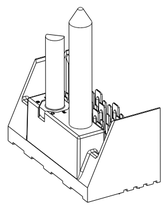
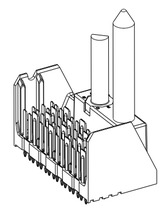
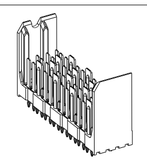
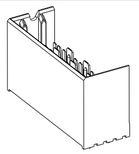
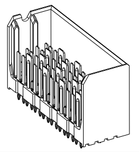
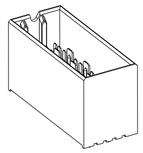
10091836 - X 0 J - X X X L F

- 4-COLUMN DIFFERENTIAL SIGNAL
- LEAD-FREE DESIGNATION ONLY WITH APPLICABLE PLATING CODES

LETTER	PEFORMANCE-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	∅0.55 [0.0217"]
2	3	4	∅0.55 [0.0217"]
3	2	4	∅0.45 [0.0177"]
4	3	4	∅0.45 [0.0177"]
5	2	3	∅0.55 [0.0217"]
6	3	3	∅0.55 [0.0217"]
7	2	3	∅0.45 [0.0177"]
8	3	3	∅0.45 [0.0177"]

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

	GROUNDED	UNGROUNDED
FINISHED	∅2.35-2.55	∅2.35-2.55
PAD	∅5.50	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

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spec ref: SEE NOTES
tolerance std: ASME Y14.5
TOLERANCES UNLESS OTHERWISE SPECIFIED
surface: - / ASME Y14.5

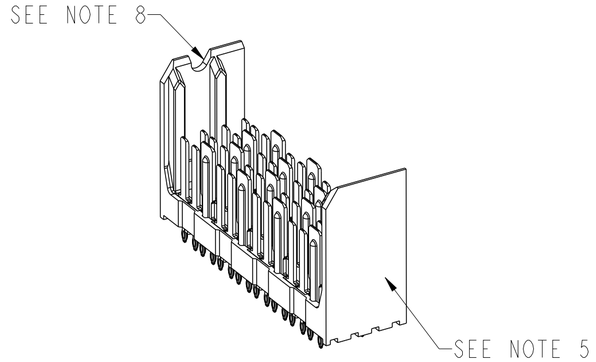
linear	0.X	±0.2
	0.XX	±0.10
	0.XXX	±0.050
angular	0°	±-°

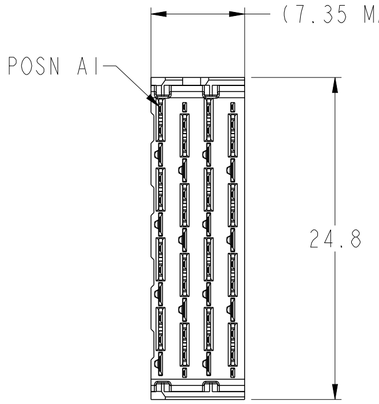
dr	Jim Swain	2010/04/13
eng	Michael Song	2016/06/06
chr	Heaven Cen	2016/06/08
appr	Pei-Ming Zheng	2016/06/15

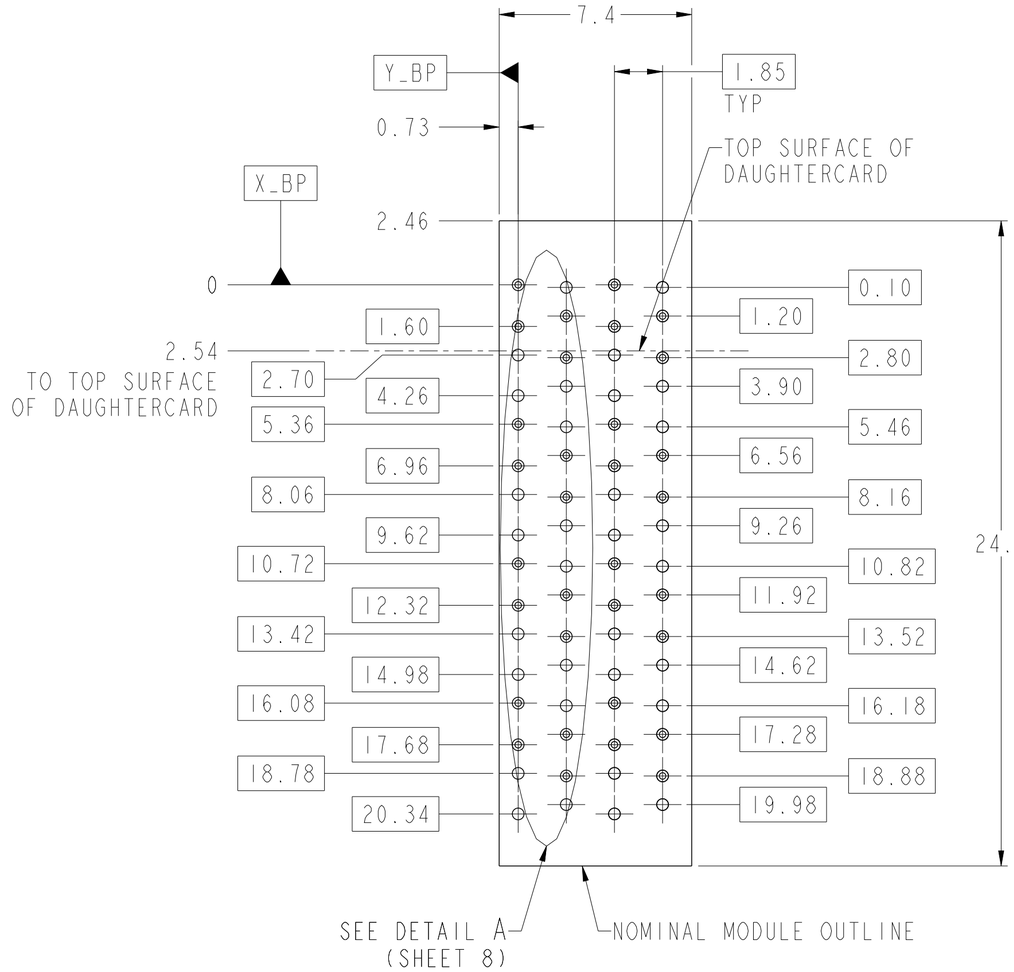
projection | MM | size A2 | scale 4:1
product family: -
ecn no: ELX-DG-24191-1
rel level: Released

Amphenol FCI
title: MODULE ASSEMBLY
VERTICAL HEADER, 4-COLUMN, 4-PAIR
dwg no: 10091836 | rev: G
cat. no. - | Product - Customer Drw | sheet 1 of 8

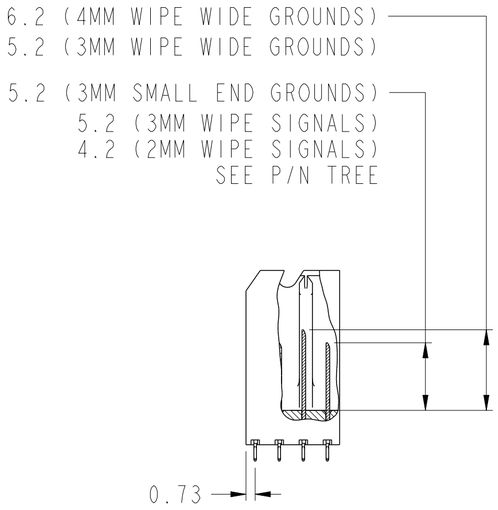
OPEN (2-WALL) MODULE

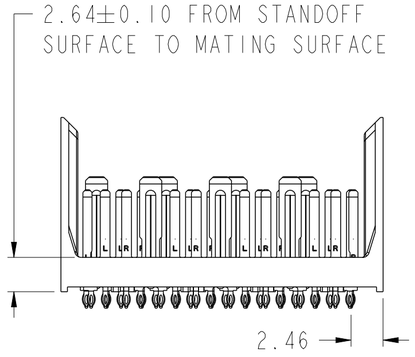


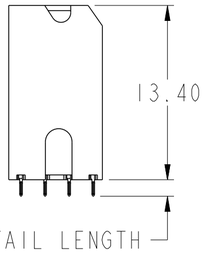




PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1







spec ref	SEE NOTES			dr	Jim Swain	2010/04/13	projection	MM	size A2	scale 4:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/06				
				chr	Heaven Cen	2016/06/08			ecn no	ELX-DG-24191-1
				appr	Pei-Ming Zheng	2016/06/15	product family -		rel level	Released
surface - ASME Y14.5	linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY			dwg no	rev
		0.XX	±0.10			VERTICAL HEADER, 4-COLUMN, 4-PAIR			10091836	G
		0.XXX	±0.050							
	angular	0°	±-°		cat. no. -	Product - Customer Drw			sheet 2 of 8	

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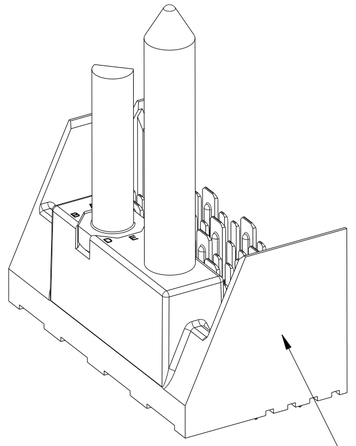
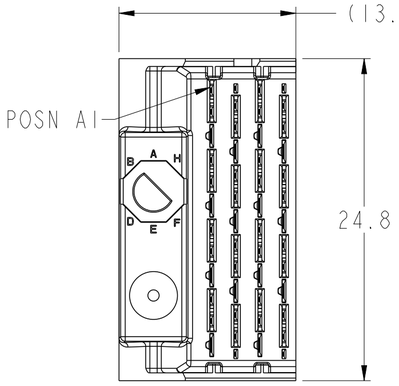
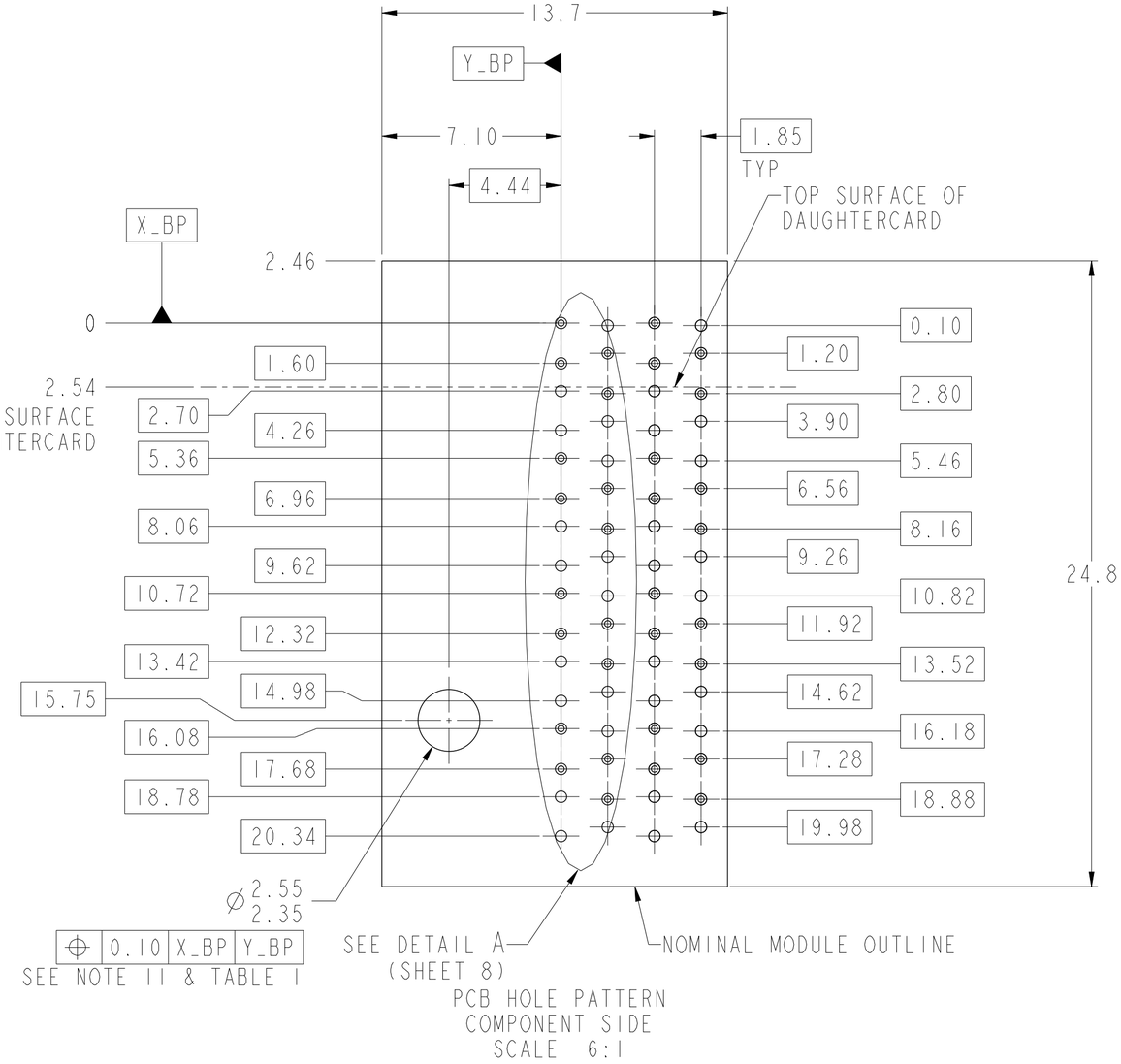
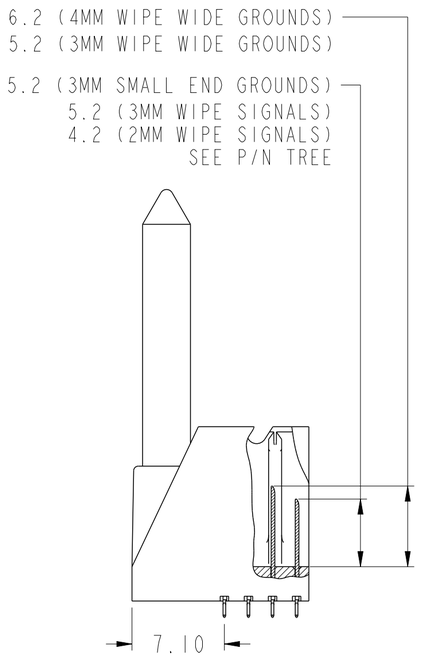
LEFT POLARIZING/GUIDE MODULE

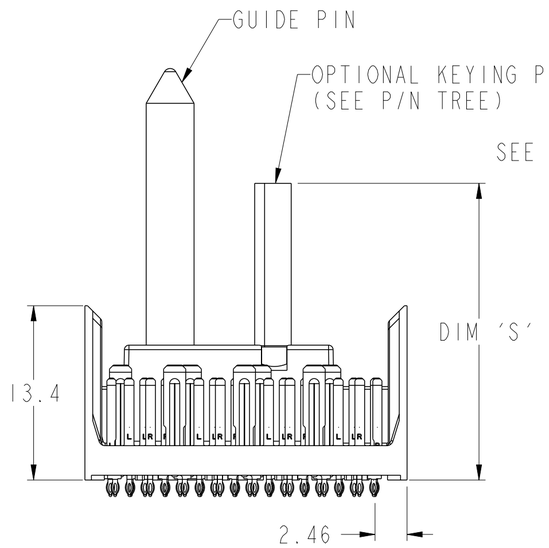


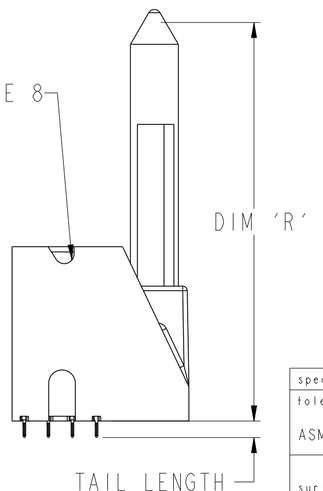
SEE NOTE 5











ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X**0**X	31.6mm	22.8mm
-X**4**X	25.7mm	20.0mm

spec ref	SEE NOTES			dr	Jim Swain	2010/04/13	projection	MM	size A2 / scale 3:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/06			
				chr	Heaven Cen	2016/06/08			ecn no ELX-DG-24191-1
				appr	Pei-Ming Zheng	2016/06/15	product family XCede		rel level **Released**
surface - ASME Y14.5	linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY	dwg no 10091836		rev G
		0.XX	±0.10			VERTICAL HEADER, 4-COLUMN, 4-PAIR			
		0.XXX	±0.050						
	angular	0°	±-°		cat. no.	SEE P/N TREE	Product - Customer Drw		sheet 3 of 8

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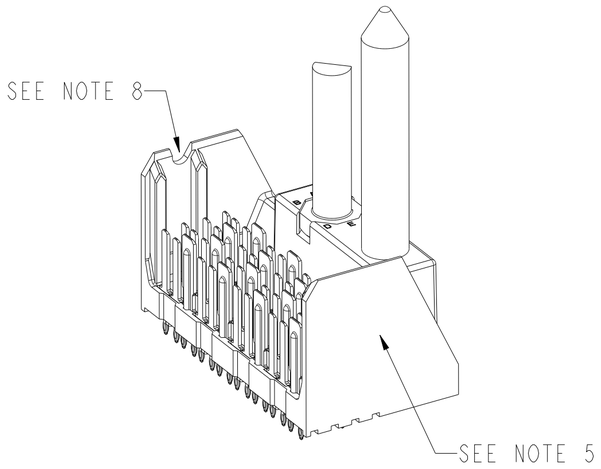
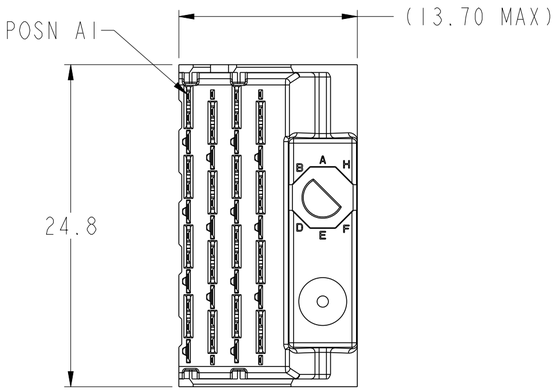
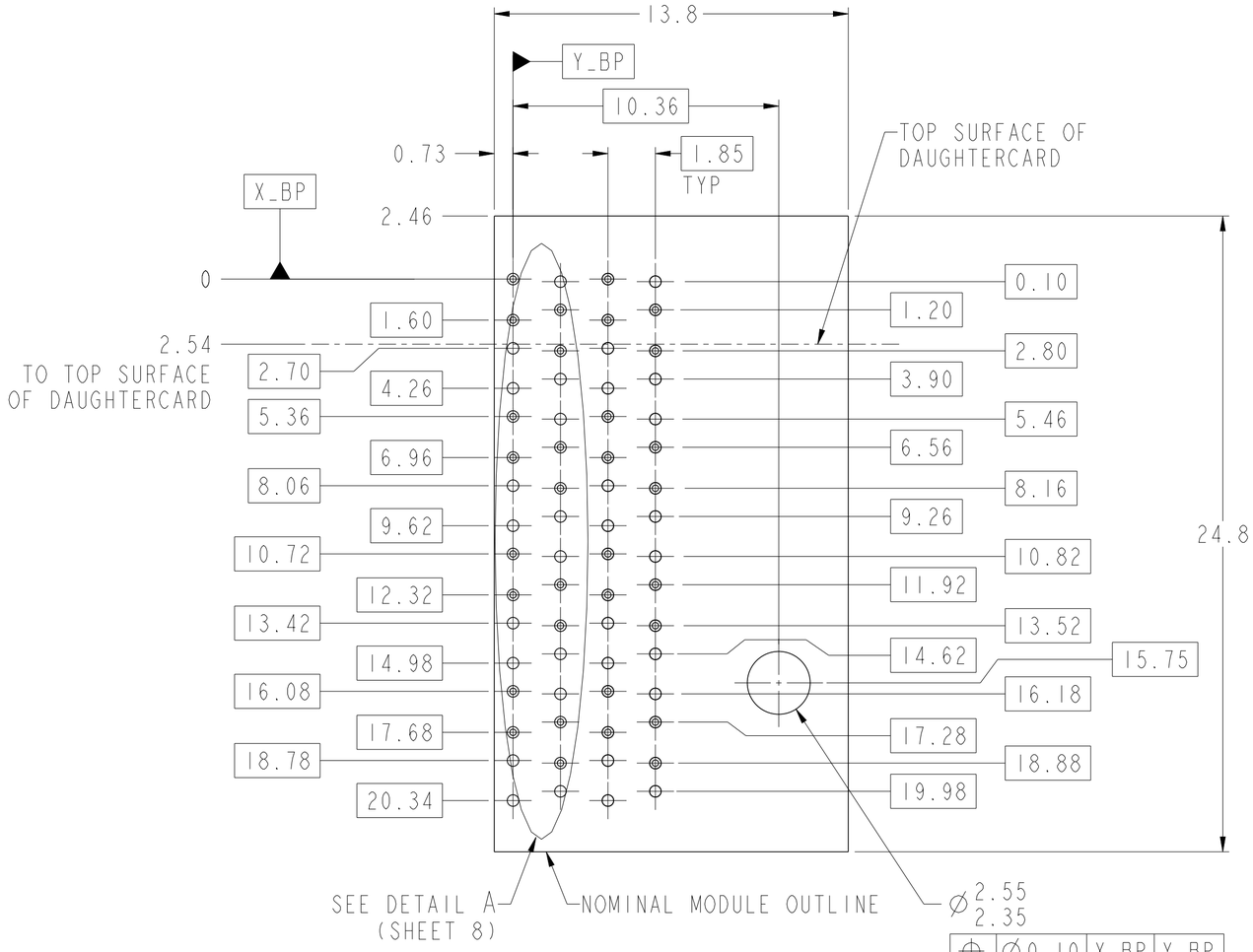
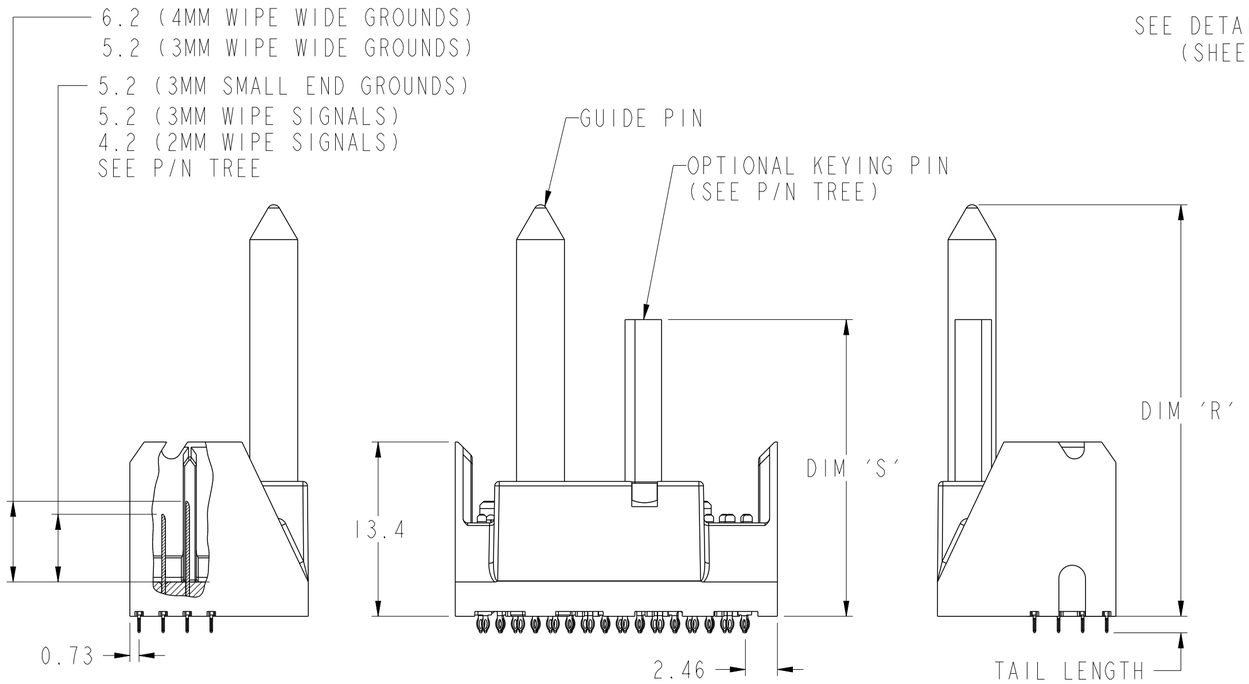
RIGHT POLARIZING/GUIDE MODULE







PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1



ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X**0**X	31.6mm	22.8mm
-X**4**X	25.7mm	20.0mm

spec ref	SEE NOTES		dr	Jim Swain	2010/04/13	projection	MM	size A2	scale 3:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1
			chr	Heaven Cen	2016/06/08				
			appr	Pei-Ming Zheng	2016/06/15	product family	XCede	rel level	Released
surface ASME Y14.5	linear	0.X ±0.2	Amphenol FCi	title	MODULE ASSEMBLY			dwg no	10091836 rev G
		0.XX ±0.10			VERTICAL HEADER, 4-COLUMN, 4-PAIR				
		0.XXX ±0.050		cat. no.	SEE P/N TREE	Product - Customer Drw		sheet 4 of 8	
	angular	0° ±-°							

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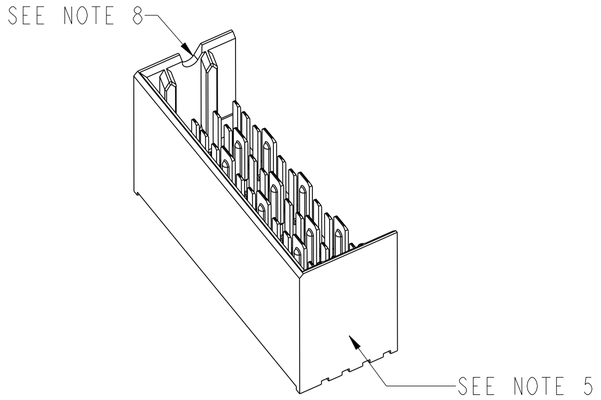
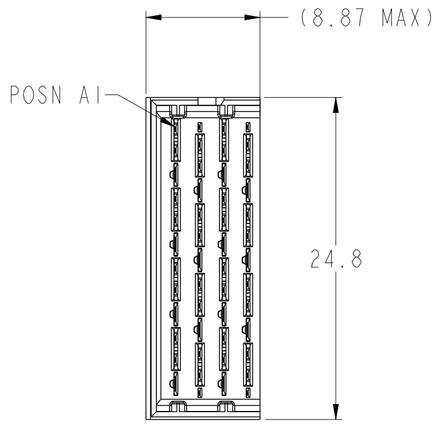
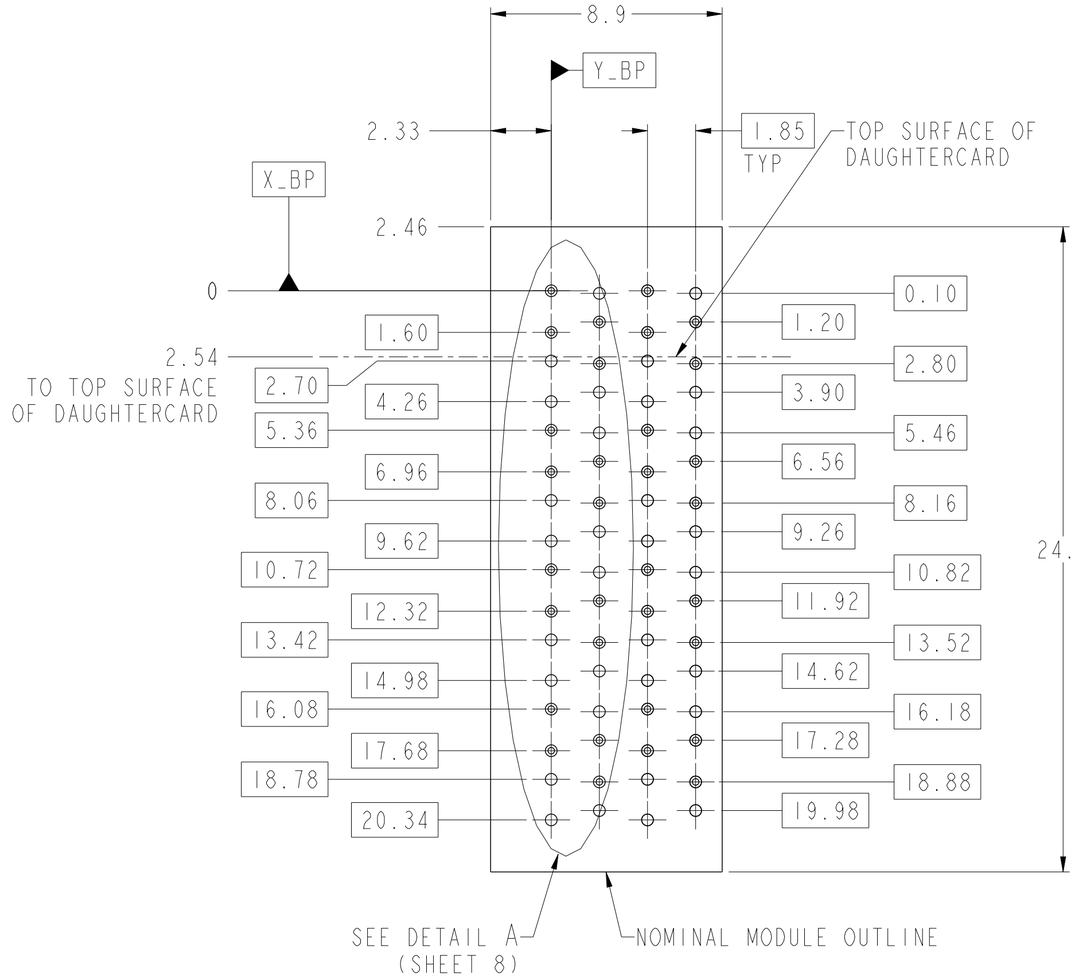
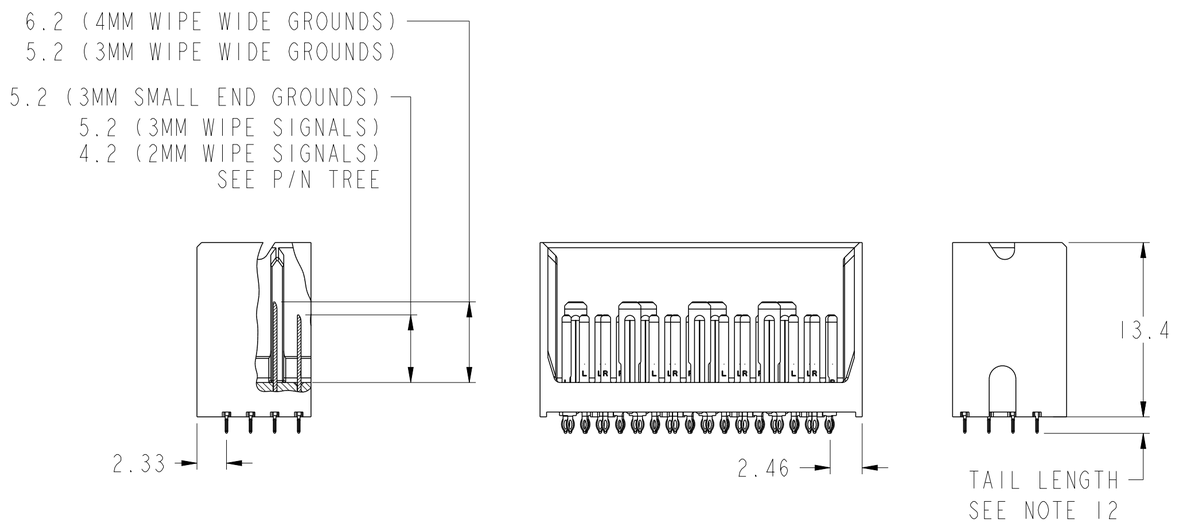
LEFT WALL MODULE







PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1



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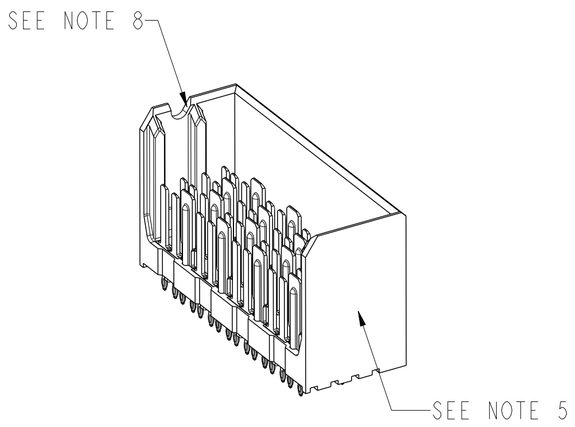
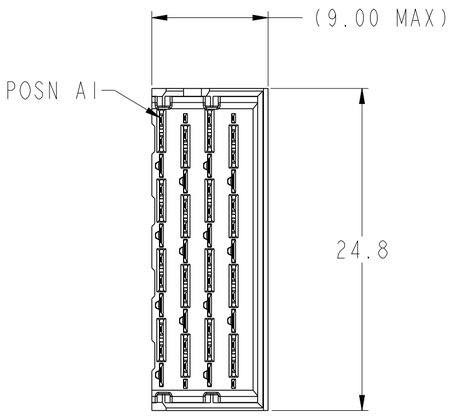
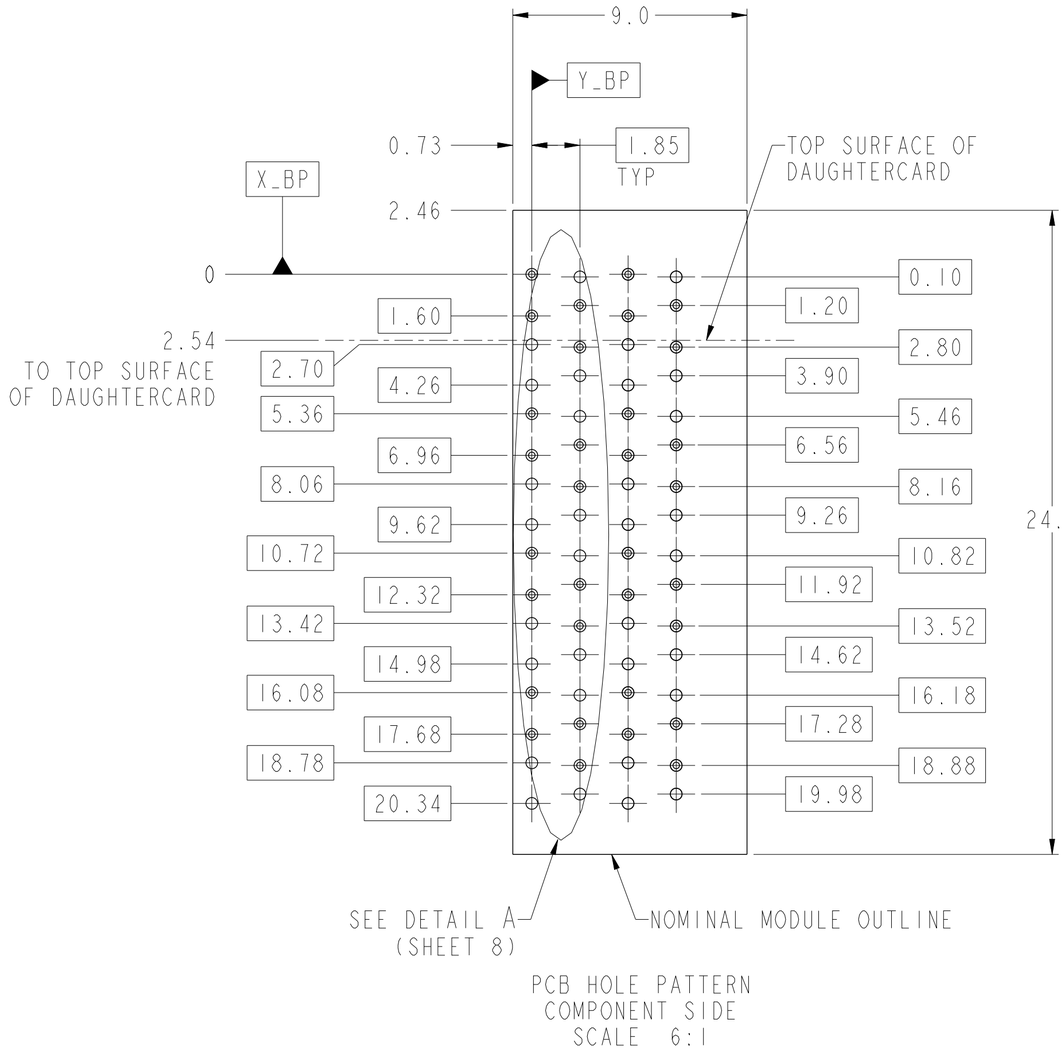
spec ref	SEE NOTES			dr	Jim Swain	2010/04/13	projection
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/06	MM
				chr	Heaven Cen	2016/06/08	size A2 / scale 3:1
				appr	Pei-Ming Zheng	2016/06/15	ecn no ELX-DG-24191-1
							product family XCede / rel level Released
surface - ASME Y14.5	linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY VERTICAL HEADER, 4-COLUMN, 4-PAIR	dwg no 10091836 / rev G
		0.XX	±0.10				
		0.XXX	±0.050				
	angular	0°	±-°		cat. no.	SEE P/N TREE	Product - Customer Drw / sheet 5 of 8

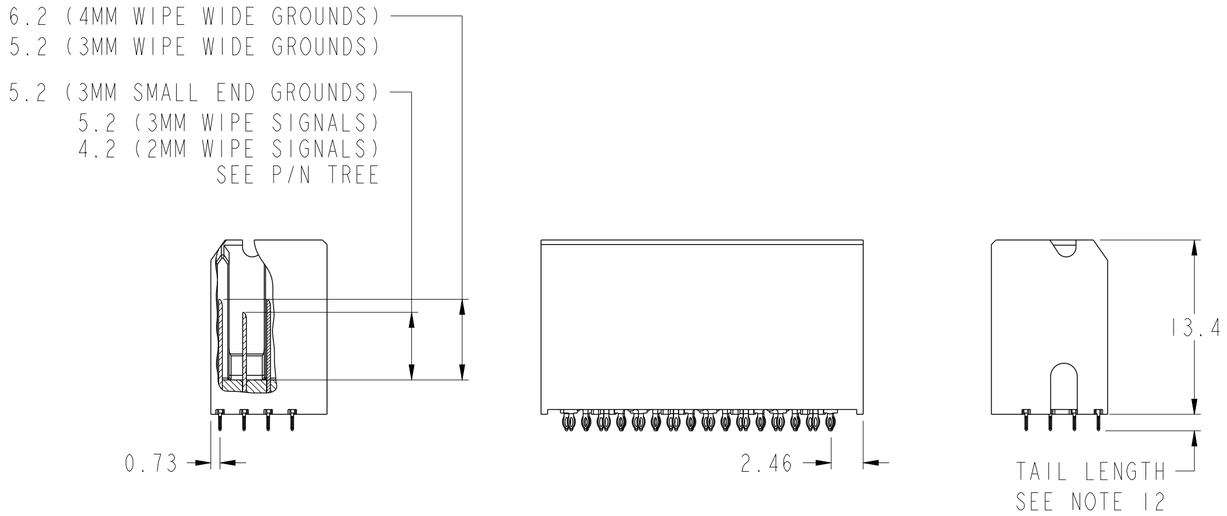
RIGHT WALL MODULE







PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1



spec ref	SEE NOTES			dr	Jim Swain	2010/04/13	projection	MM	size A2	scale 3:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1
				chr	Heaven Cen	2016/06/08				
				appr	Pei-Ming Zheng	2016/06/15	product family	XCede	rel level	Released
surface ASME Y14.5	linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY	dwg no	10091836	rev	G
		0.XX	±0.10			VERTICAL HEADER, 4-COLUMN, 4-PAIR				
		0.XXX	±0.050							
	angular	0°	±-°			cat. no. SEE P/N TREE	Product - Customer Drw		sheet 6 of 8	

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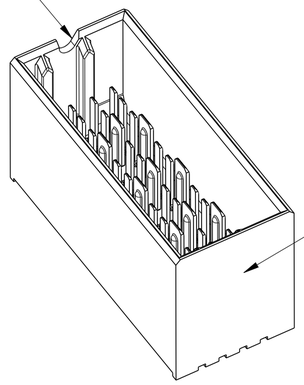
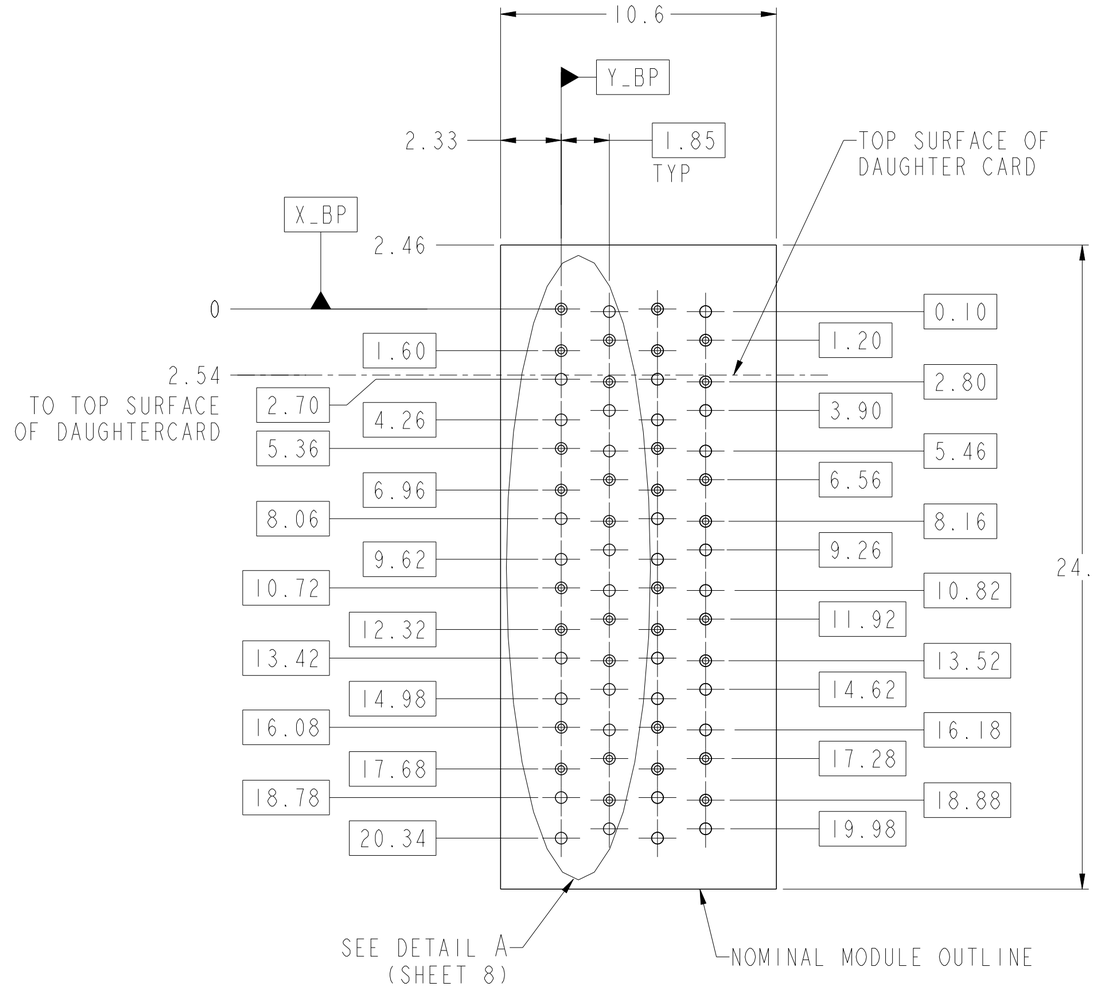
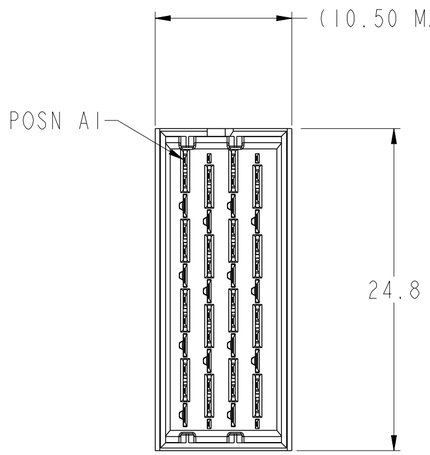
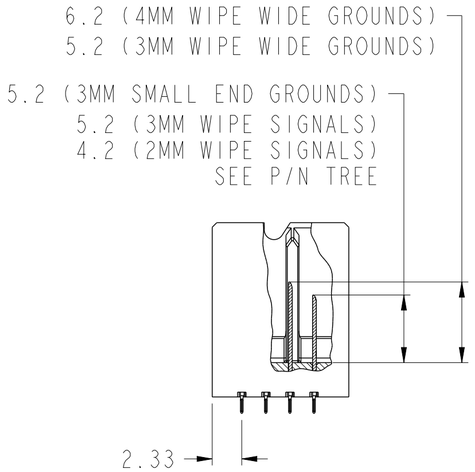
4-WALL MODULE

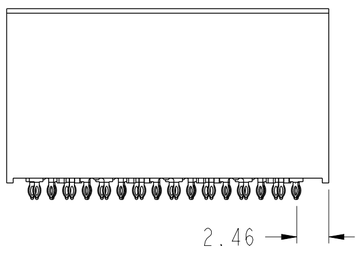


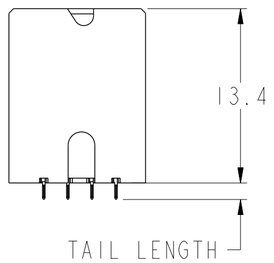


PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1









spec ref	SEE NOTES			dr	Jim Swain	2010/04/13	projection	MM	size A2 / scale 4:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/06			ecn no ELX-DG-24191-1
				chr	Heaven Cen	2016/06/08			
				appr	Pei-Ming Zheng	2016/06/15	product family -		rel level Released
surface - ASME Y14.5	linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY	dwg no	10091836	rev G
		0.XX	±0.10			VERTICAL HEADER, 4-COLUMN, 4-PAIR			
		0.XXX	±0.050			cat. no. -	Product - Customer Drw		sheet 7 of 8
	angular	0°	±-°						

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PDS: Rev :G STATUS: Released Printed: Jun 15, 2016

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.

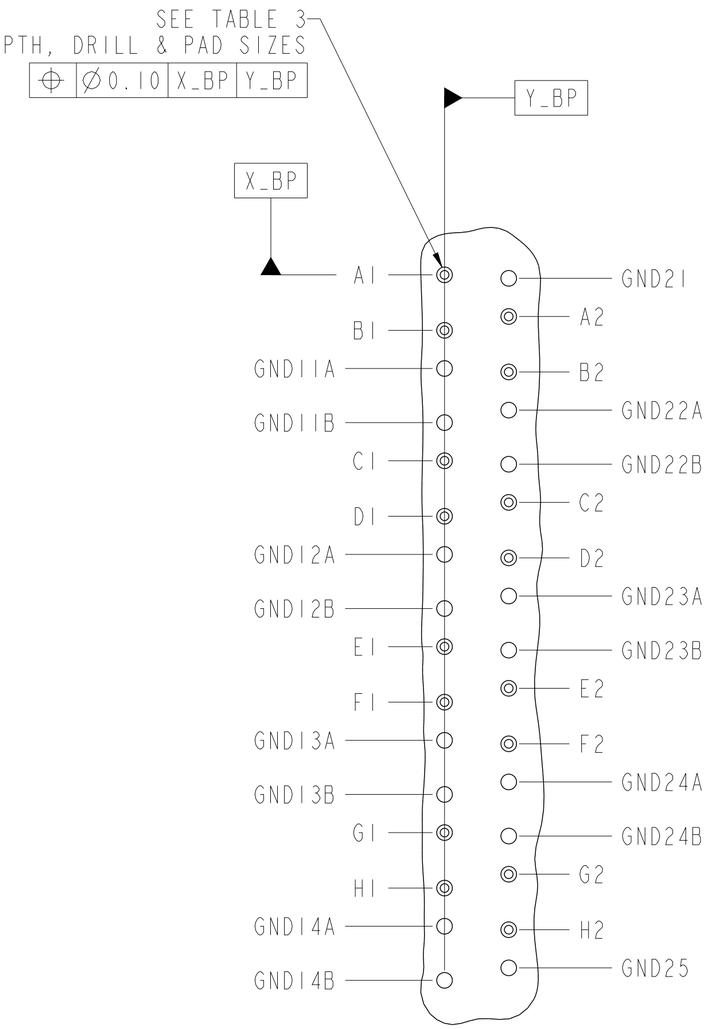
10. SCREW IS OPTIONAL AND ENGAGES WITH BOTTOM OF GUIDE-PIN FROM BENEATH THE PCB FOR ADDITIONAL GUIDE-PIN SUPPORT.

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 ∅0.55[0.0217"]COMPLIANT PIN DRILL
    TAIL LENGTH=1.5mm FOR ∅0.45[0.0177"]COMPLIANT PIN DRILL

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



DETAIL A
SCALE 8:1

spec ref	SEE NOTES			dr	Jim Swain	2010/04/13	projection	MM	size A2 / scale 4:1
tolerance std ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/06			
				chr	Heaven Cen	2016/06/08			ecn no ELX-DG-24191-1
				appr	Pei-Ming Zheng	2016/06/15	product family -		rel level Released
surface - ASME Y14.5	linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY	dwg no 10091836		rev G
		0.XX	±0.10			VERTICAL HEADER, 4-COLUMN, 4-PAIR			
		0.XXX	±0.050						
	angular	0°	±-°		cat. no. -	Product - Customer Drw			sheet 8 of 8

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