

A
B
C
D
E
F

1 0 1 1 4 8 6 8 - 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

NUMBER

PIN STYLE, HEIGHT

0

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

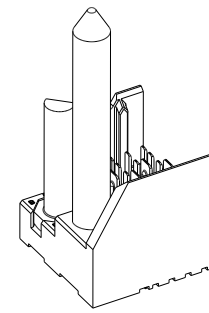
D

E

F

G

H



RIGHT
POLARIZING
GUIDANCE
MODULE
(SEE SHEET 4)

Y

P

Q

R

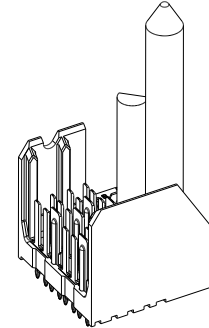
S

T

U

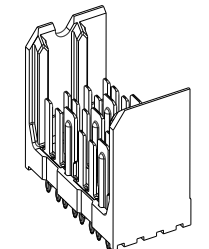
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W



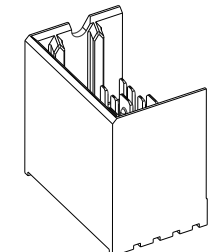
OPEN MODULE
(TWO WALL)
(SEE SHEET 2)

0 (ZERO)



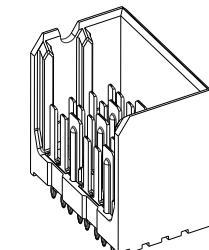
LEFT WALL
MODULE
(SEE SHEET 5)

L



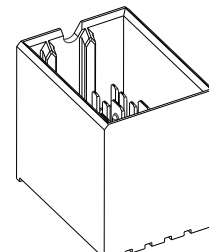
RIGHT WALL
MODULE
(SEE SHEET 6)

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

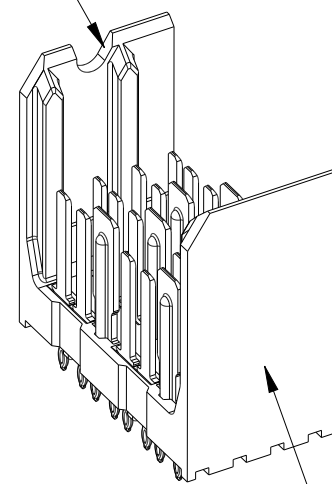
TABLE 2: OPTIONAL SCREW TYPE (SEE NOTE 10)

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

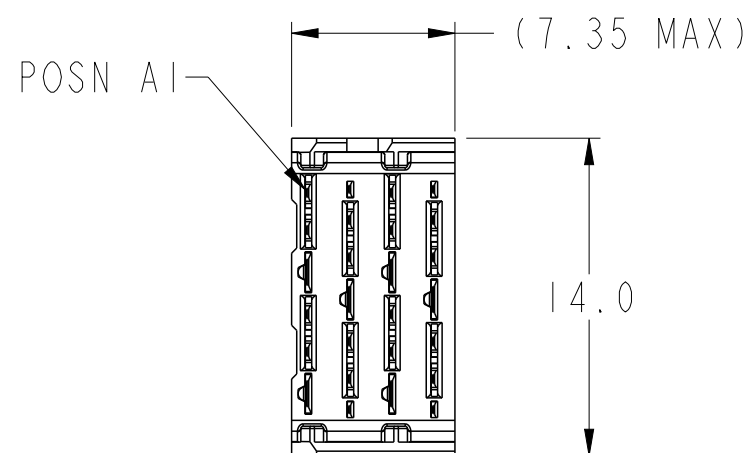
spec ref		SEE NOTES		dr	Kok-Hoe Lee	2010/06/25	projection	MM	size	A2	scale	3:1			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Michael Song	2016/06/03			ecn no	ELX-DG-24191-1					
ASME Y14.5				chr	Heaven Cen	2016/06/08									
				appr	Pei-Ming Zheng	2016/06/15							product family	-	
surface	✓	linear	0.X	±0.2	Amphenol FCI	title	MODULE ASSEMBLY				dwg no	10114868		rev	F
			0.XX	±0.10											
			0.XXX	±0.050											
ASME Y14.5		angular	0°	±°		cat. no.	SEE P/N TREE	Product - Customer Drw				sheet 1 of 8			

OPEN (2-WALL) MODULE

SEE NOTE 8



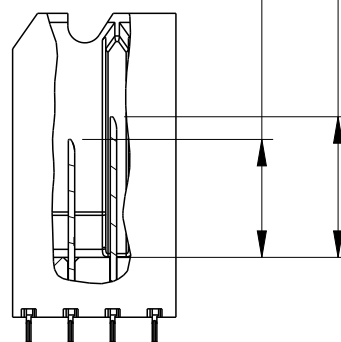
SEE NOTE 5



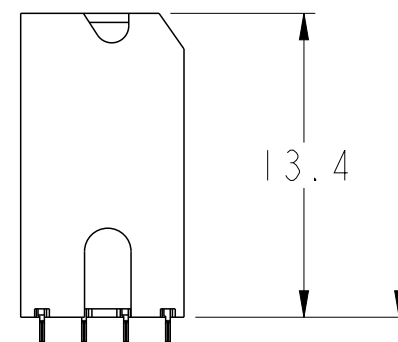
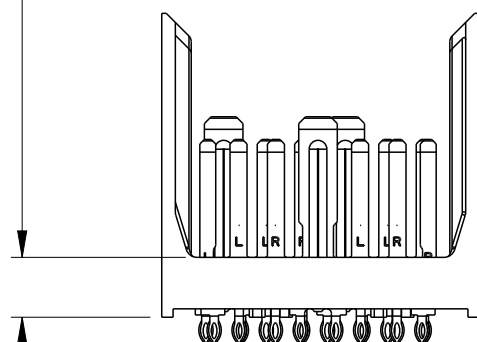
SCALE 3:1

- 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)

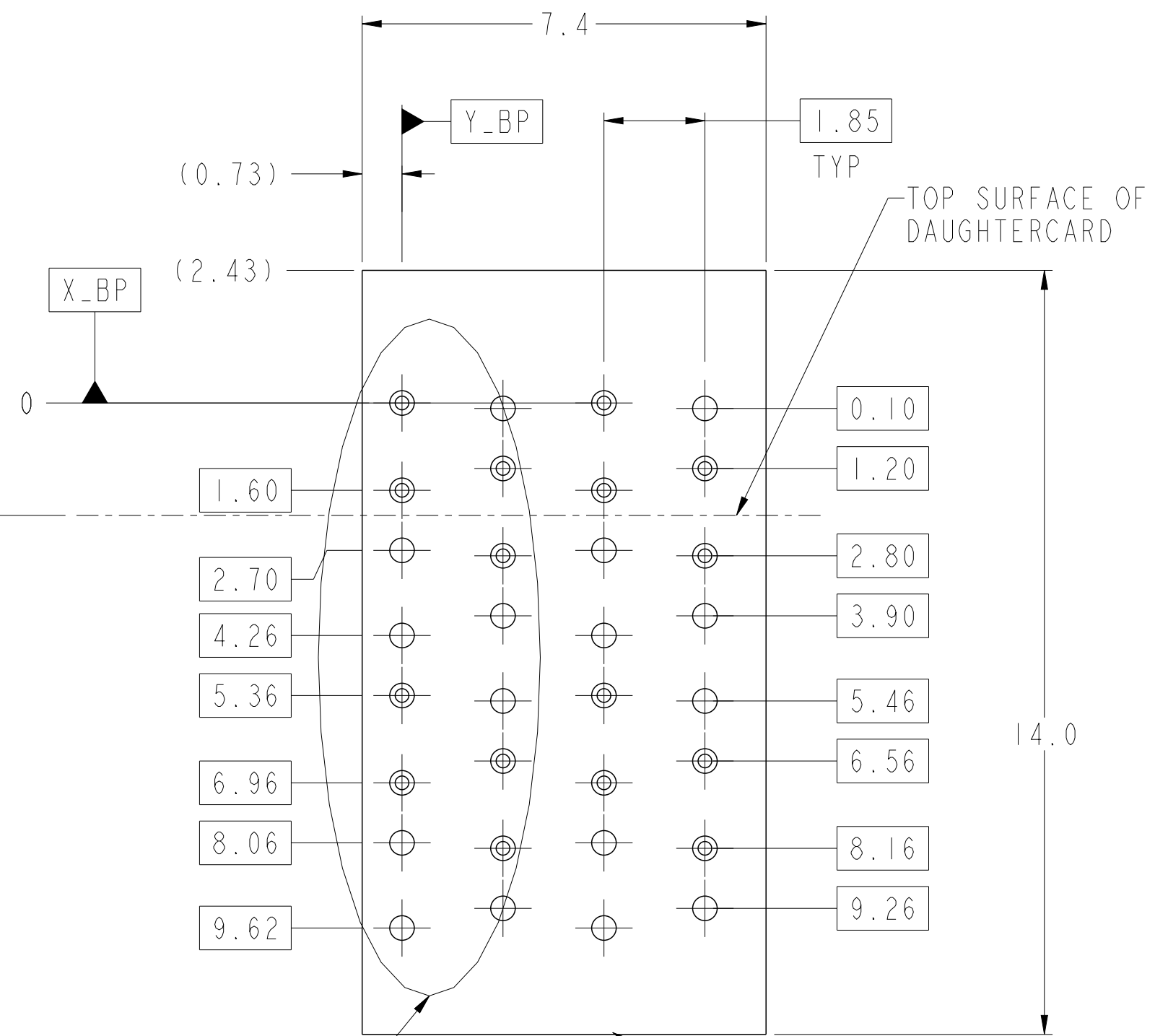
(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



2.64±0.10 FROM STANDOFF SURFACE TO MATING SURFACE



TAIL LENGTH
SEE NOTE 12



SEE DETAIL A
(SHEET 8)

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1

NOMINAL MODULE OUTLINE

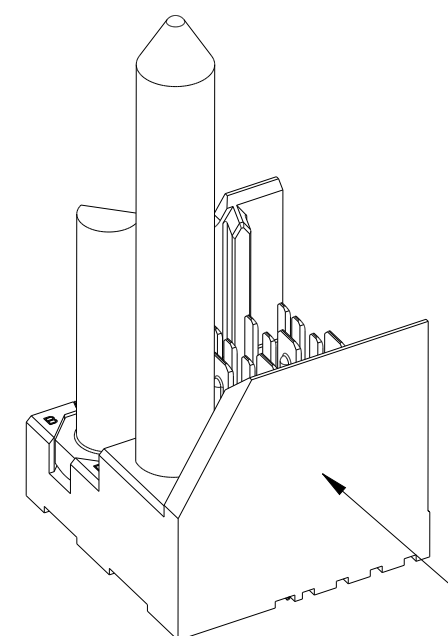
spec ref		SEE NOTES			dr		Kok-Hoe Lee		2010/06/25		projection		MM		size		A2		scale		3:1								
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng		Michael Song		2016/06/03						ecn no		ELX-DG-24191-1												
ASME Y14.5					chr		Heaven Cen		2016/06/08								rel level		Released										
					appr		Pei-Ming Zheng		2016/06/15		product family		-																
surface		linear		0.X ±0.2		0.XX ±0.10		Amphenol FCI		title		MODULE ASSEMBLY										dwg no		10114868		rev		F	
												VERTICAL HEADER, 4-COLUMN, 2-PAIR																	
ASME Y14.5		angular		0° ±°						cat. no.		SEE P/N TREE				Product - Customer Drw				sheet 2 of 8									

PDS: Rev :F

STATUS:Released

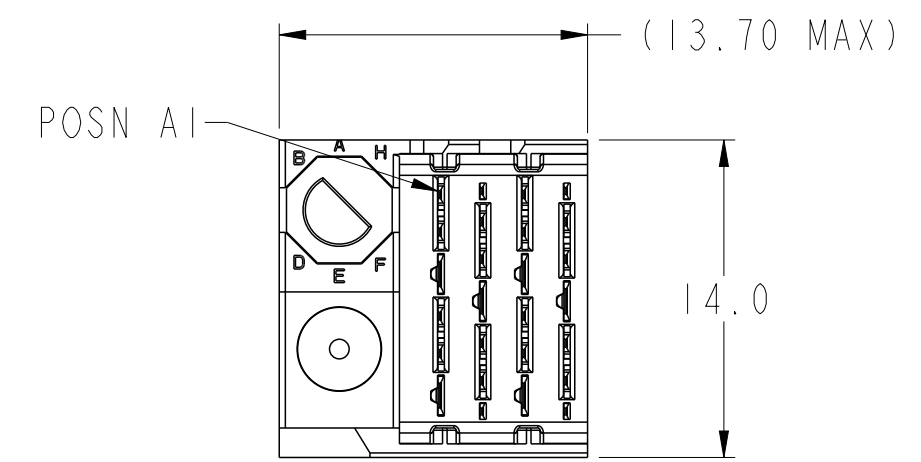
Printed: Jun 15, 2016

LEFT POLARIZING/GUIDE MODULE



SEE NOTE 5

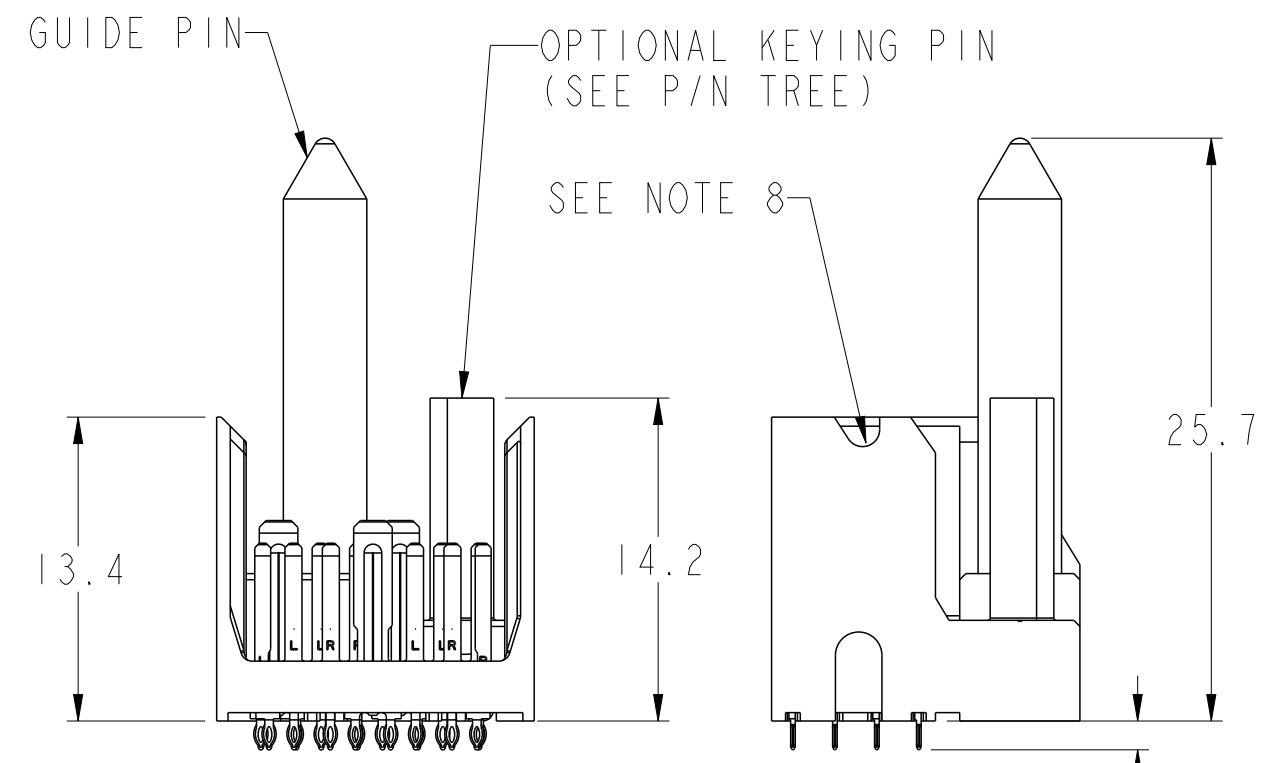
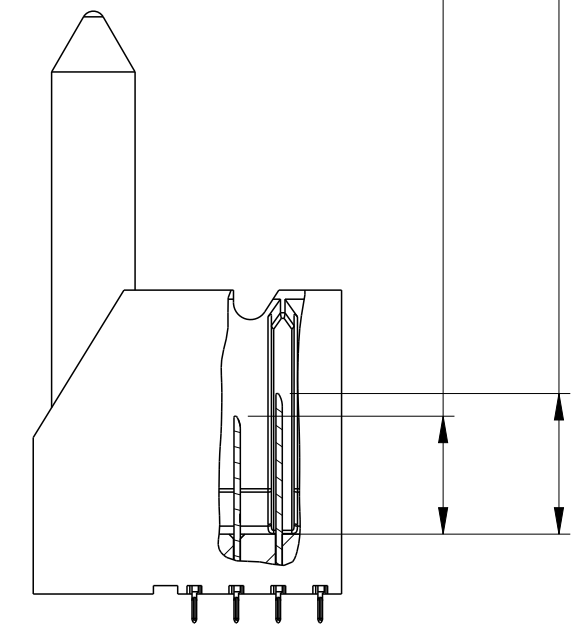
TO TOP SURFACE OF DAUGHTERCARD



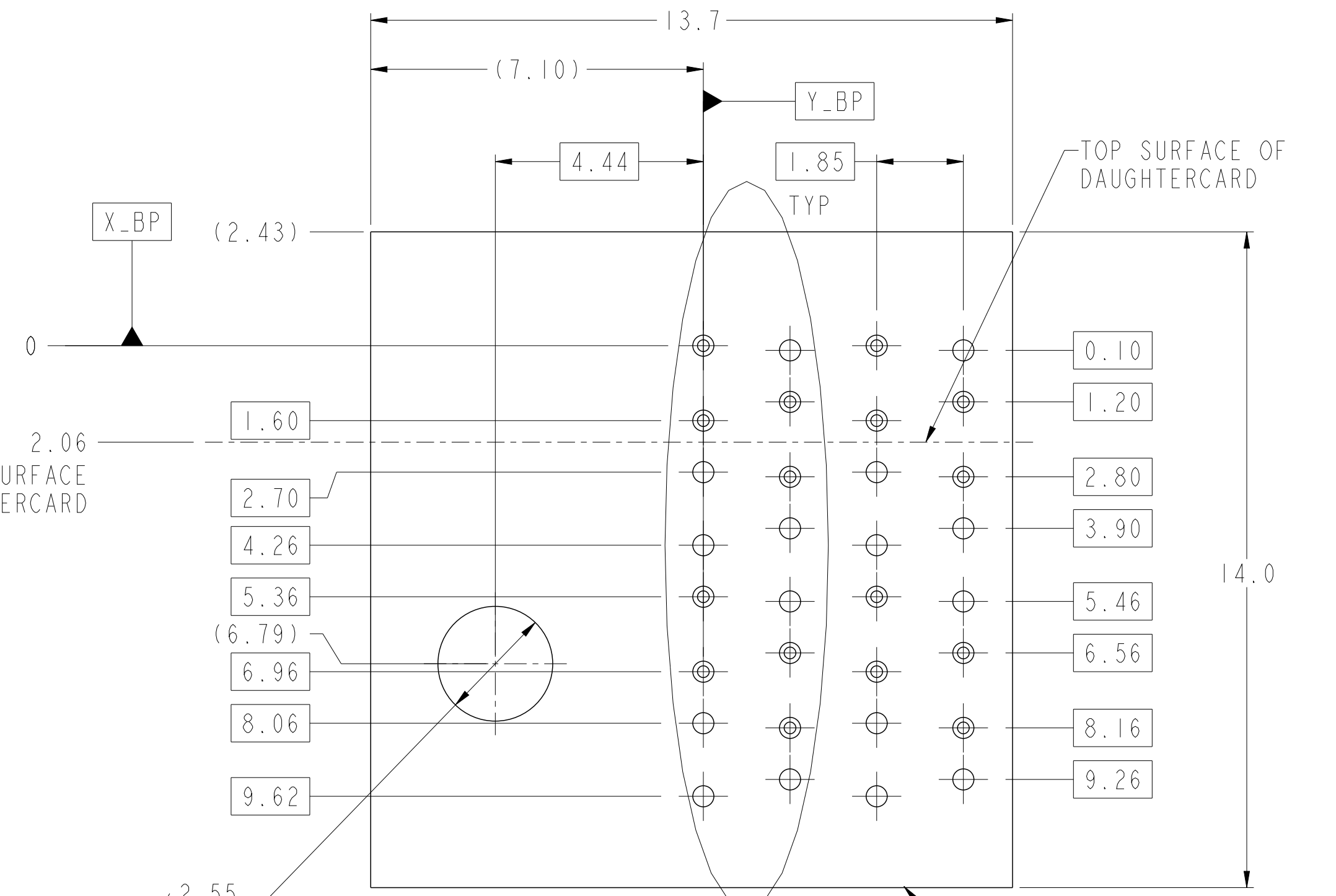
SCALE 3:1

- 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 FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH SEE NOTE 12



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

SEE NOTE 11 & TABLE 1

SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 10:1

NOMINAL MODULE OUTLINE

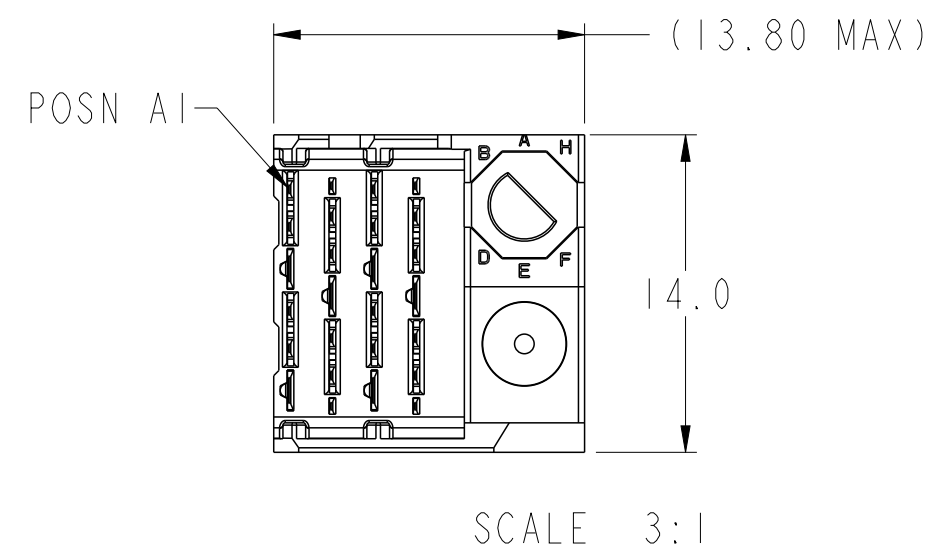
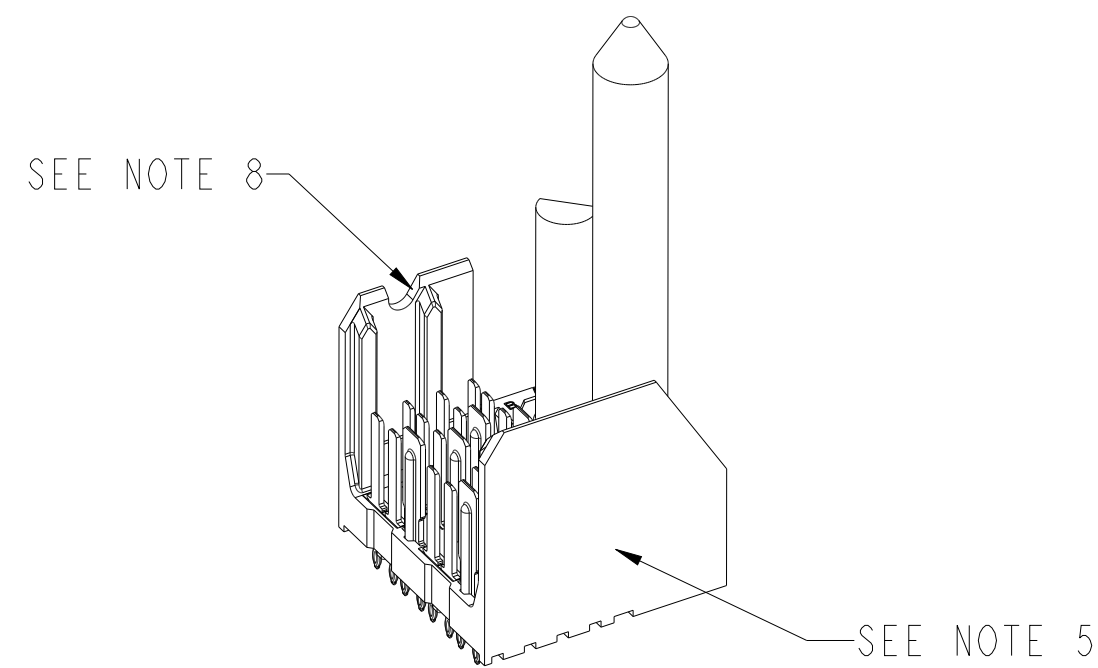
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/25	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03	chr	Heaven Cen	ecm no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		appr	Pei-Ming Zheng	2016/06/15	product family		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 3 of 8
surface	linear	0.X	± 0.2	0.XX	± 0.10	0.XXX	± 0.050	angular	0°	$\pm$
ASME Y14.5		Amphenol FCI	MODULE ASSEMBLY	VERTICAL HEADER, 4-COLUMN, 2-PAIR	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 3 of 8	rev	F

PDS: Rev :F

STATUS:Released

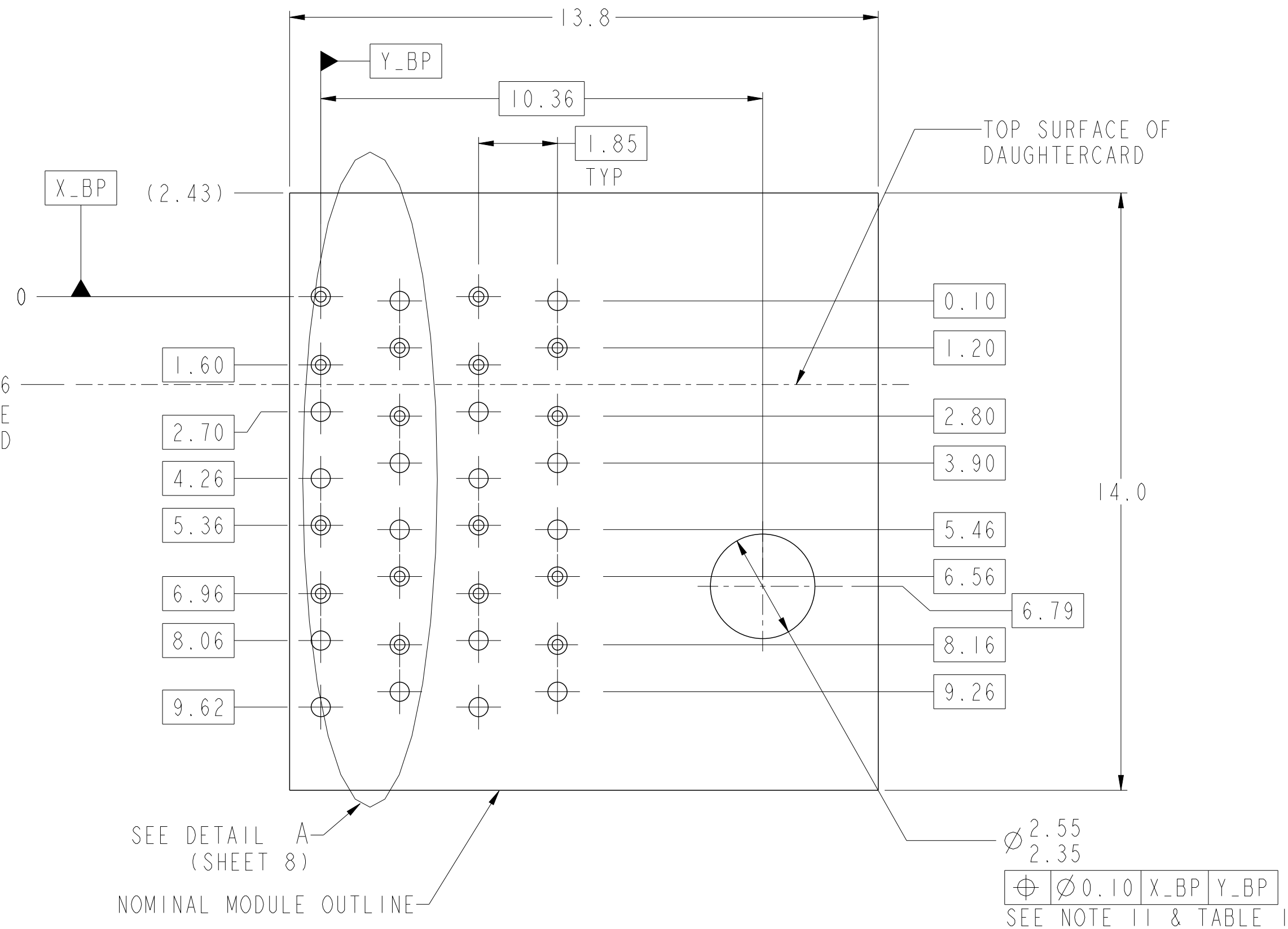
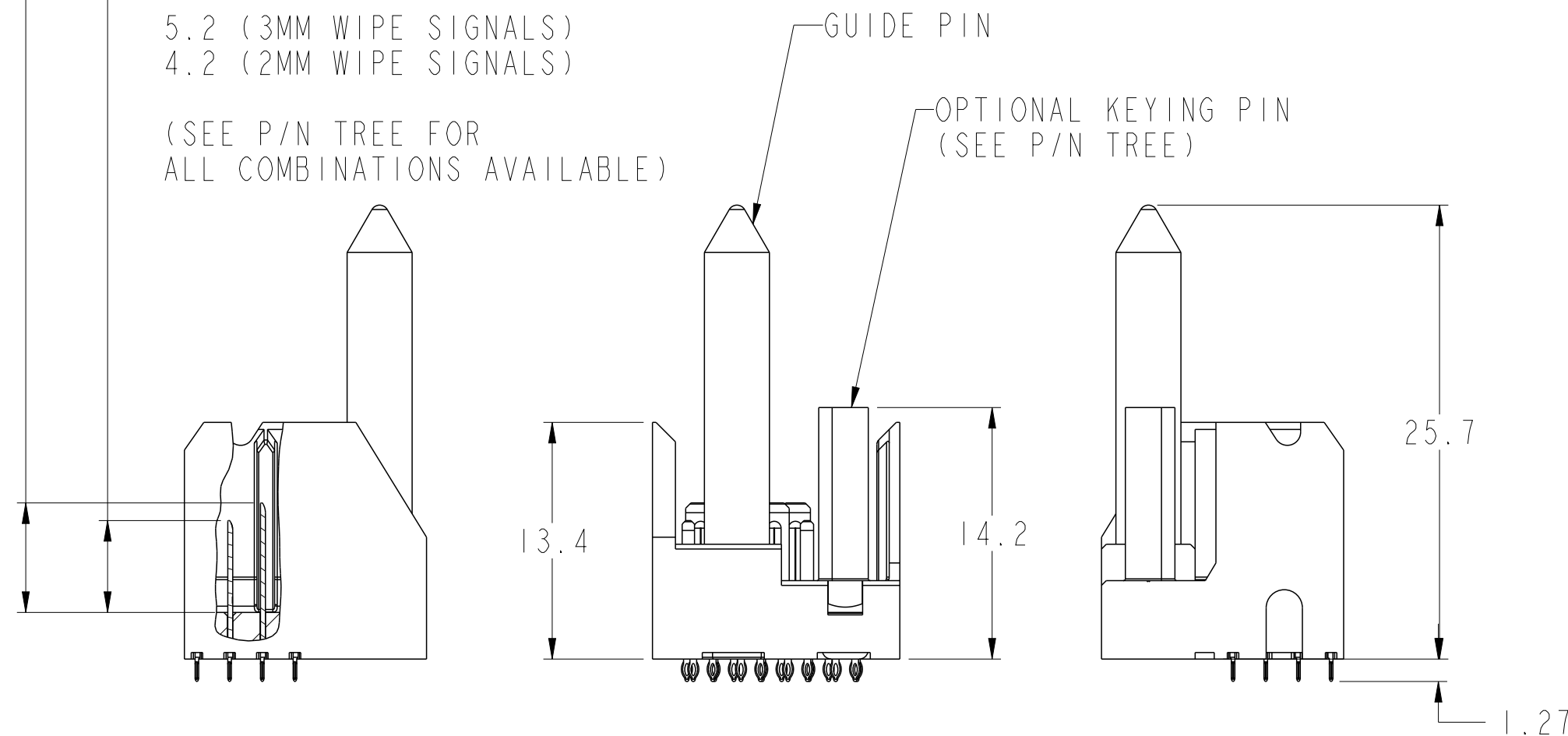
Printed: Jun 15, 2016

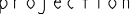
RIGHT POLARIZING/GUIDE MODULE



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)



spec ref	SEE NOTES		dr	Kok-Hoe Lee	2010/06/25			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	Pei-Ming Zheng	2016/06/15	product family		-						
surface		linear	0.X	±0.2	Amphenol FCI	title	MODULE ASSEMBLY			dwg no	10114868		rev	F
			0.XX	±0.10										
			0.XXX	±0.050										
ASME Y14.5		angular	0°	±0°		cat. no.	SEE P/N TREE	Product - Customer Drw			sheet 4 of 8			

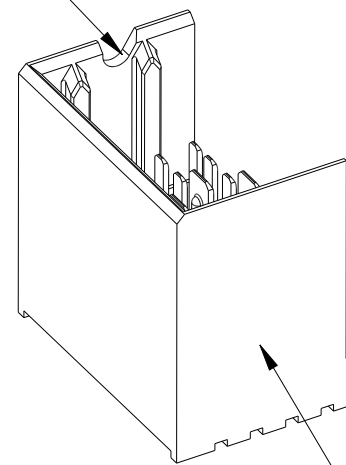
PDS: Rev :F

STATUS:Released

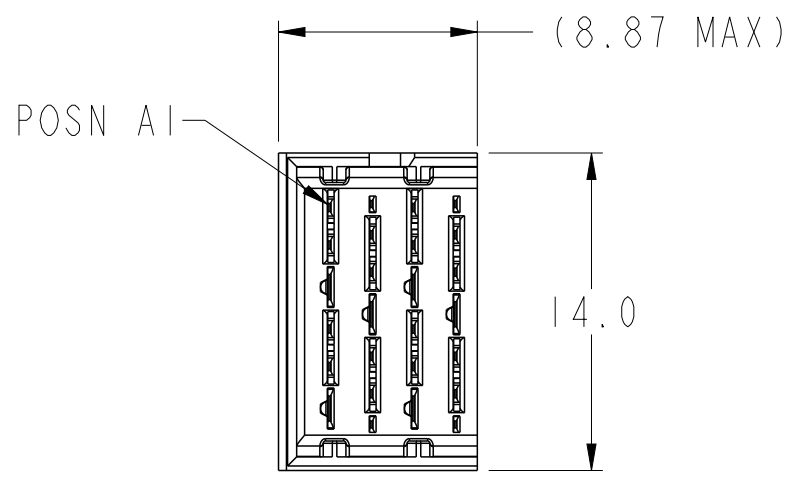
Printed: Jun 15, 2016

LEFT WALL MODULE

SEE NOTE 8



SEE NOTE 5

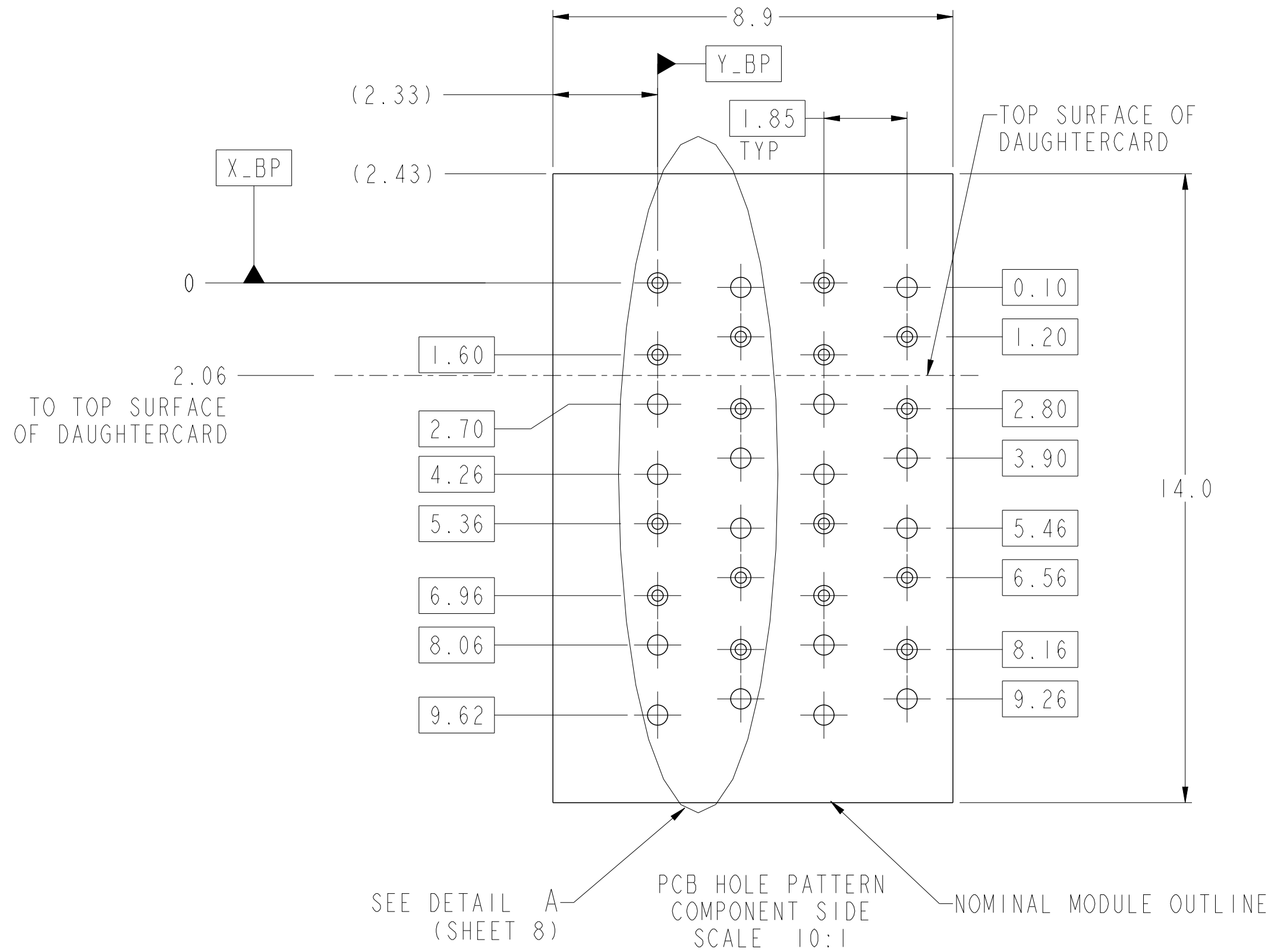
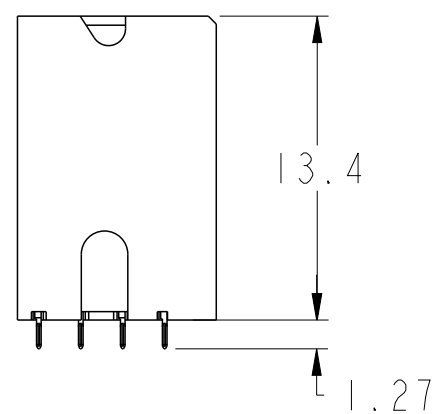
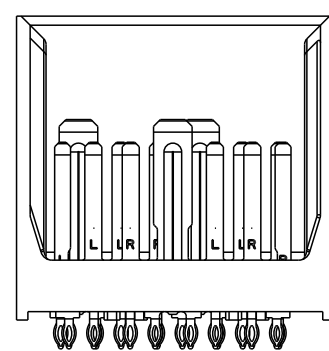
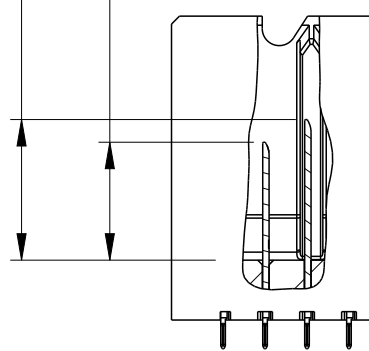


SCALE 3:1

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 FOR
ALL COMBINATIONS AVAILABLE)



spec ref	SEE NOTES		dr	Kok-Hoe Lee	2010/06/25	projection 	MM 	size	A2	scale	3:1			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Michael Song	2016/06/03	ecm no			ELX-DG-24191-1						
ASME Y14.5		chr	Heaven Cen	2016/06/08	rel level			Released						
			appr	Pei-Ming Zheng	2016/06/15	product family		-						
surface	✓	linear	0.X	±0.2	Amphenol FCI	title	MODULE ASSEMBLY				dwg no	10114868	rev	F
			0.XX	±0.10										
			0.XXX	±0.050										
ASME Y14.5		angular	0°	±°		cat. no.	SEE P/N TREE	Product - Customer Drw			sheet 5 of 8			

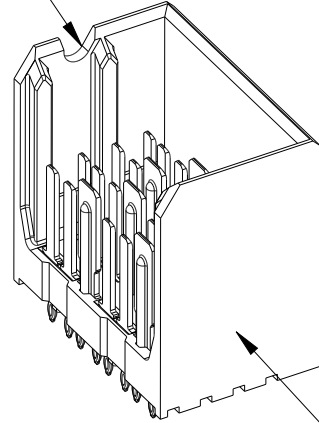
PDS: Rev :F

STATUS:Released

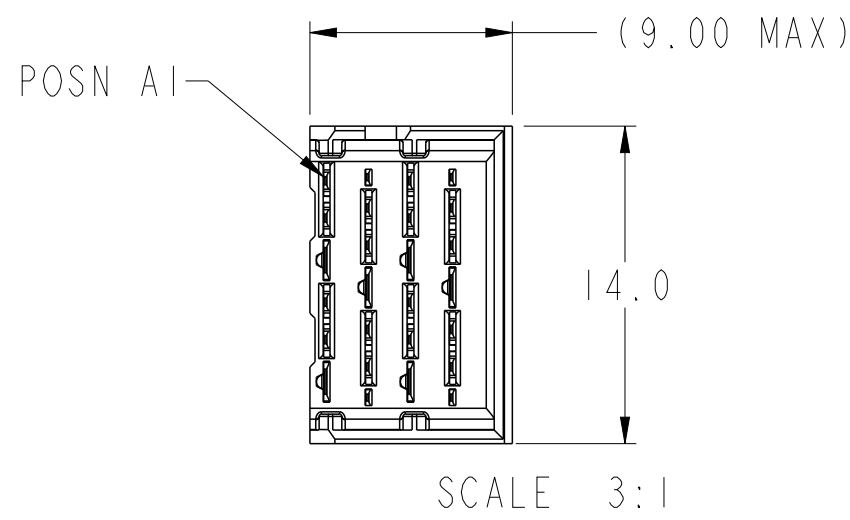
Printed: Jun 15, 2016

RIGHT WALL MODULE

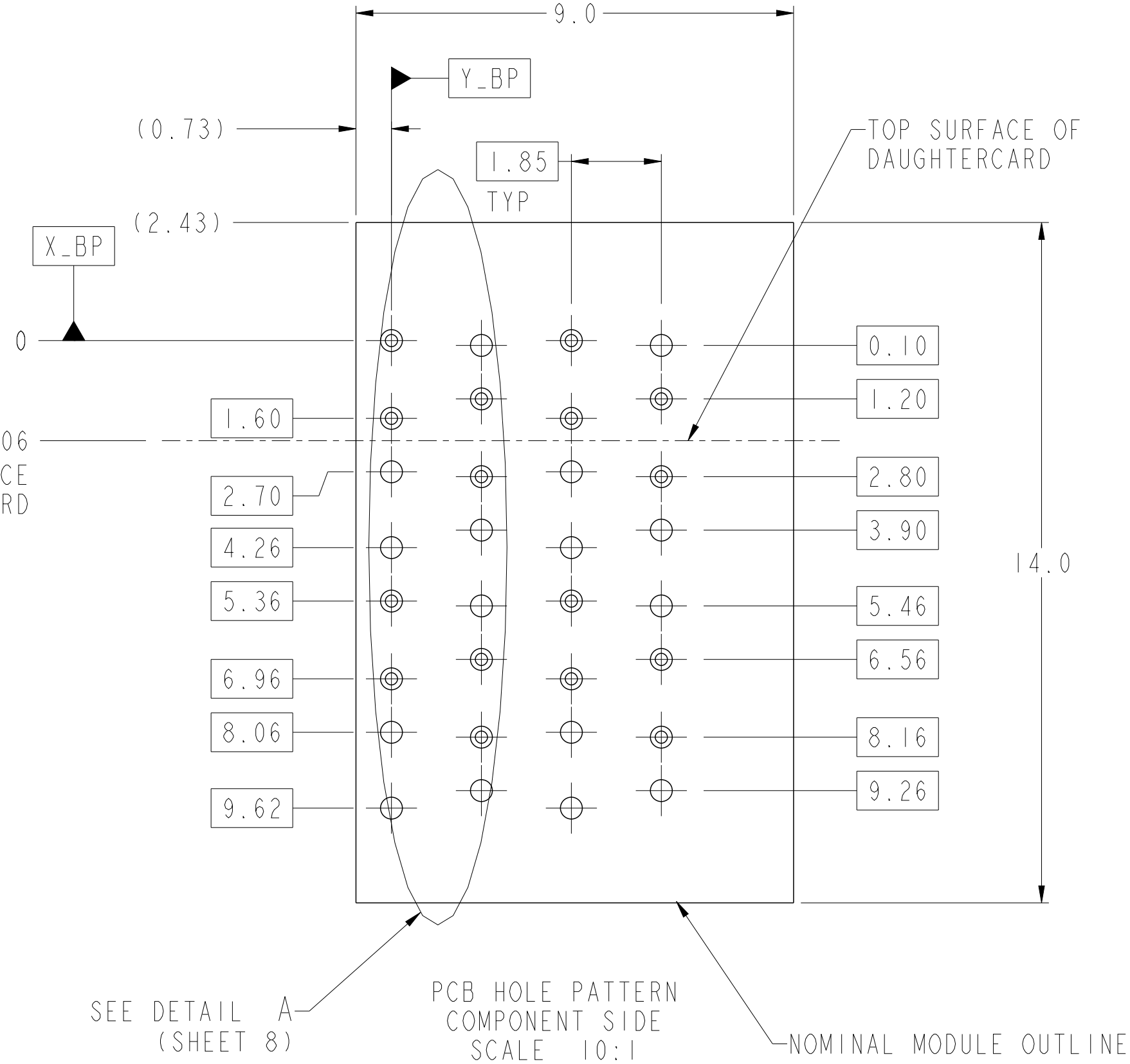
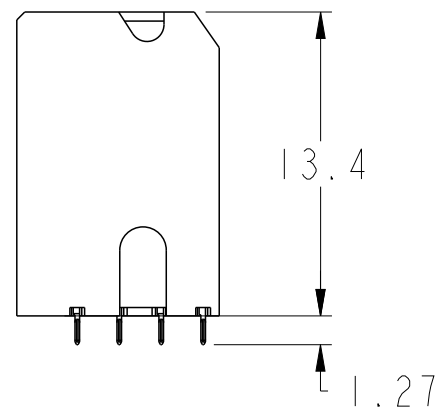
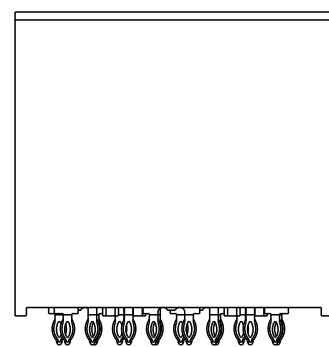
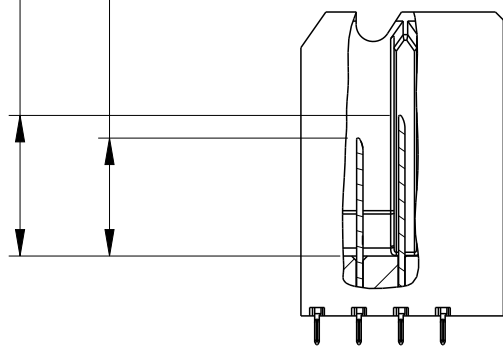
SEE NOTE 8

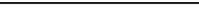
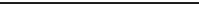


SEE NOTE 5



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)



spec ref		SEE NOTES			dr		Kok-Hoe Lee		2010/06/25		projection						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		Pei-Ming Zheng		2016/06/15		product family		-																				
surface			linear				title		MODULE ASSEMBLY						dwg no		10114868						rev		F					
																											0.X		±0.2	
																											0.XX		±0.10	
ASME Y14.5			angular				0°		±°																					

PDS: Rev :F

STATUS:Released

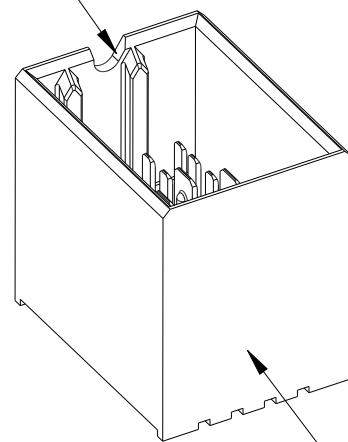
Printed: Jun 15, 2016

Amphenol FCI

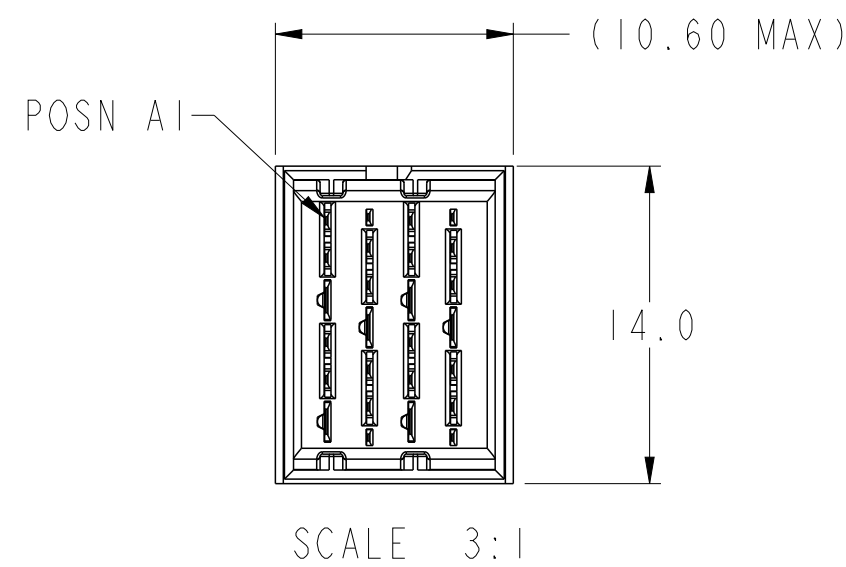
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FOUR WALL MODULE

SEE NOTE 8

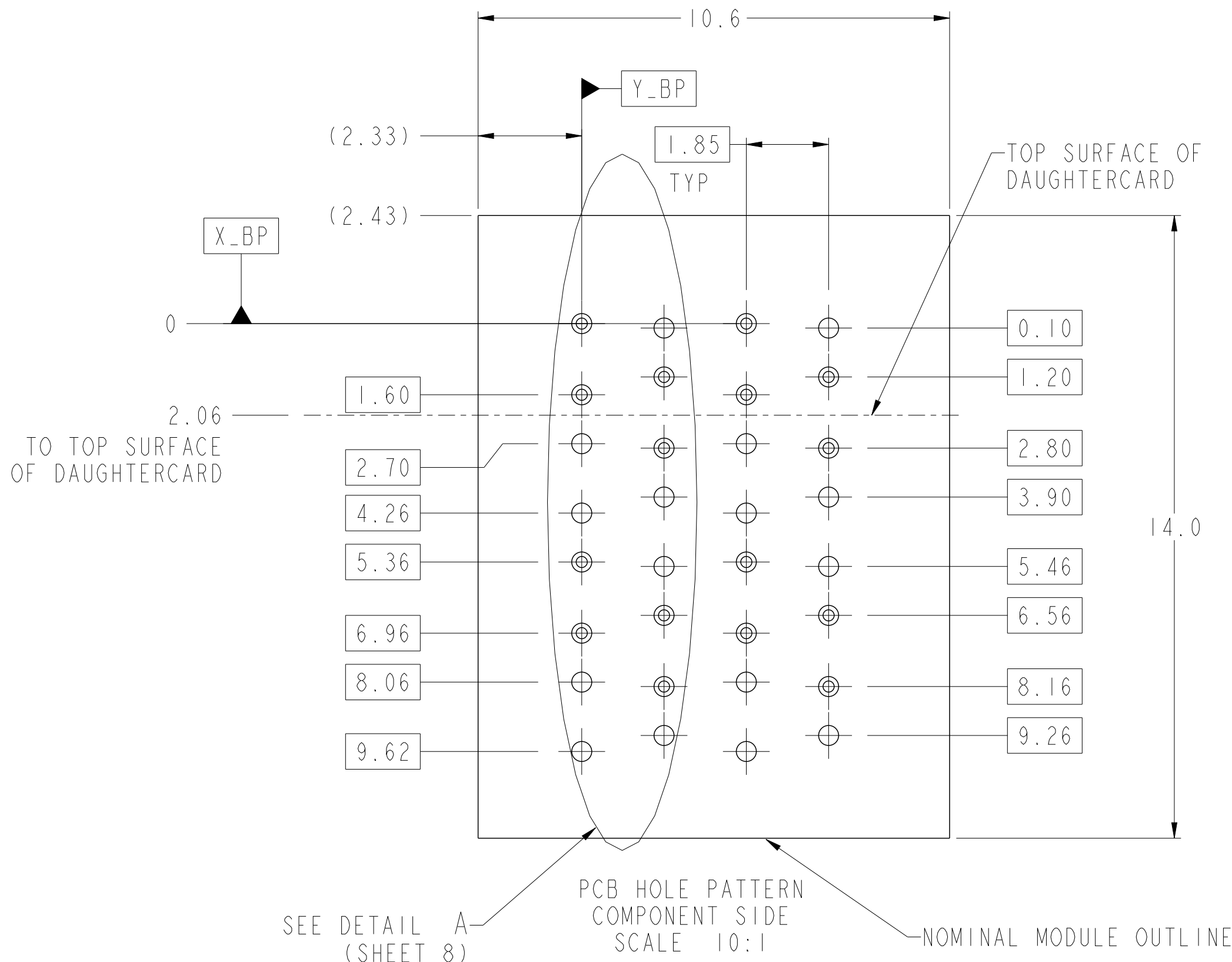
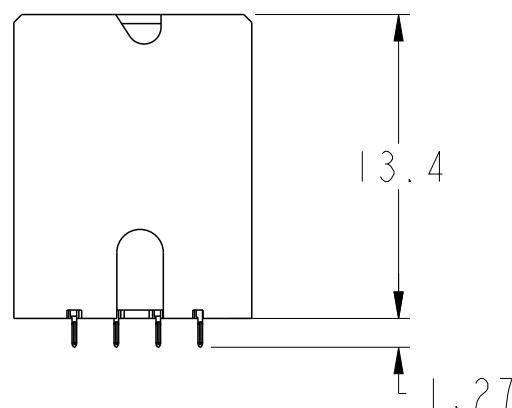
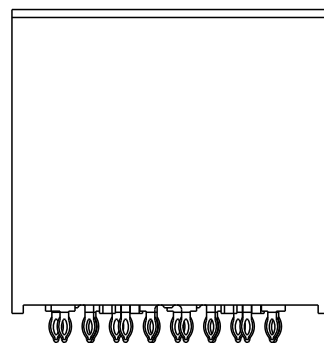
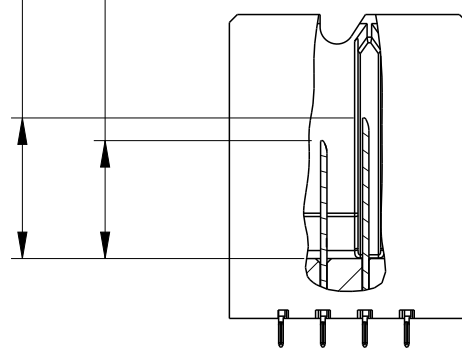


SEE NOTE 5



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	2010/06/25	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	Pei-Ming Zheng	2016/06/15					product family			-
surface	✓	linear	0.X	±0.2	Amphenol FCI	title	MODULE ASSEMBLY			dwg no	10114868		rev	F
			0.XX	±0.10										
ASME Y14.5		0.XXX	±0.050	VERTICAL HEADER, 4-COLUMN, 2-PAIR										
	angular	0°	±°	cat. no.			SEE P/N TREE	Product - Customer Drw			sheet 7 of 8			

PDS: Rev :F

STATUS:Released

Printed: Jun 15, 2016

Amphenol
FCI

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TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL	
--	--

COMPLIANT PIN DRILL	PTH	PAD
Ø 0.55 [0.0217"]	Ø 0.45±0.05	Ø 0.85
Ø 0.45 [0.0177"]	Ø 0.36±0.05	Ø 0.75

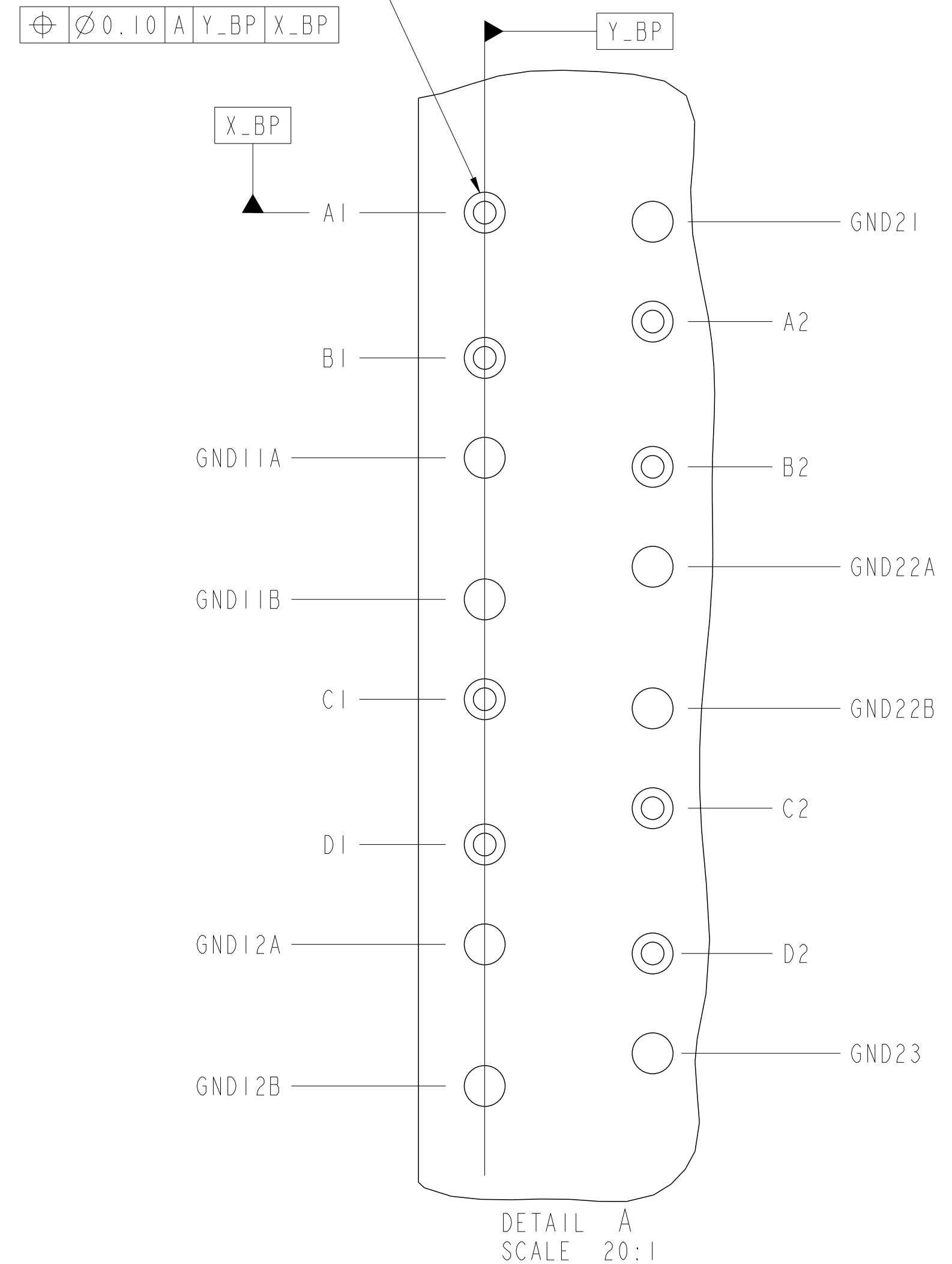
NOTES:

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 TELCORDIA GR-1217-CORE (NOVEMBER 1995) CENTRAL OFFICE TEST (CO) OR UNCONTROLLED ENVIRONMENT TEST SEQUENCE AS NOTED IN P/N TREE.

PRESS-FIT TAILS: TIN OVER NICKEL, OR TIN-LEAD ALLOY OVER NICKEL. 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 I ON SHEET 1 FOR ADDITIONAL DETAILS.

REFER TABLE 3
FOR PTH, DRILL & PAD SIZES



spec ref	SEE NOTES		dr	Kok-Hoe Lee	2010/06/25			size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Michael Song	2010/06/03			ecn no	ELX-DG-24193-1		
ASME Y14.5			chr	Heaven Cen	2010/06/08						
			appr	Pei-Ming Zheng	2010/06/15	product family	-	rel level	Released		
surface		linear			MODULE ASSEMBLY				10114868		
						VERTICAL HEADER, 4-COLUMN, 2-PAIR					
ASME Y14.5	angular	0°					cat. no.		SEE P/N TREE	Product - Customer Drw	