

10119191 - X0E - XXXLF

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	GUIDE PIN STYLE, HEIGHT
0	STANDARD GUIDE PIN MACHINED, 31.6mm
4	STANDARD GUIDE PIN MACHINED, 25.7mm

NUMBER	CONTACT MATING WIPE LENGTH		COMPLIANT PIN DRILL SIZE
	SIGNAL	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"]

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 (ONE)										

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" PHILIPS PANHEAD W/SQ CONICAL WASHER	1.60 - 5.00
10091790-003LF	#2.56 X .500" PHILIPS PANHEAD W/SQ CONICAL WASHER	5.00 - 10.00

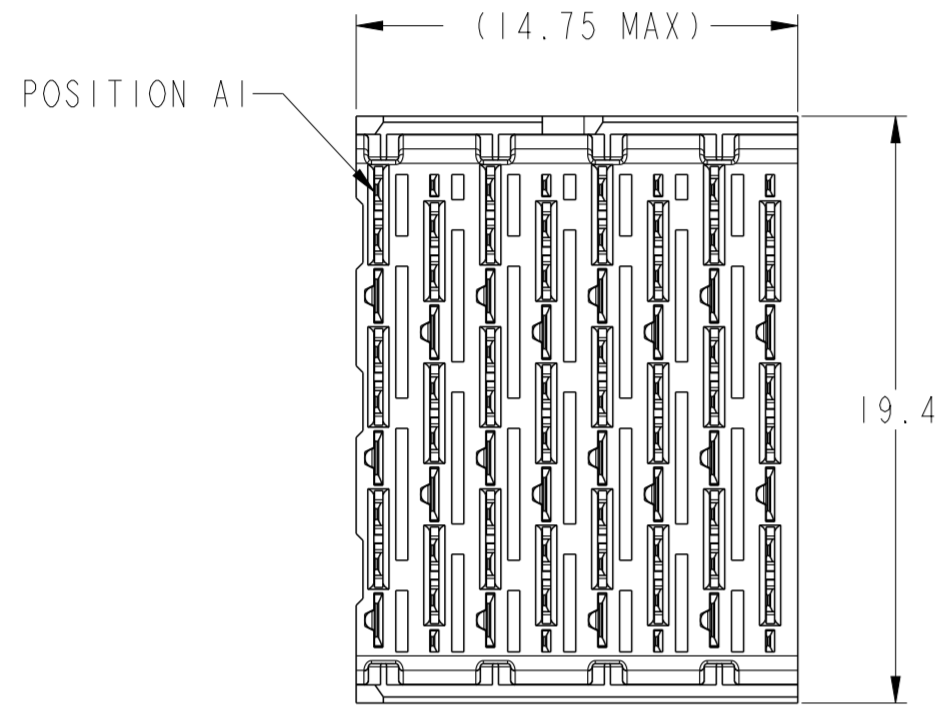
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tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01		←	ecn no	ELX-DG-24191-1	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08						
surface	linear	0.X	±0.2		MODULE ASSEMBLY	cat. no.	10119191	rev	C	
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±2°		VERTICAL HEADER, 8-COLUMN, 3-PAIR					
Product - Customer Drw						sheet 1 of 8				

OPEN (2- WALL) MODULE

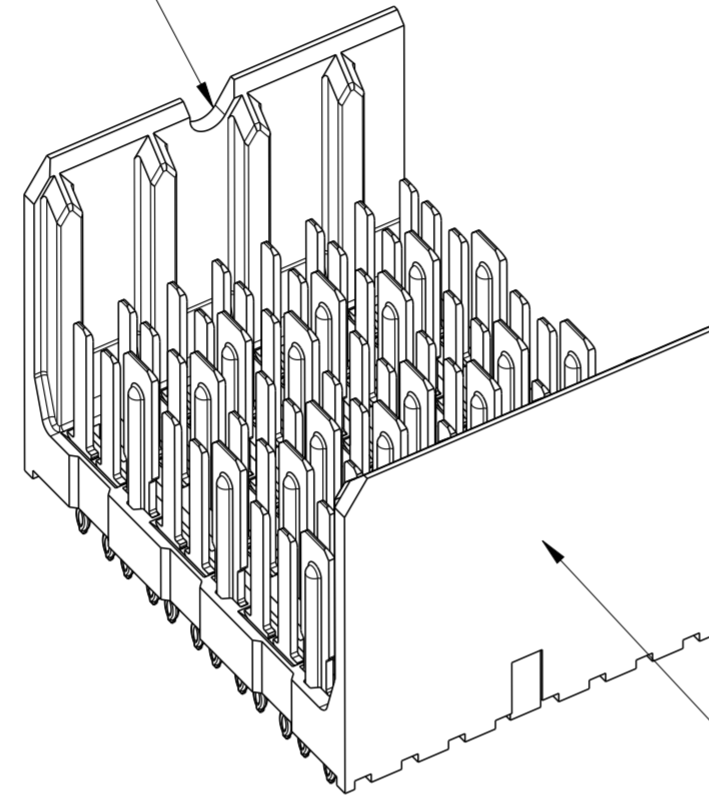
A

B

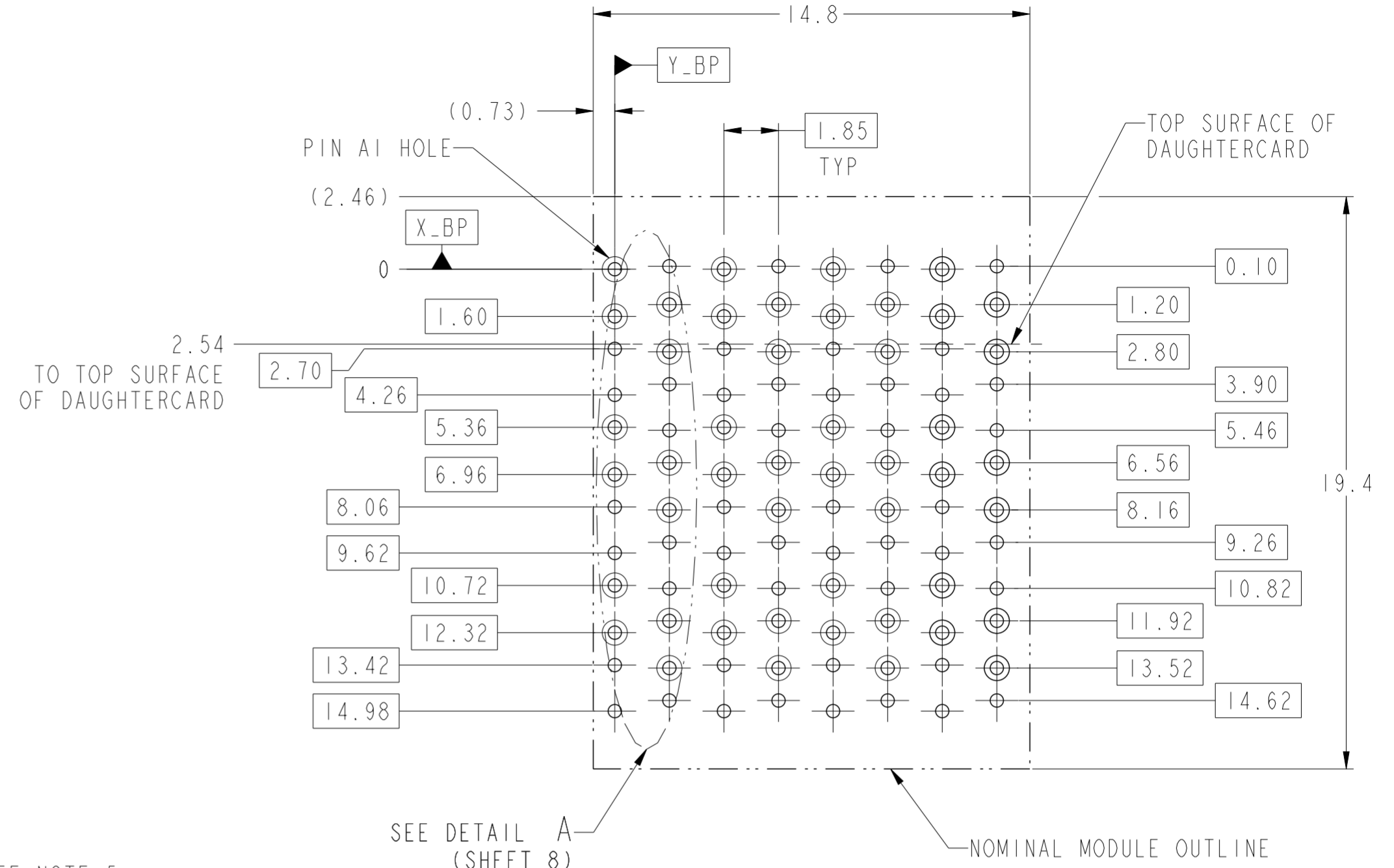
C



SEE NOTE 8



SEE NOTE 5

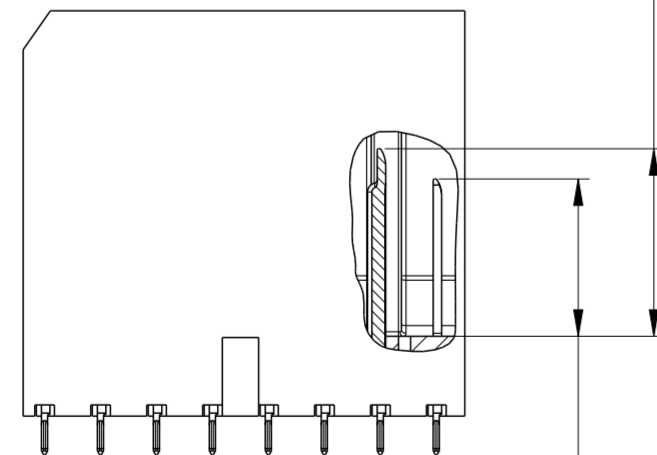


SEE DETAIL A (SHEET 8)

NOMINAL MODULE OUTLINE

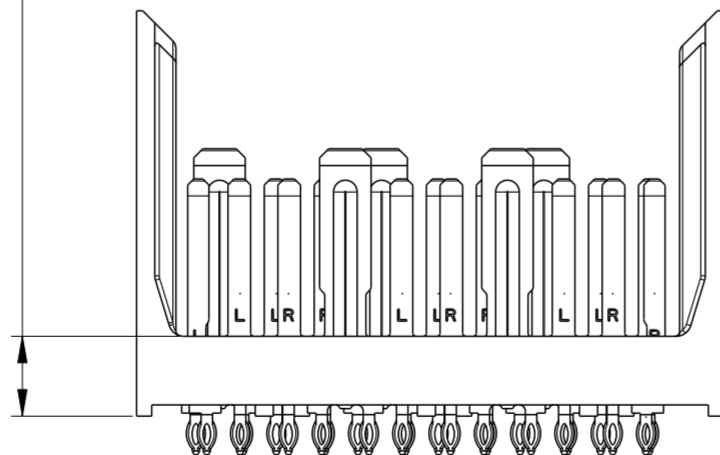
PCB HOLE PATTERN COMPONENT SIDE SCALE 6:1

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



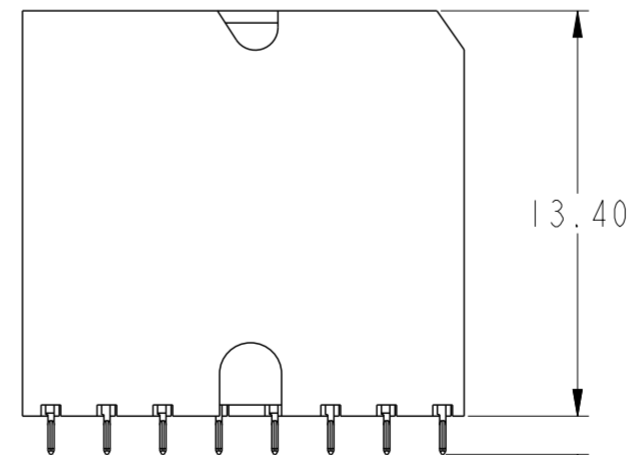
5.2 (3MM SMALL END GROUNDS)  
5.2 (3MM WIPE SIGNALS)  
4.2 (2MM WIPE SIGNALS)  
SEE P/N TREE

2.64±0.10 FROM STANDOFF SURFACE TO MATING SURFACE



13.40

TAIL LENGTH SEE NOTE 12



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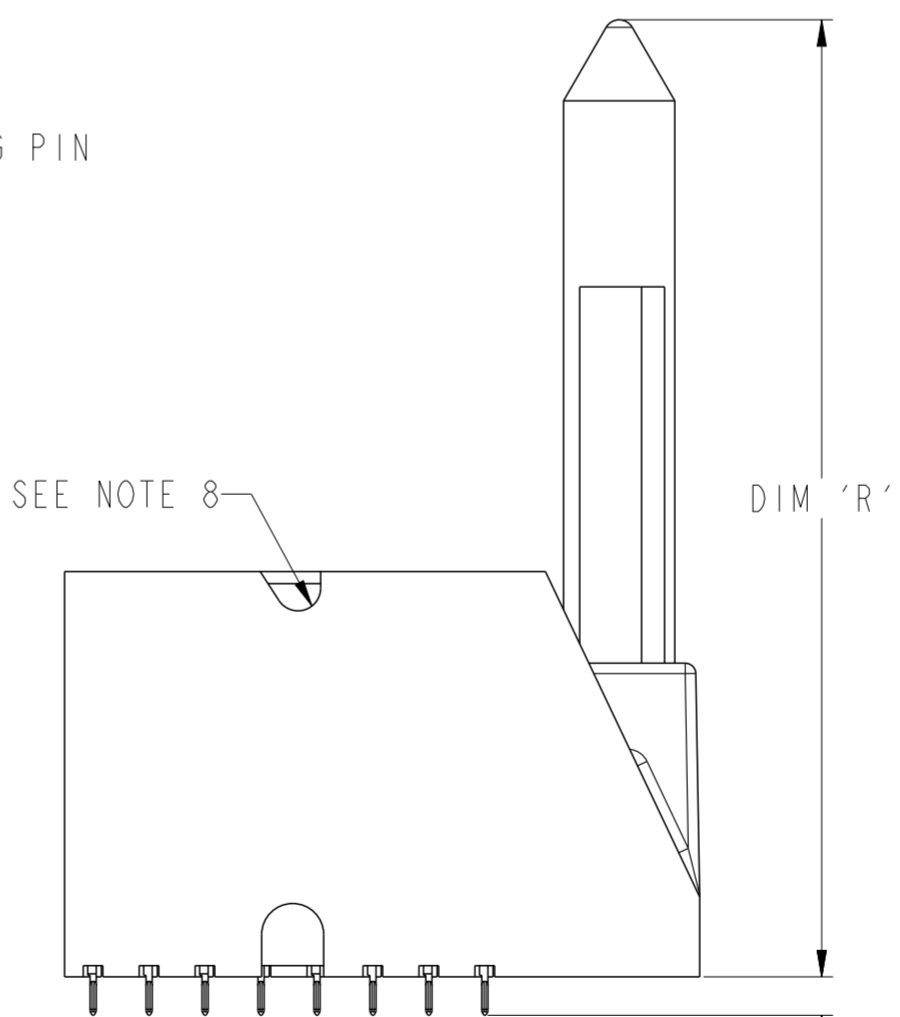
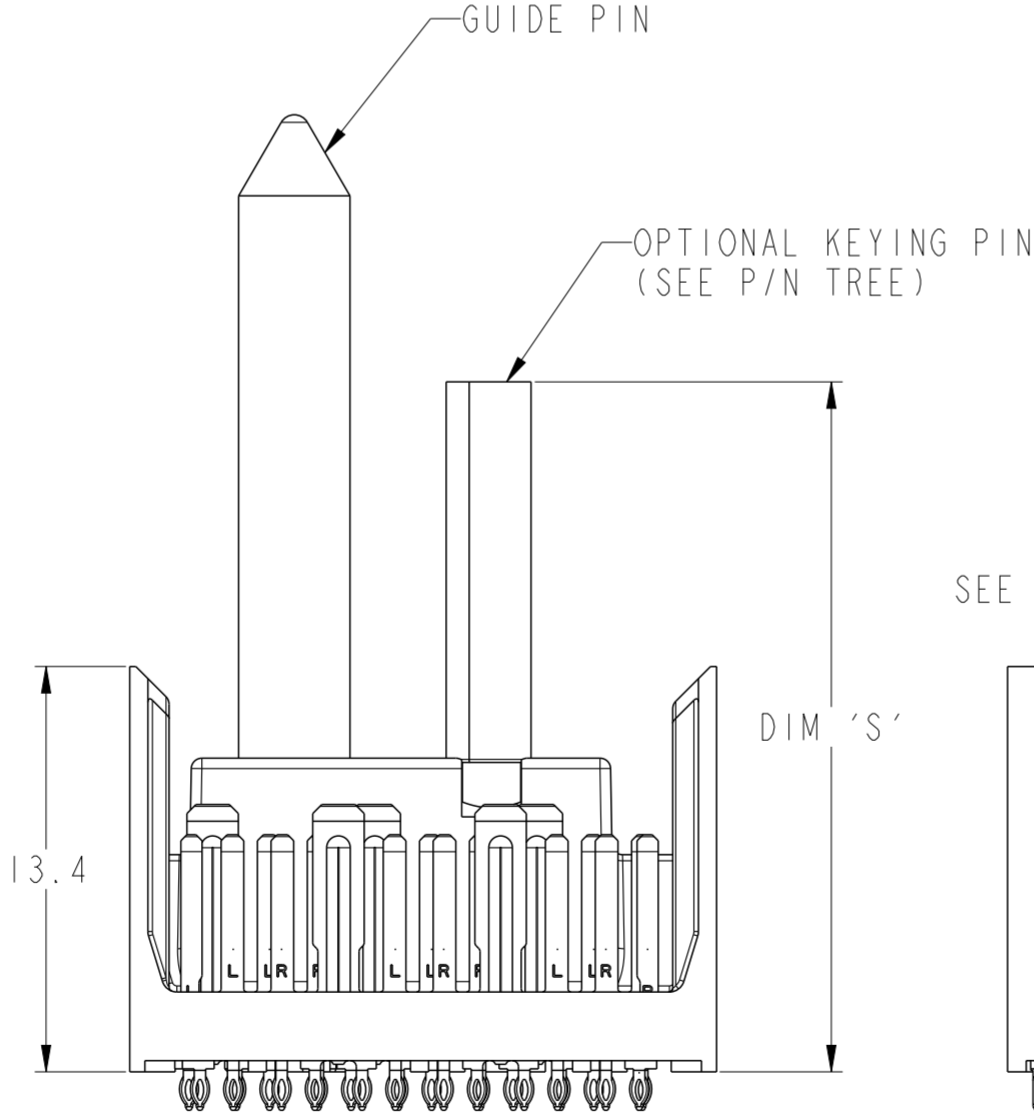
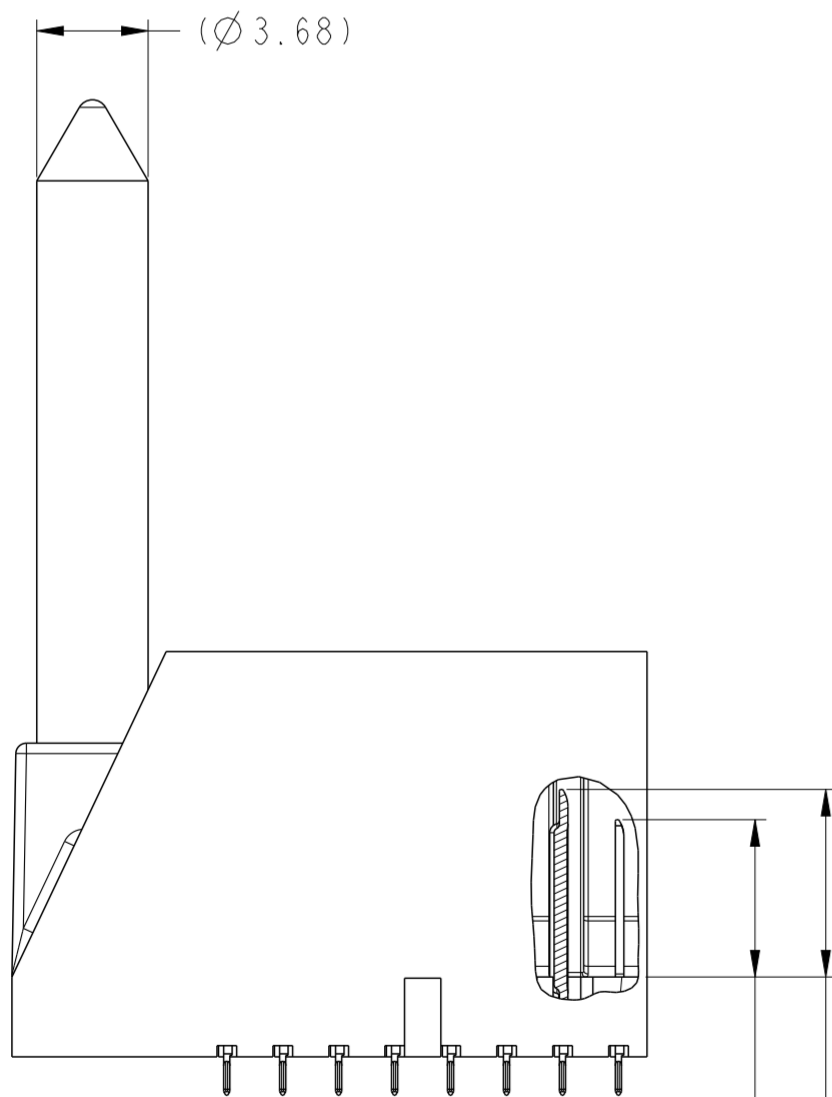
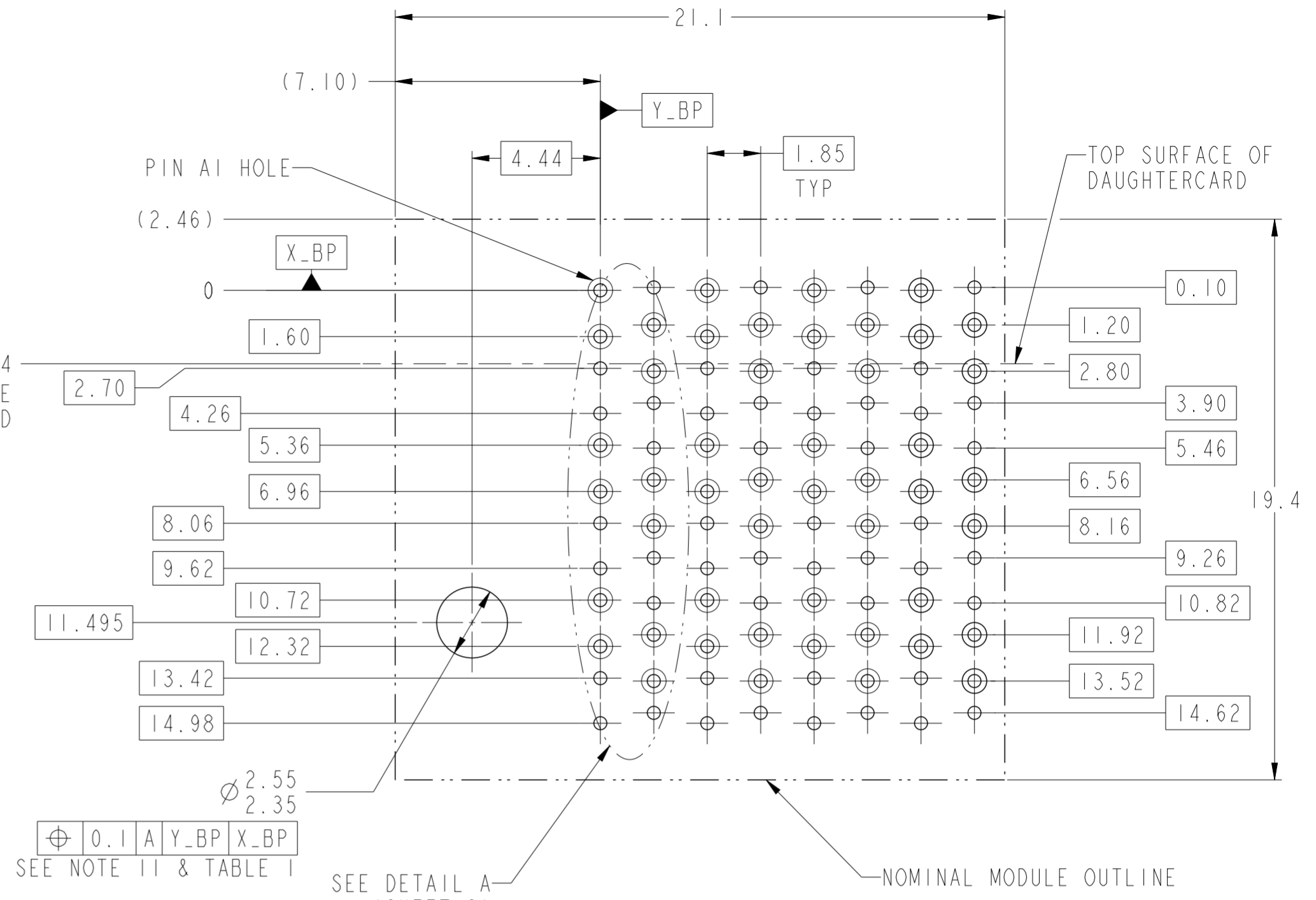
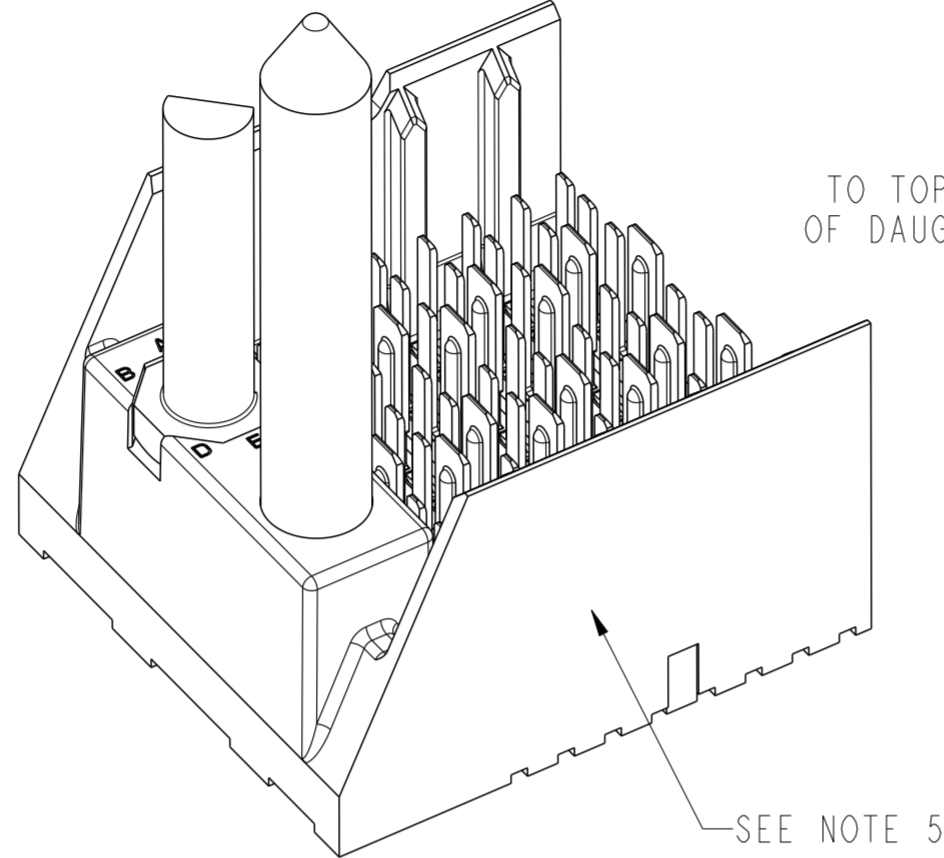
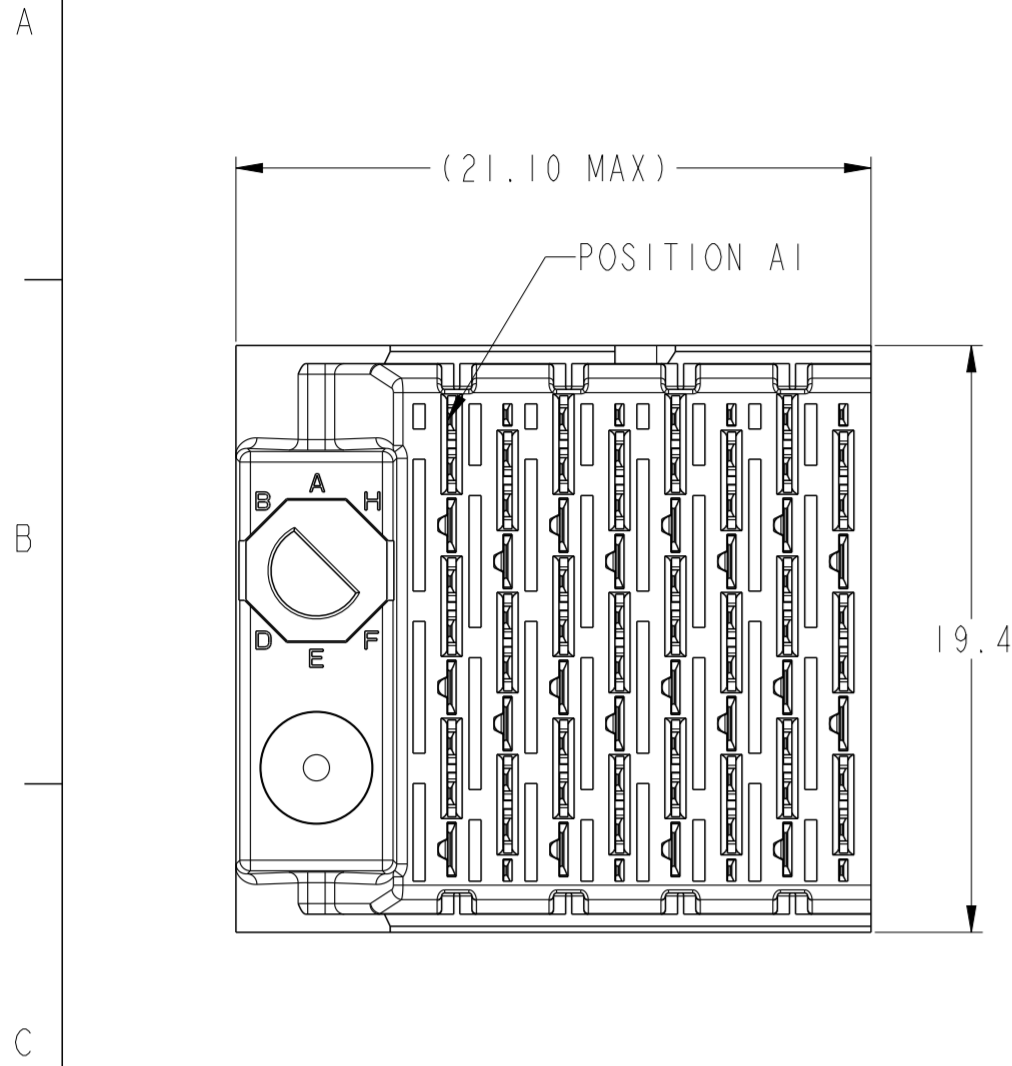
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tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			ecn no	ELX-DG-24191-1	rel level	Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08							
		appr	Pai-Ming Zheng	2016/06/15							
surface	linear	0.X	±0.2		product family XCEDE	title MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 3-PAIR	dwg no 10119191	rev C	cat. no. -	Product - Customer Drw	sheet 2 of 8
	angular	0°	±2°								

PDS: Rev :C

STATUS:Released

Printed: Jun 15, 2016

LEFT POLARIZING/GUIDE MODULE



ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X0X	31.6mm	22.8mm
-X4X	25.7mm	20.0mm

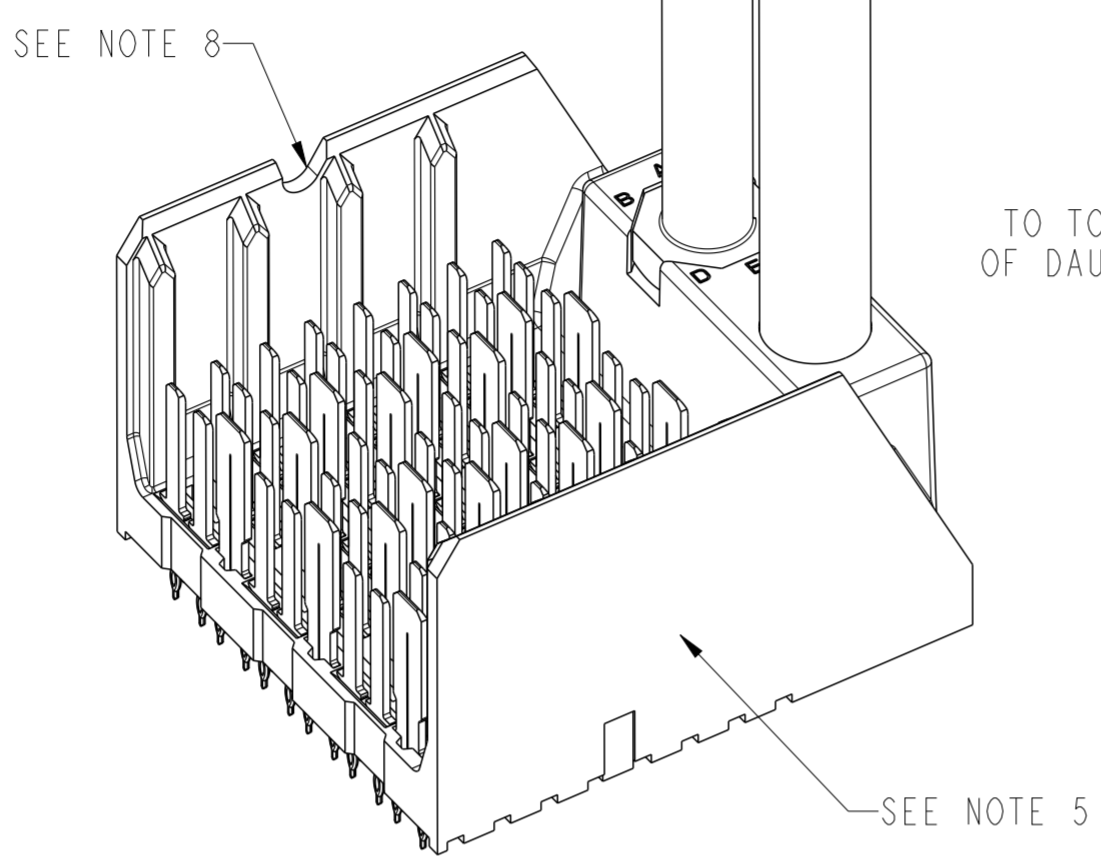
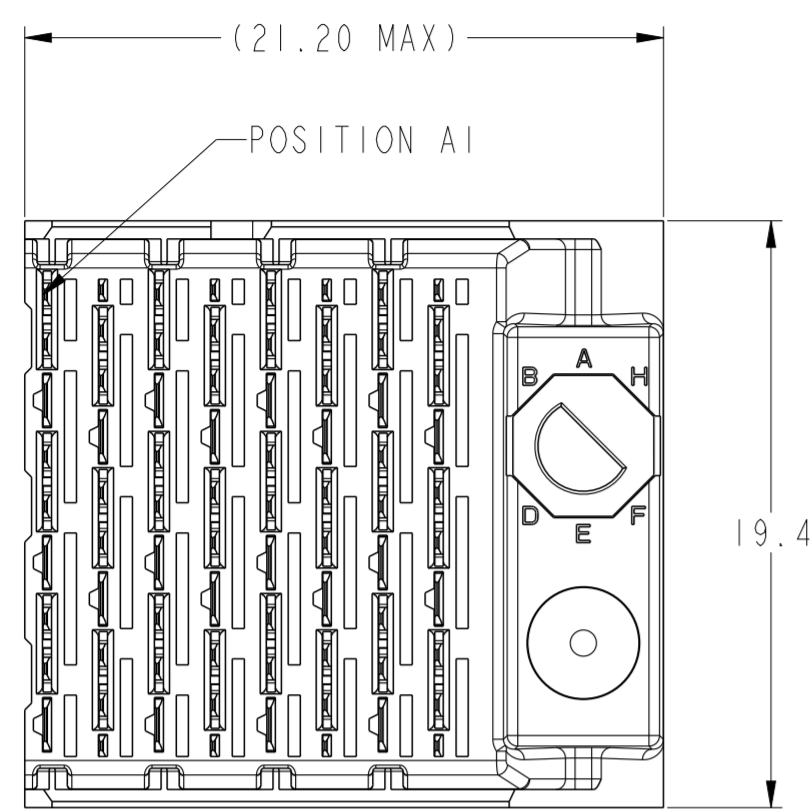
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)

spec ref	-	dr	Roger Ng	2011/11/22	projection	MM	size	A2	scale	5:1	
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			ecn no	ELX-DG-24191-1			
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08				rel level	Released		
surface	linear	appr	Pai-Ming Zheng	2016/06/15	product family	XCED		rel level	Released		
ASME Y14.5	angular	0°	±0.2	±0.10	±0.050			cat. no.	Product - Customer Drw	sheet 3 of 8	
MODULE ASSEMBLY							10119191	rev		C	
VERTICAL HEADER, 8-COLUMN, 3-PAIR							10119191		rev		C

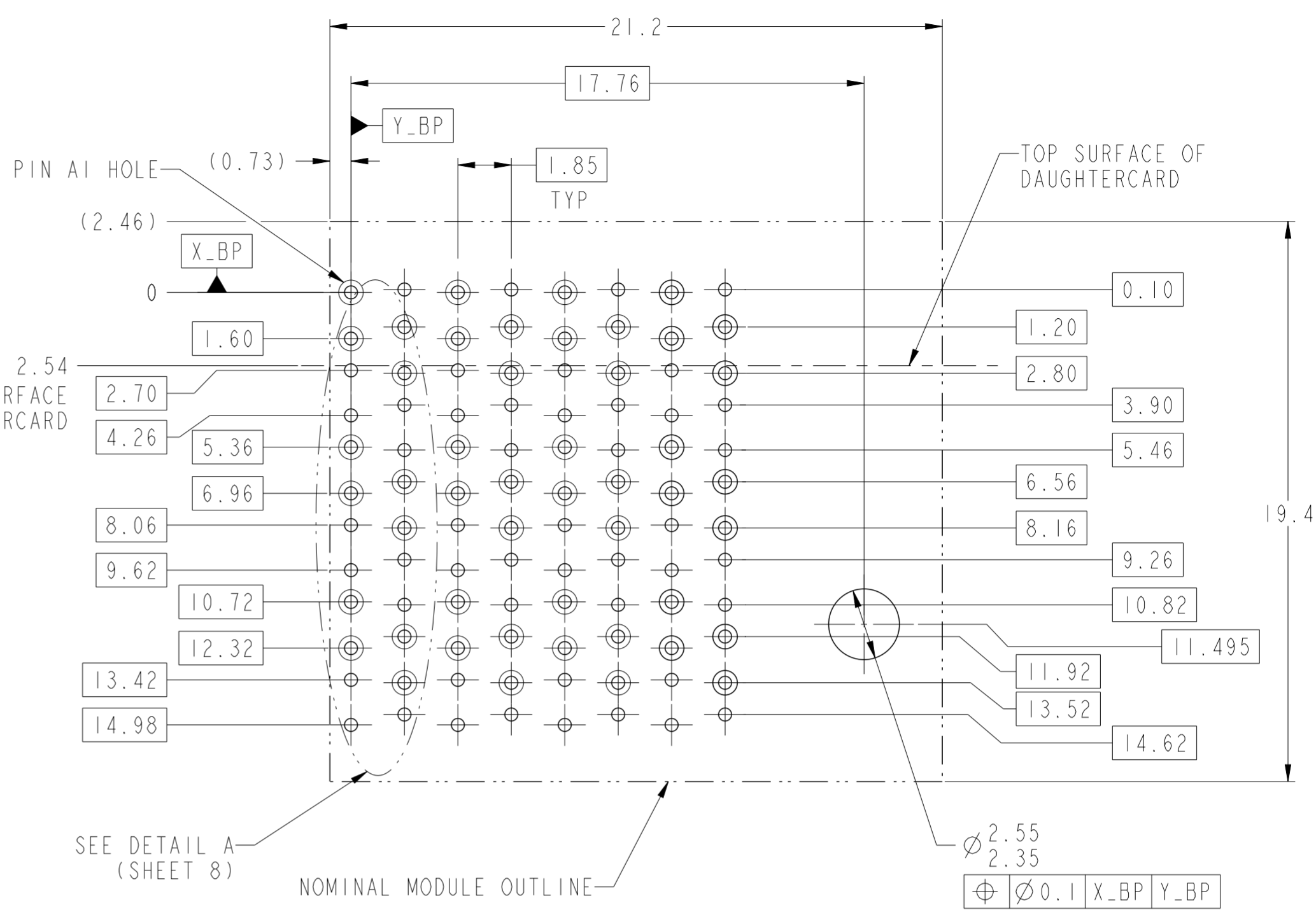
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RIGHT POLARIZING/GUIDE MODULE



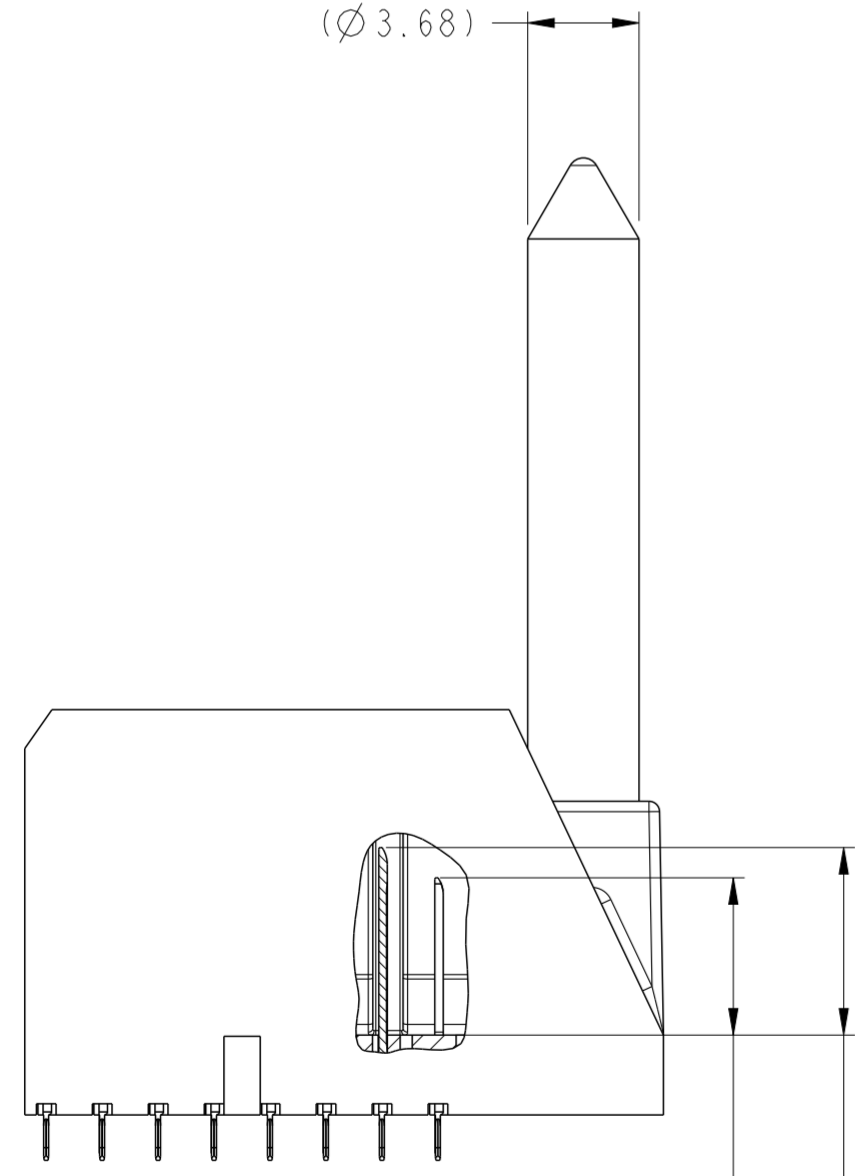
2.54  
TO TOP SURFACE  
OF DAUGHTERCARD



⊕ Ø 0.1 X\_BP Y\_BP  
SEE NOTE 11 & TABLE 1

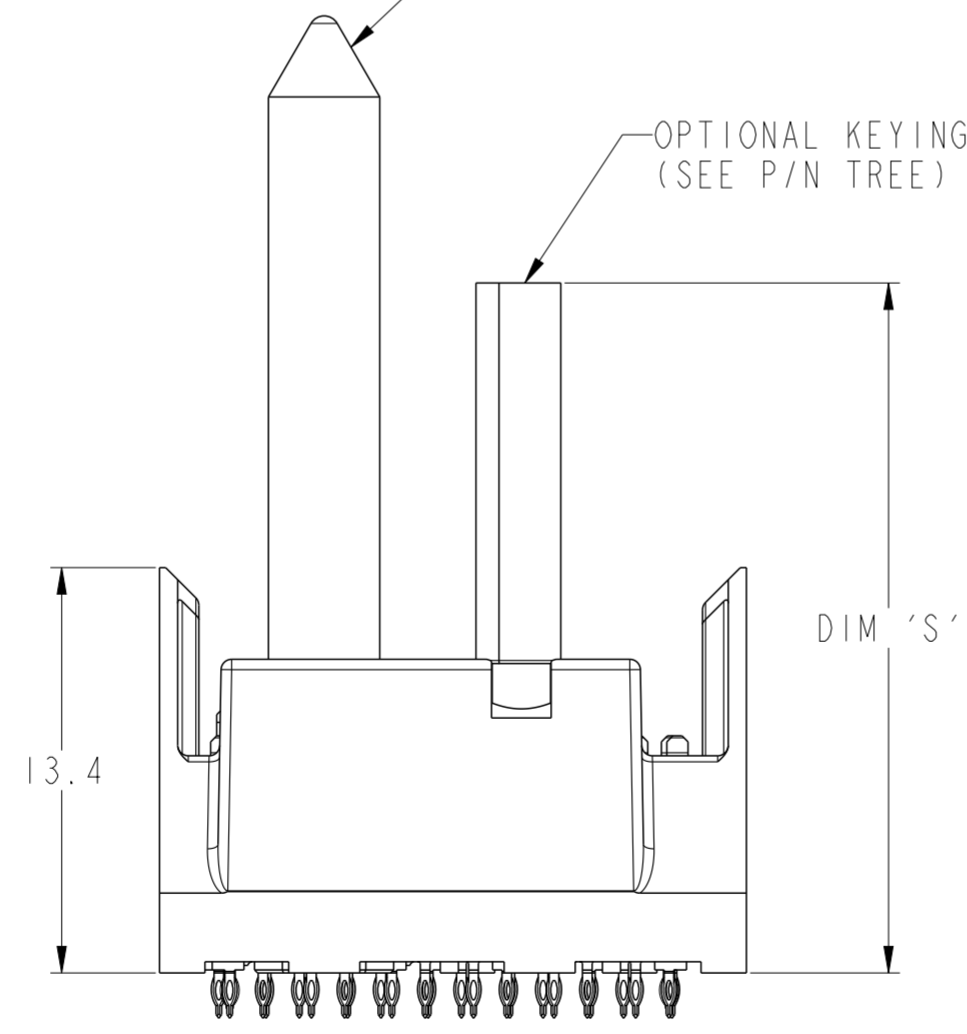
PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

Ø 3.68

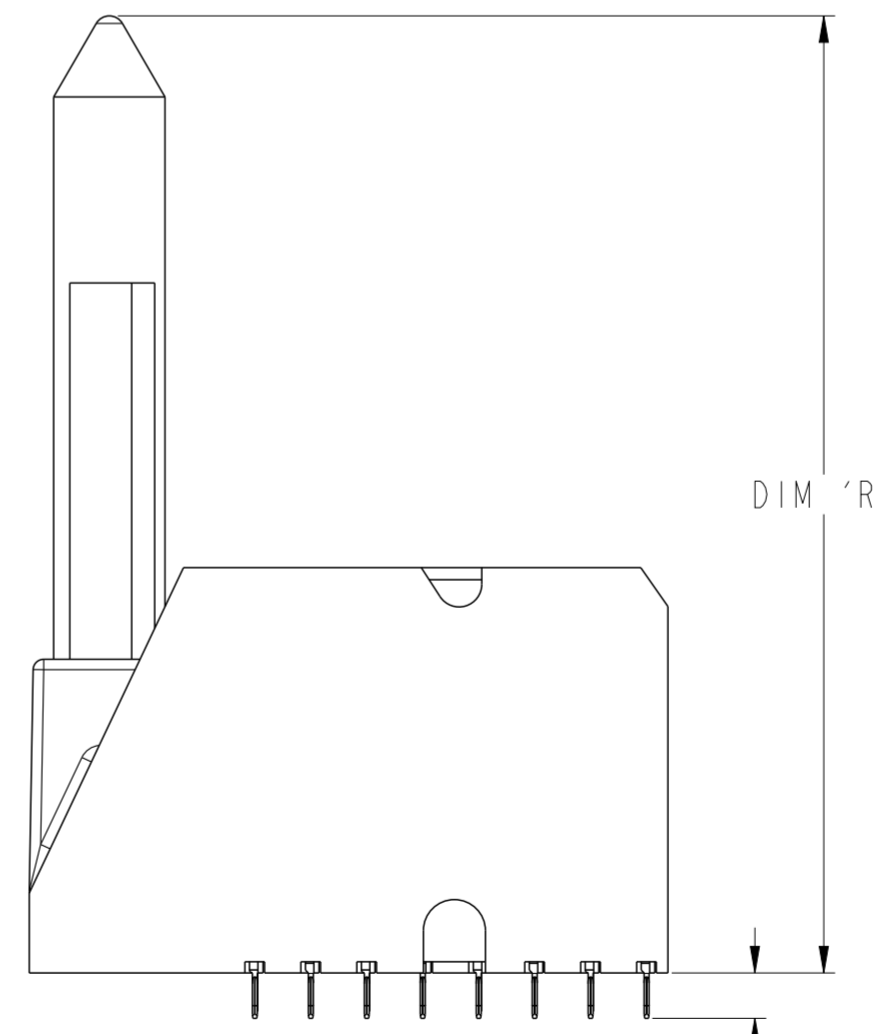


GUIDE PIN

OPTIONAL KEYING PIN  
(SEE P/N TREE)



DIM 'S'



DIM 'R'

TAIL LENGTH  
SEE NOTE 12

ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X0X	31.6mm	22.8mm
-X4X	25.7mm	20.0mm

- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)

spec ref	-	dr	Roger Ng	2011/11/22	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			ecn no	ELX-DG-24191-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08				rel level	Released	
surface	linear	appr	Pai-Ming Zheng	2016/06/15	product family	XCED		rel level	Released	
ASME Y14.5	angular	0°	±2°	0.X ±0.2	Amphenol FCI		title	MODULE ASSEMBLY		
		0.XX ±0.10	0.XXX ±0.050	cat. no.	Product - Customer Drw		dwg no	10119191		
					sheet 4 of 8		rev	C		

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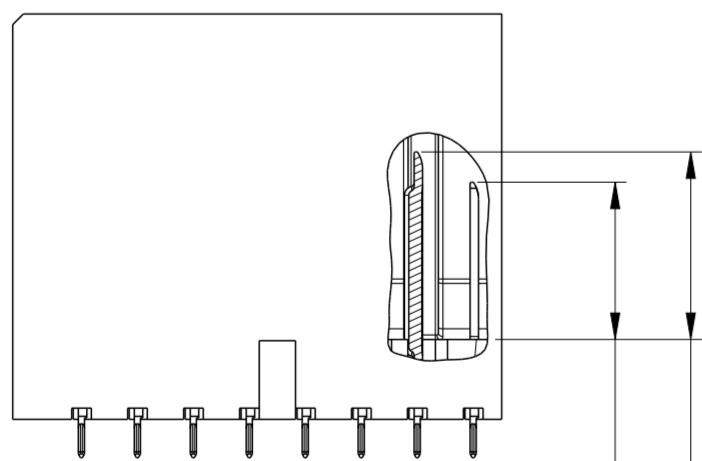
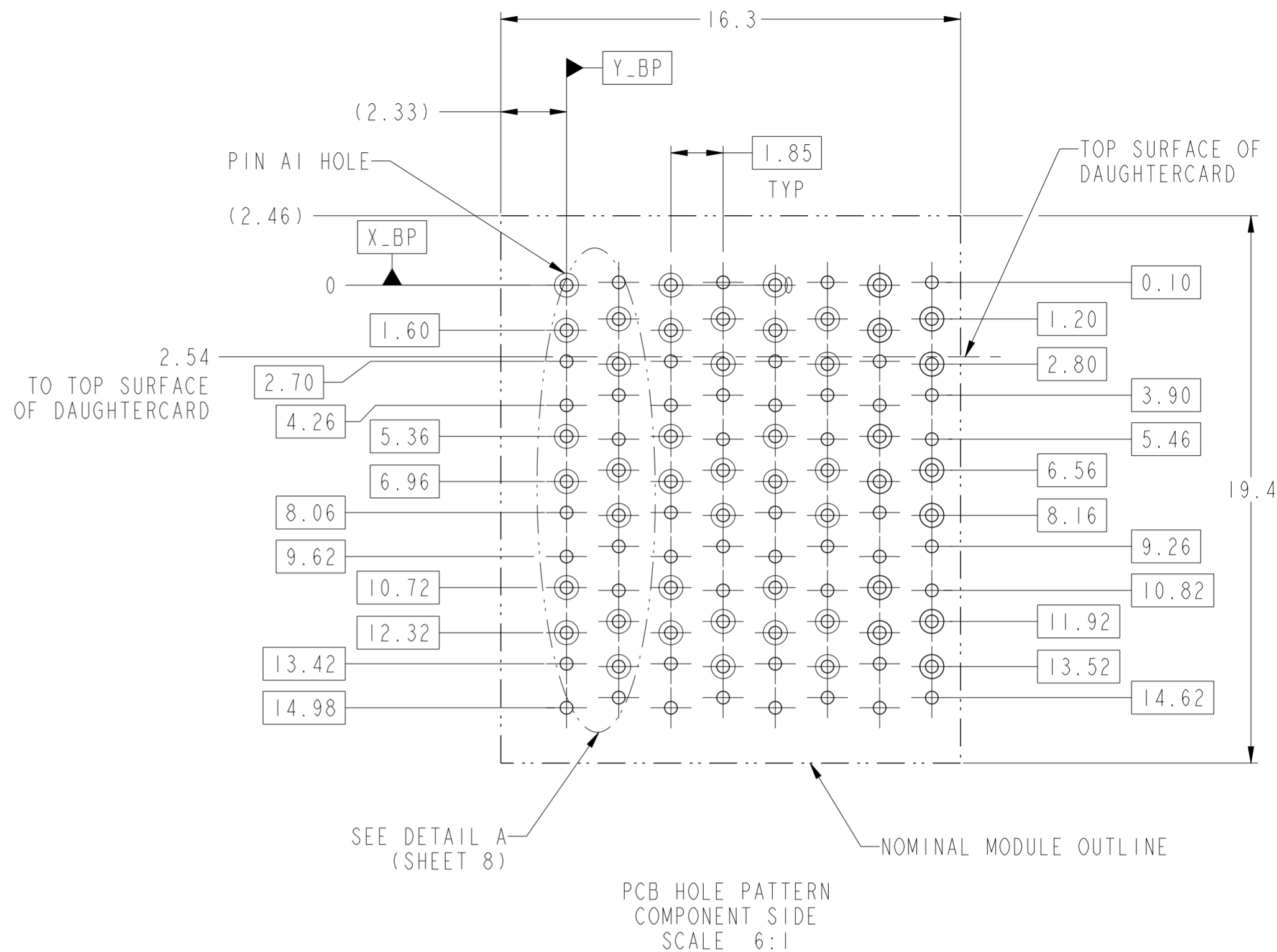
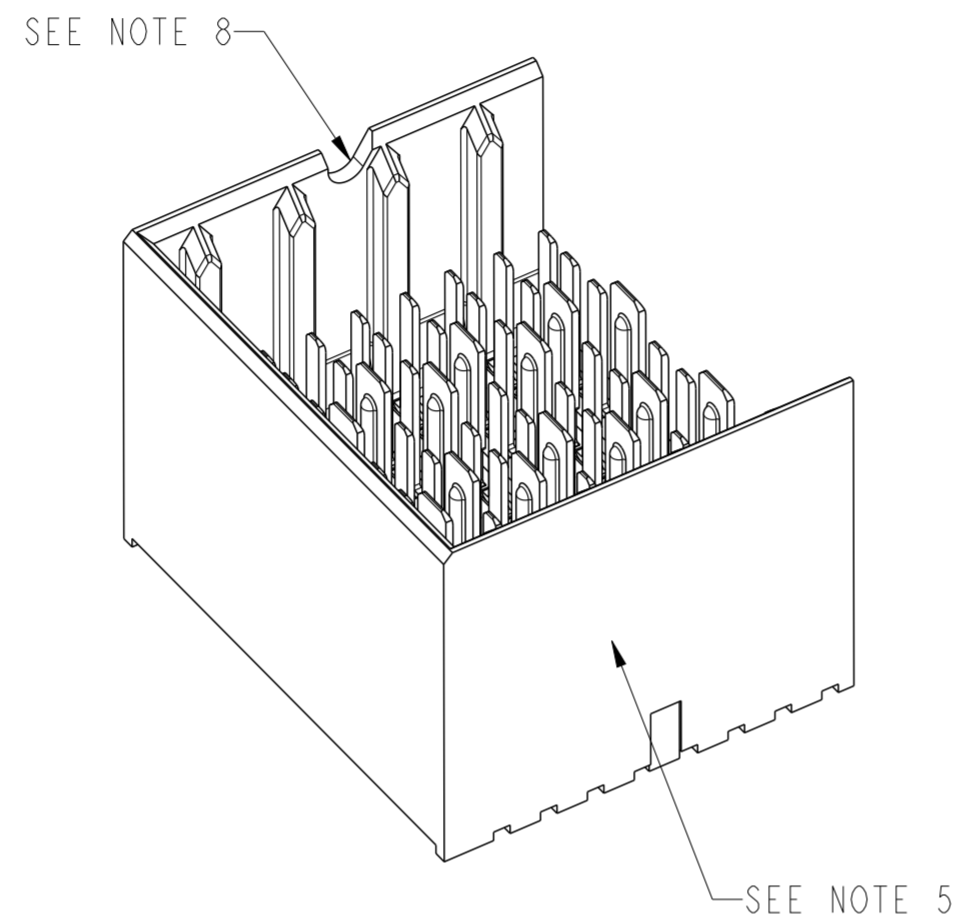
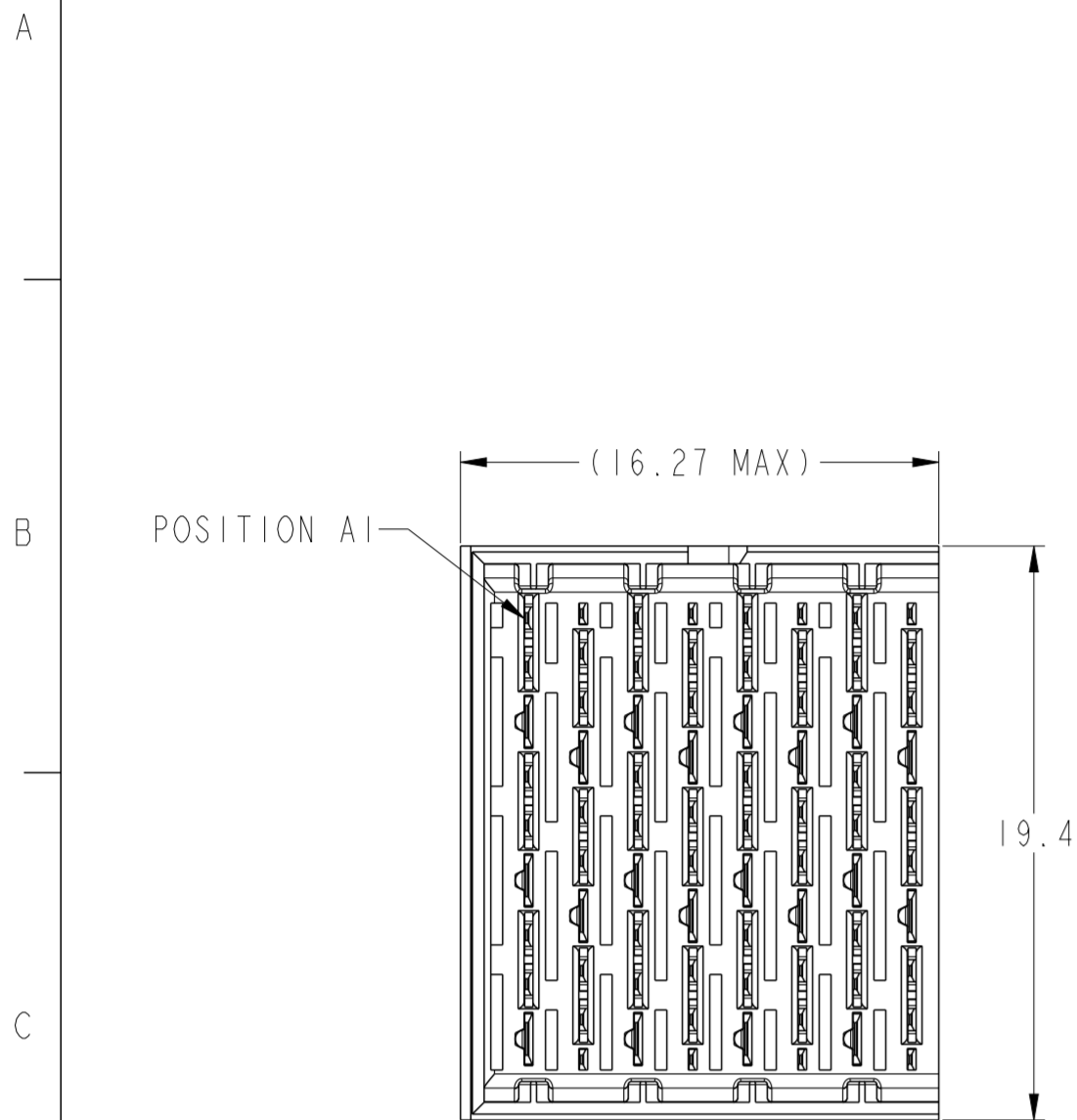
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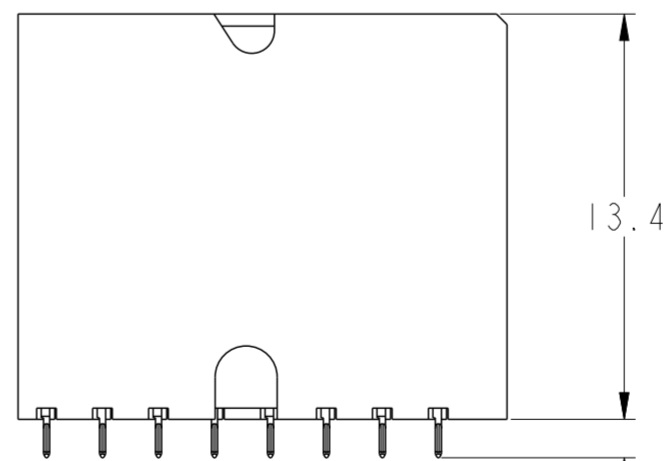
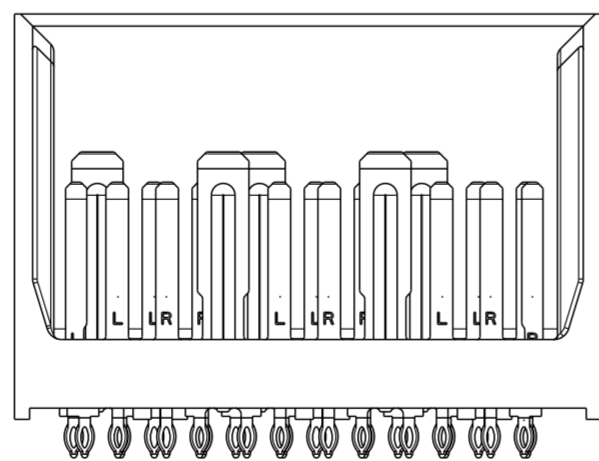


LEFT WALL MODULE



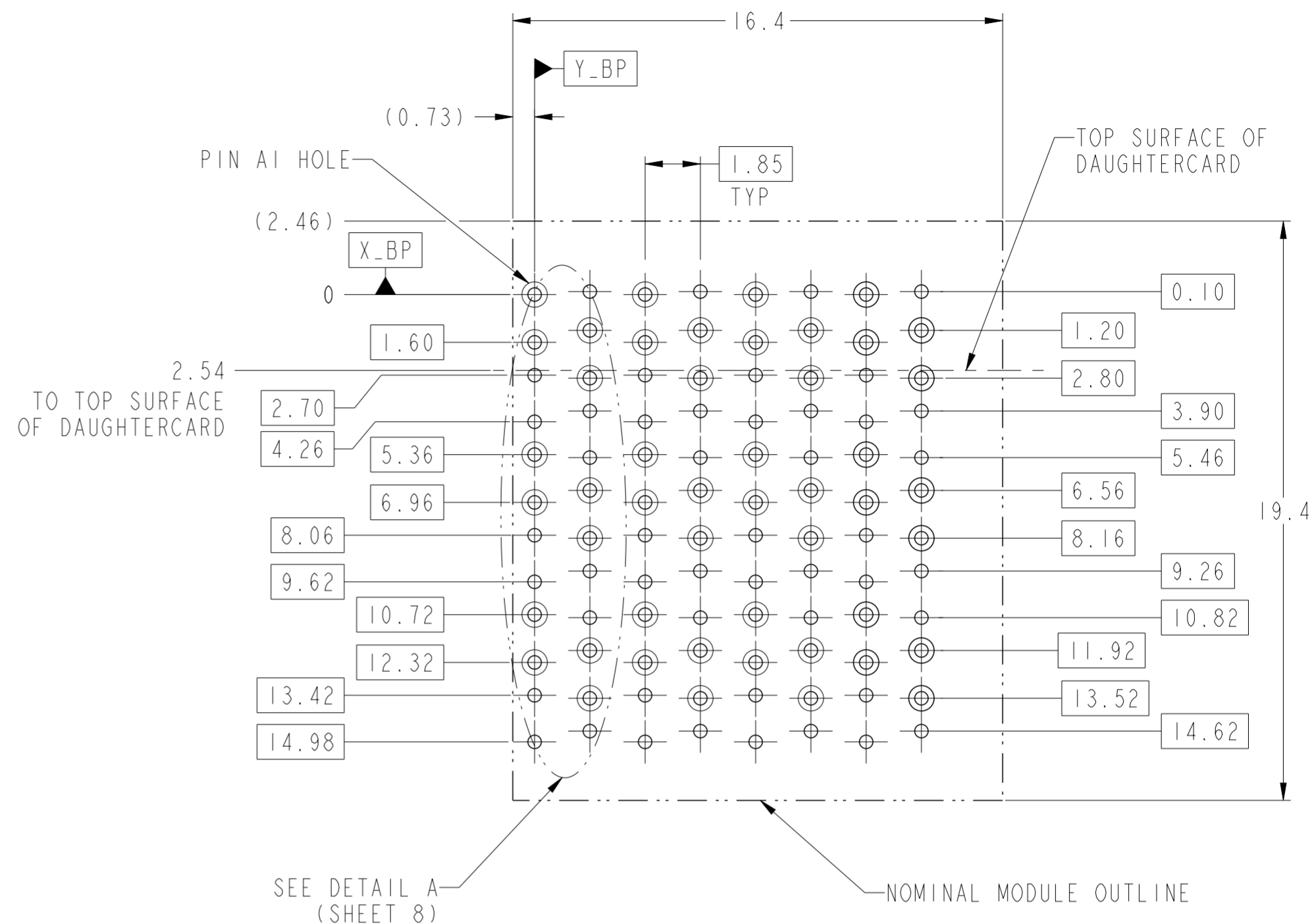
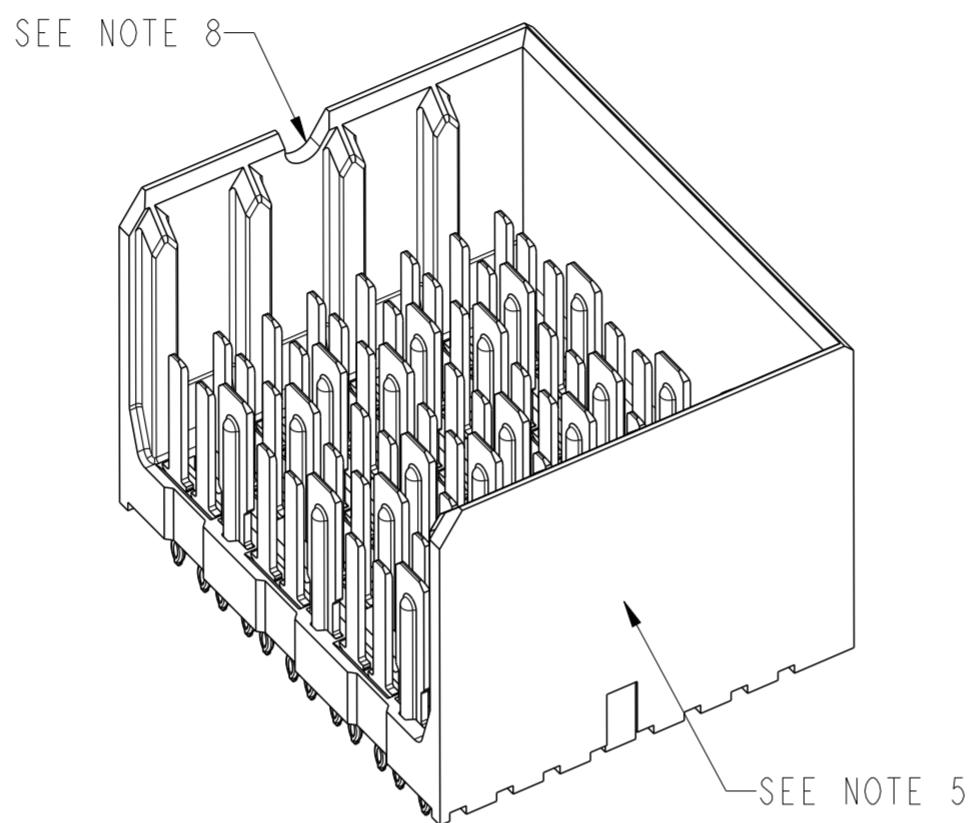
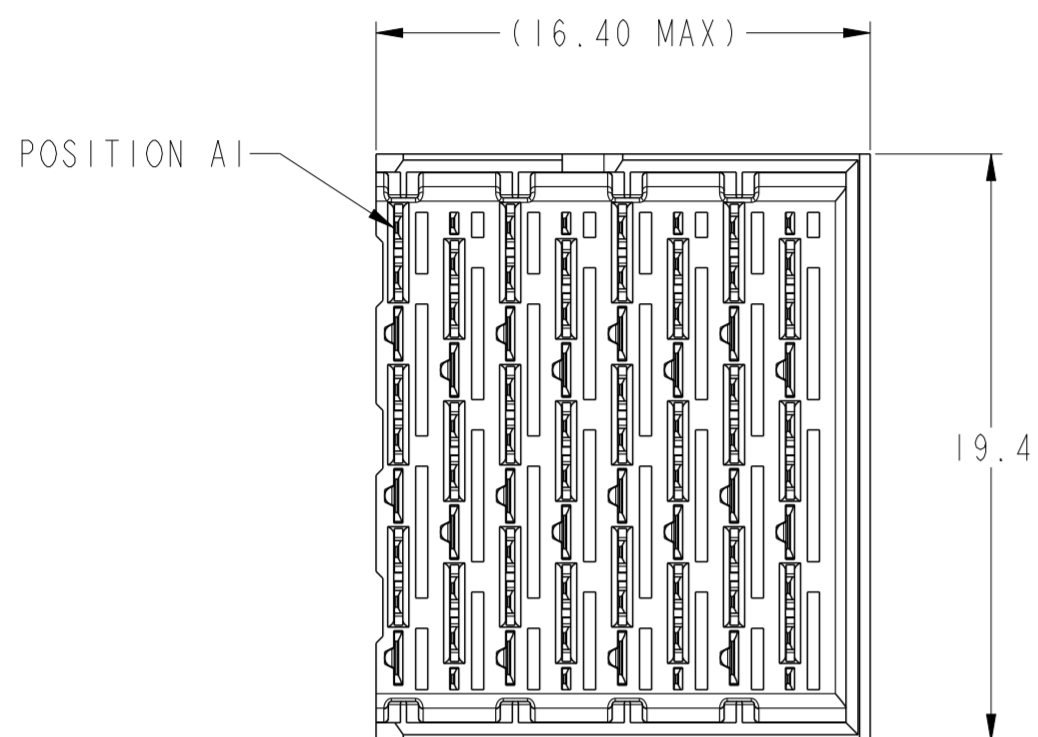
5.2 (3MM SMALL END GROUNDS)  
 5.2 (3MM WIPE SIGNALS)  
 4.2 (2MM WIPE SIGNALS)  
 SEE P/N TREE

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

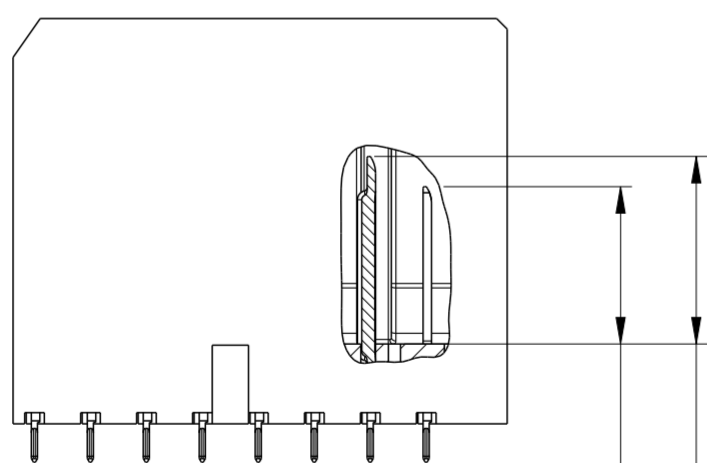


spec ref	-	dr	Roger Ng	2011/11/22	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			ecn no	ELX-DG-24191-1	rel level <b>Released</b>	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08			product family	XCEDE		
surface	ASME Y14.5	appr	Pai-Ming Zheng	2016/06/15			cat. no.	Product - Customer Drw		
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050			title MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 3-PAIR		dwg no 10119191	rev C			
angular	0° ±2°	PDS: Rev : C		STATUS: Released		Printed: Jun 15, 2016				

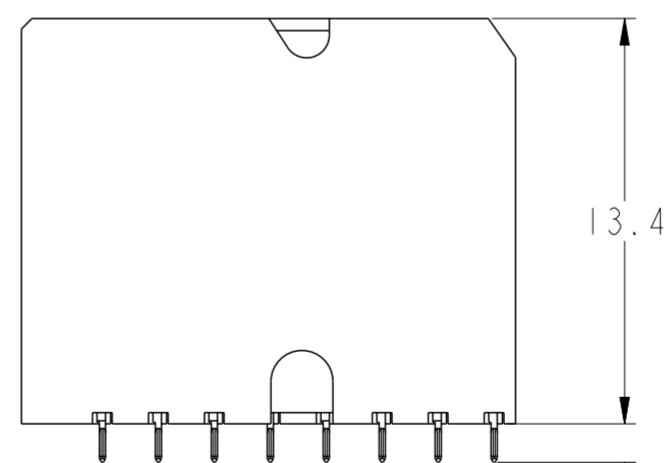
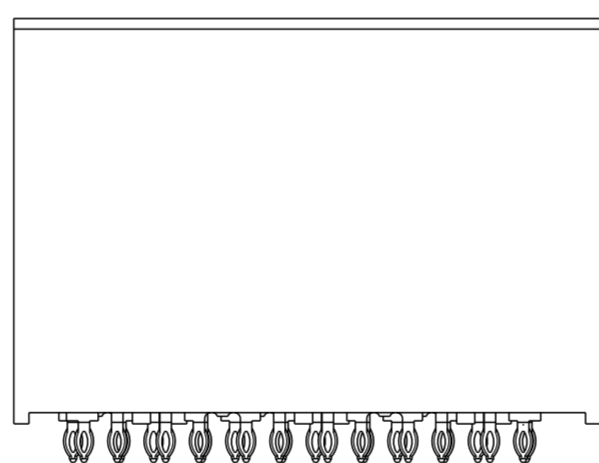
RIGHT WALL MODULE



PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1



- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)



TAIL LENGTH  
SEE NOTE 12

spec ref	-	dr	Roger Ng	2011/11/22	projection	MM	size	A2	scale	4:1		
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			ecn no	ELX-DG-24191-1	rel level <b>Released</b>			
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08			product family	XCEDE				
surface	linear	0.X	±0.2	0.XX			±0.10	0.XXX		±0.050	Amphenol FCI	MODULE ASSEMBLY
	angular	0°	±2°	appr	Pai-Ming Zheng	2016/06/15	cat. no.	-	Product - Customer Drw	sheet 6 of 8		

FOUR WALL MODULE

A

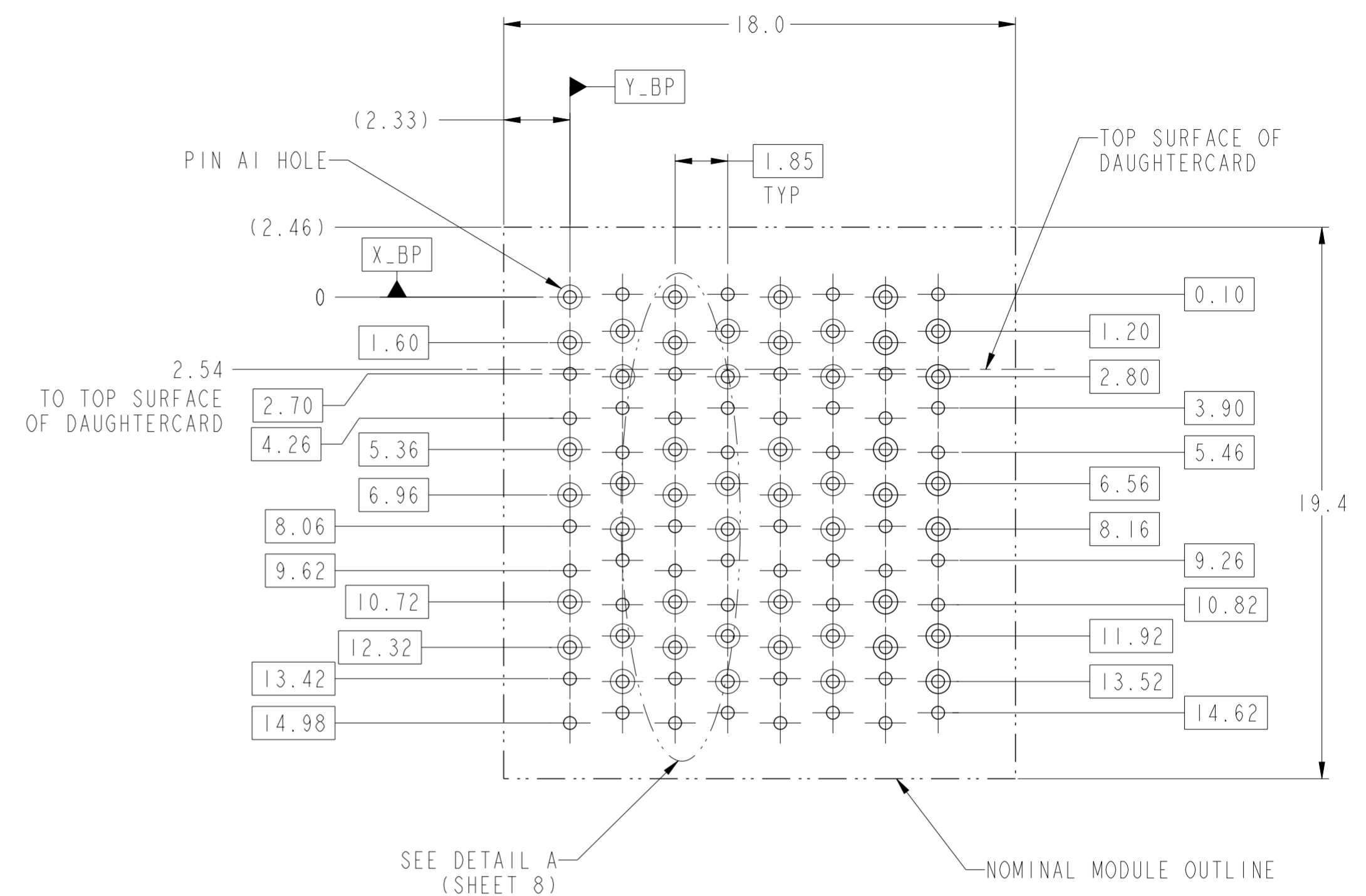
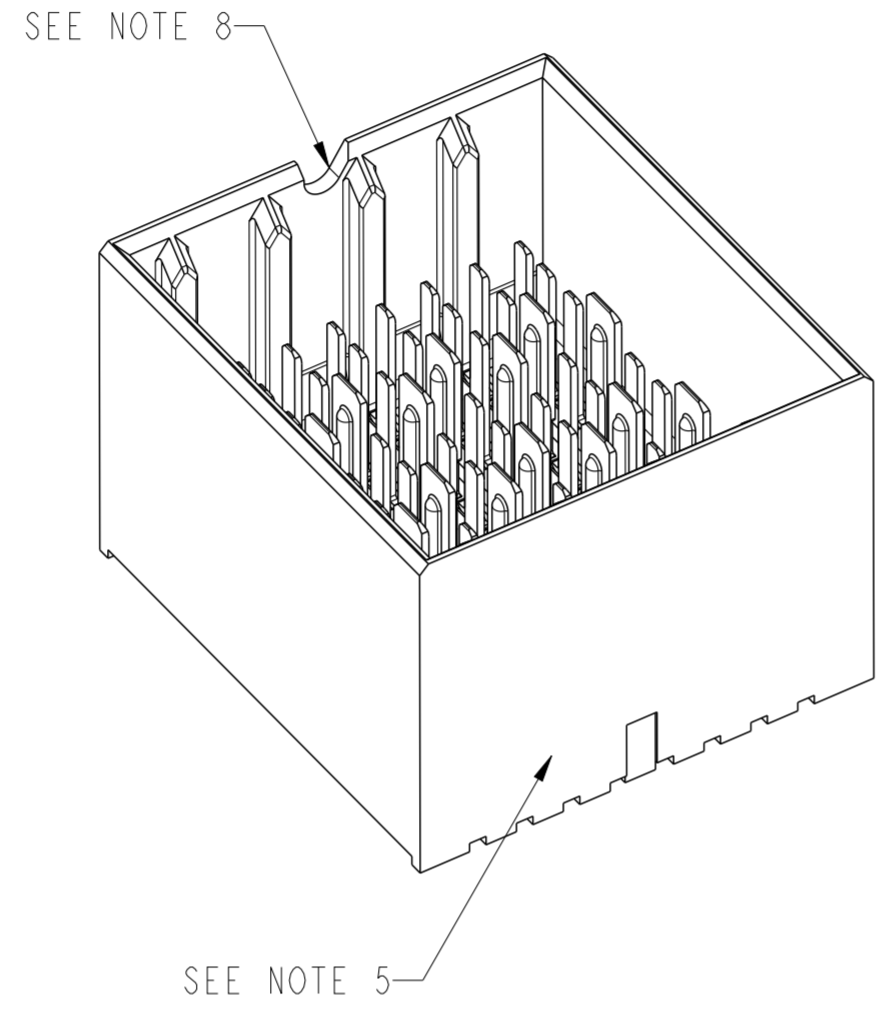
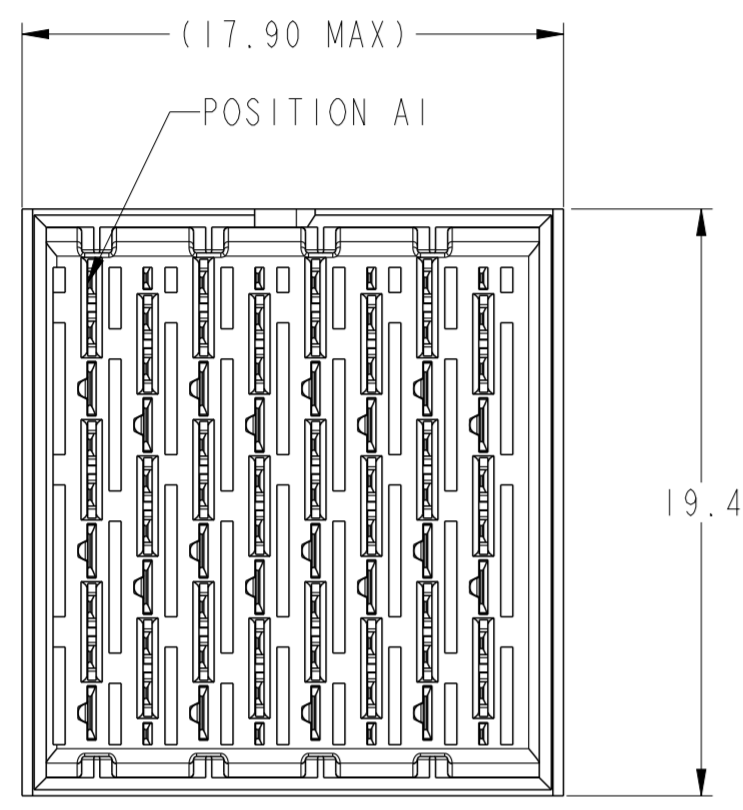
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C

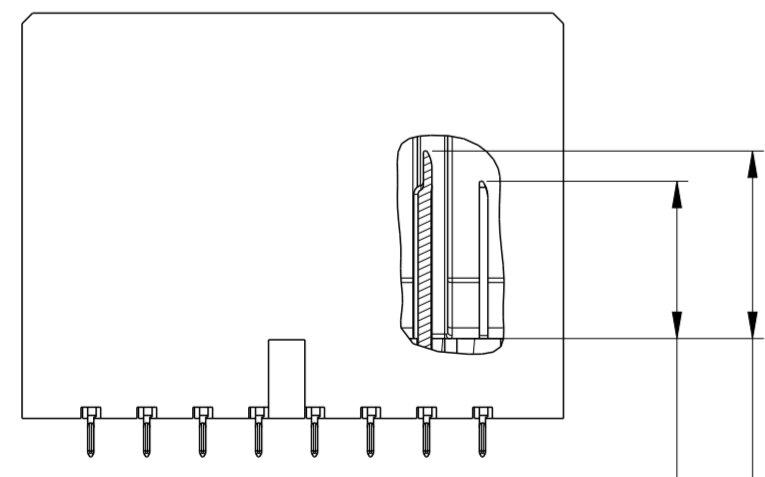
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E

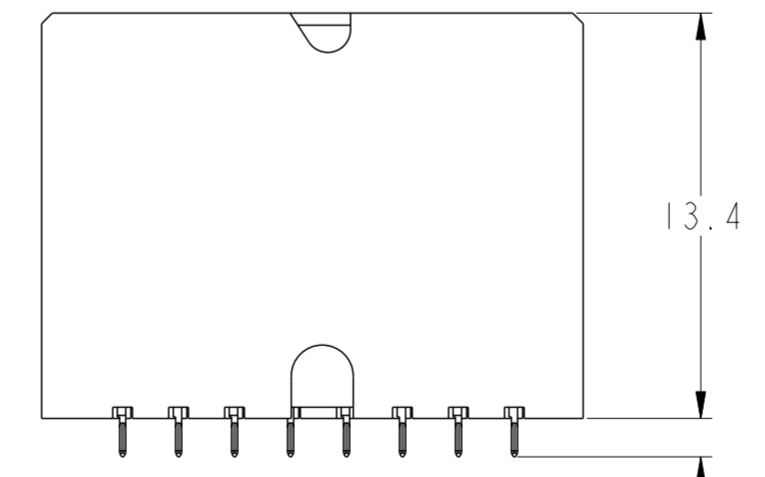
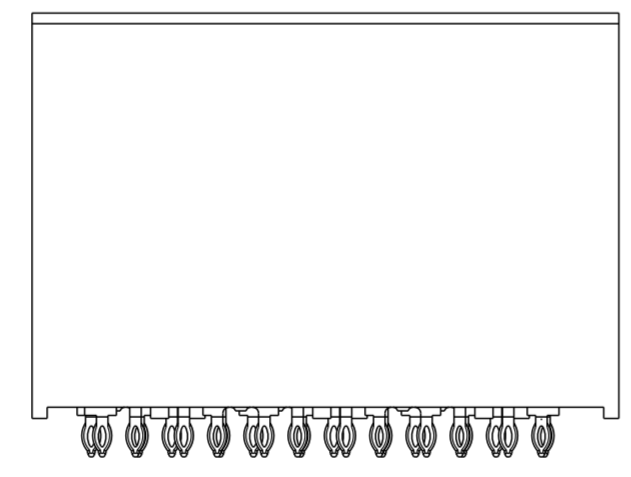
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PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1



- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)



TAIL LENGTH  
SEE NOTE 12

spec ref	-	dr	Roger Ng	2011/11/22	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			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	0.XX			±0.10	0.XXX		±0.050
ASME Y14.5		appr	Pai-Ming Zheng	2016/06/15			<b>Amphenol FCI</b> MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 3-PAIR	cat. no. Product - Customer Drw	sheet 7 of 8	

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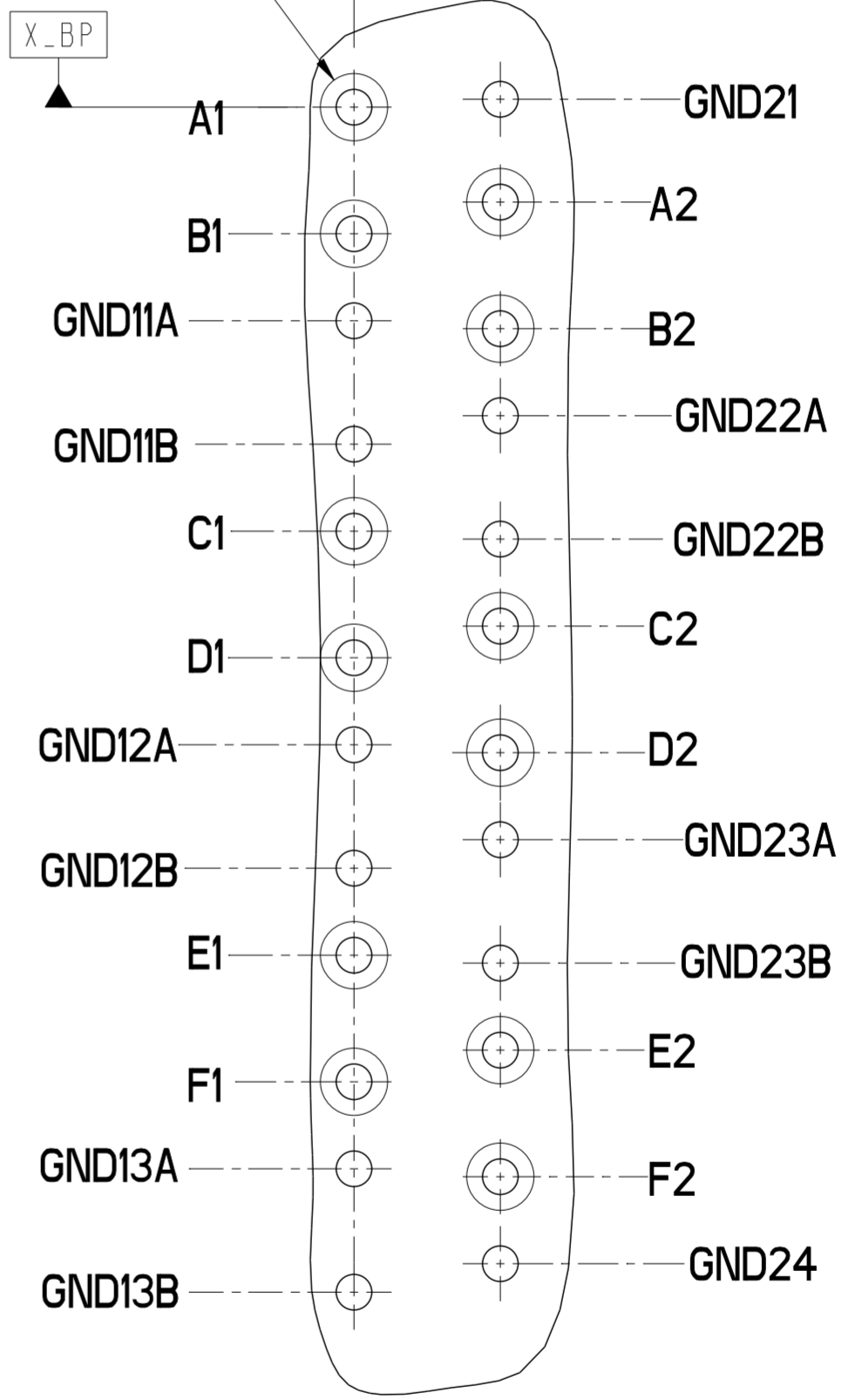
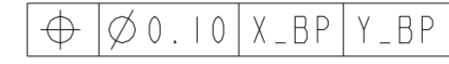
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TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL		
COMPLIANT PIN DRILL	PTH	PAD
∅0.55 [0.0217"]	∅0.45±0.05	∅0.85
∅0.45 [0.0177"]	∅0.36±0.05	∅0.75

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 THE 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 (LF), OR TIN-LEAD ALLOY OVER NICKEL (NON-LF). 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. OPTIMAL 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 ∅0.55[0.0217"]COMPLIANT PIN DRILL  
TAIL LENGTH=1.5mm FOR ∅0.45[0.0177"]COMPLIANT PIN DRILL

REFER TO TABLE 3 FOR PTH, DRILL & PAD SIZES



DETAIL A  
SCALE 12:1

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spec ref	-	dr	Roger Ng	2011/11/22	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/01			ecn no	ELX-DG-24191-1	rel level <b>Released</b>	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Heaven Cen	2016/06/08			product family	-		
surface	ASME Y14.5	appr	Pai-Ming Zheng	2016/06/15			title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 3-PAIR		dwg no
					cat. no.	-	Product - Customer Drw	sheet 8 of 8		

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