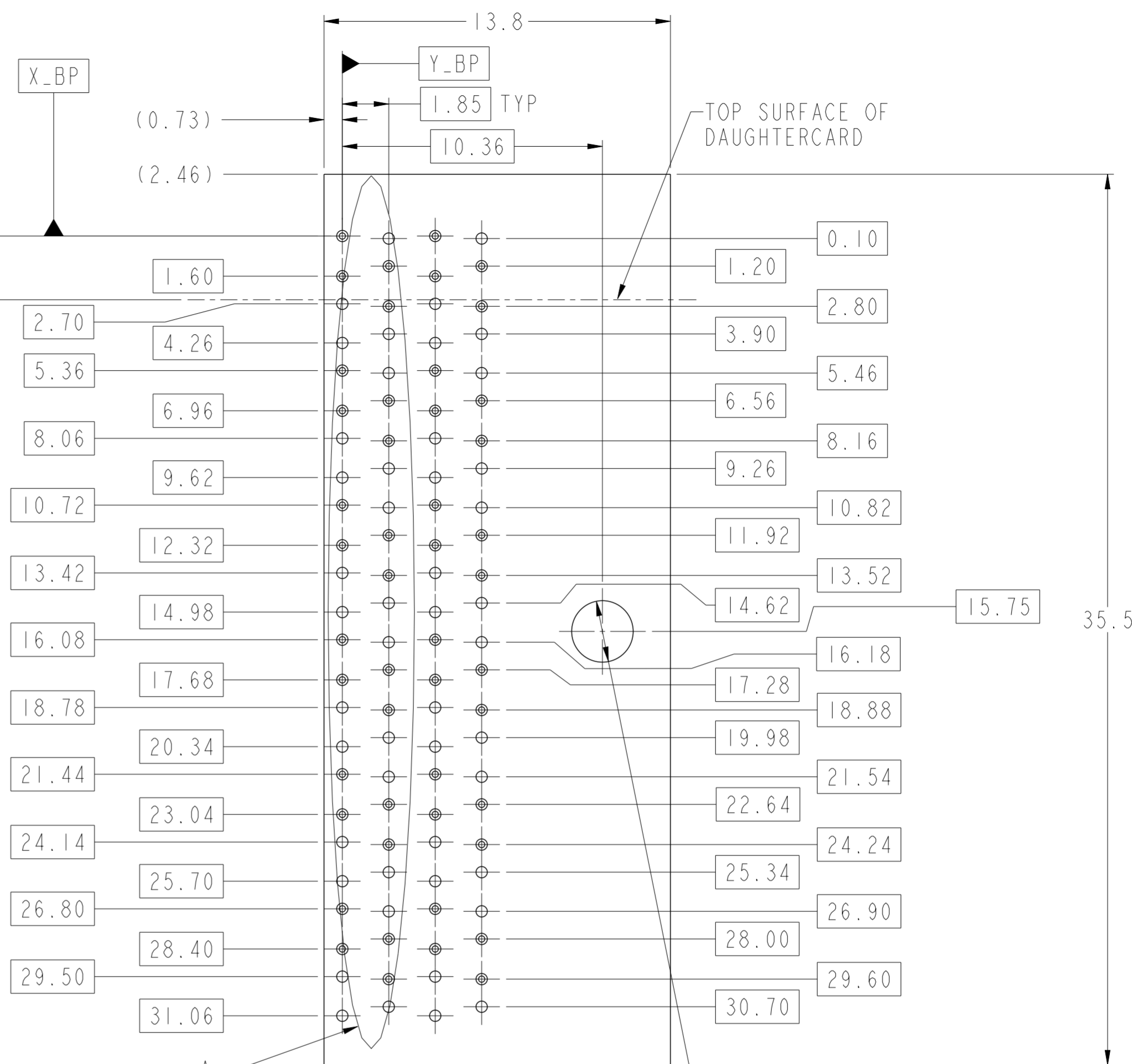
RIGHT POLARIZING/GUIDE MODULE



- 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

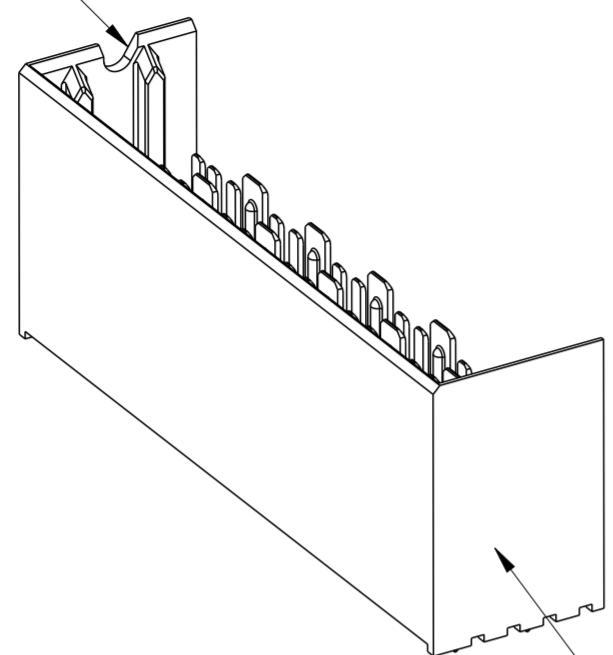
Ø 2.55
2.35

⊕ 0.10 X_BP Y_BP
SEE NOTE 11 & TABLE 1

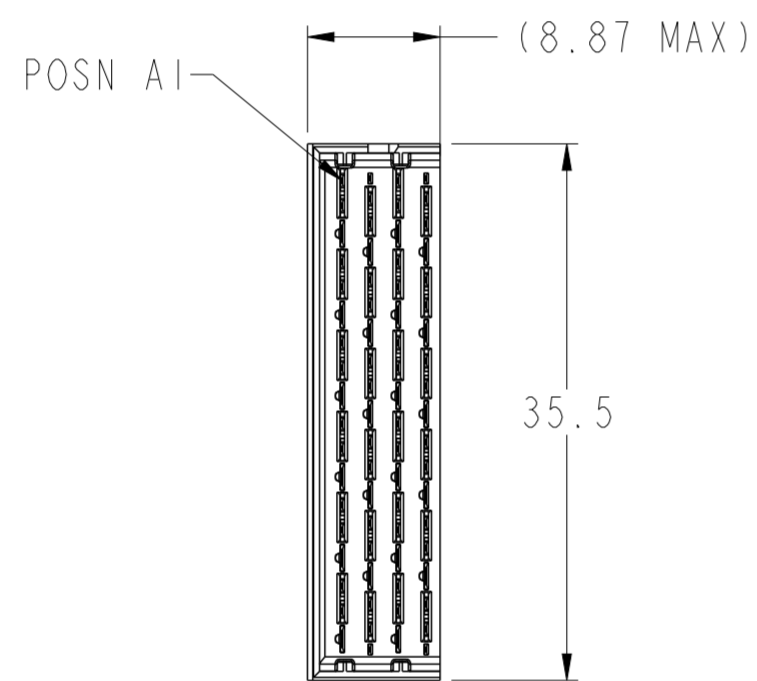
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	5:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03			ecn no	ELX-DG-24191-1		
ASME Y14.5		chr	Heaven Cen	2016/06/08				rel level	Released	
surface	linear	appr	Pai-Ming Zheng	2016/06/15	product family		dwg no	10114508		
ASME Y14.5	angular						rev	G		
					cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 4 of 8		

LEFT WALL MODULE

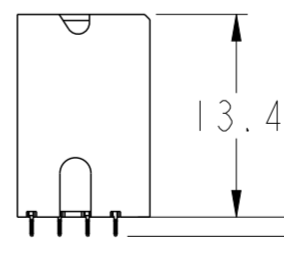
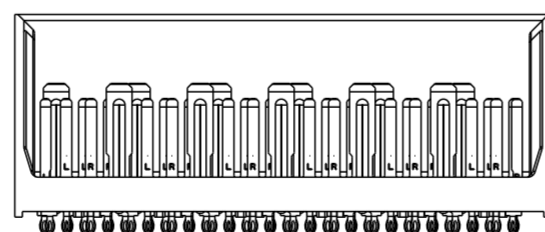
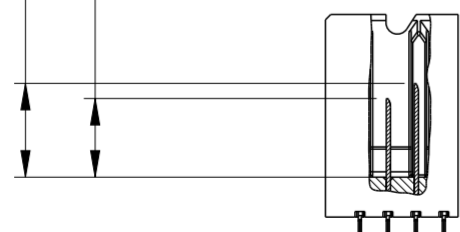
SEE NOTE 8



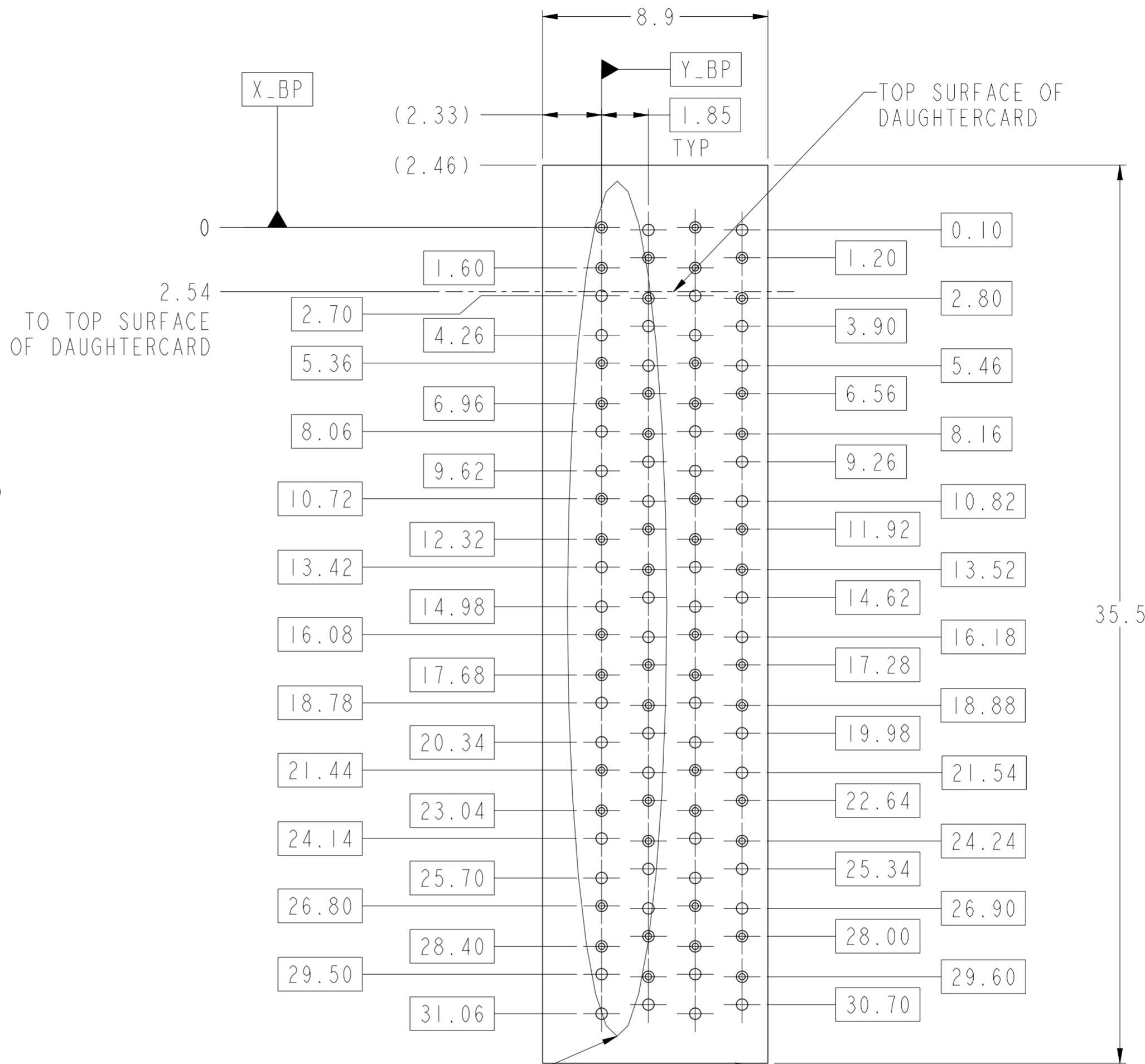
SEE NOTE 5



- 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)

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

NOMINAL MODULE OUTLINE

Amphenol
FCi

© 2016 AFci

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03			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		cat. no. SEE P/N TREE	Product - Customer Drw	sheet 5 of 8	
		0.XX	±0.10		VERTICAL HEADER, 4-COLUMN, 6-PAIR	dwg no 10114508				rev G
ASME Y14.5	angular	0.XXX	±0.050							

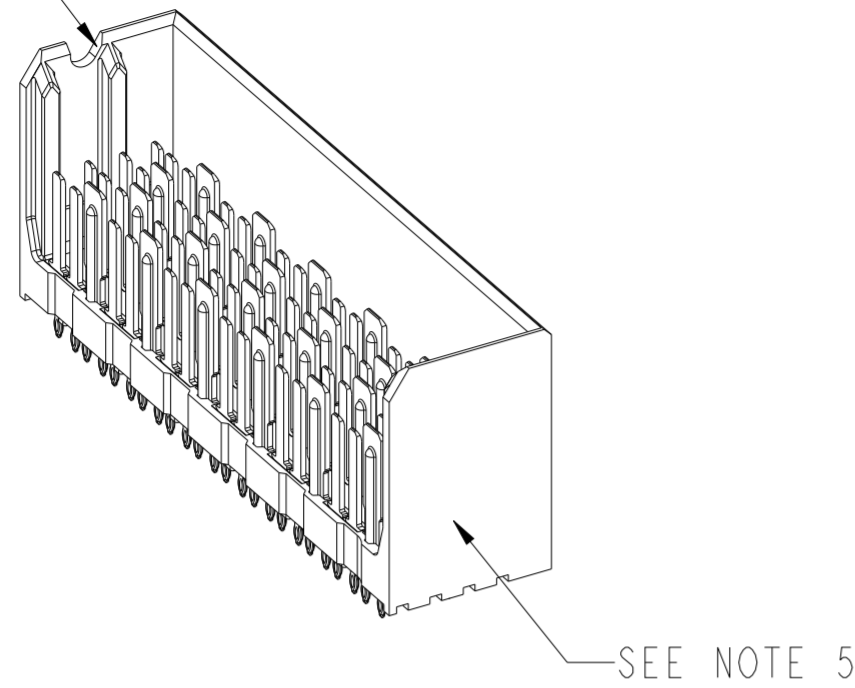
PDS: Rev :G

STATUS:Released

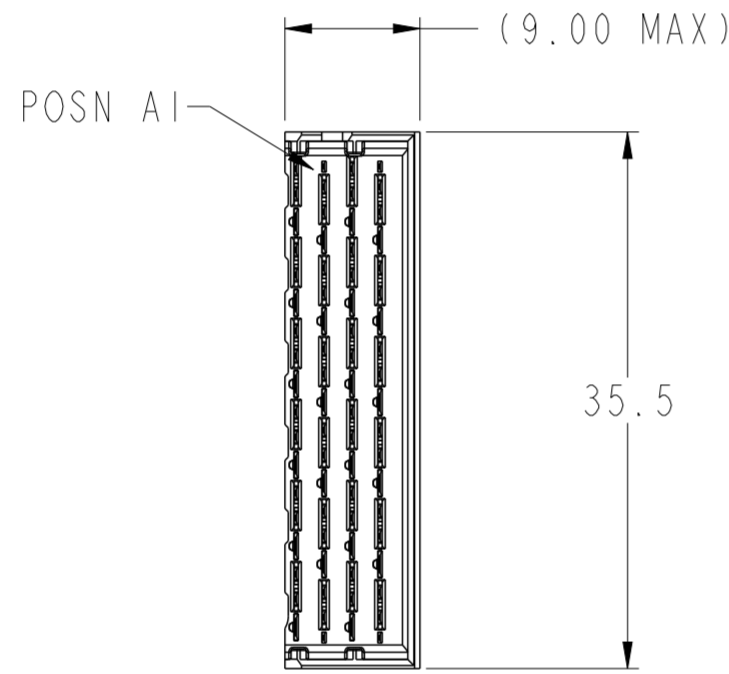
Printed: Jun 15, 2016

RIGHT WALL MODULE

SEE NOTE 8

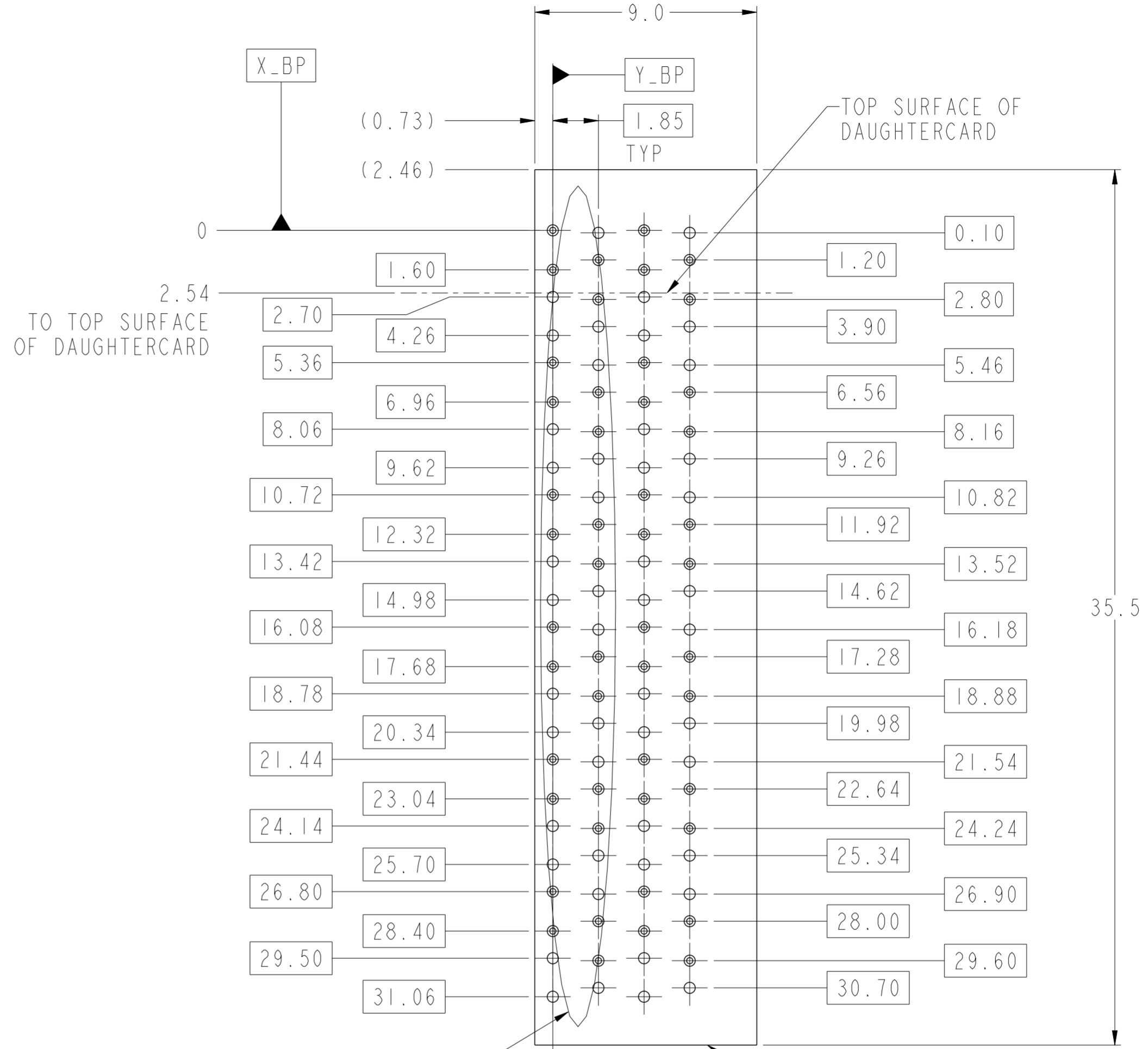
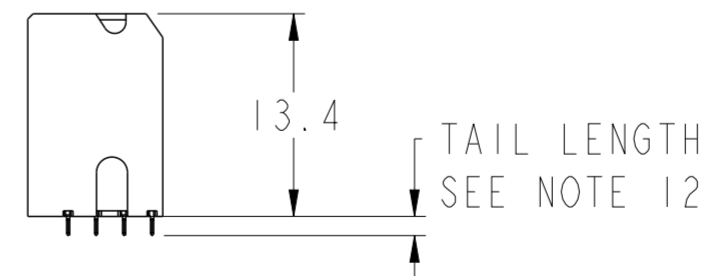
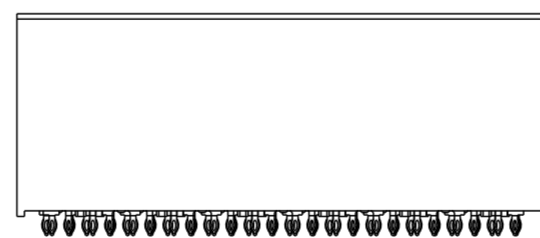
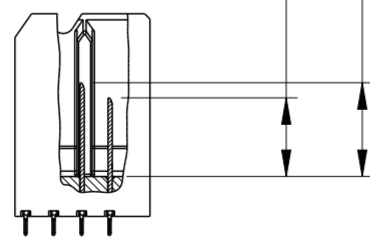


SEE NOTE 5



- 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)

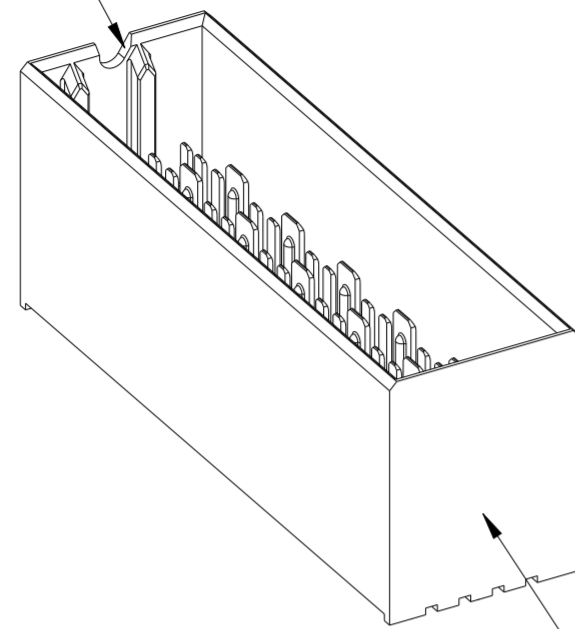


SEE DETAIL A (SHEET 8) PCB HOLE PATTERN COMPONENT SIDE SCALE 6:1 NOMINAL MODULE OUTLINE

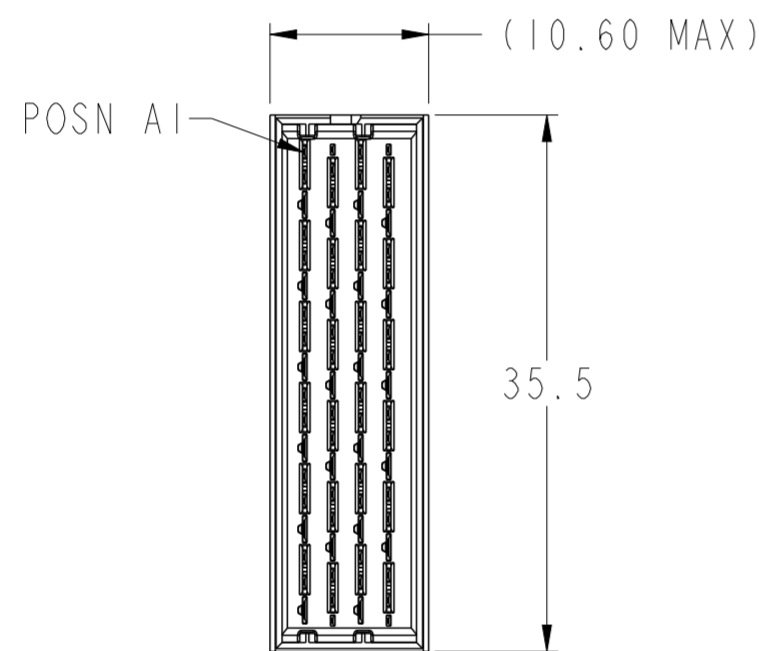
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03			ecn no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		chr	Heaven Cen	2016/06/08						
		appr	Pai-Ming Zheng	2016/06/15						
surface	linear	0.X	±0.2	Amphenol FCI		MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 6-PAIR		dwg no 10114508	rev G	
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8			

FOUR WALL MODULE

SEE NOTE 8

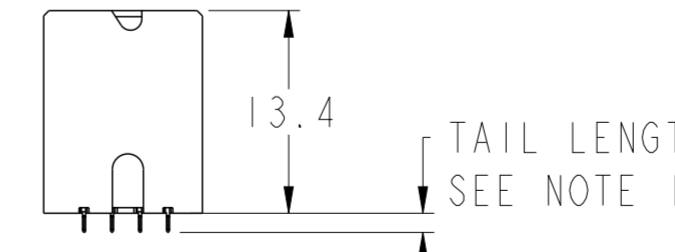
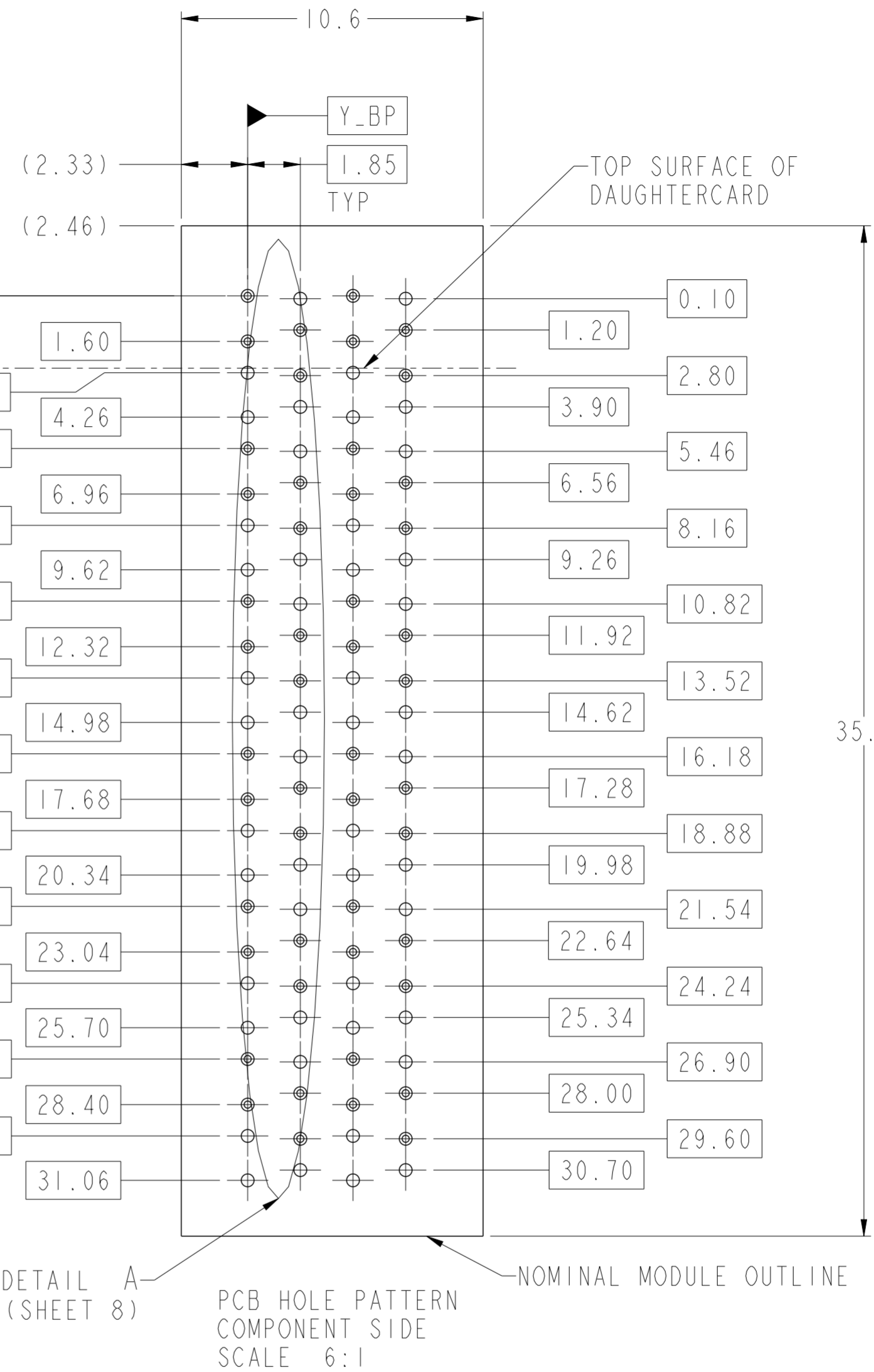
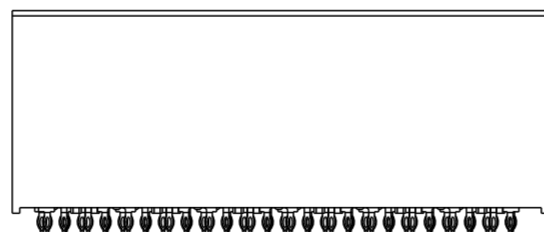
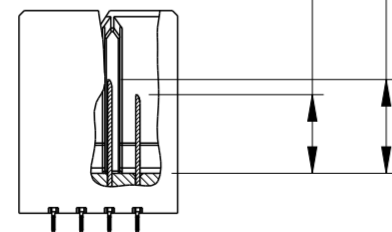


SEE NOTE 5



- 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)



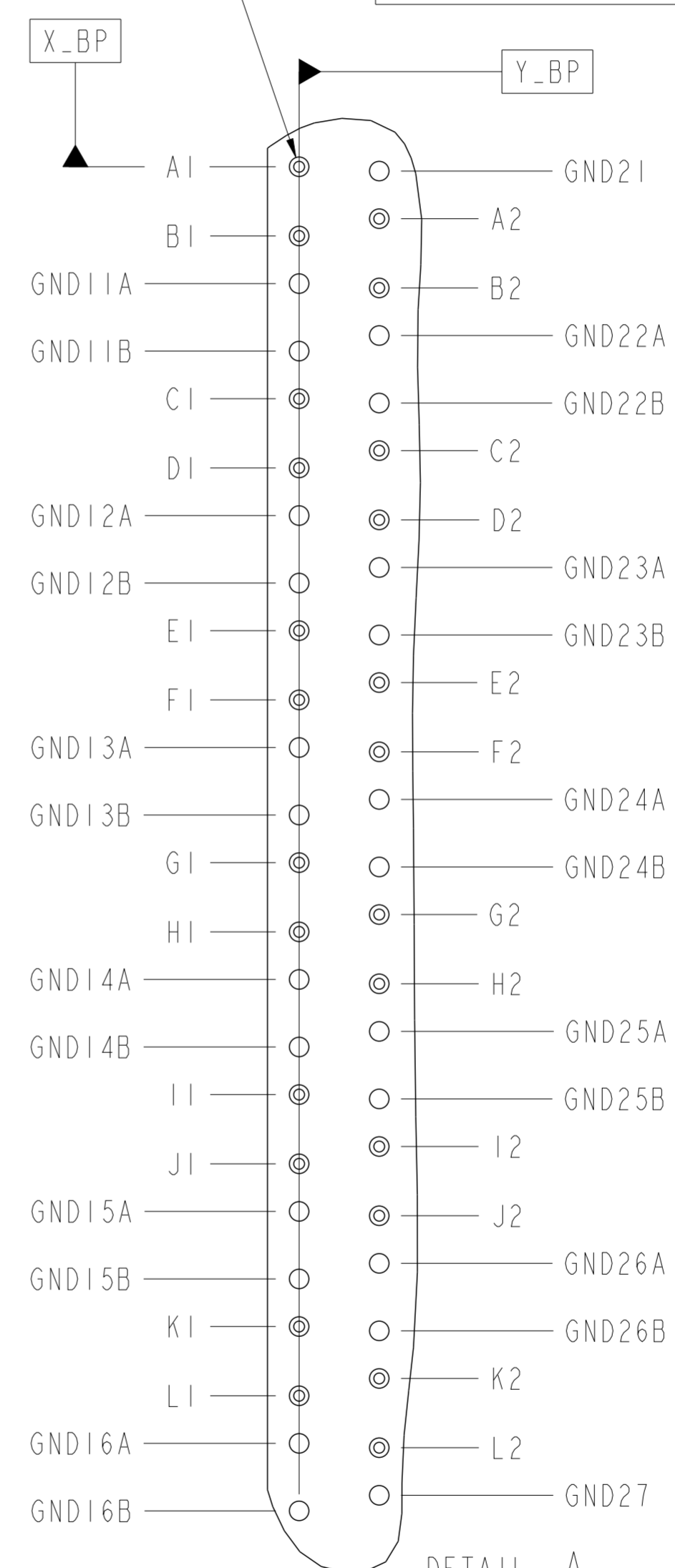
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/23	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03			ecn no	ELX-DG-24191-1		
ASME Y14.5		chr	Heaven Cen	2016/06/08			rel level	Released		
		appr	Pai-Ming Zheng	2016/06/15			product family			
surface	linear	0.X	±0.2		MODULE ASSEMBLY		dwg no 10114508	rev G		
		0.XX	±0.10		VERTICAL HEADER, 4-COLUMN, 6-PAIR					
ASME Y14.5	angular	0.XXX	±0.050		cat. no.	SEE P/N TREE			Product - Customer Drw	sheet 7 of 8

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

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



- 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

Amphenol FCI

© 2016 AFCl

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	Michael Song	2016/06/03			ecn no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		chr	Heaven Cen	2016/06/08						
surface	linear	appr	Pai-Ming Zheng	2016/06/15	Amphenol FCI		MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 6-PAIR		dwg no 10114508	rev G
ASME Y14.5	angular			cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 8 of 8			