

1 0 0 9 | 8 3 6 - X 0 J - X 0 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

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

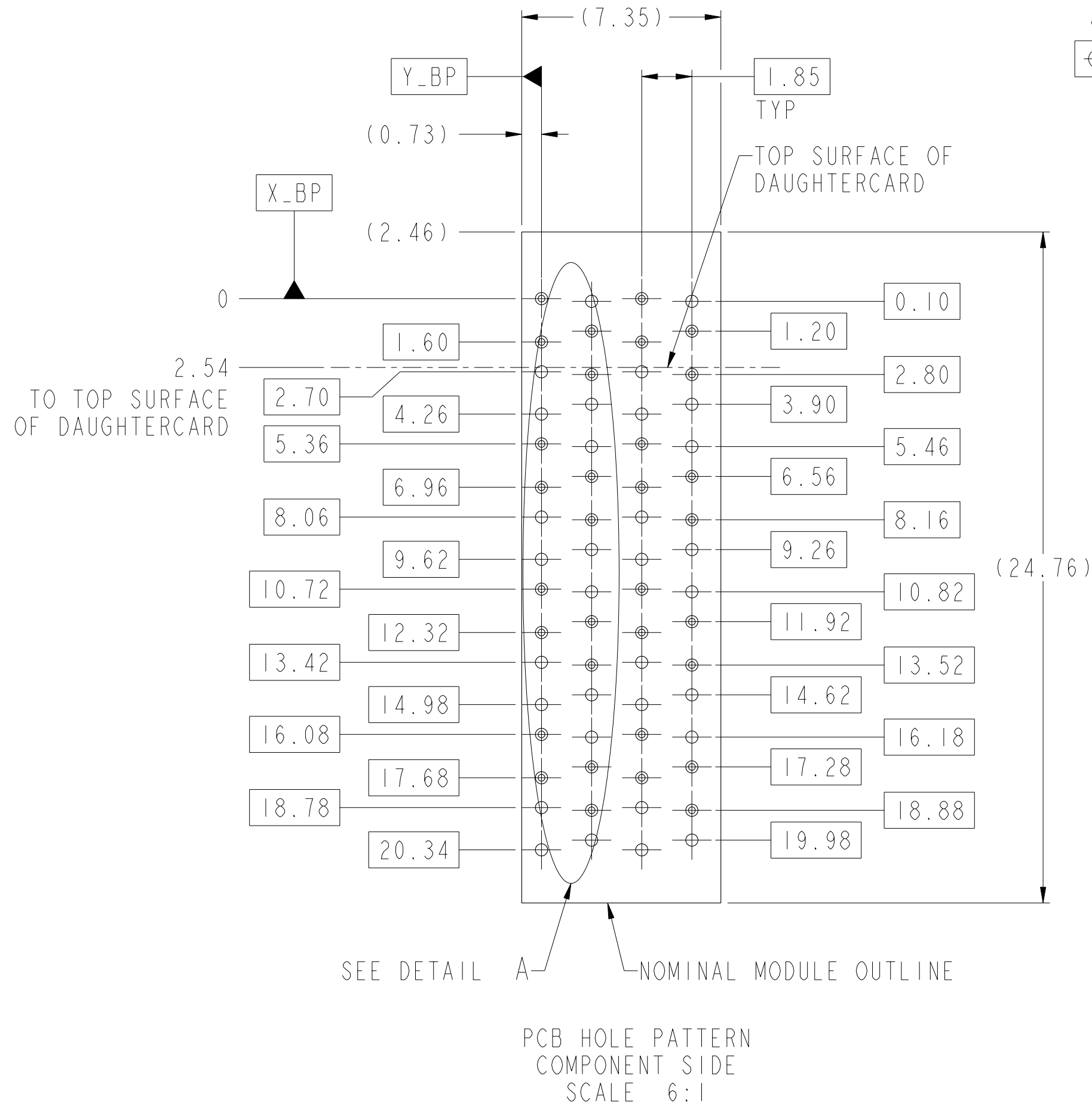
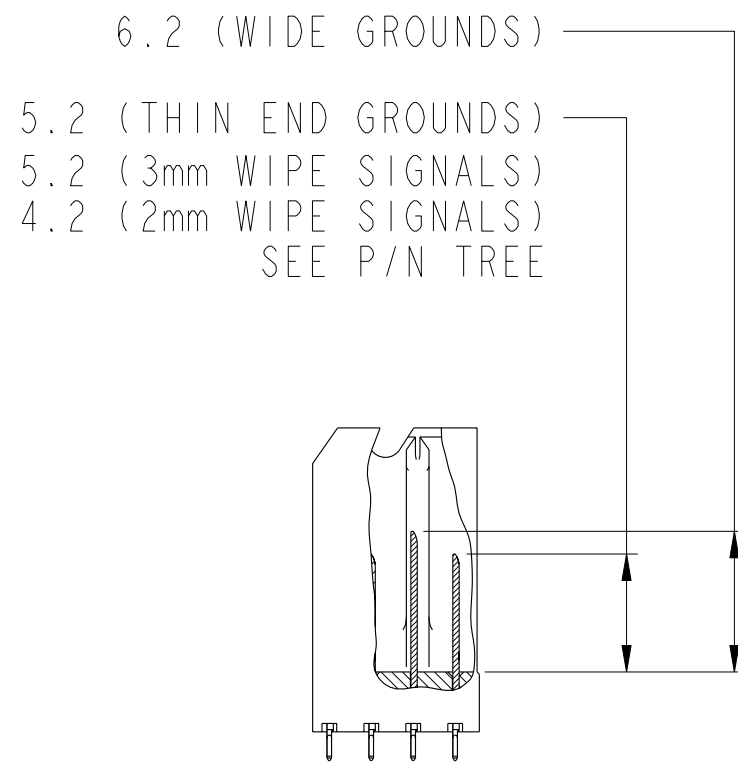
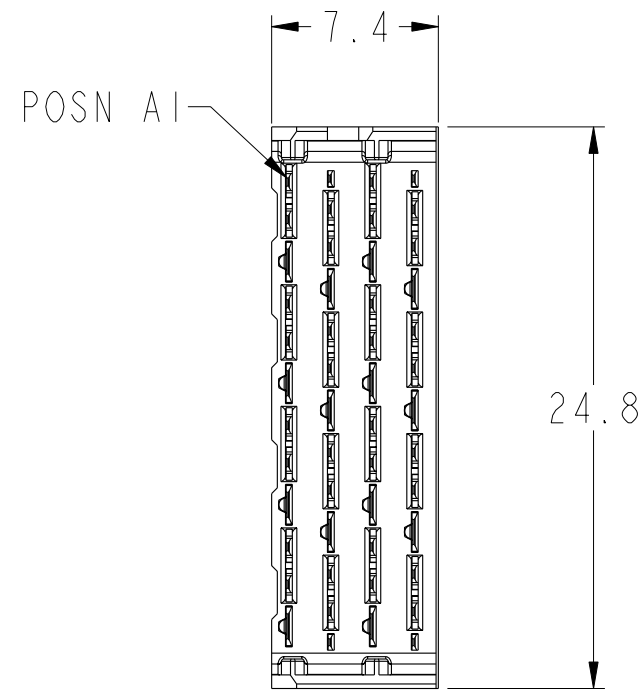
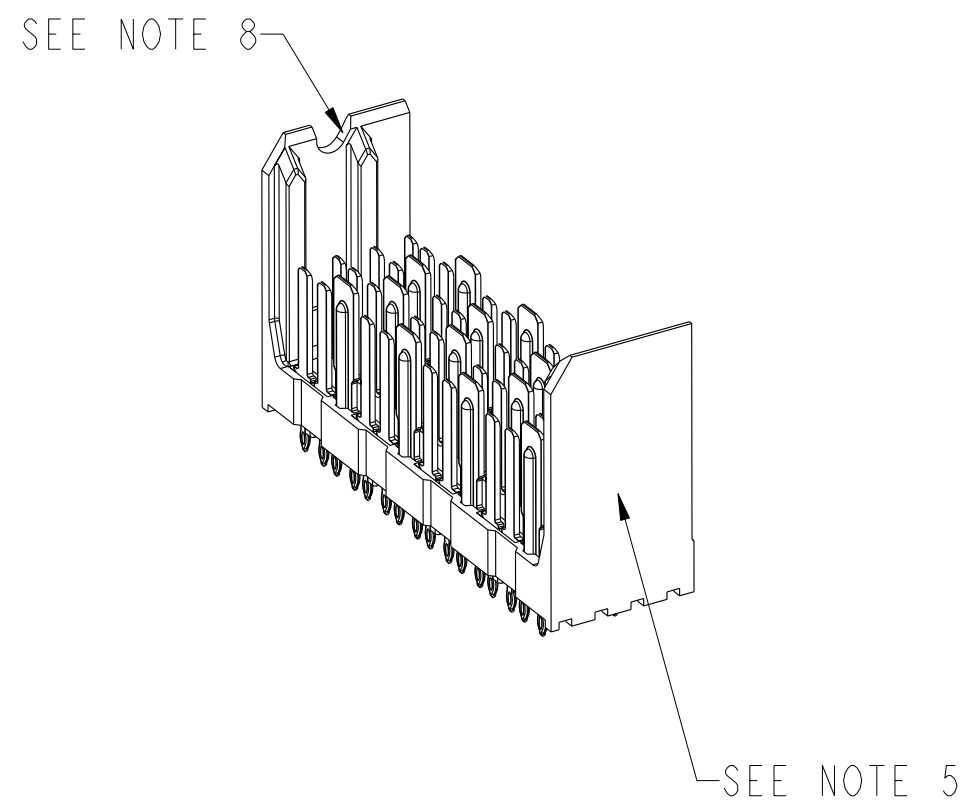
SCREW P/N	DESCRIPTION	BOARD THICKNESS
10091790-002LF	#2-56 X .375" PHILLIPS PANHEAD W/SQ CONICAL WASHER	1.60 - 5.00
10091790-003LF	#2-56 X .500" PHILLIPS PANHEAD W/SQ CONICAL WASHER	5.00 - 10.00

**PRELIMINARY**

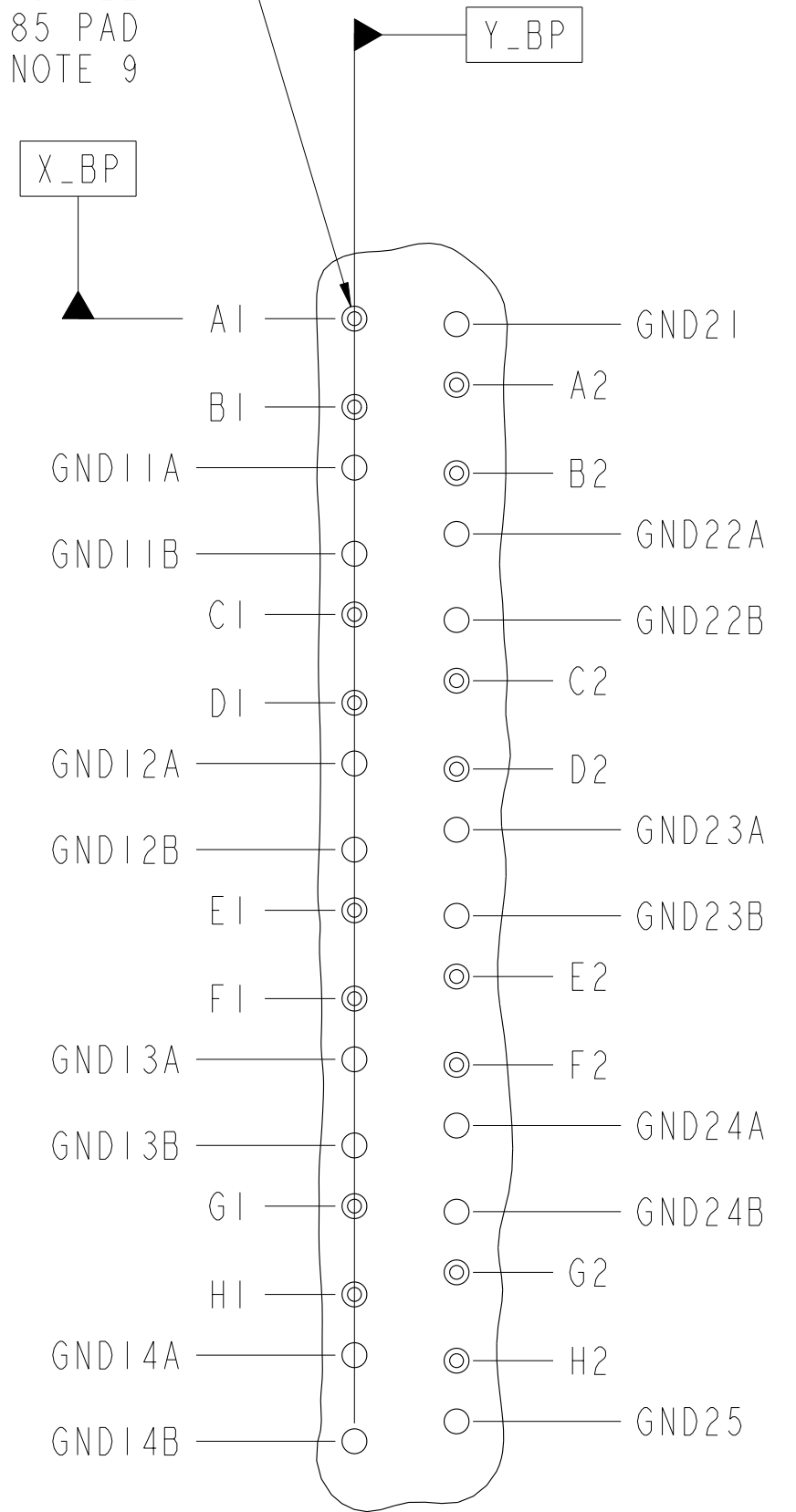
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tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	W.J.SWAIN	2010-05-20		←	ecn no			
ASME Y14.5		chr	W.J.SWAIN	2010-05-20			product family	XCode	rel level	In Work
surface	linear	0.X	±0.2		MODULE ASSEMBLY	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 1 of 8	rev
		0.XX	±0.10							
		0.XXX	±0.050							
ASME Y14.5	angular	0°	±°	www.fci.com	diag no	10091836				

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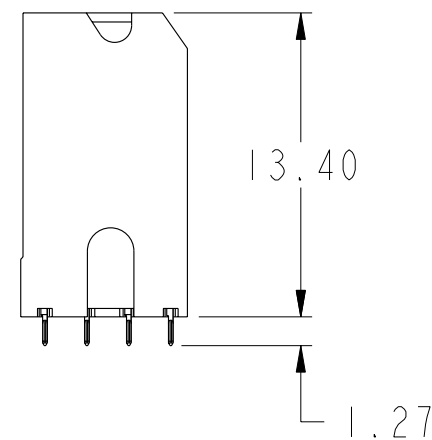
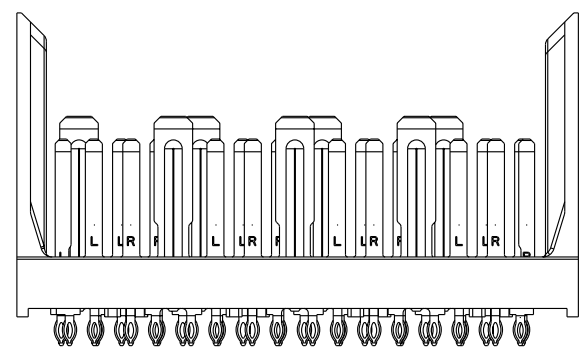
# OPEN (2-WALL) MODULE



$\varnothing 0.45 \pm 0.05$  PTH TYP  
 $\varnothing 0.10$  A Y\_BP X\_BP  
 $0.55$  [0.0217"] DRILL  
 $\varnothing 0.85$  PAD  
 SEE NOTE 9



DETAIL A  
SCALE 8:1

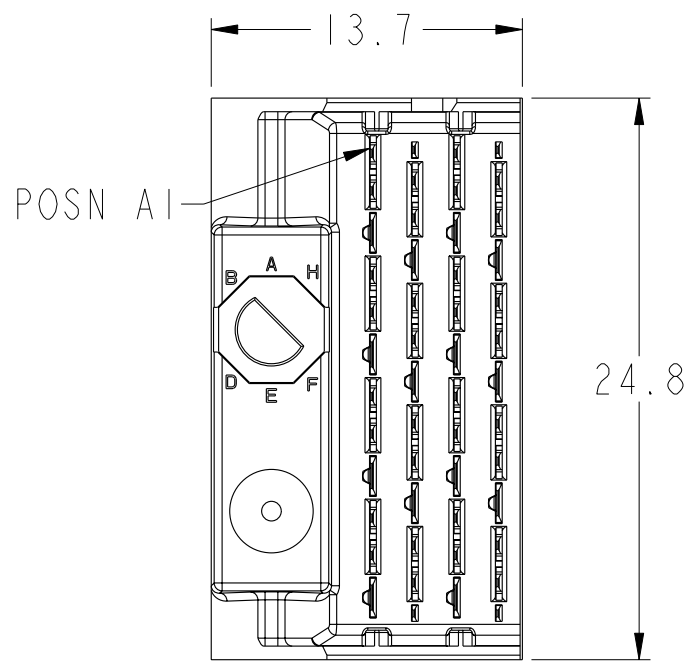
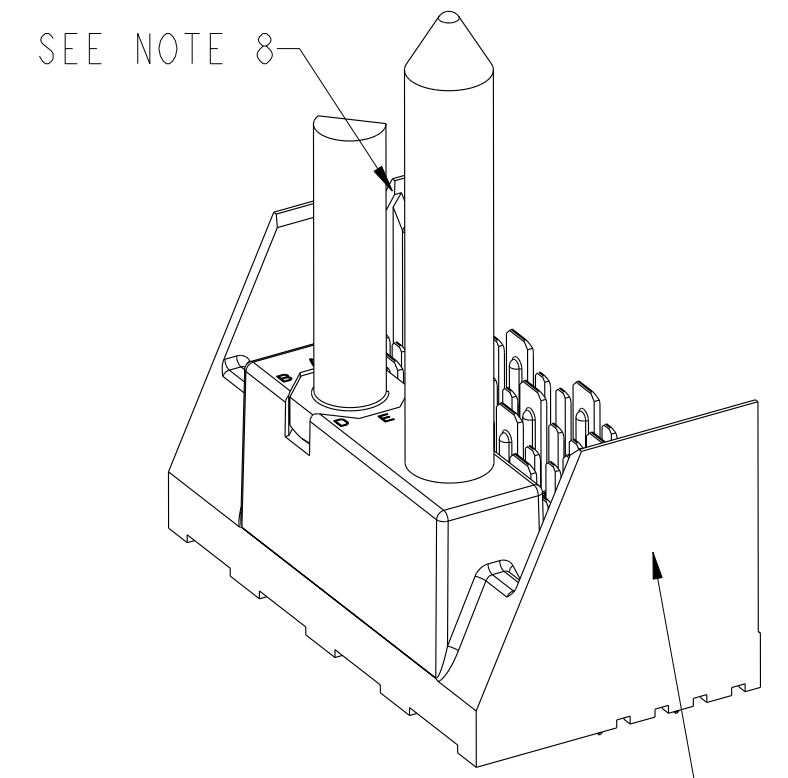


spec ref	SEE NOTES	dr	N.BHARATHI	2010-05-20	projection	MM	size	A2	scale	4:1										
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	W.J.SWAIN	2010-05-20			ecn no	rel level	In Work	rev										
ASME Y14.5		chr	W.J.SWAIN	2010-05-20																
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td><math>\pm 0.2</math></td> </tr> <tr> <td></td> <td>0.XX</td> <td><math>\pm 0.10</math></td> </tr> <tr> <td></td> <td>0.XXX</td> <td><math>\pm 0.050</math></td> </tr> <tr> <td>angular</td> <td>0°</td> <td><math>\pm</math>°</td> </tr> </table>	linear	0.X	$\pm 0.2$		0.XX	$\pm 0.10$		0.XXX	$\pm 0.050$	angular	0°	$\pm$ °			<b>MODULE ASSEMBLY</b> VERTICAL HEADER, 4-COLUMN, 4-PAIR		cat. no. SEE P/N TREE	Product - Customer Drw	sheet 2 of 8
linear	0.X	$\pm 0.2$																		
	0.XX	$\pm 0.10$																		
	0.XXX	$\pm 0.050$																		
angular	0°	$\pm$ °																		

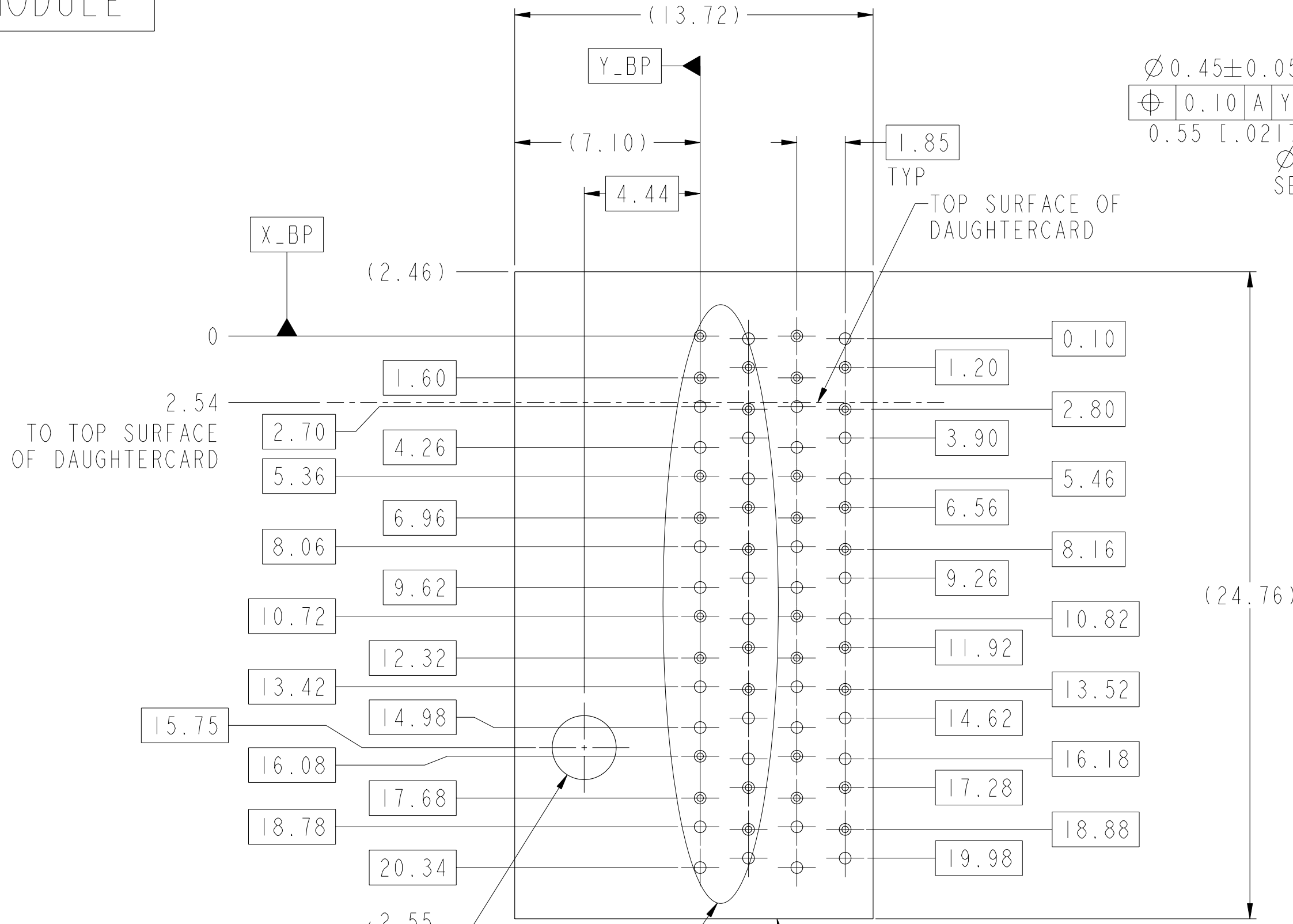
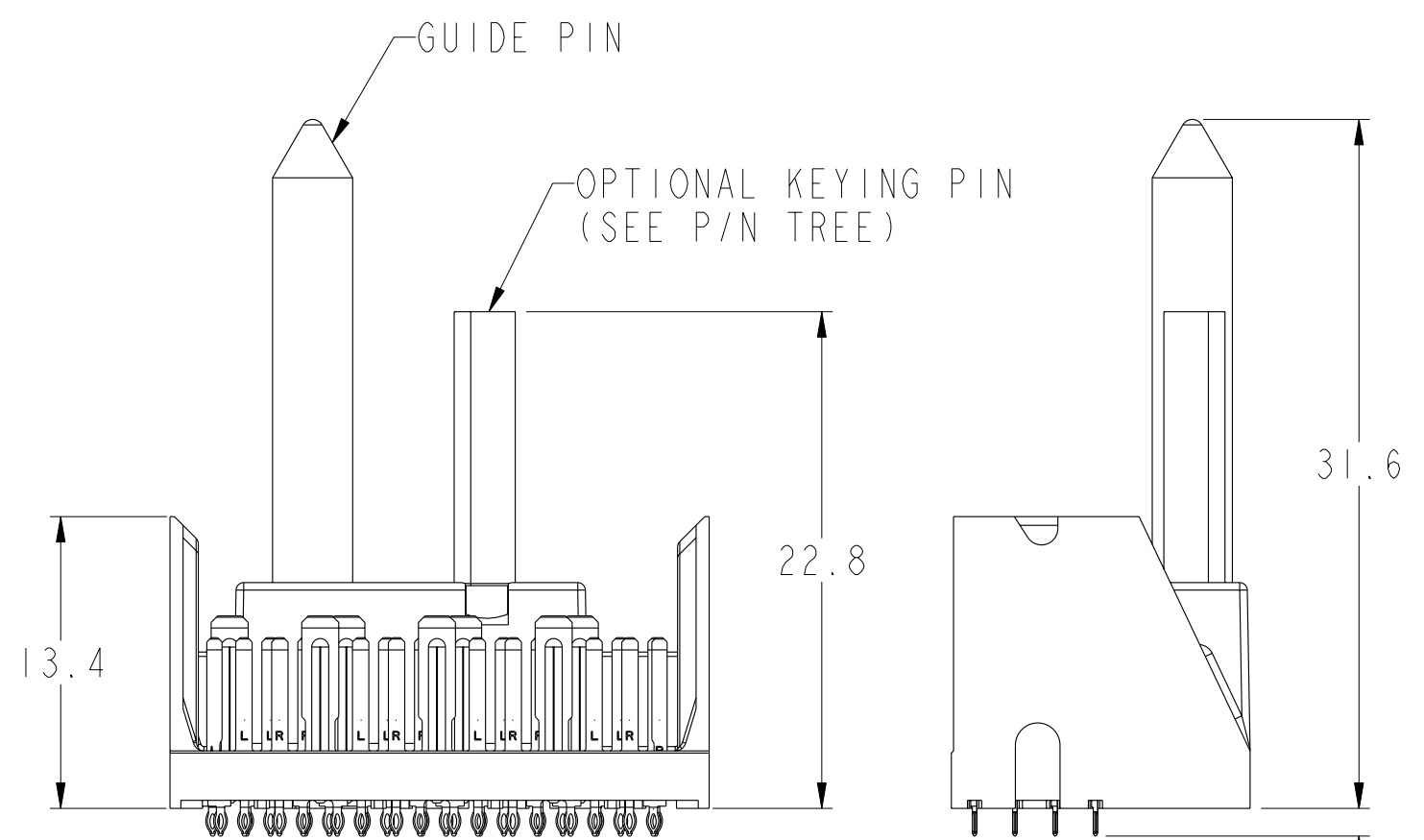
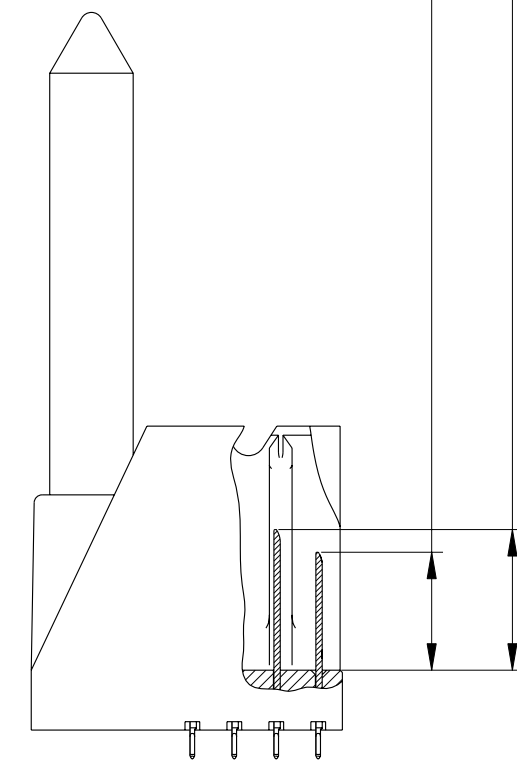
**PRELIMINARY**

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# LEFT POLARIZING/GUIDE MODULE



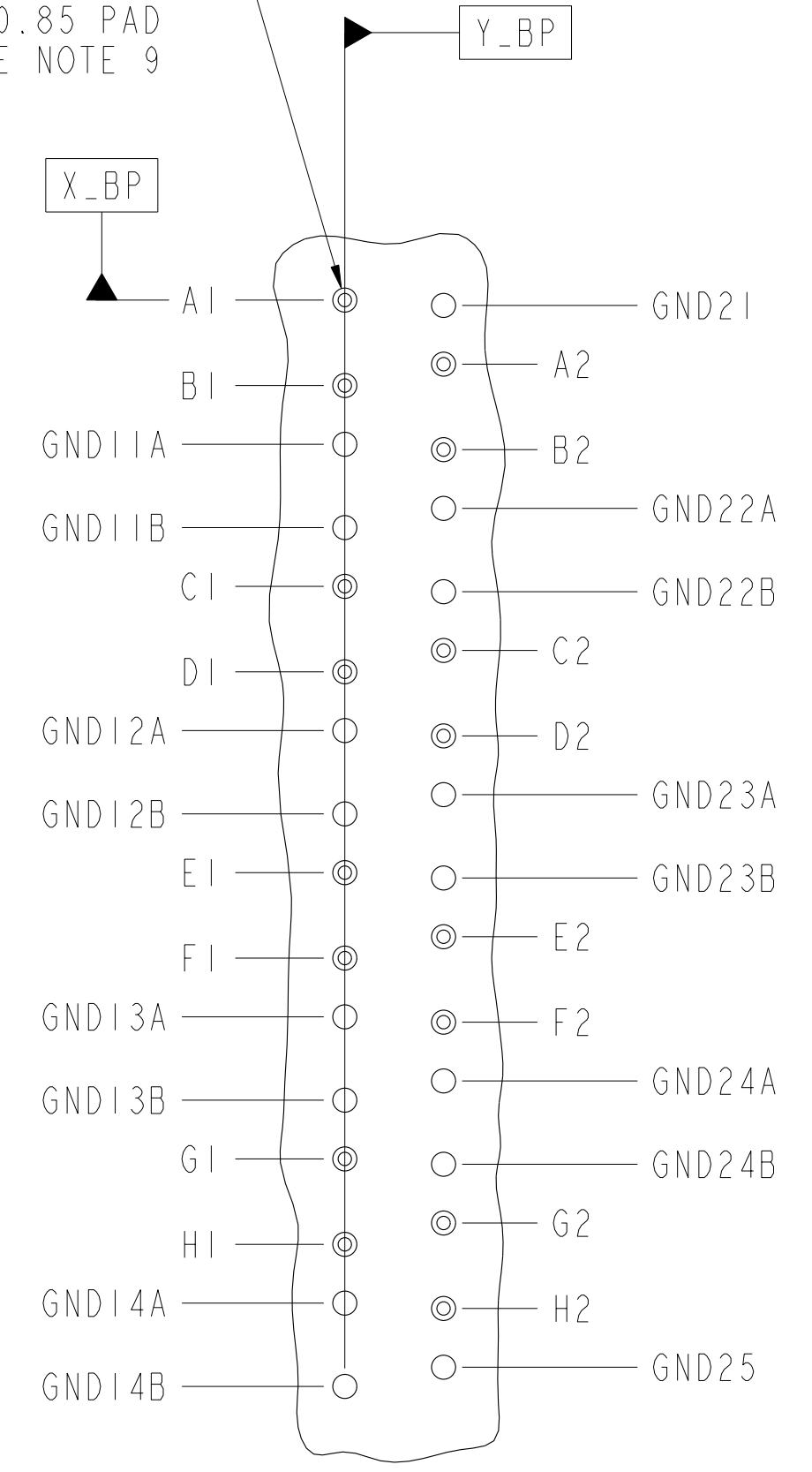
6.2 (WIDE GROUNDS)  
 5.2 (THIN END GROUNDS)  
 5.2 (3mm WIPE SIGNALS)  
 4.2 (2mm WIPE SIGNALS)  
 SEE P/N TREE



SEE NOTE 11 & TABLE 1

PCB HOLE PATTERN  
 COMPONENT SIDE  
 SCALE 6:1

$\varnothing 0.45 \pm 0.05$  PTH TYP  
 $\varnothing 0.10$  A Y\_BP X\_BP  
 0.55 [.0217"] DRILL  
 $\varnothing 0.85$  PAD  
 SEE NOTE 9

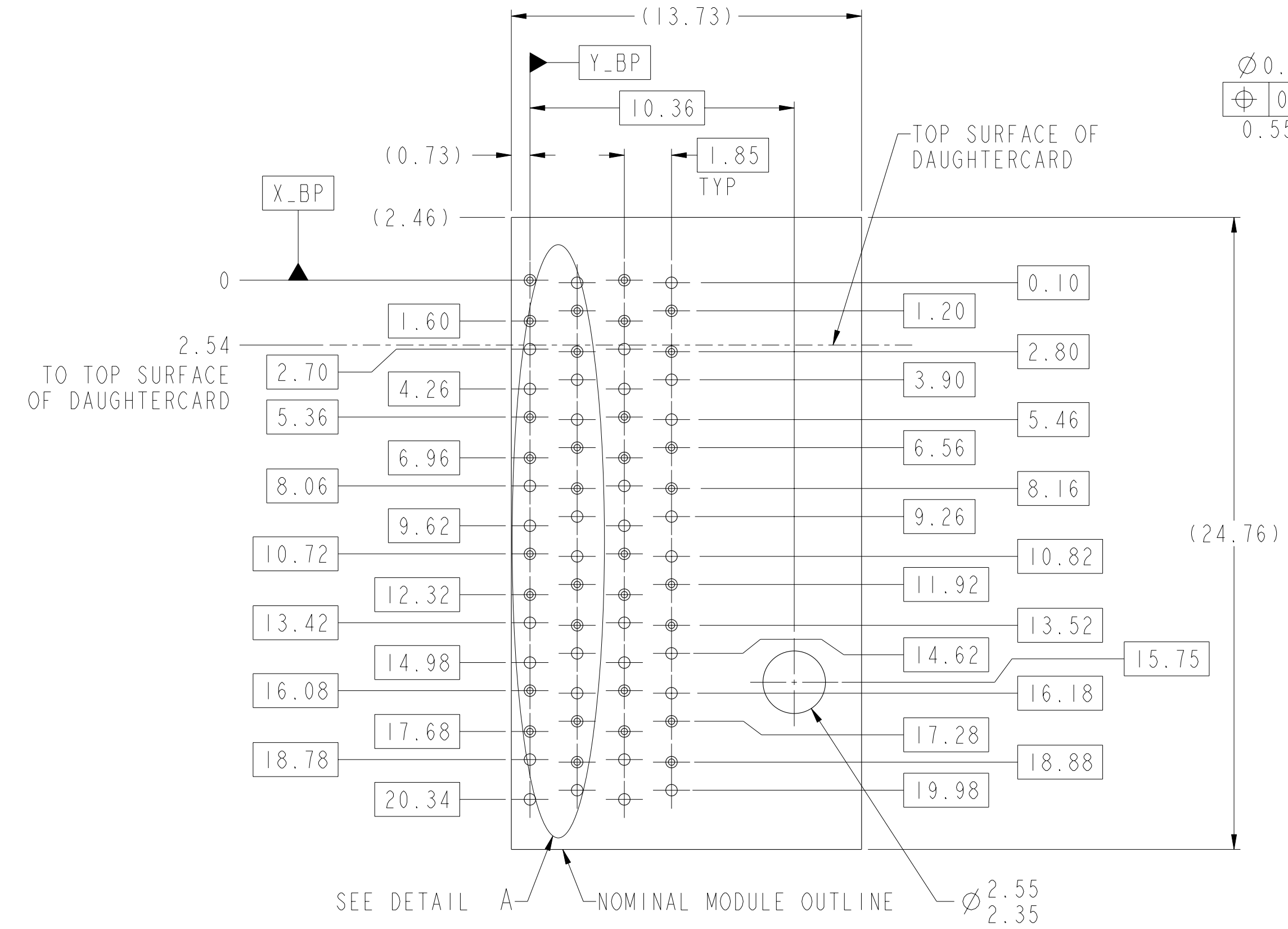
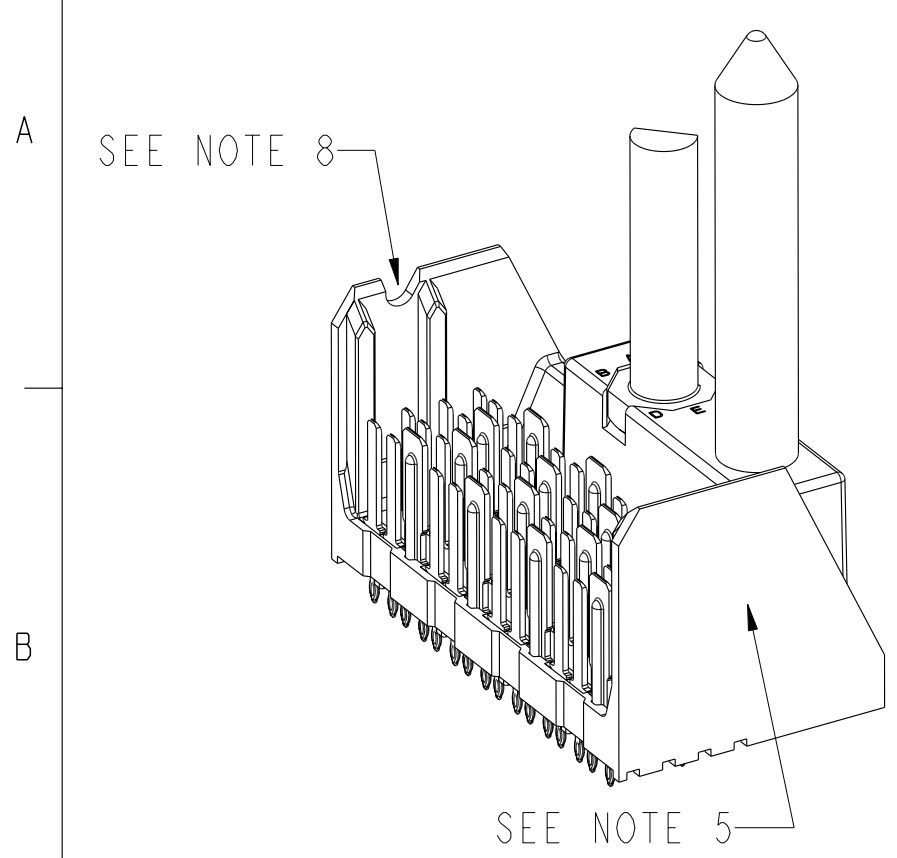


DETAIL A  
 SCALE 8:1

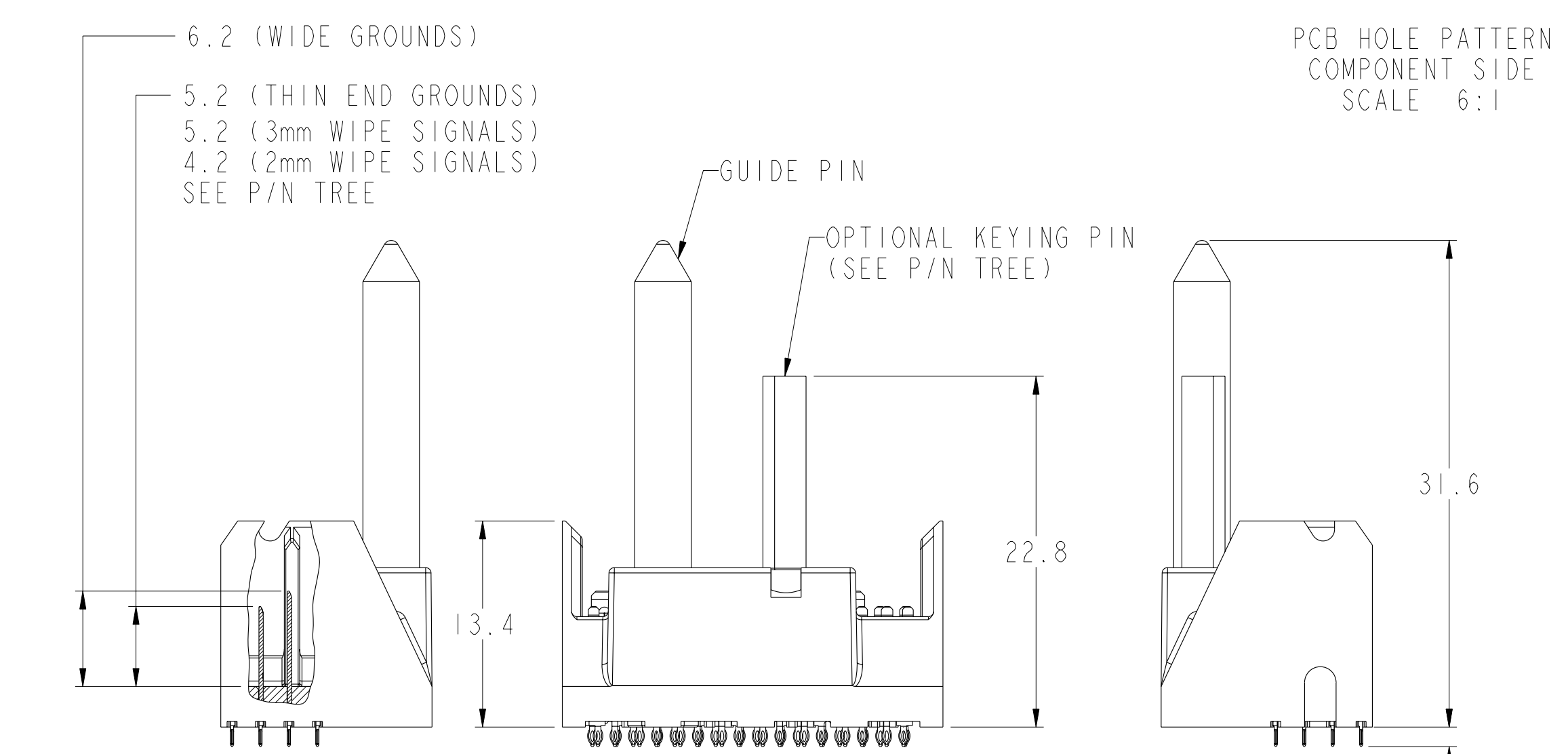
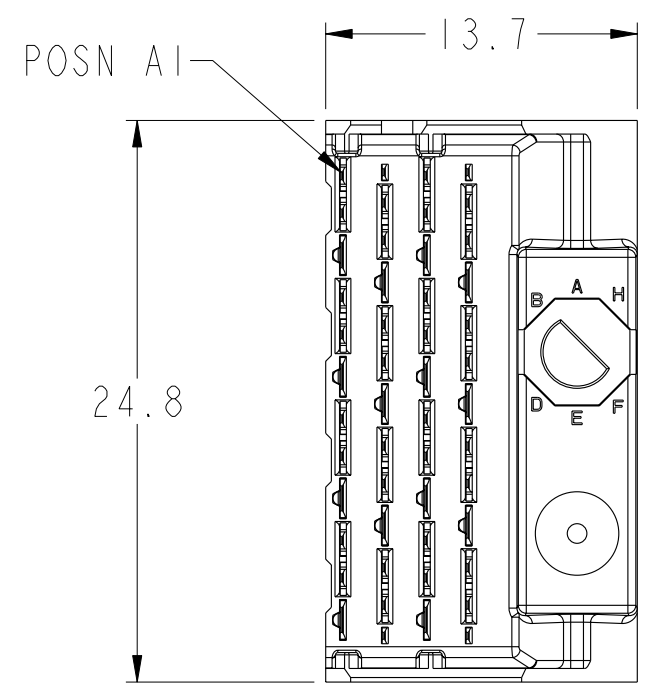
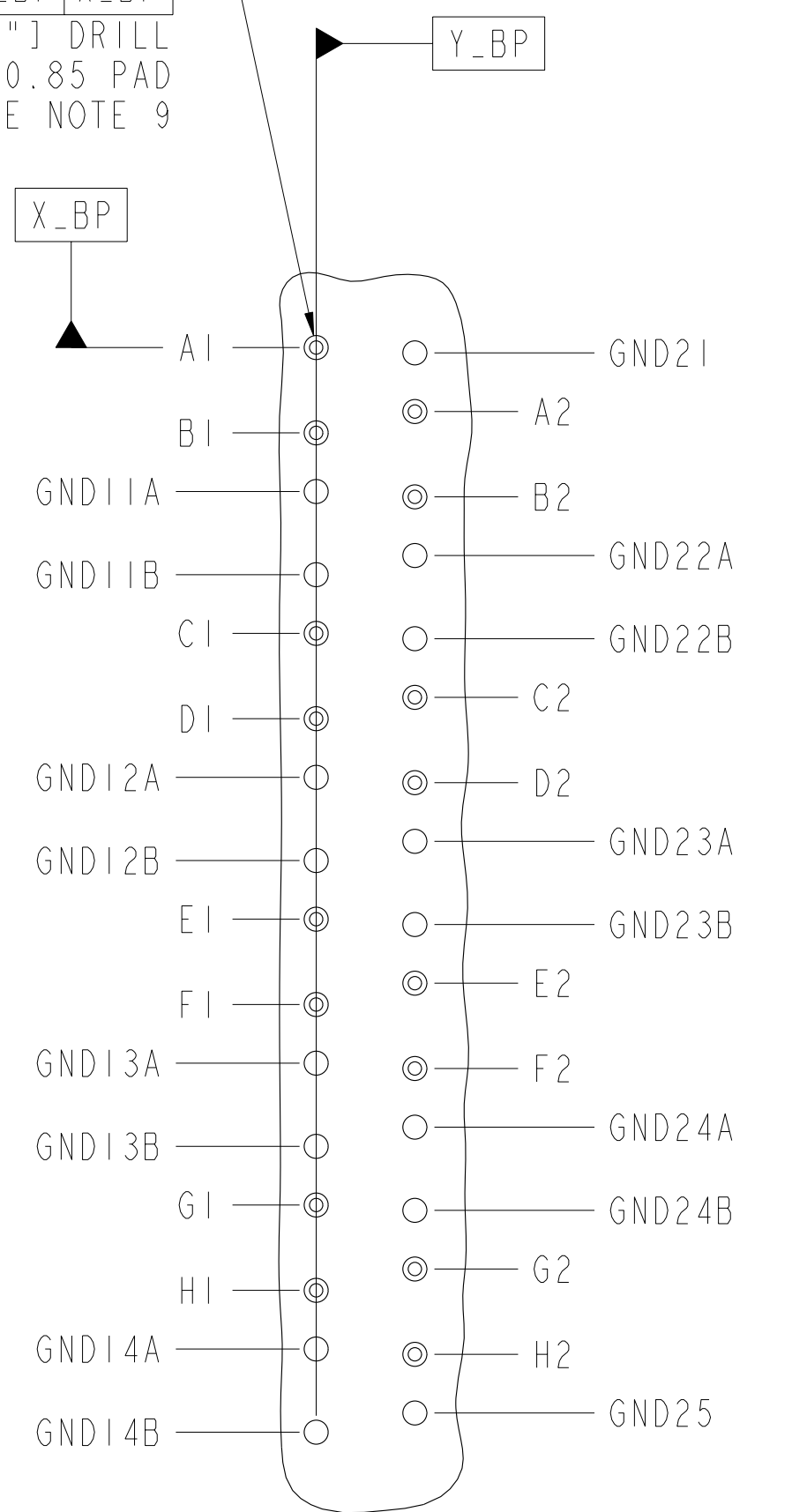
Copyright FCI  
**FCI**

spec ref	SEE NOTES	dr	N.BHARATHI	2010-05-20	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	W.J.SWAIN	2010-05-20	chr	W.J.SWAIN	2010-05-20	ecn no		
surface	linear	0.X	$\pm 0.2$	0.XX	$\pm 0.10$	0.XXX	$\pm 0.050$	angular	$0^\circ$	$\pm 0^\circ$
TOLERANCES UNLESS OTHERWISE SPECIFIED		<b>FCI</b>		product family		XCede		rel level		In Work
MODULE ASSEMBLY		cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 3 of 8		rev
VERTICAL HEADER, 4-COLUMN, 4-PAIR		www.fci.com		10091836		I				

# RIGHT POLARIZING/GUIDE MODULE



$\varnothing 0.45 \pm 0.05$  PTH TYP  
 $\varnothing 0.10$  A Y\_BP X\_BP  
 $0.55$  [0.0217"] DRILL  
 $\varnothing 0.85$  PAD  
 SEE NOTE 9



$\varnothing 2.55$   
 $\varnothing 2.35$   
 $\varnothing 0.10$  A Y\_BP X\_BP  
 SEE NOTE 11 & TABLE 1

PCB HOLE PATTERN  
 COMPONENT SIDE  
 SCALE 6:1

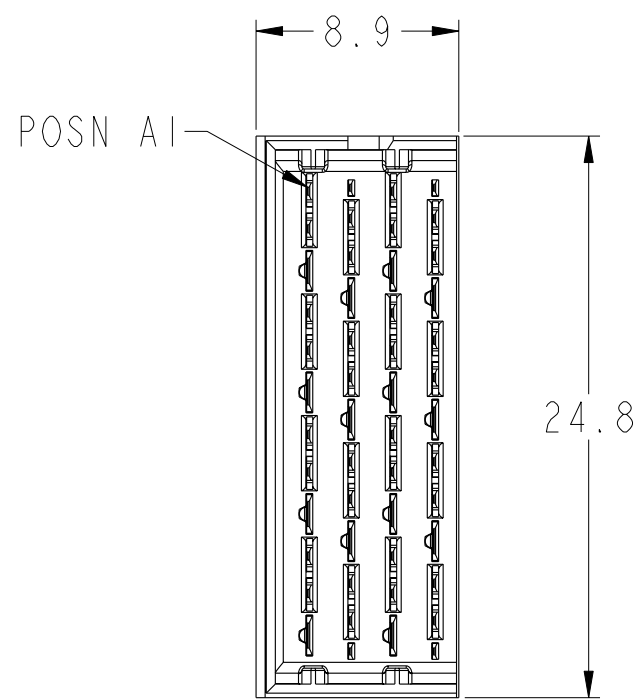
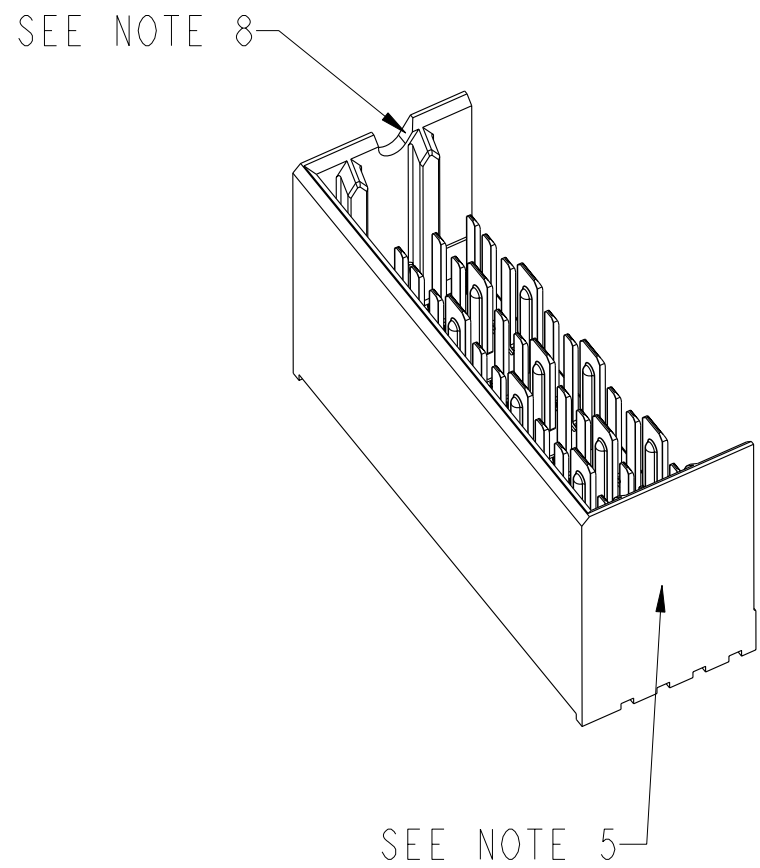
DETAIL A  
 SCALE 8:1

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**FCI**

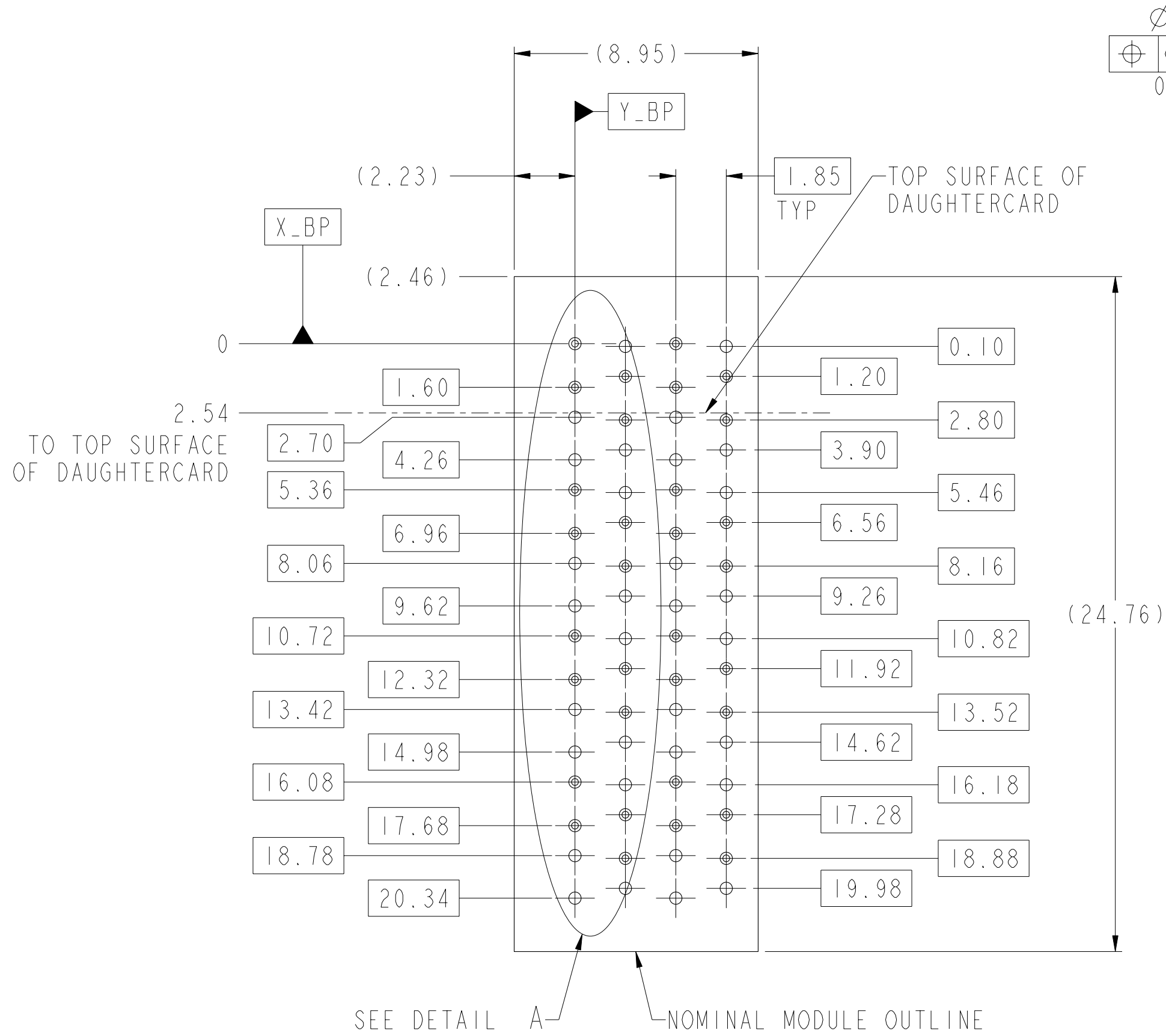
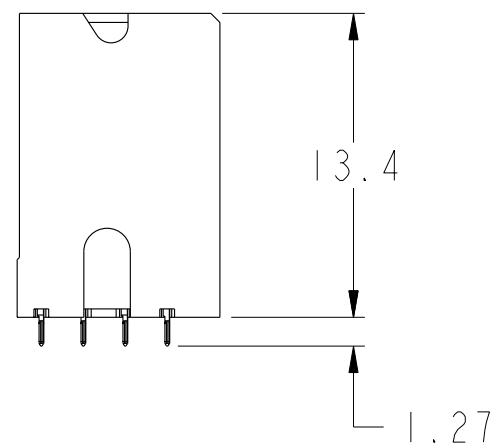
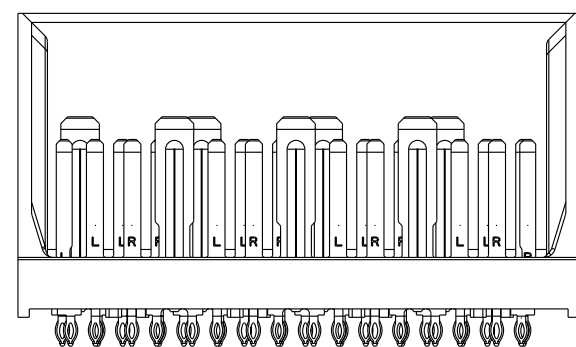
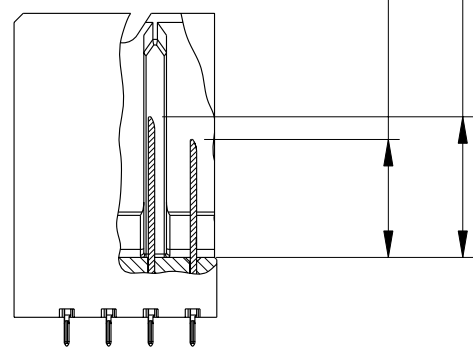
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tolerance std	ASME Y14.5	eng	W.J.SWAIN	2010-05-20	chr	W.J.SWAIN	2010-05-20	ecn no		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	appr			product family	XCede	rel level	In Work		
surface	linear	0.X	$\pm 0.2$	<b>FCI</b> MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 4-PAIR www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 4 of 8	rev	I
		0.XX	$\pm 0.10$		dwg no	10091836				
	angular	0°	$\pm 0.050$							

**PRELIMINARY**

# LEFT WALL MODULE

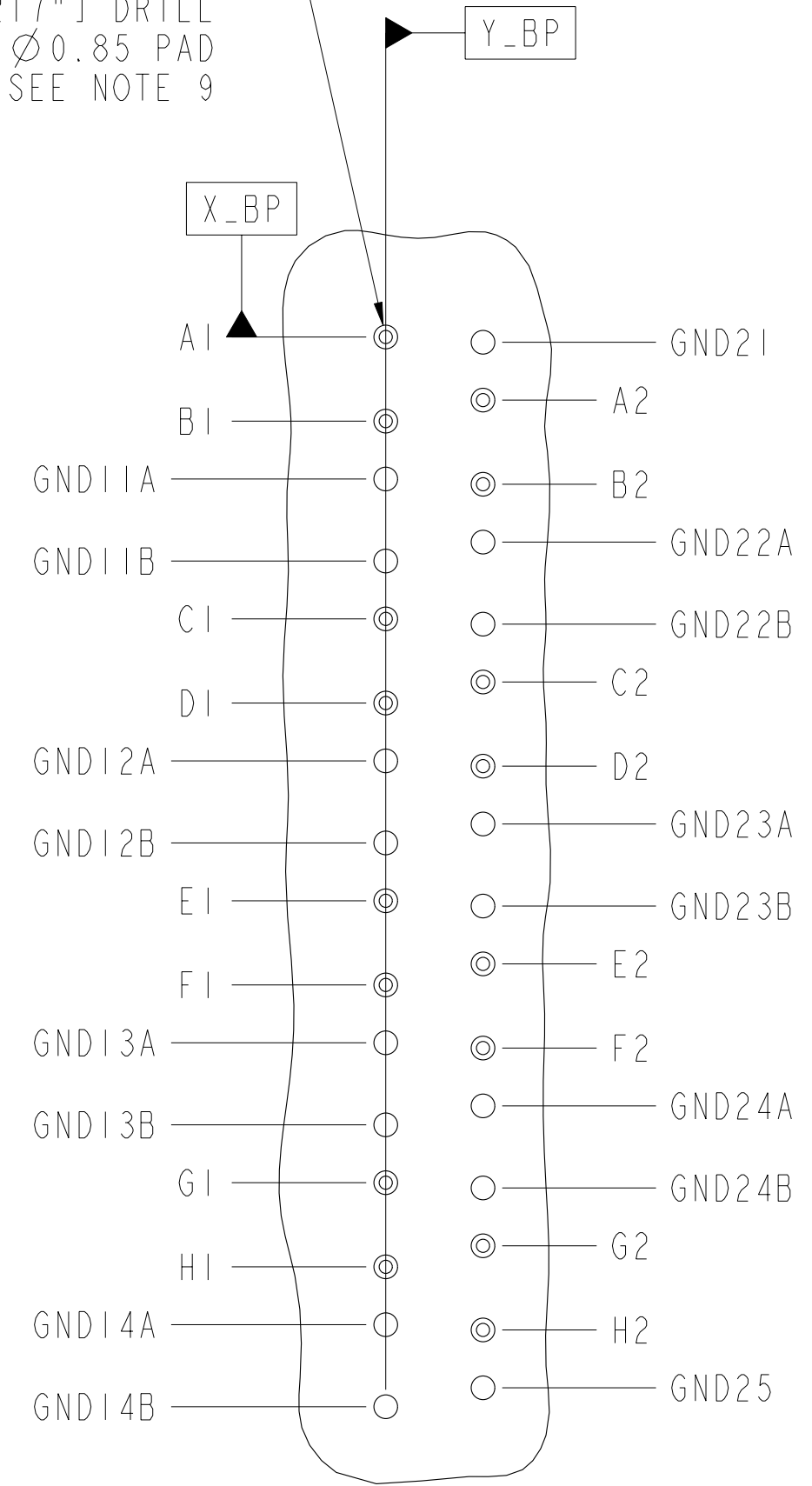


- 6.2 (WIDE GROUNDS)
- 5.2 (THIN END GROUNDS)
- 5.2 (3mm WIPE SIGNALS)
- 4.2 (2mm WIPE SIGNALS)
- SEE P/N TREE



PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

$\varnothing 0.45 \pm 0.05$  PTH TYP  
 $\varnothing 0.10$  A Y\_BP X\_BP  
 0.55 [0.0217"] DRILL  
 $\varnothing 0.85$  PAD  
 SEE NOTE 9

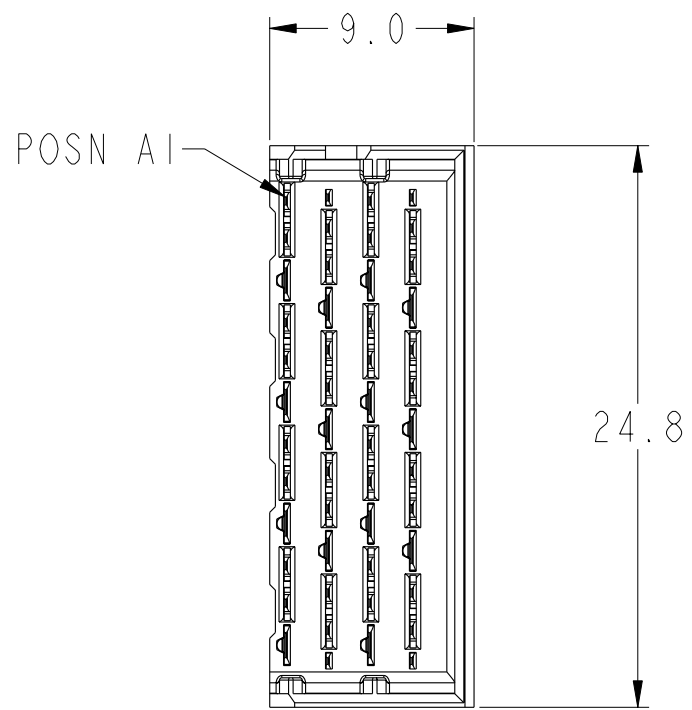
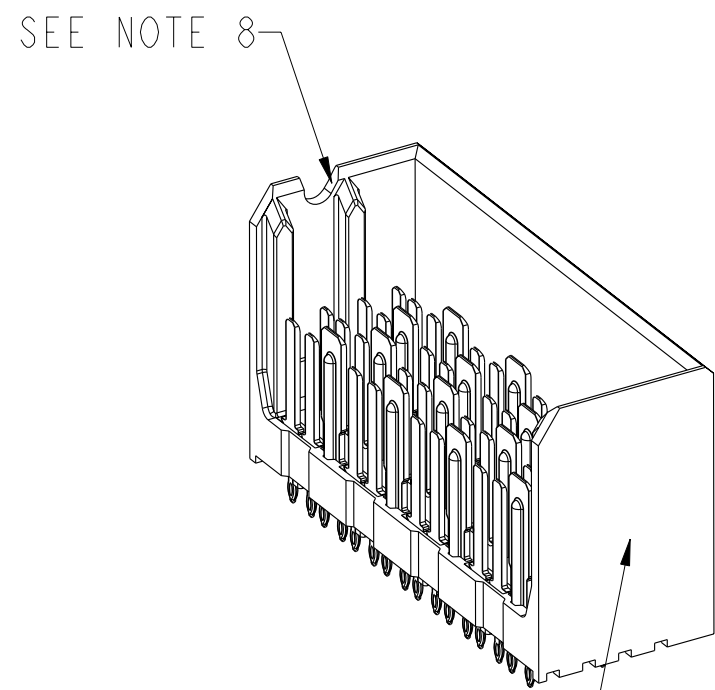


DETAIL A  
SCALE 8:1

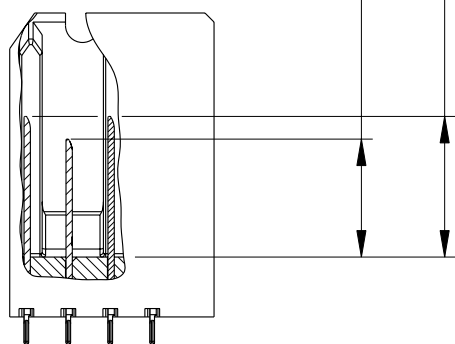
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spec ref	SEE NOTES	dr	N.BHARATHI	2010-05-20	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	W.J.SWAIN	2010-05-20			ecn no	rel level	In Work	rev
ASME Y14.5		chr	W.J.SWAIN	2010-05-20						
surface	linear	0.X	±0.2		MODULE ASSEMBLY		10091836	Product - Customer Drw	sheet 5 of 8	I
		0.XX	±0.10		cat. no.	SEE P/N TREE				
ASME Y14.5	angular	0°	±°		www.fci.com					

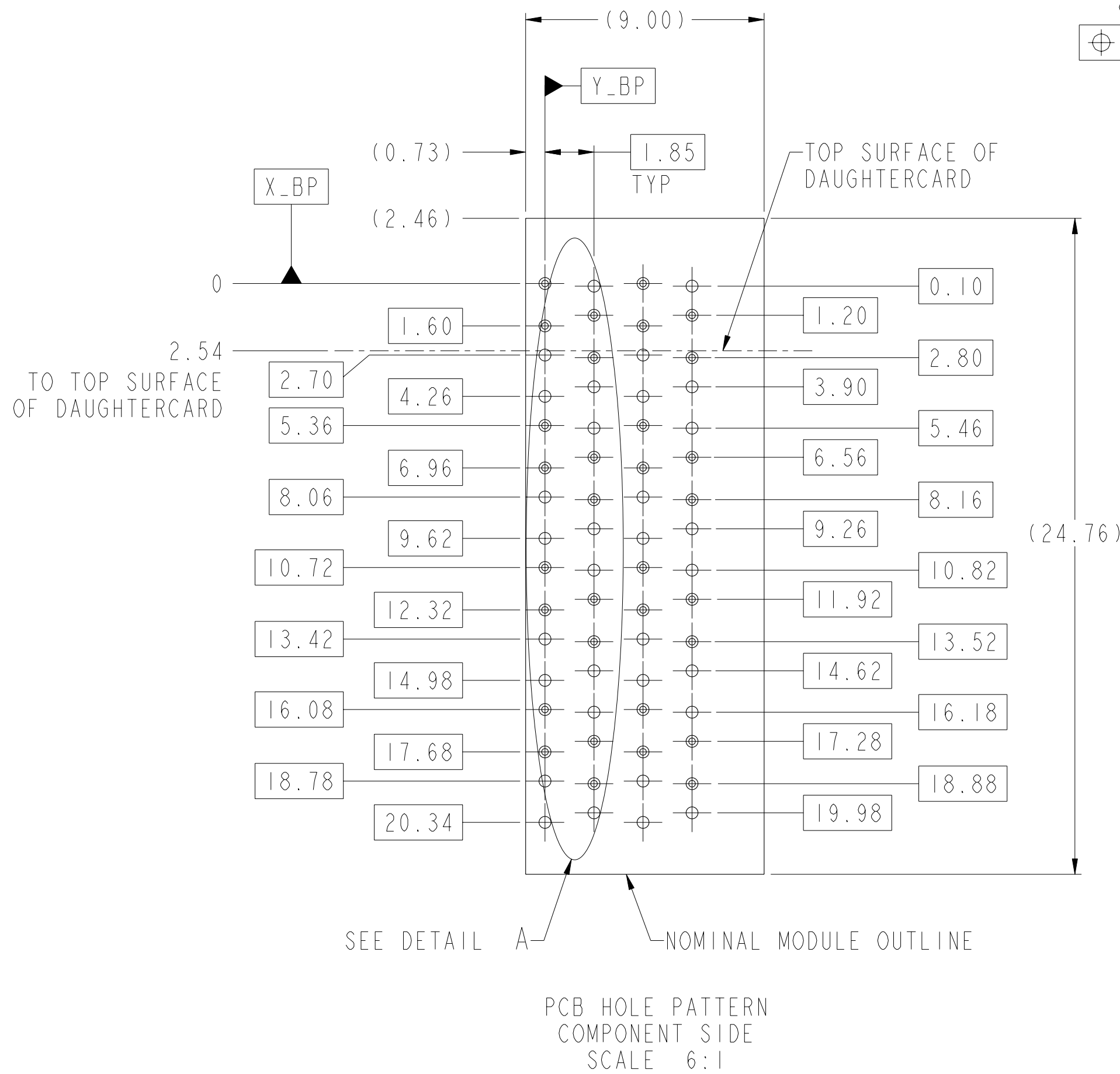
# RIGHT WALL MODULE



- 6.2 (WIDE GROUNDS)
- 5.2 (THIN END GROUNDS)
- 5.2 (3mm WIPE SIGNALS)
- 4.2 (2mm WIPE SIGNALS)
- SEE P/N TREE



2.54  
TO TOP SURFACE  
OF DAUGHTERCARD



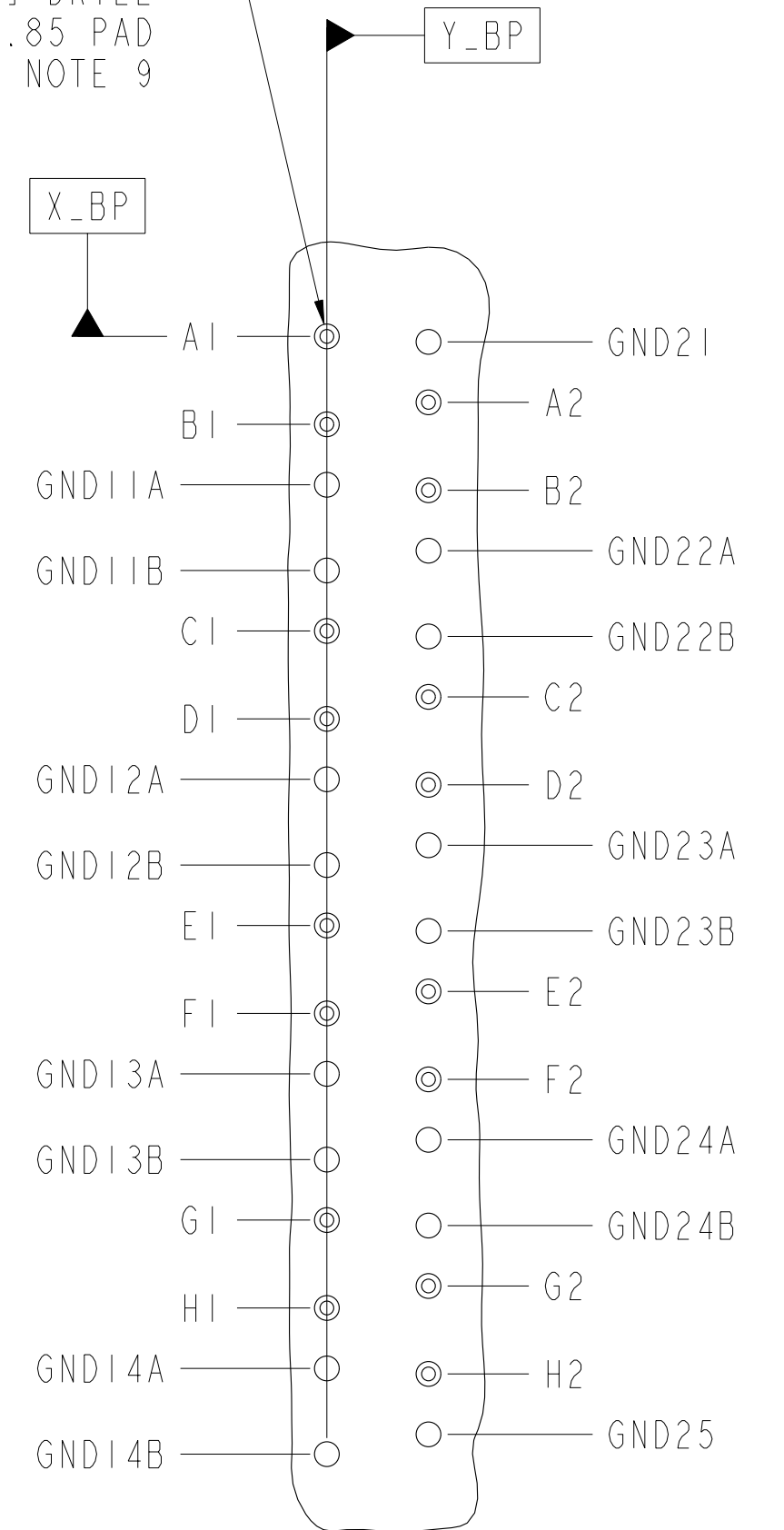
$\varnothing 0.45 \pm 0.05$  PTH TYP

$\varnothing$	A	Y_BP	X_BP
0.10			

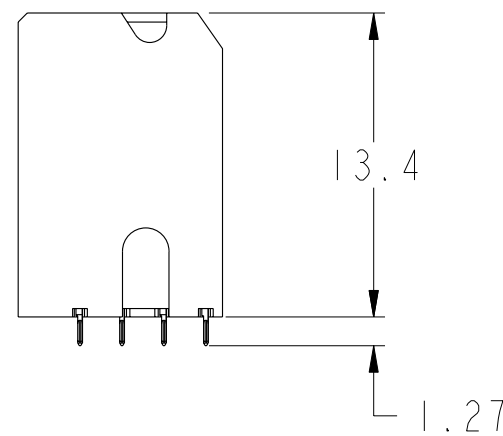
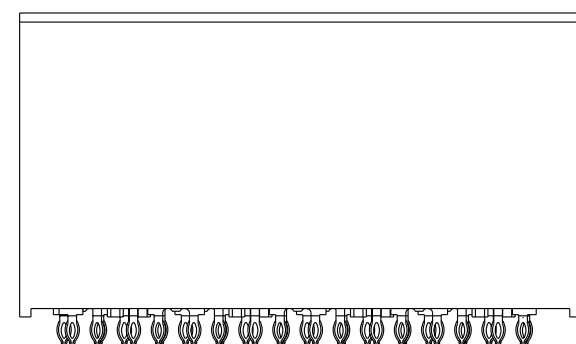
0.55 [0.0217"] DRILL

$\varnothing 0.85$  PAD

SEE NOTE 9



DETAIL A  
SCALE 8:1



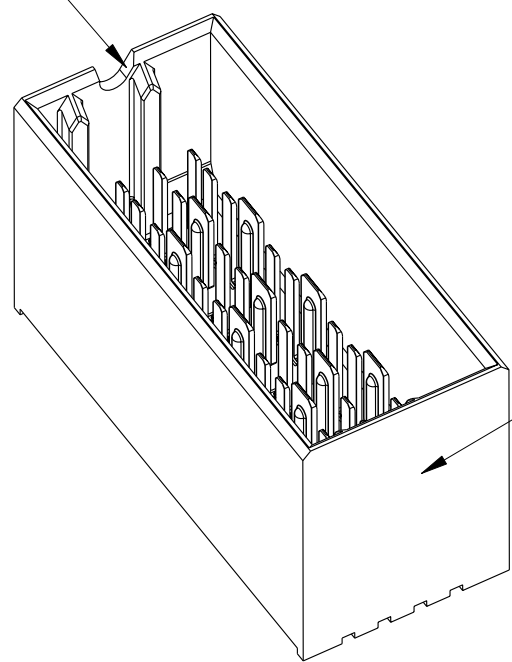
spec ref	SEE NOTES	dr	N.BHARATHI	2010-05-20	projection	MM	size	A2	scale	4:1											
tolerance std	ASME Y14.5	eng	W.J.SWAIN	2010-05-20			ecn no	rel level	In Work	rev											
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	W.J.SWAIN	2010-05-20																	
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td><math>\pm 0.2</math></td> </tr> <tr> <td></td> <td>0.XX</td> <td><math>\pm 0.10</math></td> </tr> <tr> <td></td> <td>0.XXX</td> <td><math>\pm 0.050</math></td> </tr> <tr> <td>angular</td> <td>0°</td> <td><math>\pm</math>°</td> </tr> </table>	linear	0.X	$\pm 0.2$		0.XX	$\pm 0.10$		0.XXX	$\pm 0.050$	angular	0°	$\pm$ °			product family	XCode	rel level	In Work	rev	I
linear	0.X	$\pm 0.2$																			
	0.XX	$\pm 0.10$																			
	0.XXX	$\pm 0.050$																			
angular	0°	$\pm$ °																			
ASME Y14.5		www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8															

PRELIMINARY

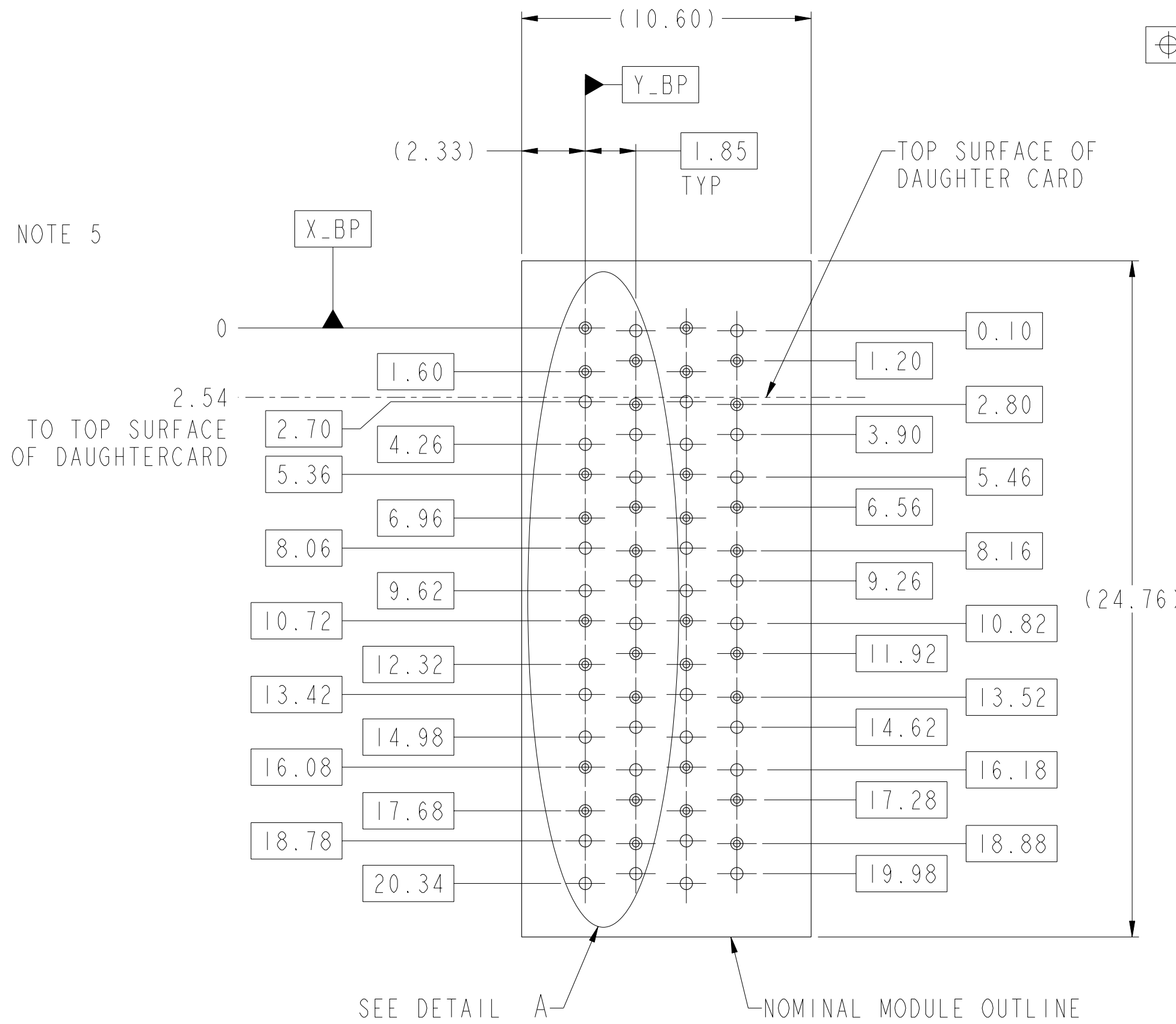
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# 4-WALL MODULE

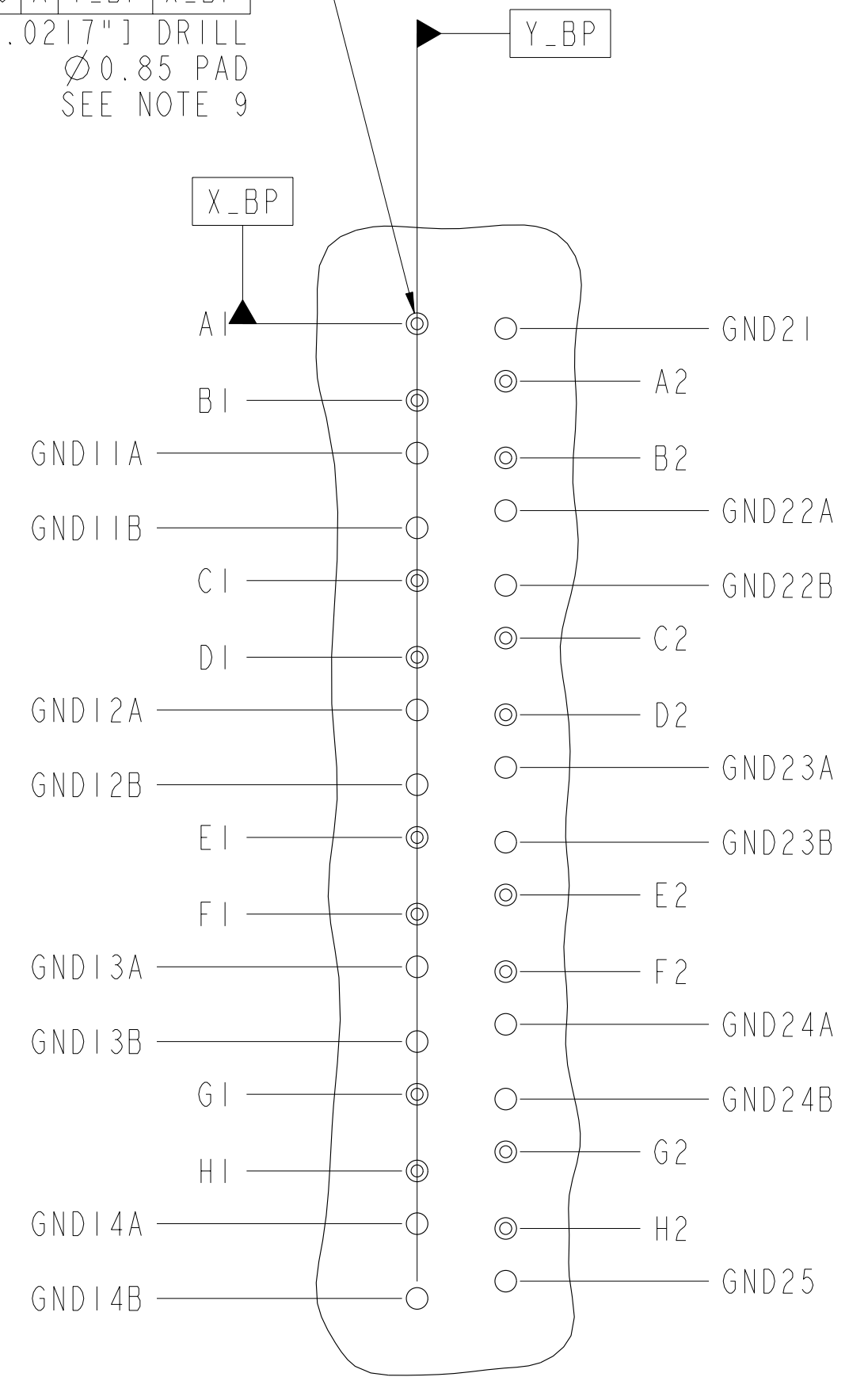
SEE NOTE 8



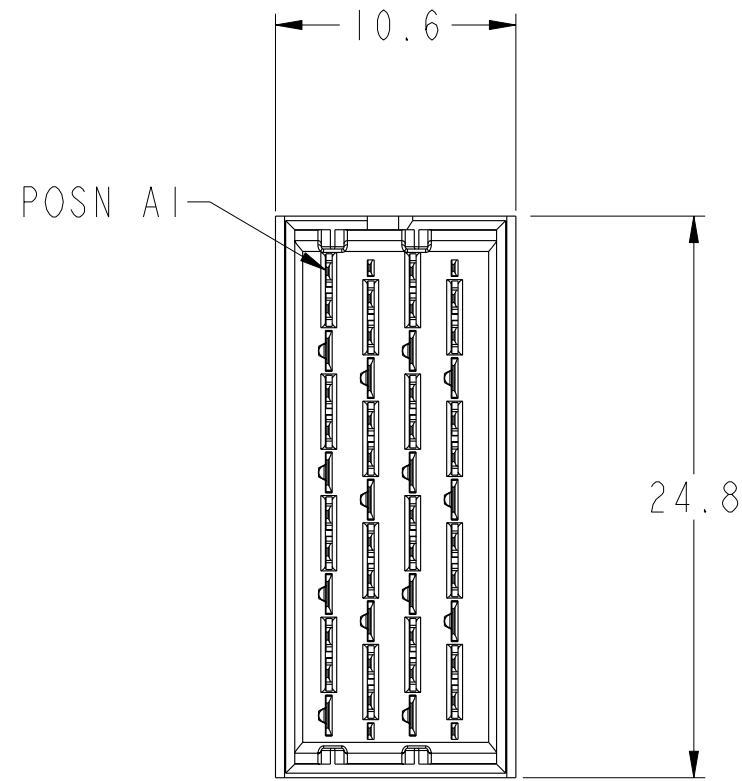
SEE NOTE 5



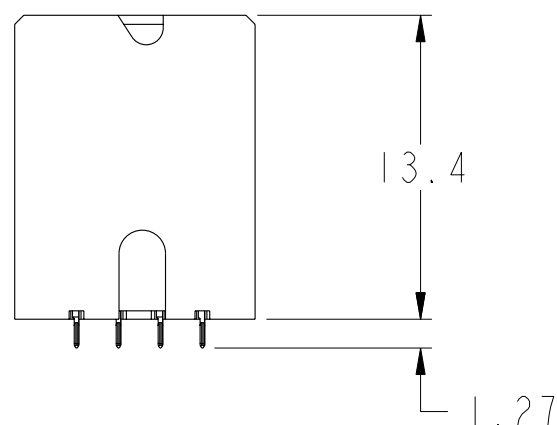
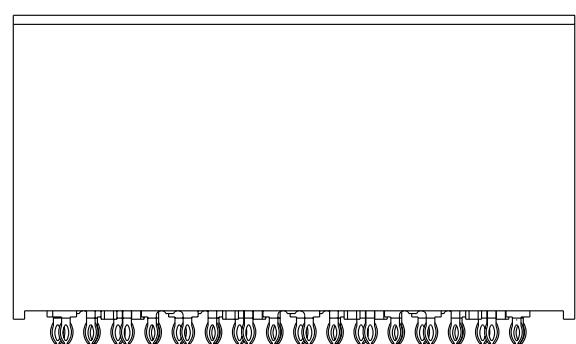
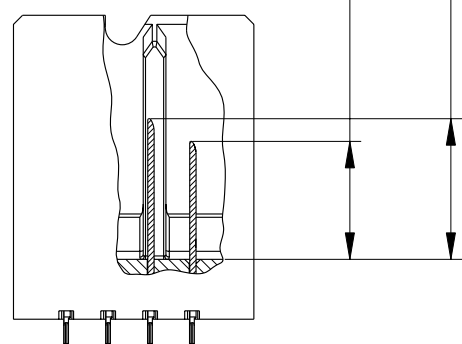
$\varnothing 0.45 \pm 0.05$  PTH TYP  
 $\varnothing 0.10$  [Y\_BP X\_BP]  
 0.55 [0.0217"] DRILL  
 $\varnothing 0.85$  PAD  
 SEE NOTE 9



DETAIL A  
SCALE 8:1



6.2 (WIDE GROUNDS)  
 5.2 (THIN END GROUNDS)  
 5.2 (3mm WIPE SIGNALS)  
 4.2 (2mm WIPE SIGNALS)  
 SEE P/N TREE



SEE DETAIL A NOMINAL MODULE OUTLINE

PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

spec ref	SEE NOTES	dr	N.BHARATHI	2010-05-20	projection	MM	size	A2	scale	3:1										
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	W.J.SWAIN	2010-05-20			ecn no													
ASME Y14.5		chr	W.J.SWAIN	2010-05-20			rel level	In Work												
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td><math>\pm 0.2</math></td> </tr> <tr> <td></td> <td>0.XX</td> <td><math>\pm 0.10</math></td> </tr> <tr> <td></td> <td>0.XXX</td> <td><math>\pm 0.050</math></td> </tr> <tr> <td>angular</td> <td>0°</td> <td><math>\pm</math>°</td> </tr> </table>	linear	0.X	$\pm 0.2$		0.XX	$\pm 0.10$		0.XXX	$\pm 0.050$	angular	0°	$\pm$ °		title MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 4-PAIR	cat. no. SEE P/N TREE	product family XCode	rel level In Work	In Work	rev I
linear	0.X	$\pm 0.2$																		
	0.XX	$\pm 0.10$																		
	0.XXX	$\pm 0.050$																		
angular	0°	$\pm$ °																		
ASME Y14.5		www.fci.com			Product - Customer Drw	sheet 7 of 8	10091836	10091836	10091836	10091836										

PRELIMINARY

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NOTES:

1. CONNECTOR MATERIALS  
SHROUD: HIGH-TEMP THERMOPLASTIC, 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 (PRELIMINARY)
4. APPLICATION SPECIFICATION: GS-20-121 (PRELIMINARY)
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.

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**PRELIMINARY**

spec ref	SEE NOTES	dr	N.BHARATHI	2010-05-20	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	W.J.SWAIN	2010-05-20		←→	ecn no			
ASME Y14.5		chr	W.J.SWAIN	2010-05-20			rel level	In Work		
		appr					product family	XCede		
surface	linear	0.X	±0.2		MODULE ASSEMBLY	dig no	10091836	rev	I	
ASME Y14.5		0.XX	±0.10							
	angular	0°	±°							
		www.fci.com	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 8 of 8				