

1 0 0 9 | 8 3 6 - X 0 J - X X X L 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
4	STANDARD GUIDE PIN MACHINED, 25.7mm

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"]

TABLE 1: OPTIONAL PCB HOLE SIZE (SEE NOTE 11)

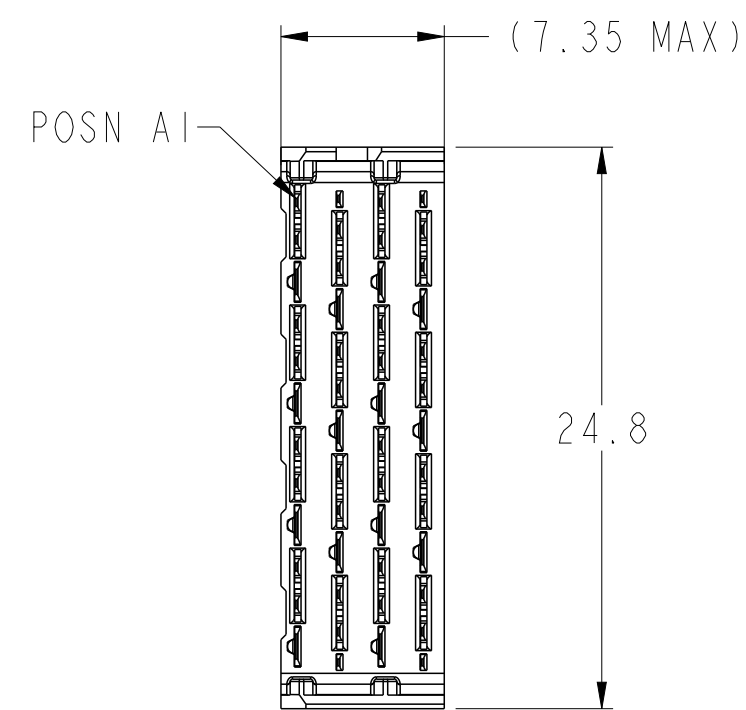
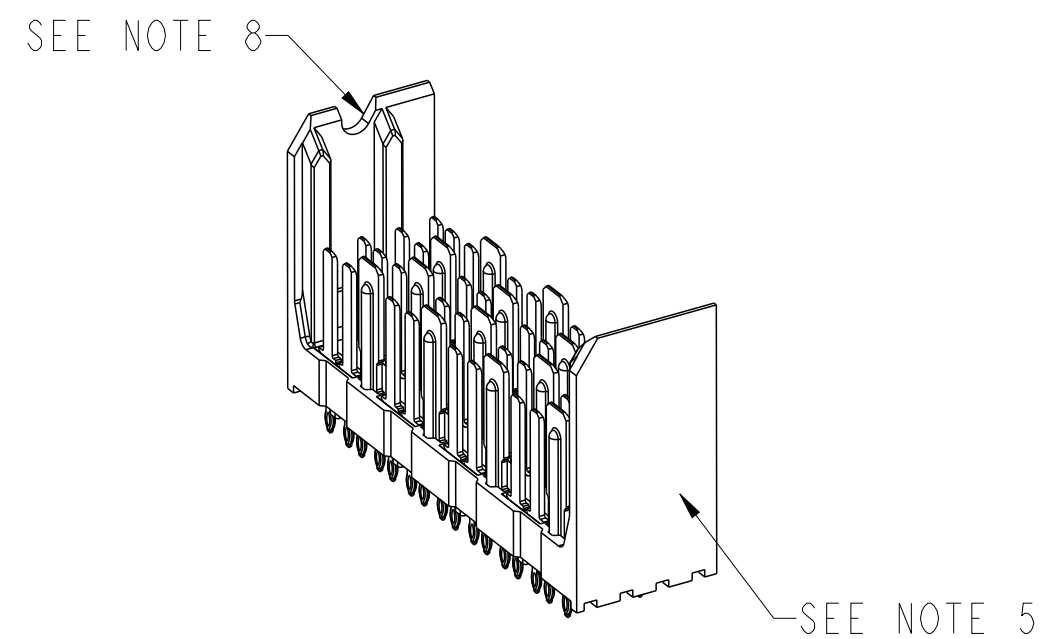
	GROUNDED	UNGROUNDED
FINISHED	Ø2.35-2.55	Ø2.35-2.55
PAD	Ø5.50	N/A
PLATED	YES	NO
DRILL (mm/in)	2.58 /.1015	2.44 /.096

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

spec ref		SEE NOTES		dr		Jim Swain	2010/04/12		projection		MM		size		A2	scale		4:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng		Sandar 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		XCede								
surface			linear	0.X	±0.2				title		MODULE ASSEMBLY		dwg no		10091836		rev		E
				0.XX	±0.10														
ASME Y14.5				0.XXX	±0.050														
		angular	0°	±°		www.fci.com		cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 1 of 8					

OPEN (2-WALL) MODULE

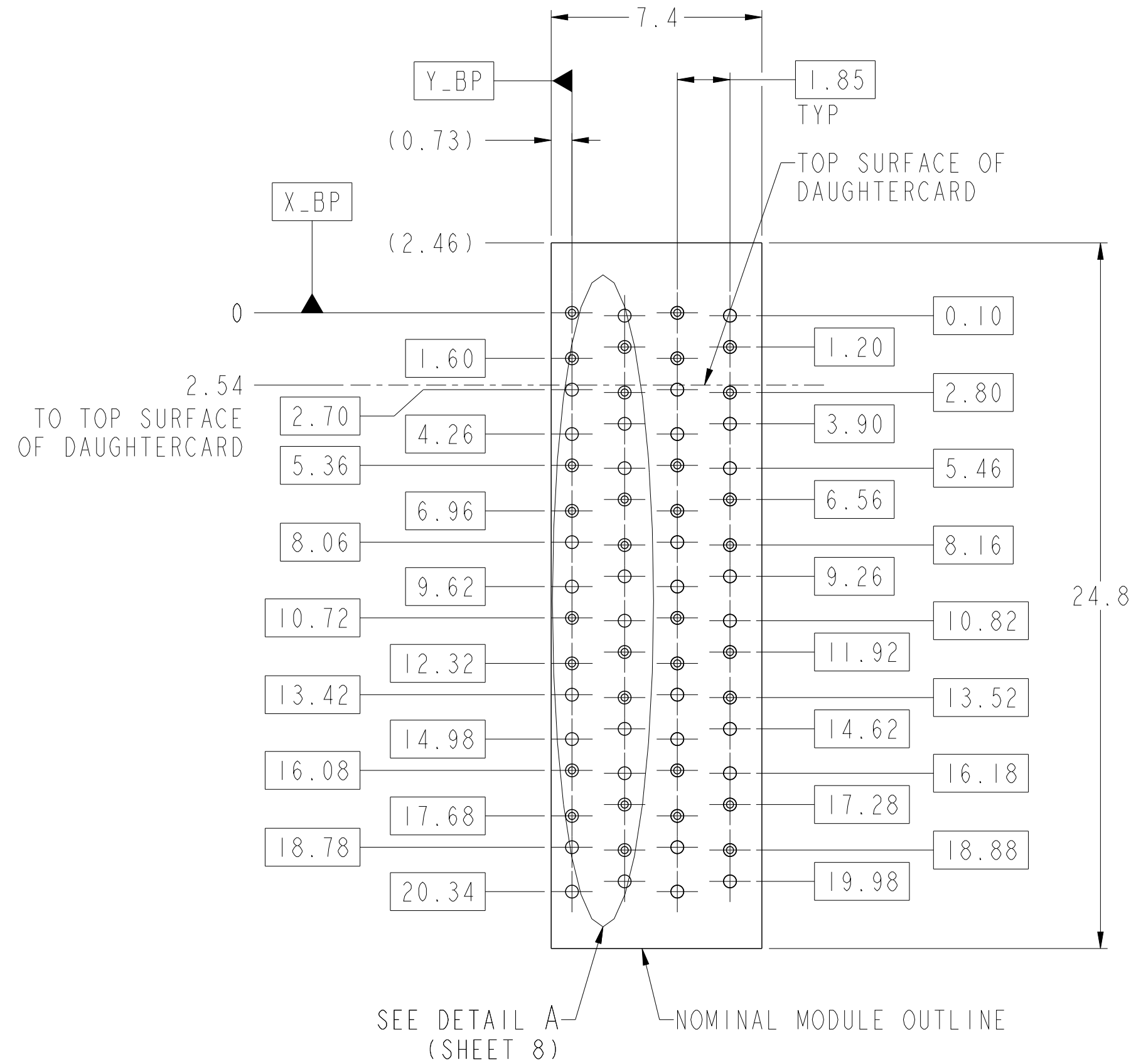
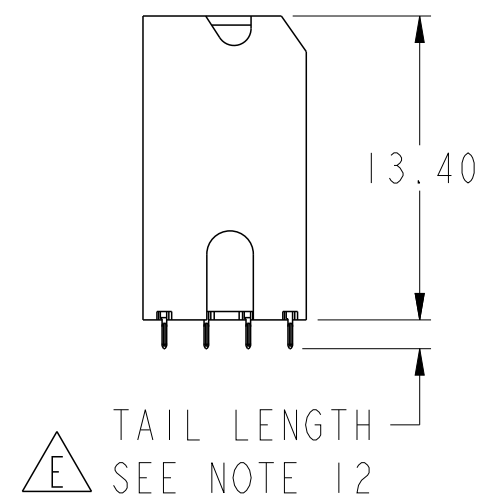
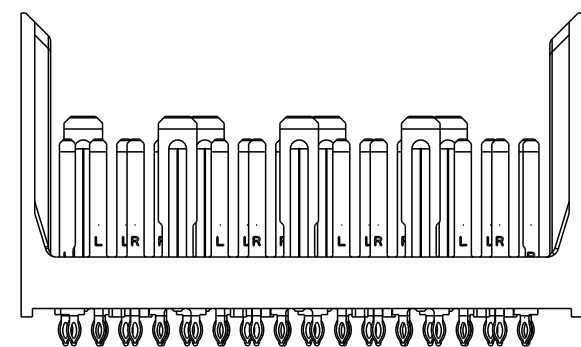
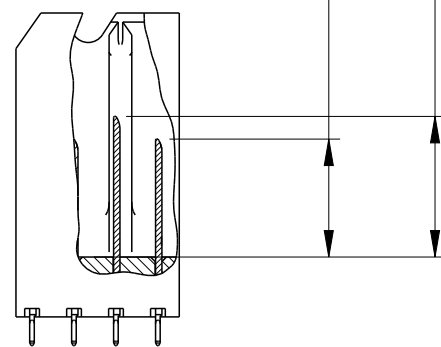


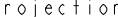
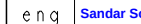
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6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

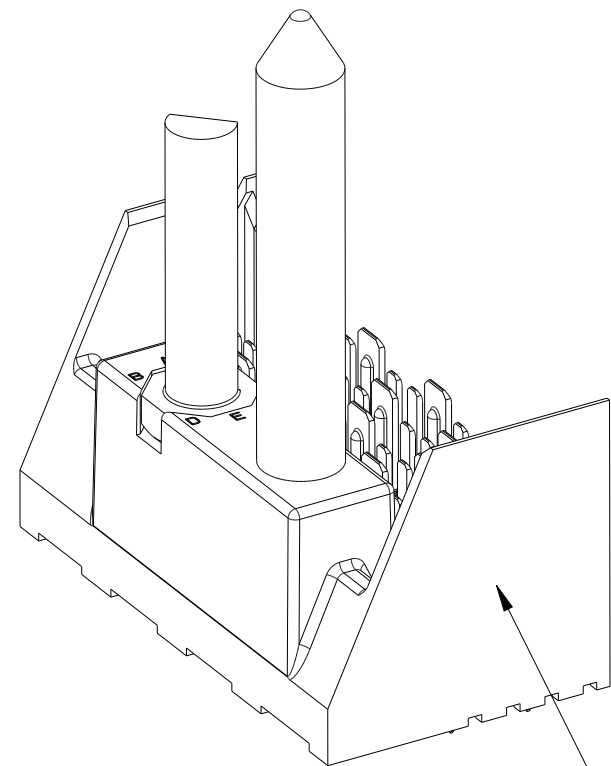
5.2 (3MM SMALL END GROUNDS)
    5.2 (3MM WIPE SIGNALS)
    4.2 (2MM WIPE SIGNALS)
        SEE P/N TREE

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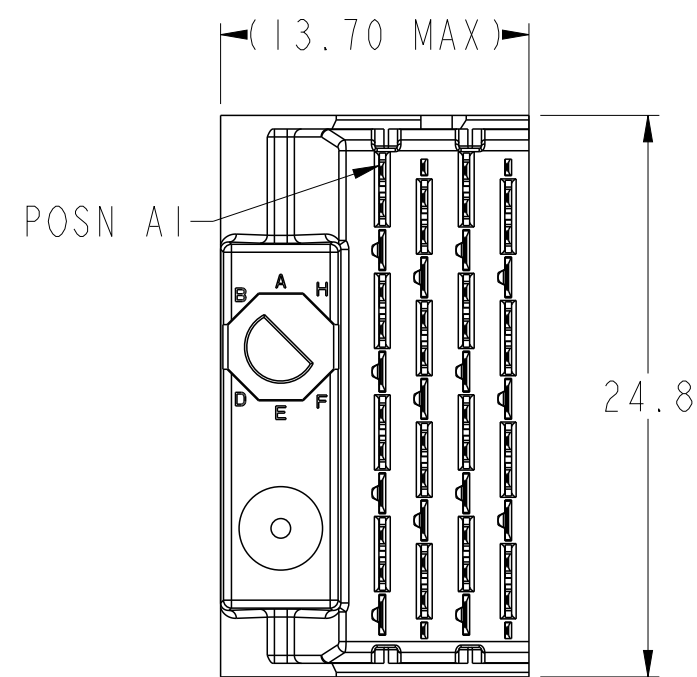


spec ref		SEE NOTES		dr Jim Swain2010/04/12		projection		size A2		scale 4:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng Sander Soe2014/01/002				MM			
ASME Y14.5				chr - -							
				appr Chen-Hong Tan2014/12/210		product family		XCede		rel level Released	
surface 		linear				title MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 4-PAIR		dwg no 10091836		rev E	
		0.X ±0.2									
		0.XX ±0.10									
ASME Y14.5		angular 0° ±0.050		www.fci.com		cat. no. SEE P/N TREE		Product - Customer Drw		sheet 2 of 8	

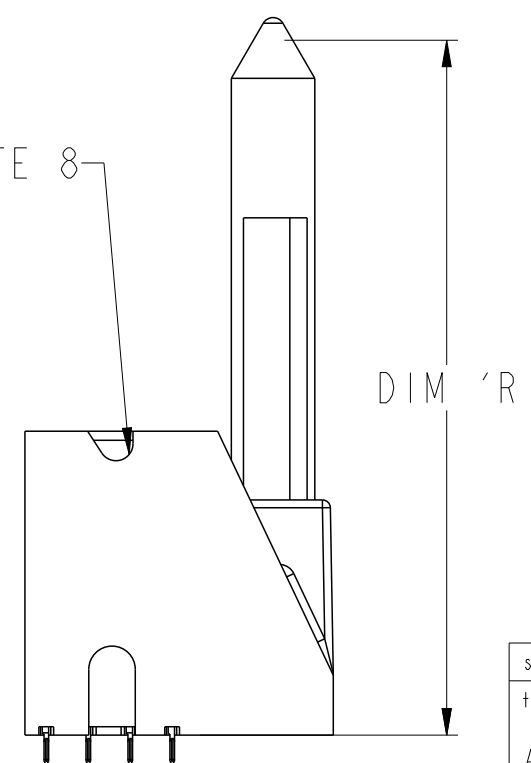
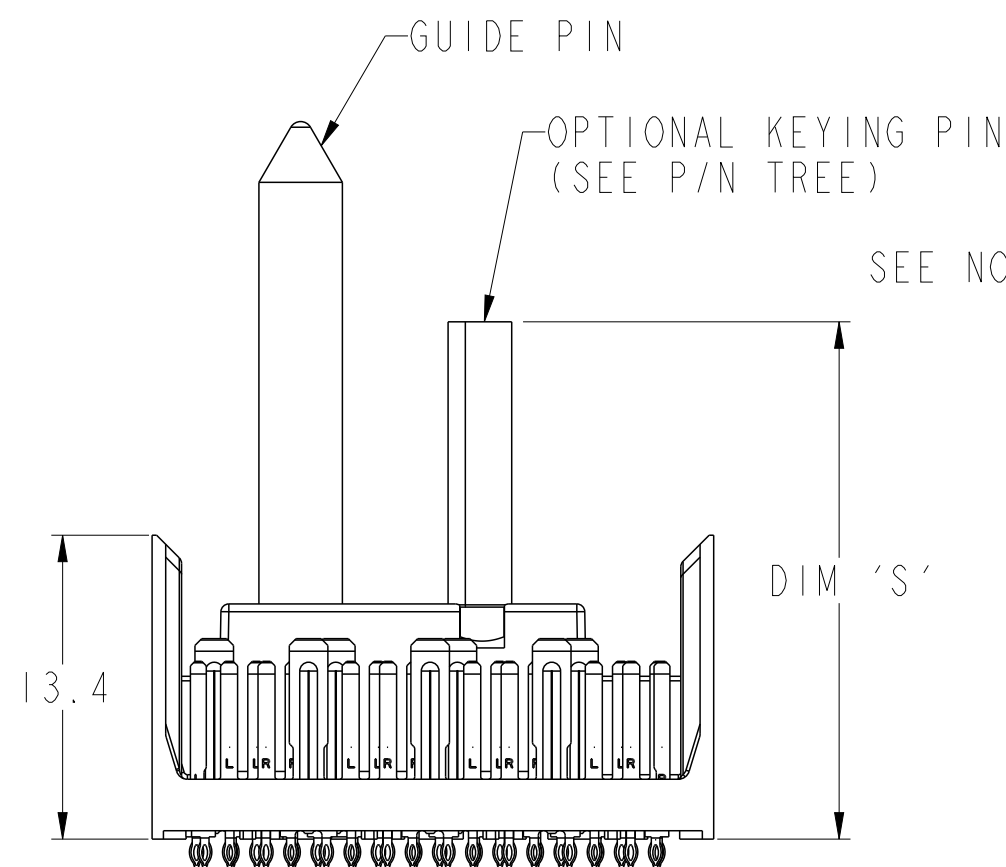
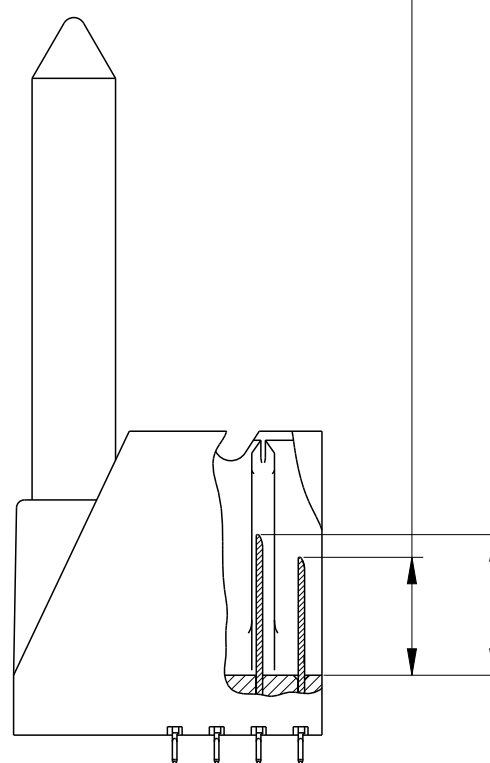
LEFT POLARIZING/GUIDE MODULE



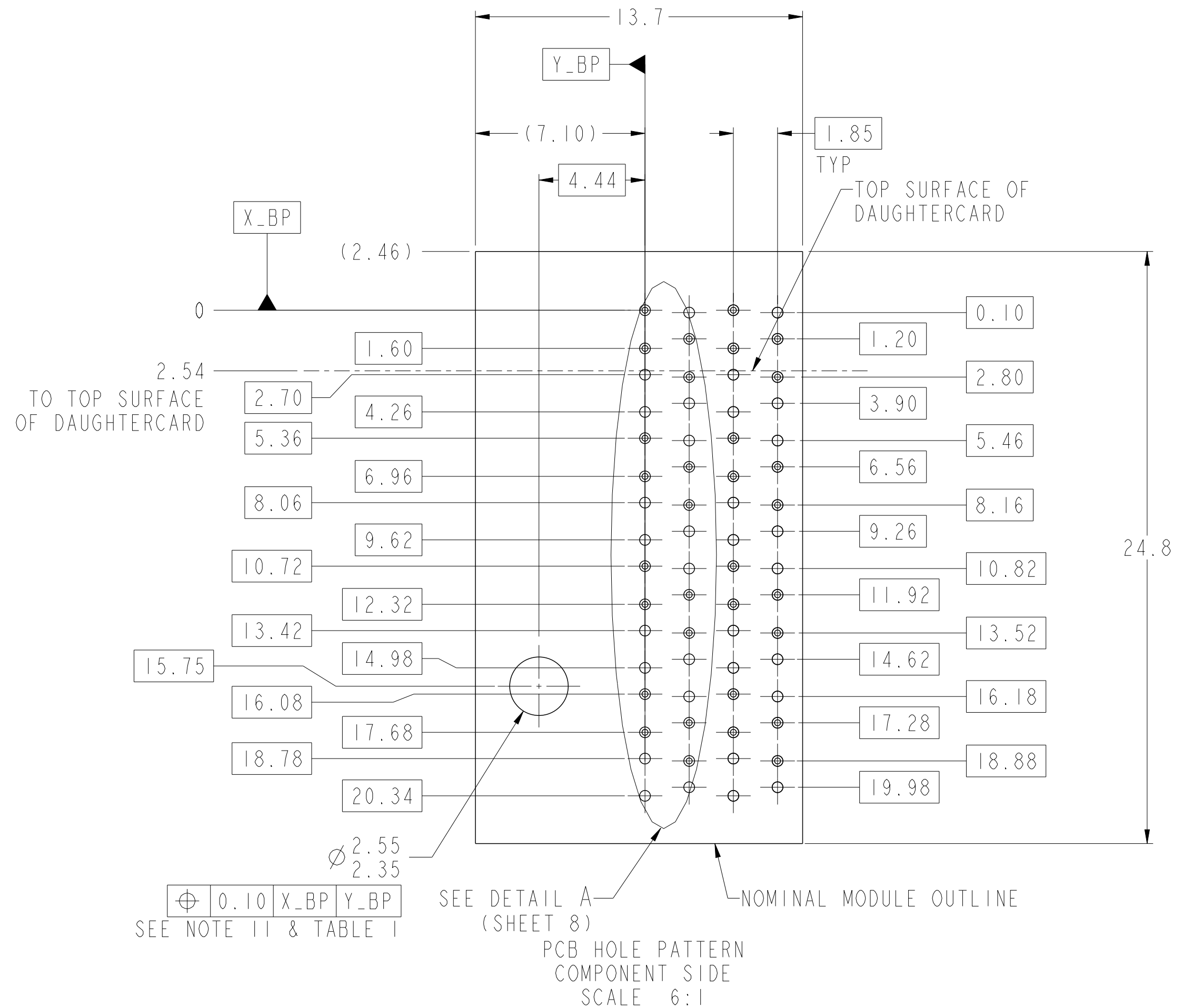
—SEE NOTE 5



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



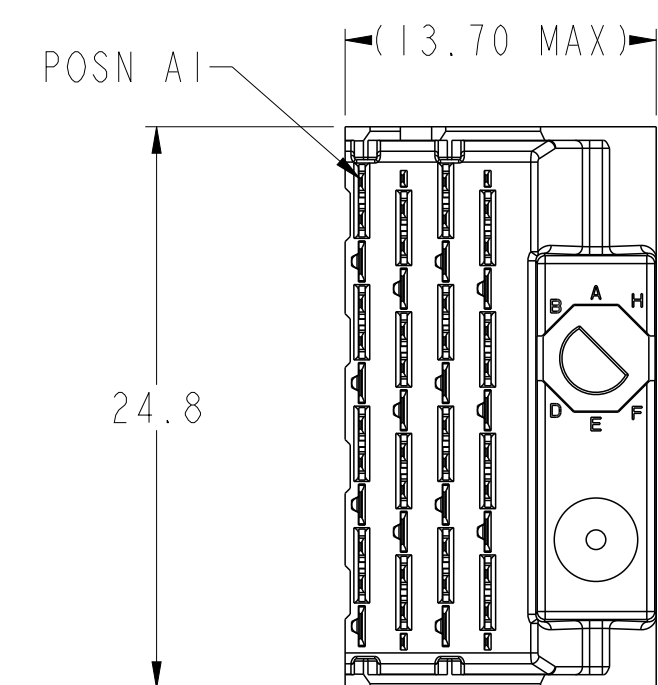
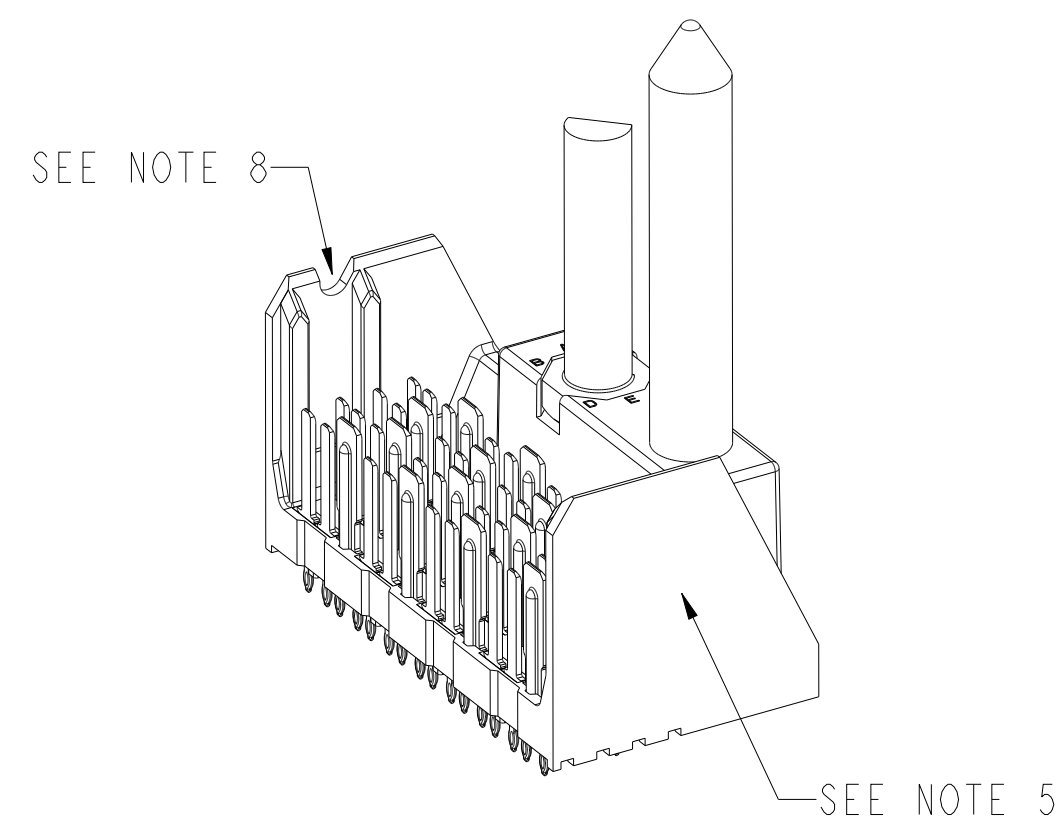
△ TAIL LENGTH
E SEE NOTE 12



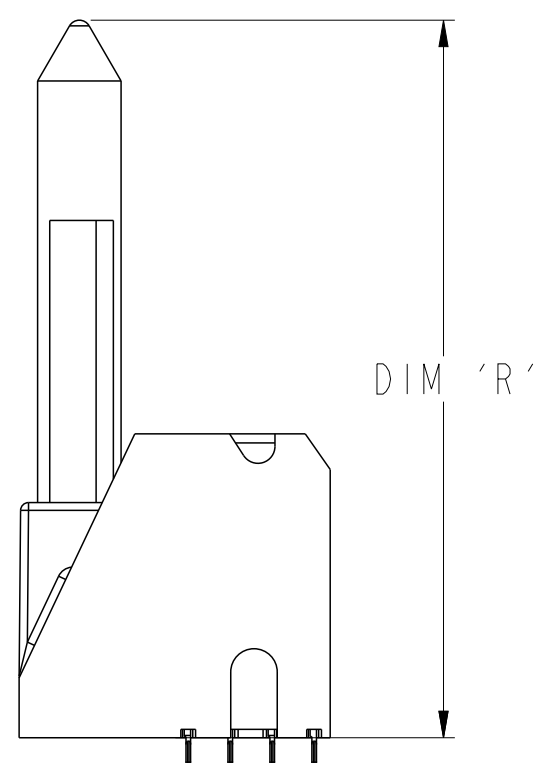
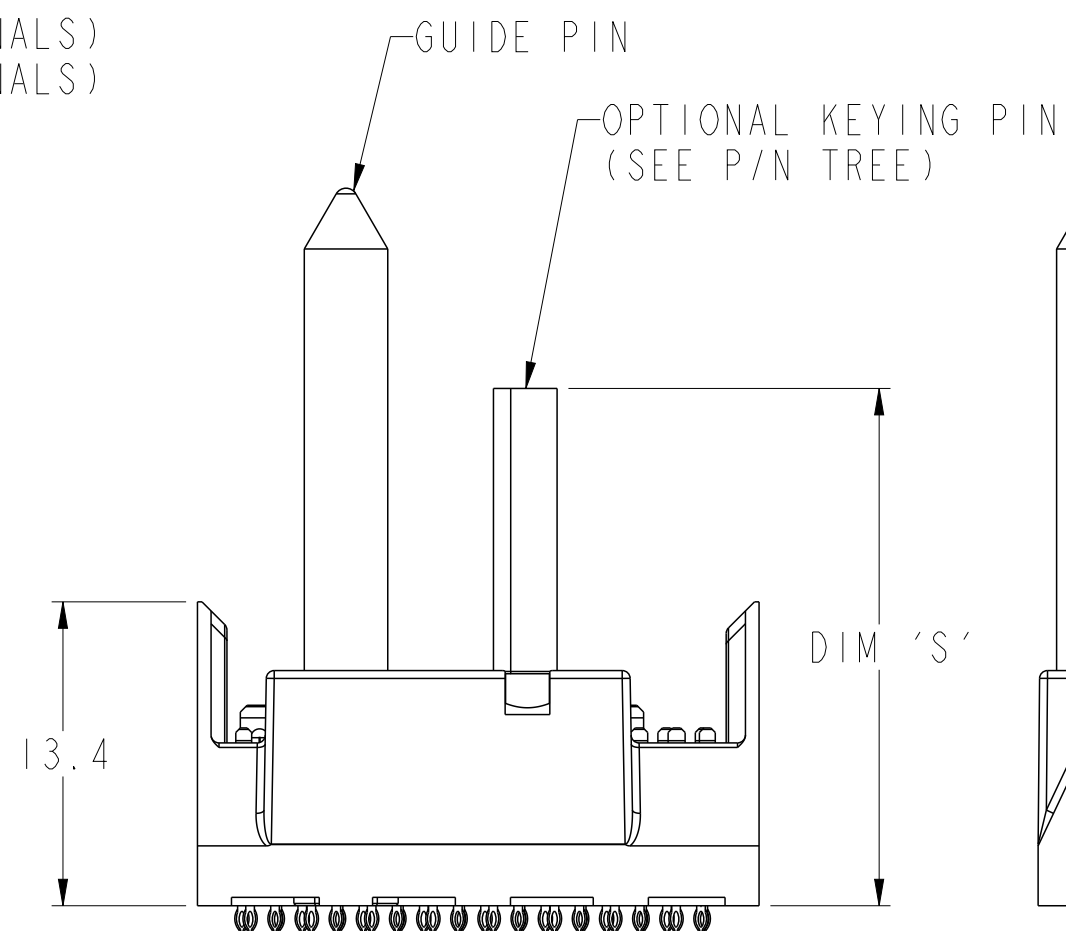
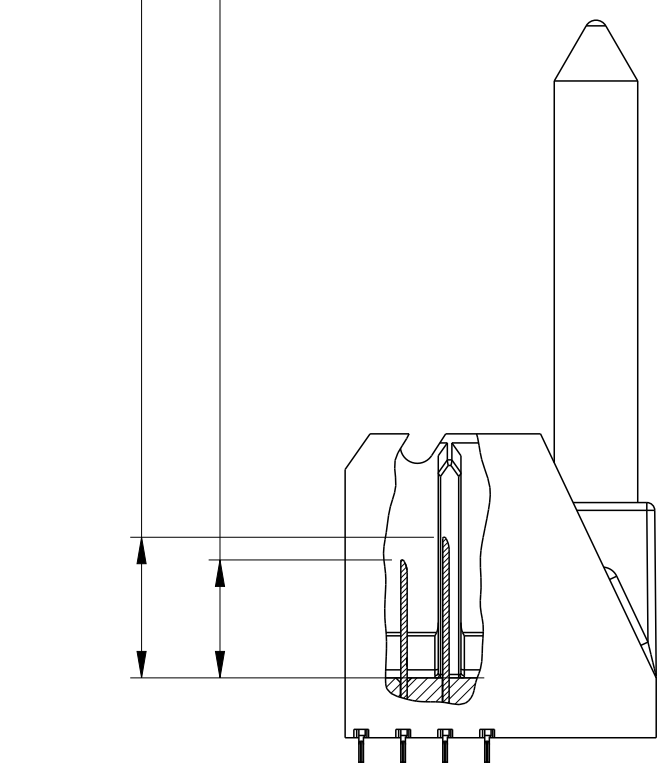
ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X0X	31.6mm	22.8mm
-X4X	25.7mm	20.0mm

spec ref		SEE NOTES		dr Jim Swain		2010/04/12		projection		size		scale	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng Sander Soe		2014/01/002				A2		4:1	
ASME Y14.5				chr -		-				ecn no		ELX-S-18843-1	
				appr Chen-Hong Tan		2014/12/210		product family		XCede		rel level	
												Released	
surface		linear		0.X		±0.2		 title MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 4-PAIR		dwg no 10091836		rev E	
				0.XX		±0.10							
ASME Y14.5		angular		0°		±0.050							
				www.fci.com		cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 3 of 8	

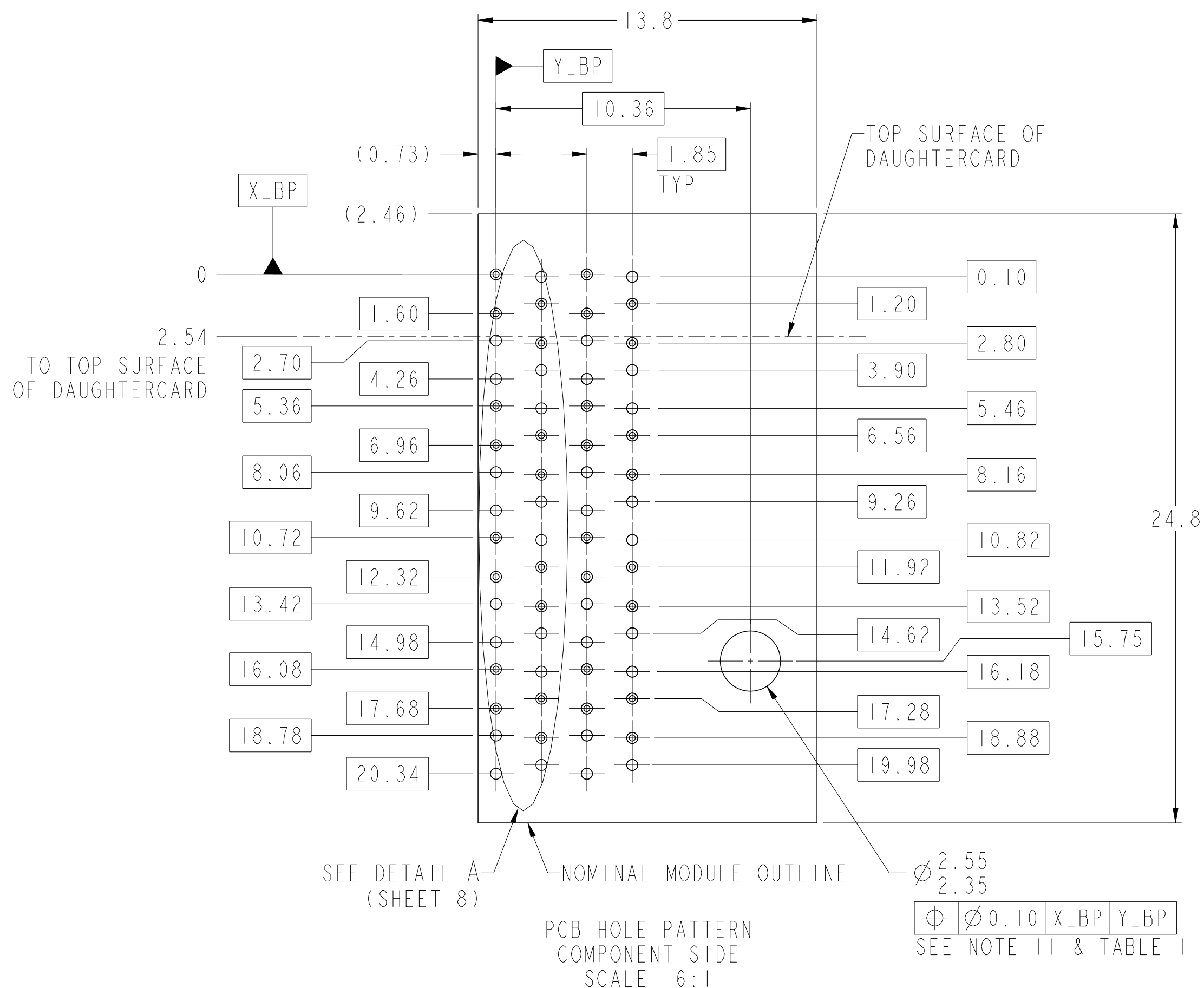
RIGHT POLARIZING/GUIDE MODULE



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



TAIL LENGTH
SEE NOTE 12

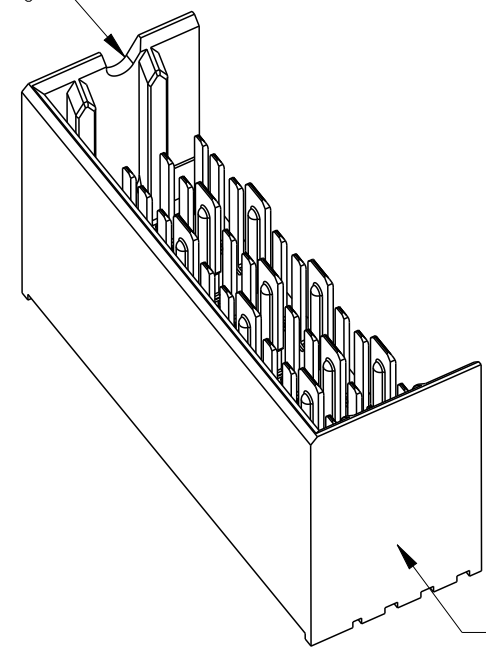


ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X0X	31.6mm	22.8mm
-X4X	25.7mm	20.0mm

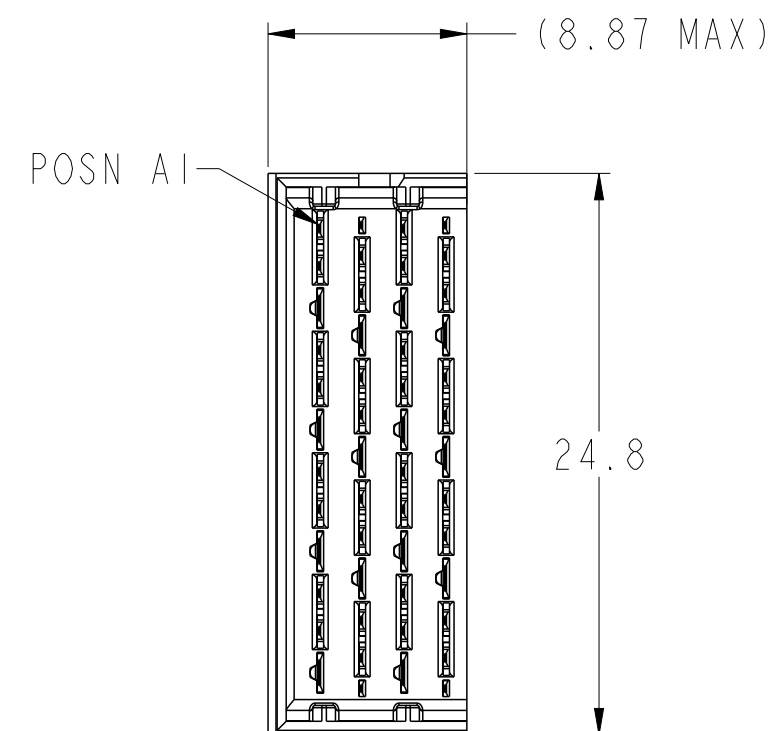
spec ref	SEE NOTES	dr	Jim Swain	2010/04/12	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02			ecn no	ELX-S-18843-1		
ASME Y14.5		chr	-	-	product family	XCede	rel level	Released		
surface	linear	appr	Chen-Hong Tan	2014/12/10			dwg no	10091836	rev	E
ASME Y14.5	angular									
	0.X									
	0.XX									
	0.XXX									
	0°									

LEFT WALL MODULE

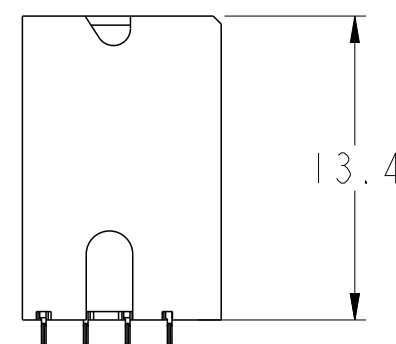
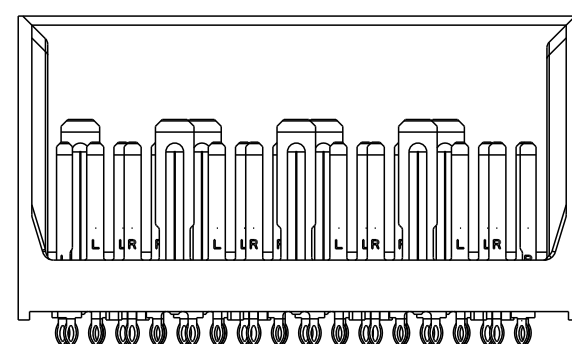
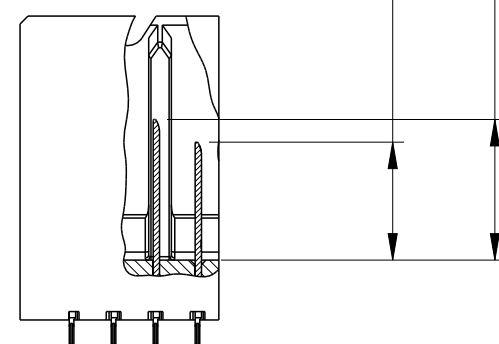
SEE NOTE 8



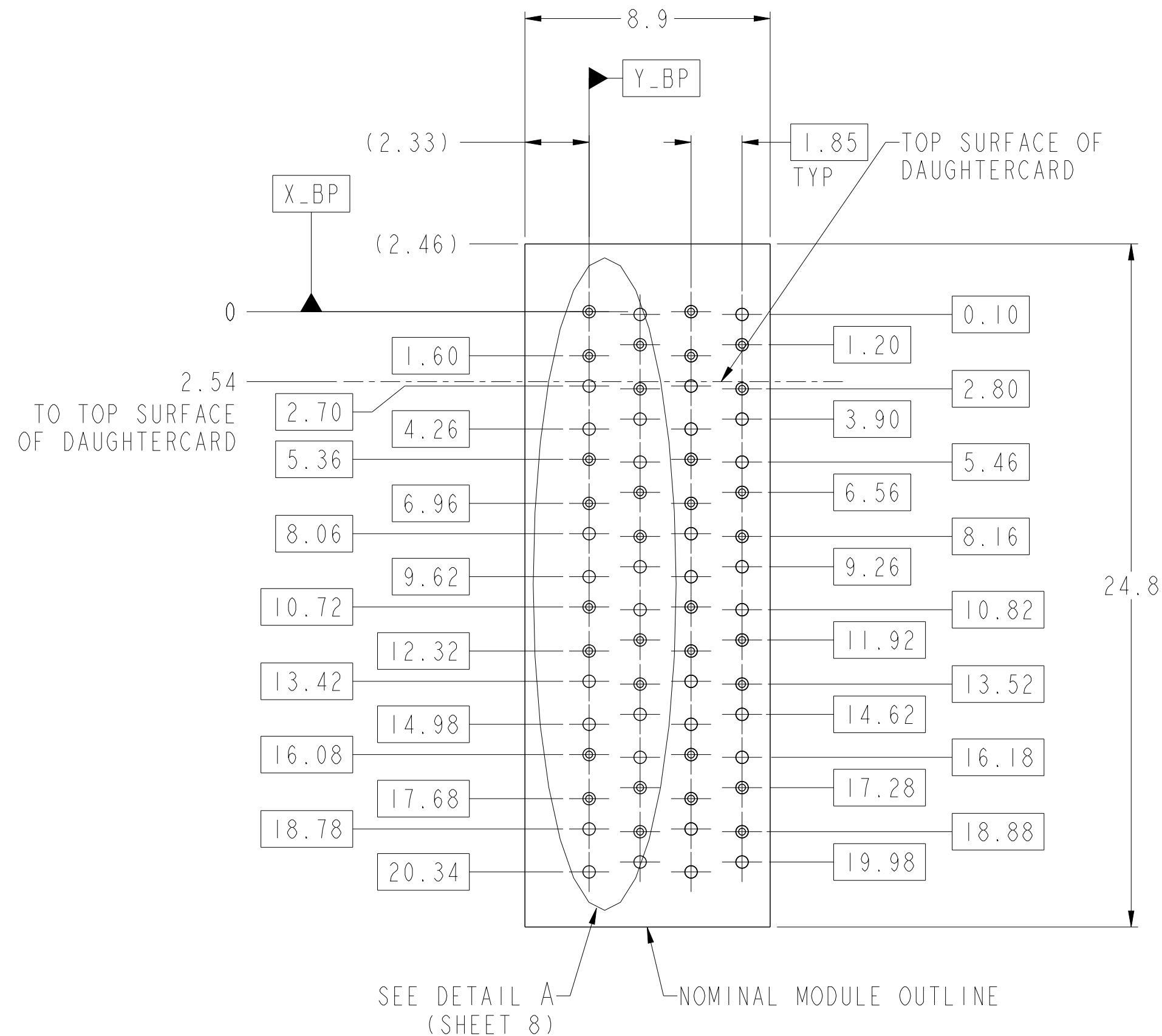
SEE NOTE 5



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



TAIL LENGTH
SEE NOTE 12



spec ref	SEE NOTES	dr	Jim Swain	2010/04/12	projection	MM	size	A2	scale	4:1
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	XCede	rel level	Released	rev	E
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	title	MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 4-PAIR	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 5 of 8			
angular	0° ±0°	www.fci.com								

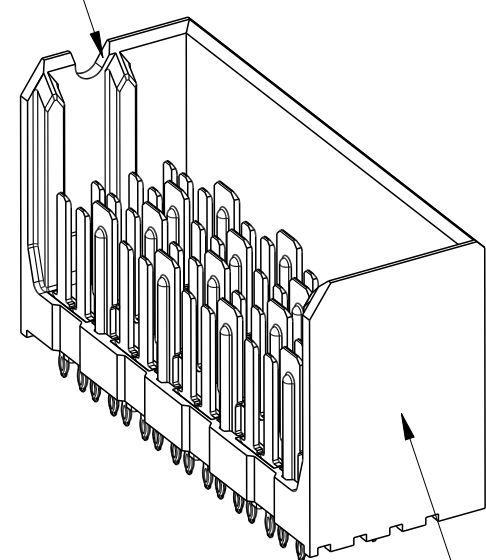
PDS: Rev :E

STATUS:Released

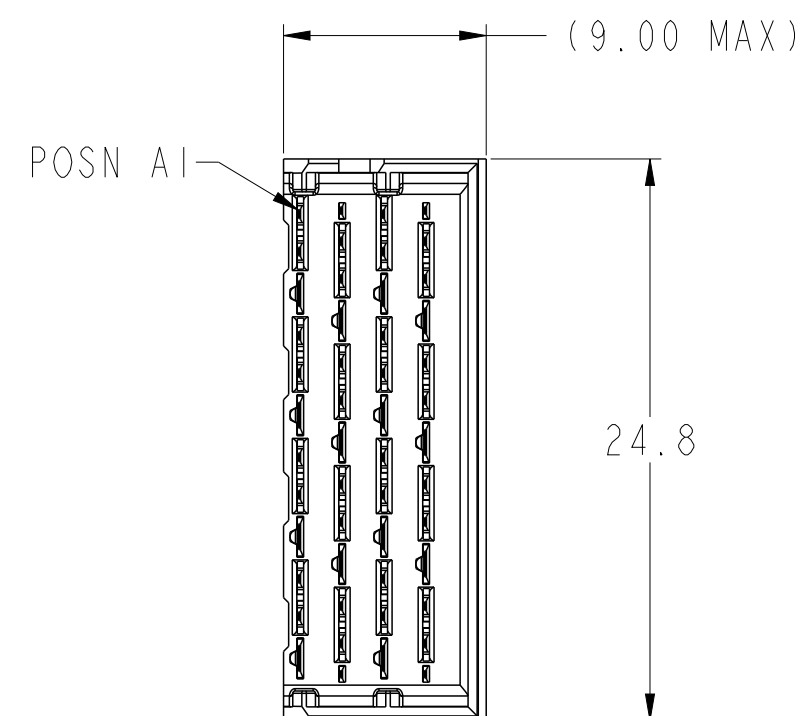
Printed: Dec 10, 2014

RIGHT WALL MODULE

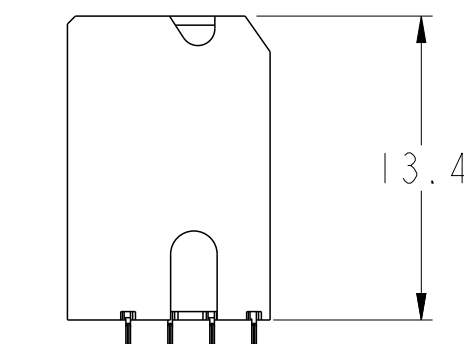
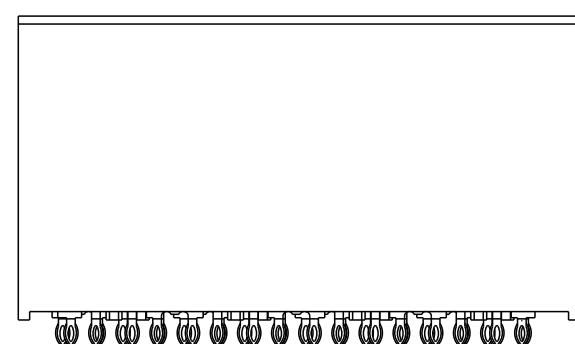
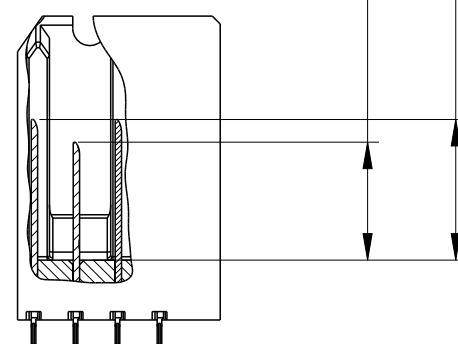
SEE NOTE 8



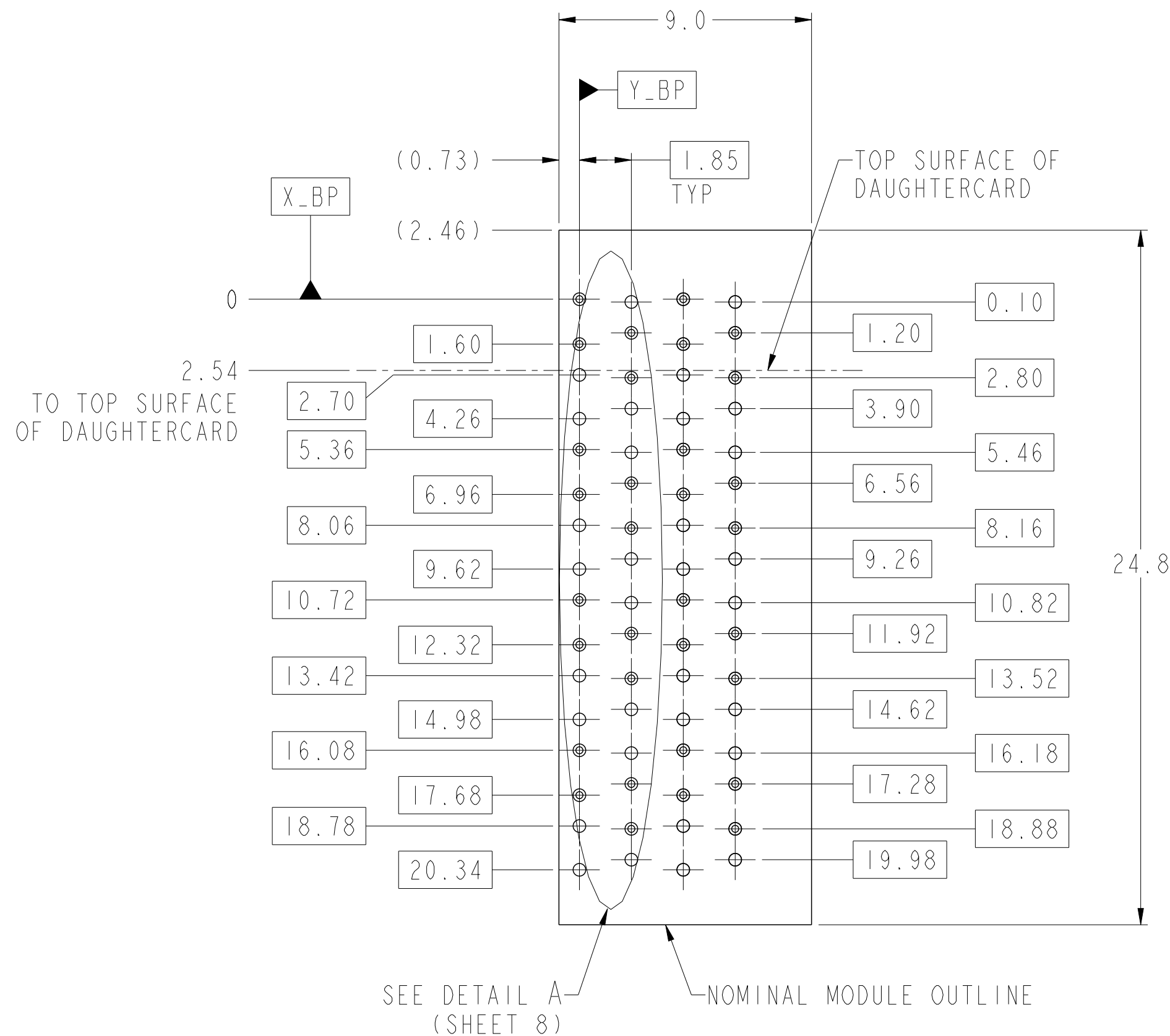
SEE NOTE 5



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



TAIL LENGTH
SEE NOTE 12



PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref		SEE NOTES		dr		Jim Swain		2010/04/12		projection		MM		size		A2		scale		4:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng		Sandar Soe		2014/10/02						ecn no		ELX-S-18843-1		Released			
ASME Y14.5				chr		-		-													
				appr		Chen-Hong Tan		2014/12/10		product family		XCede		rel level							
surface						title		MODULE ASSEMBLY		dwg no		10091836		rev		E					
linear		0.X																		±0.2	
		0.XX																		±0.10	
ASME Y14.5		angular		0°		±°															

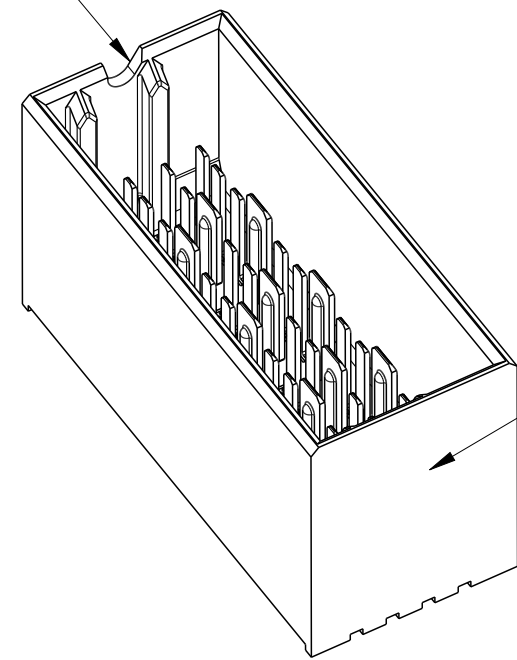
PDS: Rev :E

STATUS:Released

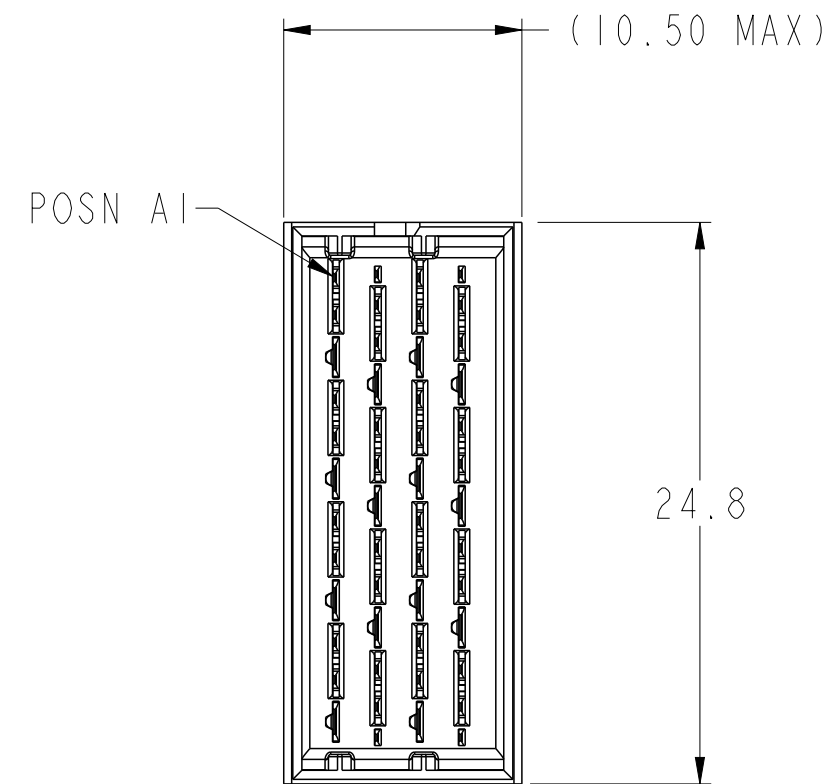
Printed: Dec 10, 2014

4-WALL MODULE

SEE NOTE 8

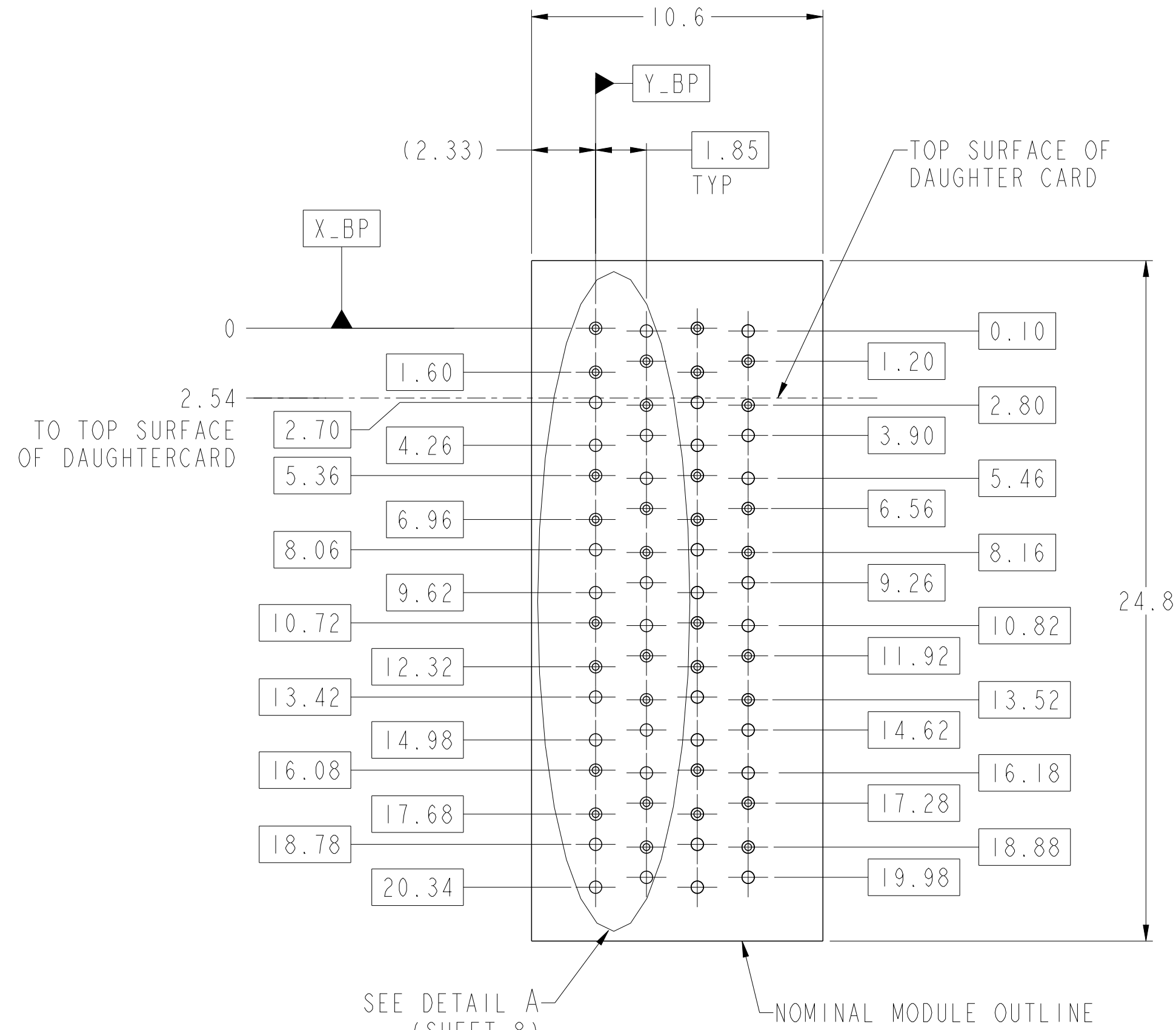
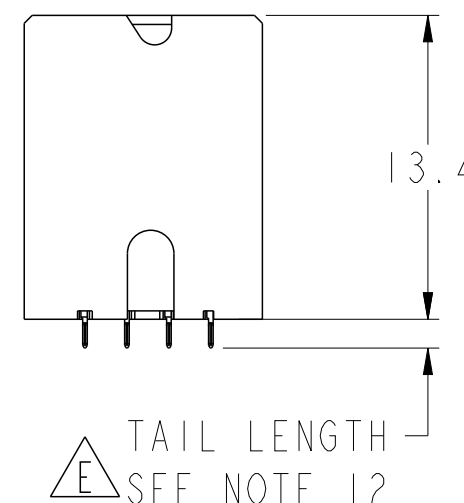
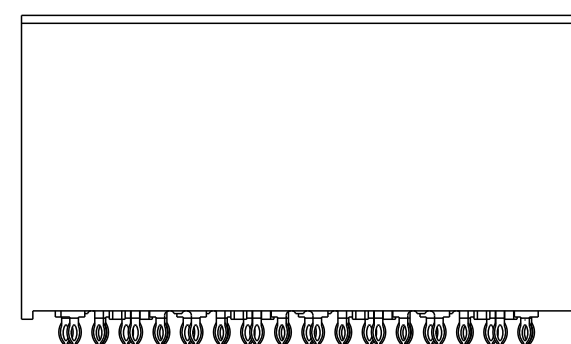
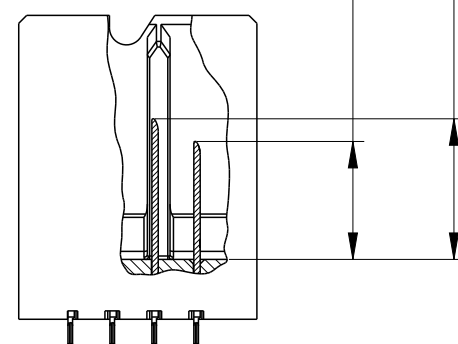


SEE NOTE 5



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



PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Jim Swain	2010/04/12	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
surface	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 7 of 8	rev	E		

PDS: Rev :E

STATUS:Released

Printed: Dec 10, 2014

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.

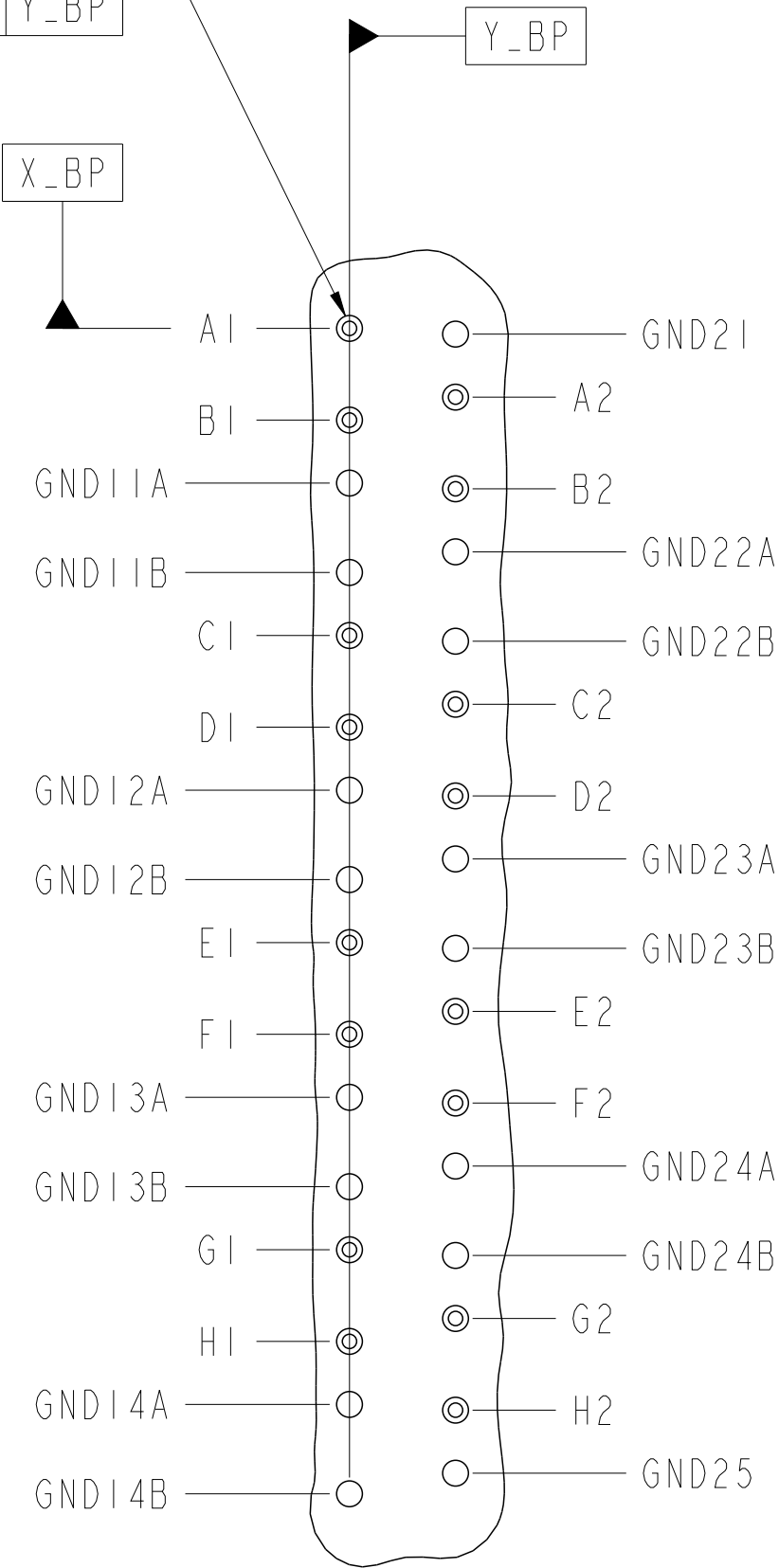
PRESS-FIT TAILS: TIN OVER NICKEL (LF), OR TIN-LEAD ALLOY OVER NICKEL (NON-LF). SEE P/N TREE.
3. PRODUCT SPECIFICATION: GS-12-588
4. APPLICATION SPECIFICATION: GS-20-121
5. PRODUCT MARKING (PART NUMBER AND LOT CODE) ON THESE SURFACES.
6. HOUSING MUST WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 40 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. 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  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW OR NOTE THAT HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

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

SEE TABLE 3
FOR PTH, DRILL & PAD SIZES

	Ø0.10	X_BP	Y_BP
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DETAIL A
SCALE 8:1

spec ref		SEE NOTES			dr		Jim Swain		2010/04/12		projection				size		A2		scale		4:1				
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng		Sandar Soe		2014/10/02						ecn no		ELX-S-18843-1								
ASME Y14.5					chr		-		-						product family		XCede					rel level		Released	
					appr		Chen-Hong Tan		2014/12/10																
surface				linear		0.X		±0.2				title		MODULE ASSEMBLY		dwg no		10091836		rev		E			
				0.XX		±0.10																			
ASME Y14.5				0.XXX		±0.050																			
		angular		0°		±°		www.fci.com		cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 8 of 8									