

1 0 0 9 | 7 7 7 - X 0 E - X X X L F

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

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

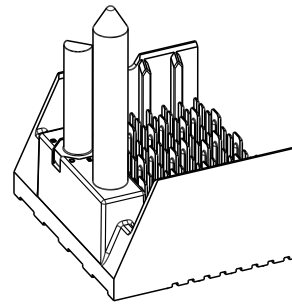
D

E

F

G

H



RIGHT
POLARIZING
GUIDANCE
MODULE
(SEE SHEET 4)

Y

P

Q

R

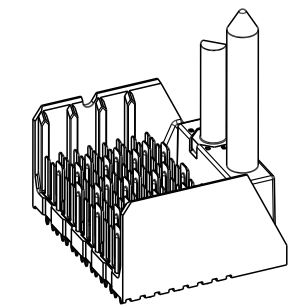
S

T

U

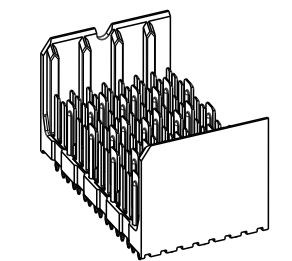
V

W



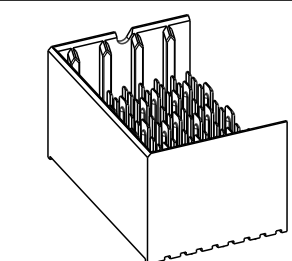
OPEN MODULE
(TWO WALL)
(SEE SHEET 2)

0 (ZERO)



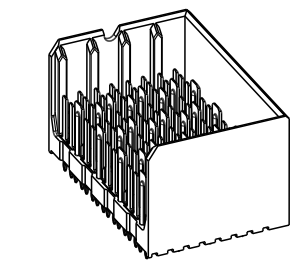
LEFT WALL
MODULE
(SEE SHEET 5)

L



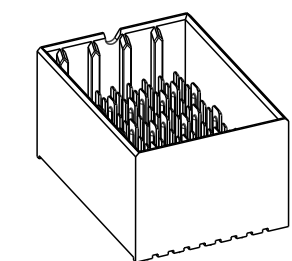
RIGHT WALL
MODULE
(SEE SHEET 6)

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
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED
ASME Y14.5	
surface	linear
ASME Y14.5	angular

0.X	±0.2
0.XX	±0.10
0.XXX	±0.050
0°	±°

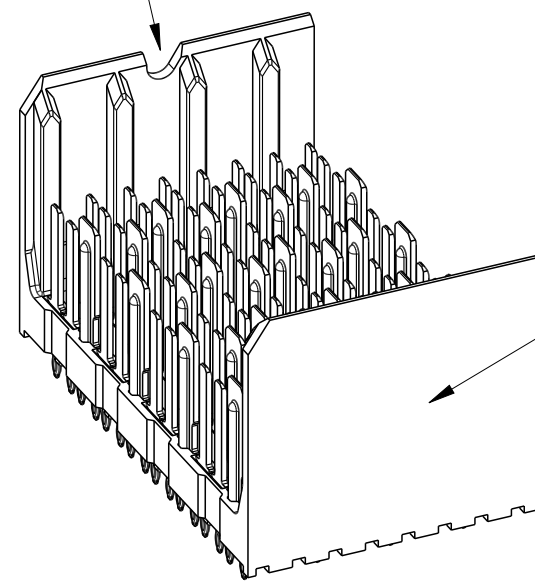
dr	Jim Swain	2009/07/07
eng	Sandar Soe	2014/10/02
chr	-	-
appr	Chen-Hong Tan	2014/12/10
www.fci.com	cat. no.	SEE P/N TREE

projection	MM
product family	XCede

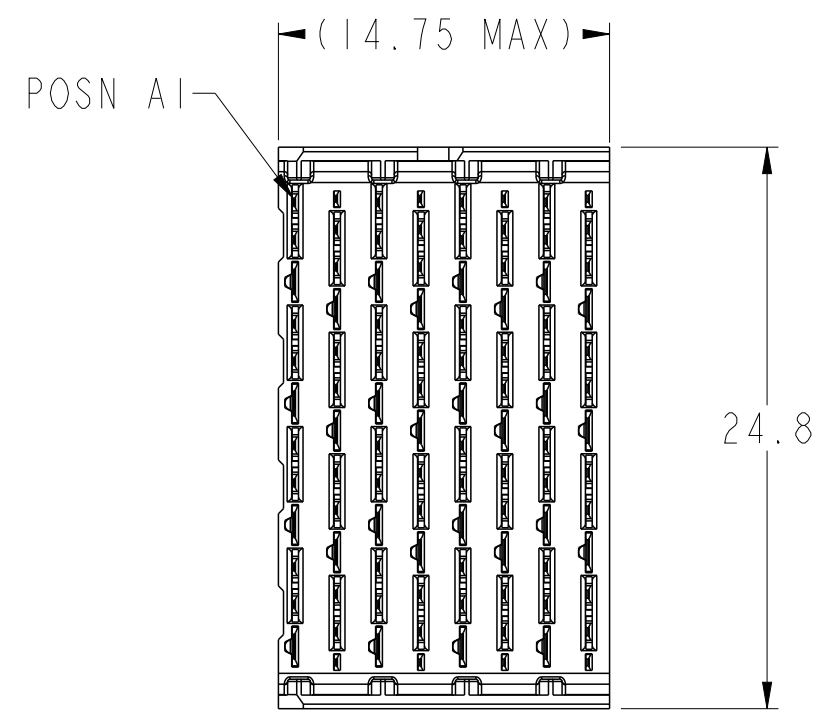
size	A2	scale	4:1
ecn no	ELX-S-18843-1	rel level	Released
title	MODULE ASSEMBLY	dwg no	10091777
rev	E	Product - Customer Drw	sheet 1 of 8

OPEN (2-WALL) MODULE

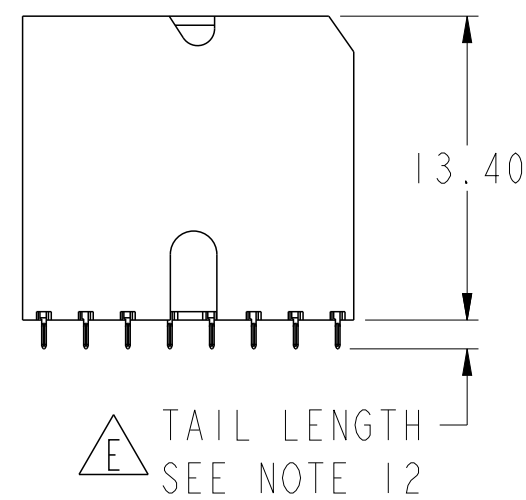
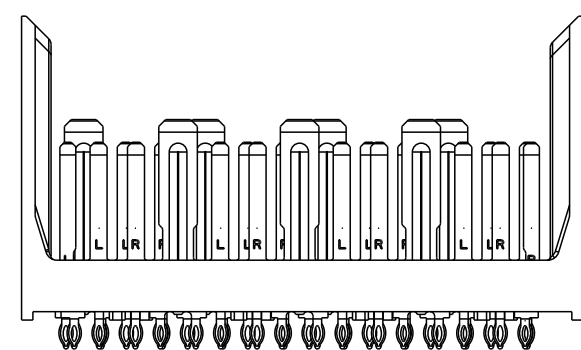
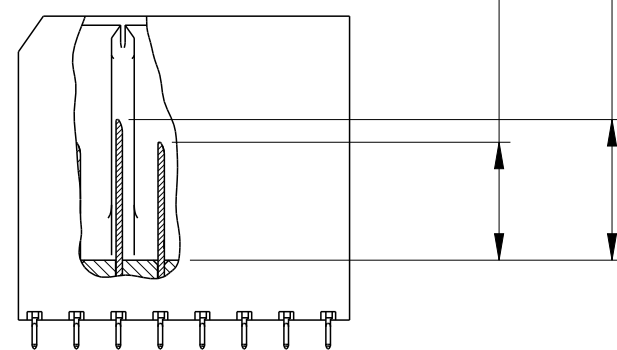
SEE NOTE 8



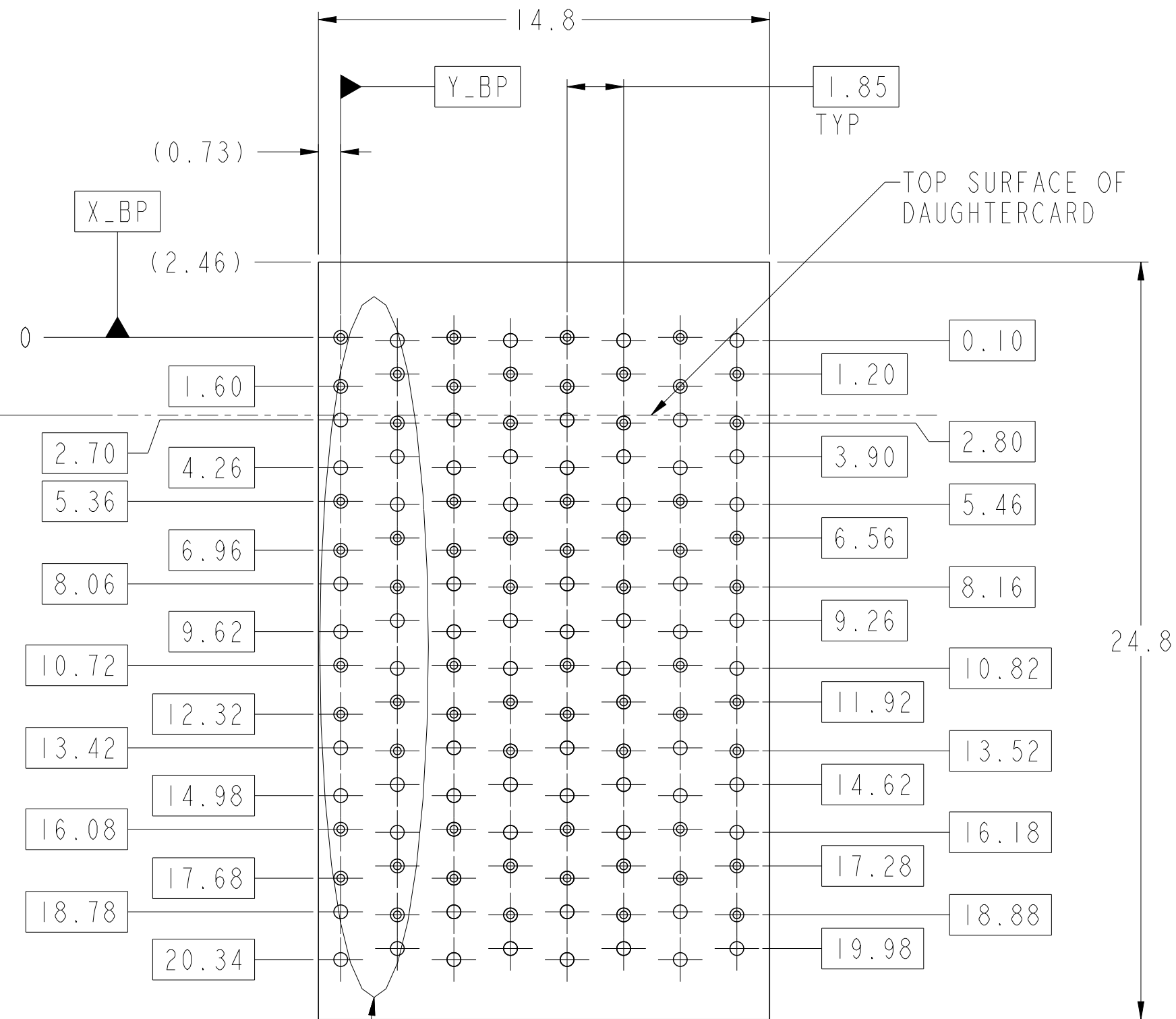
SEE NOTE 5



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



SEE DETAIL A
(SHEET 8)

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

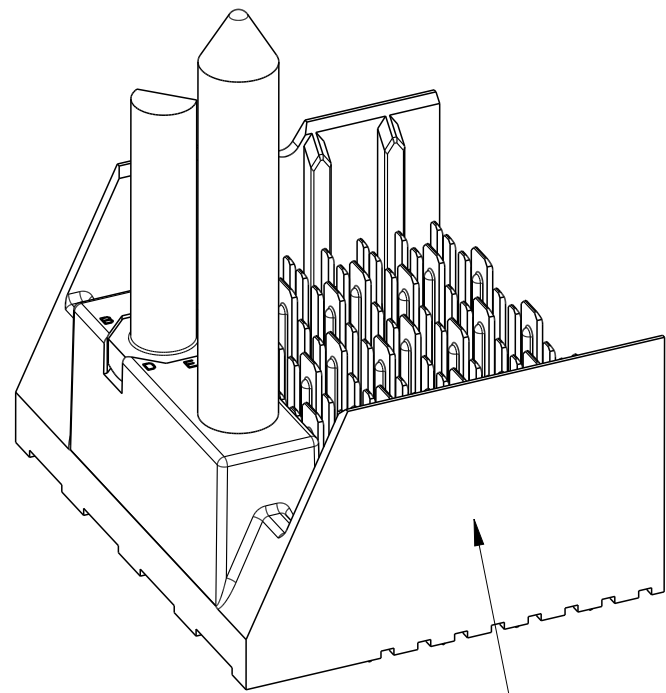
spec ref	SEE NOTES	dr	Jim Swain	2009/07/07	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 4-PAIR	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 2 of 8			
angular	0° ±°									

PDS: Rev :E

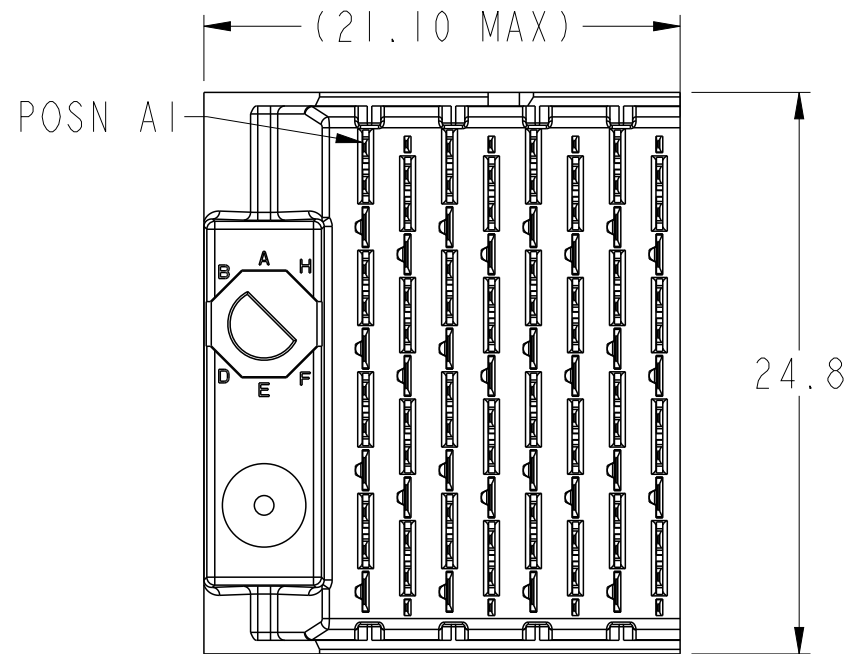
STATUS:Released

Printed: Dec 10, 2014

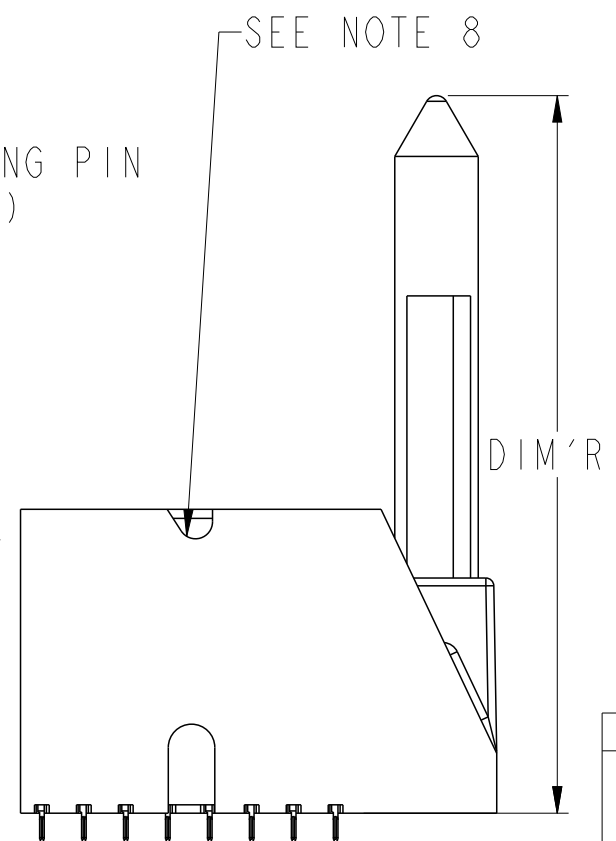
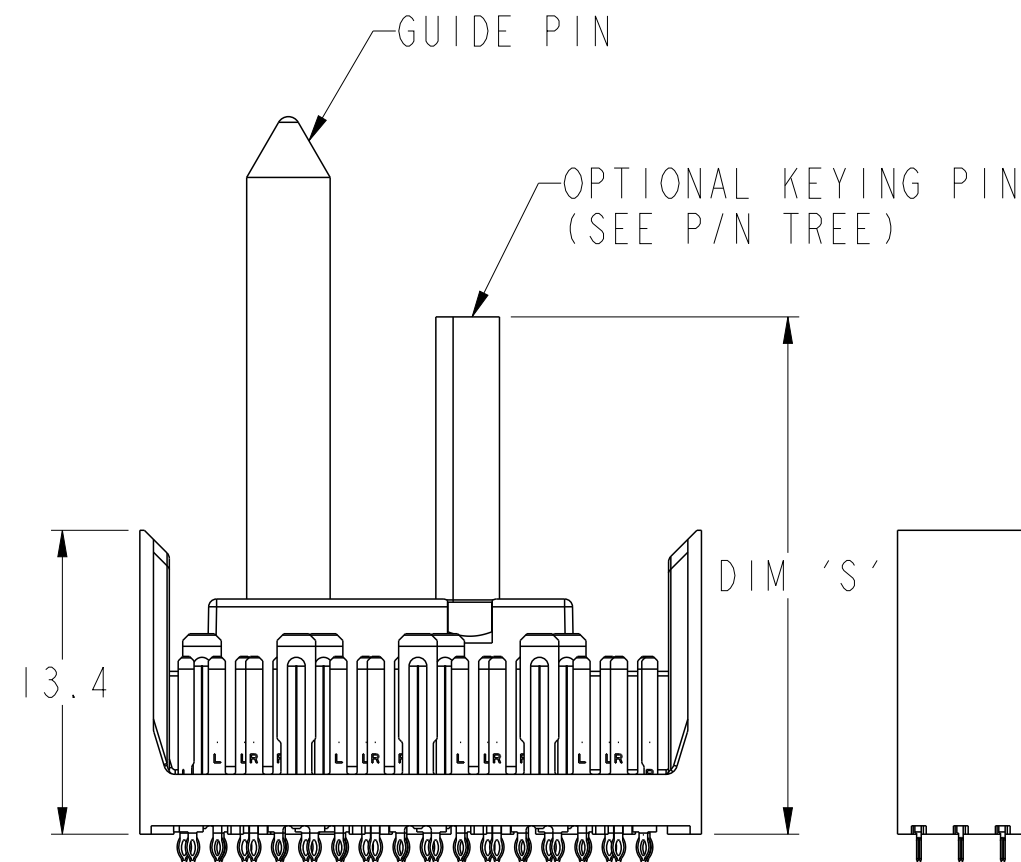
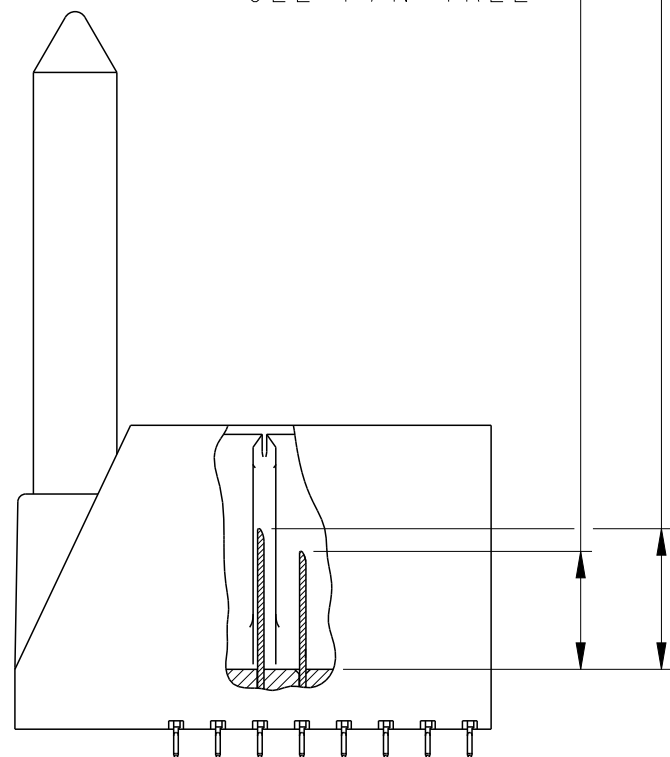
LEFT POLARIZING/GUIDE MODULE



SEE NOTE 5



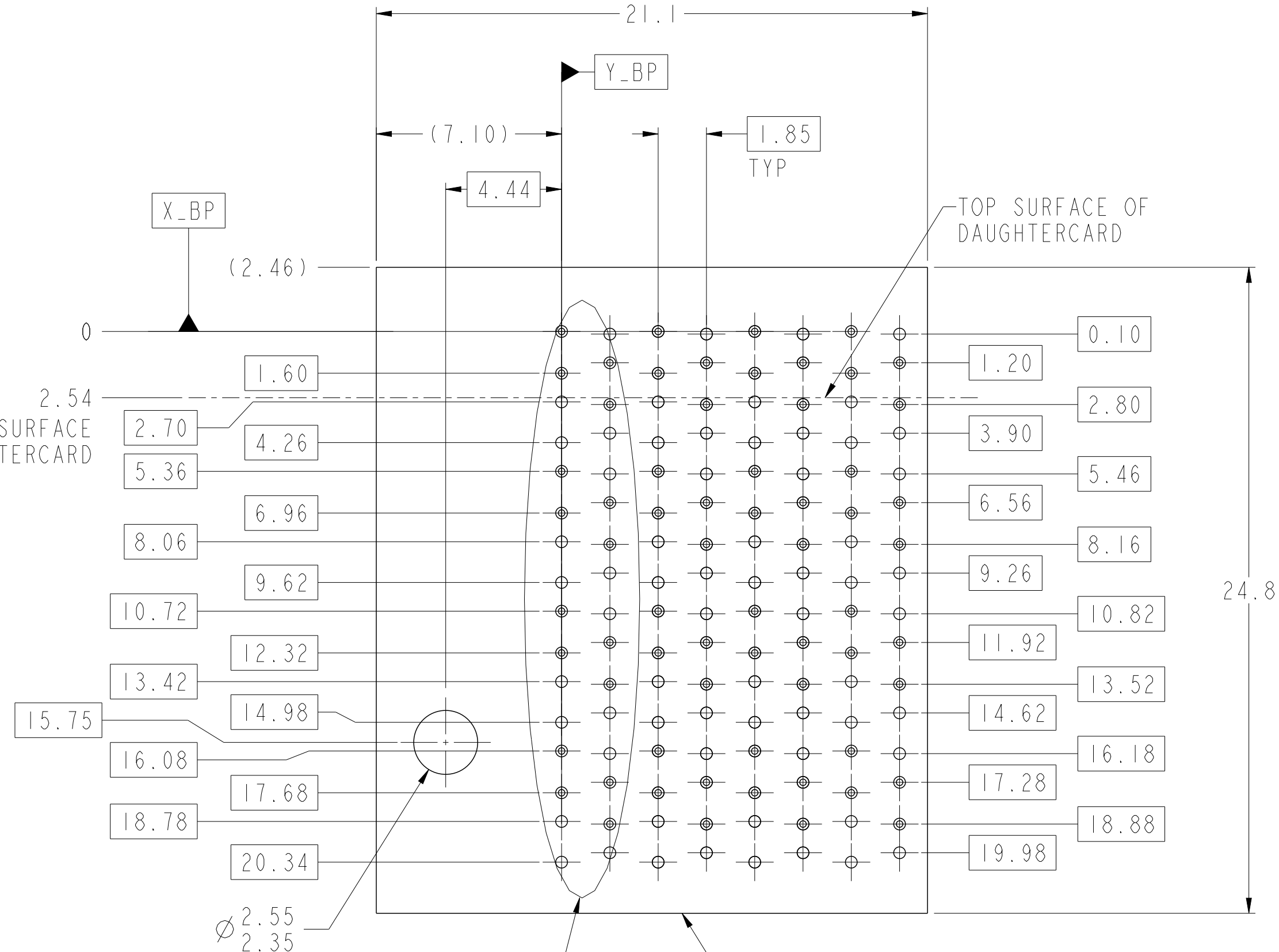
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE



TAIL LENGTH
SEE NOTE 12

TO TOP SURFACE
OF DAUGHTERCARD

SEE NOTE 11 & TABLE 1



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

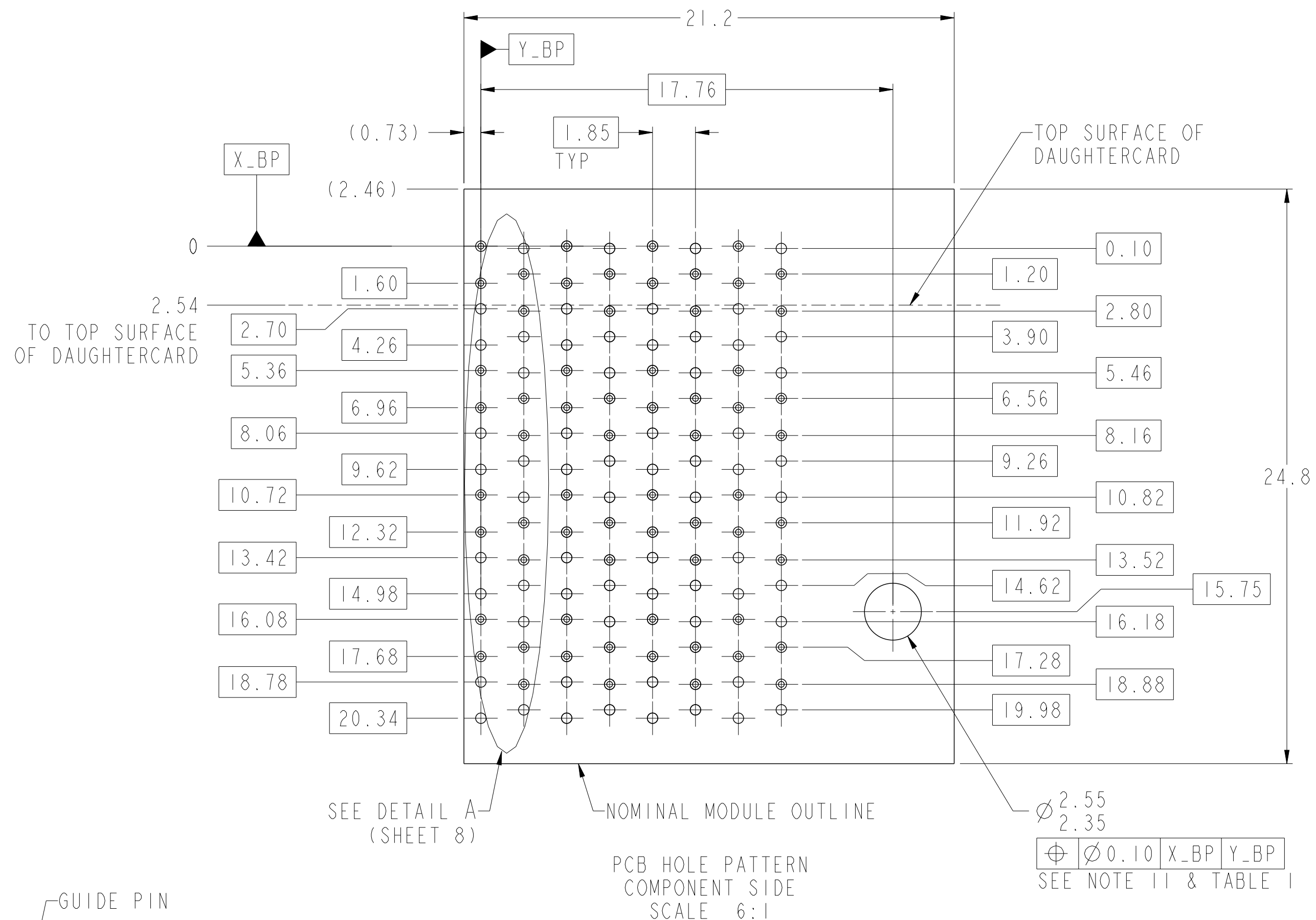
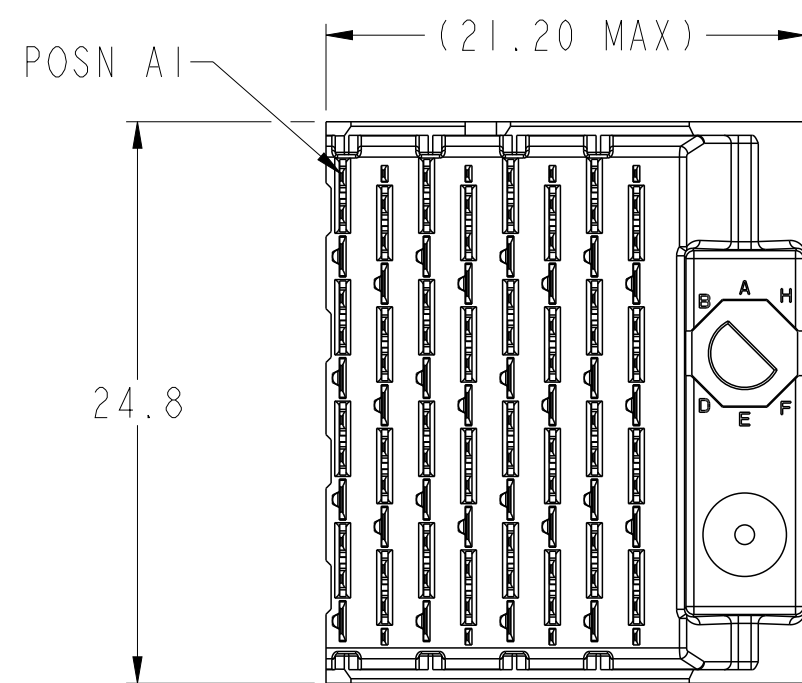
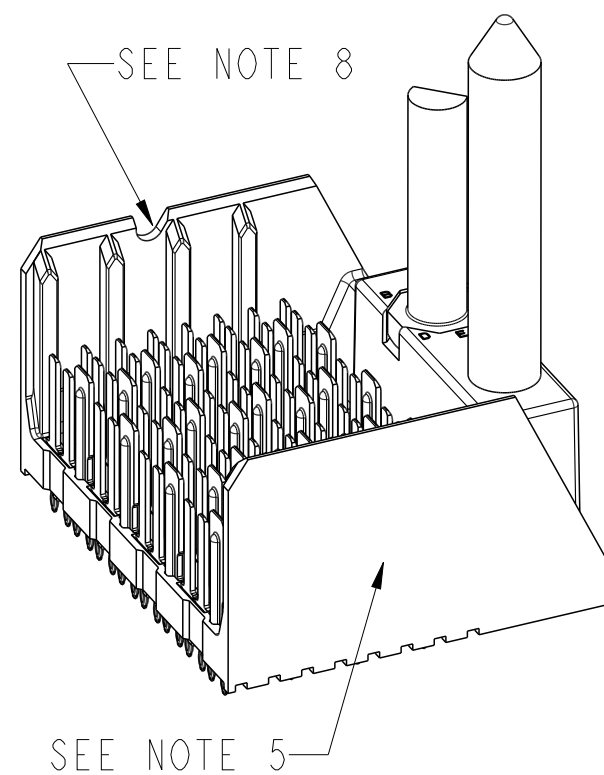
spec ref	SEE NOTES	dr	Jim Swain	2009/07/07	projection	MM	size	A2	scale	4:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	XCede	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 3 of 8
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	title	MODULE ASSEMBLY	dwg no	10091777	rev	E			
angular	0° ±	www.fci.com								

PDS: Rev :E

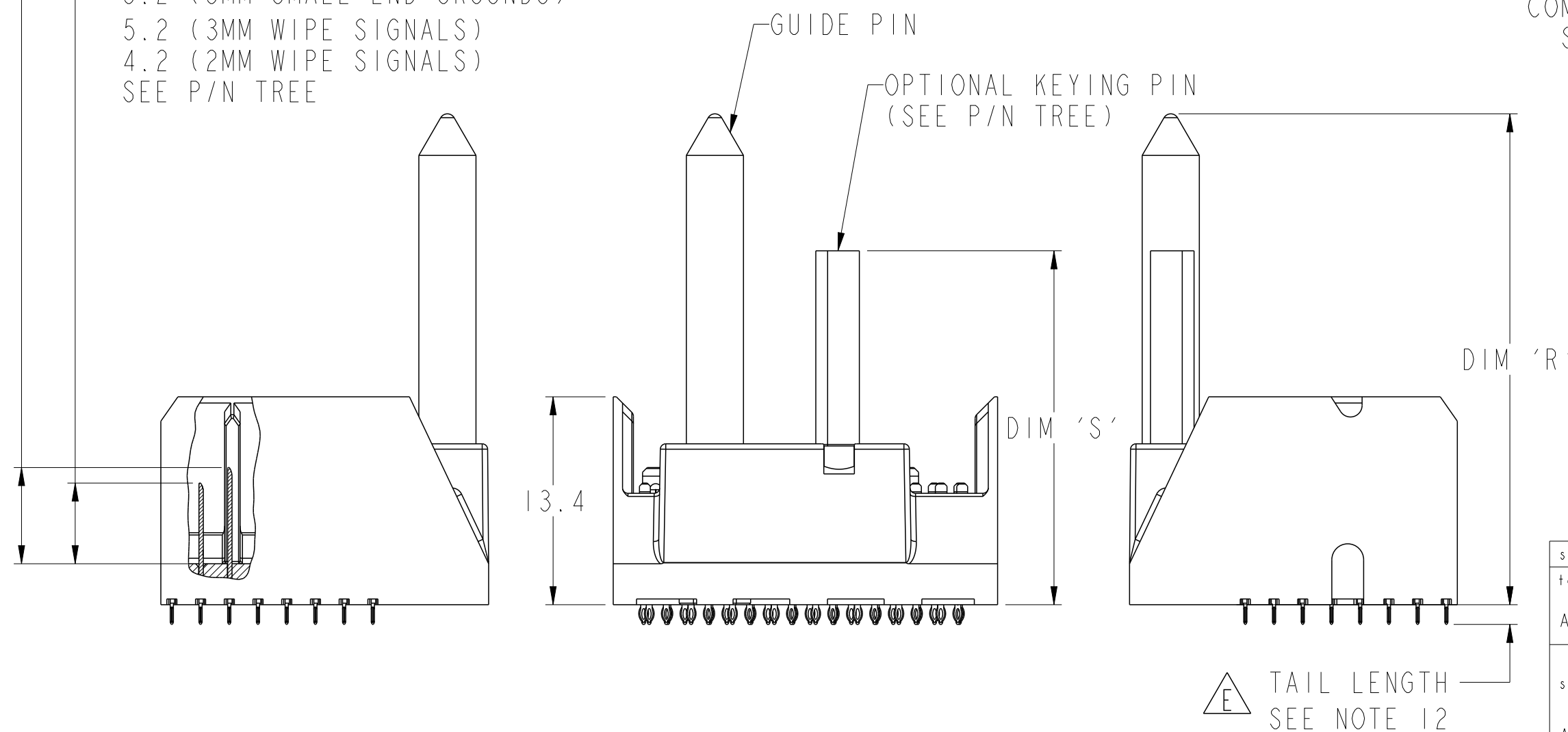
STATUS:Released

Printed: Dec 10, 2014

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



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	2009/07/07	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	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 4 of 8
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	angular	0° ±°	title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 4-PAIR	dwg no	10091777	rev	E	

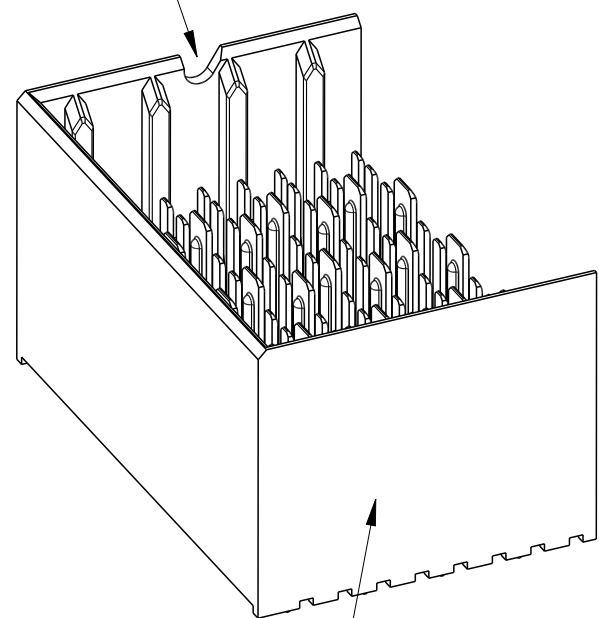
PDS: Rev :E

STATUS:Released

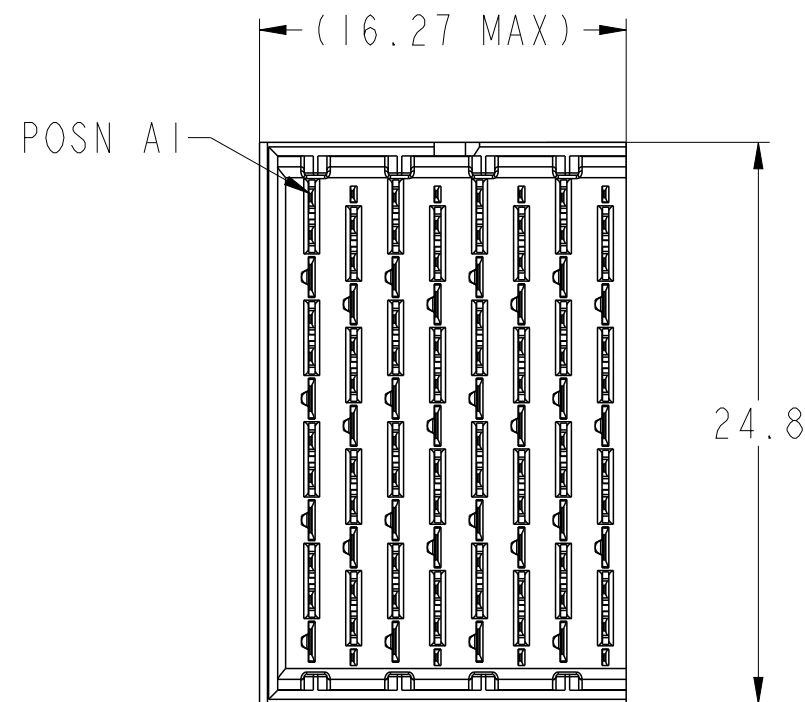
Printed: Dec 10, 2014

LEFT WALL MODULE

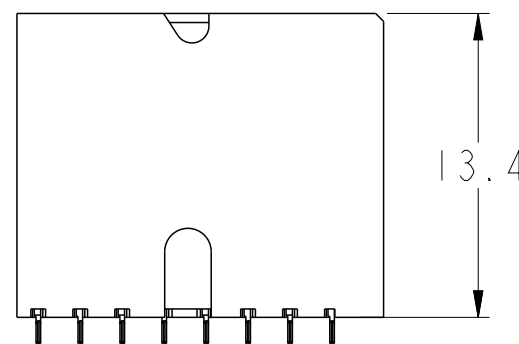
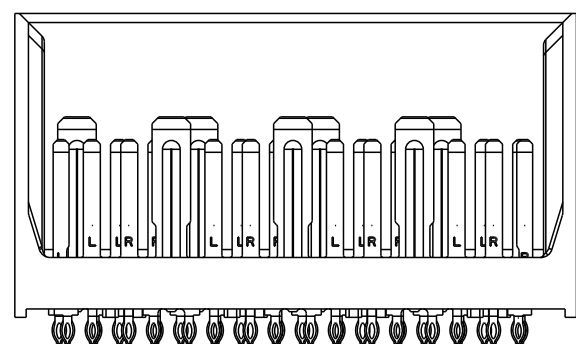
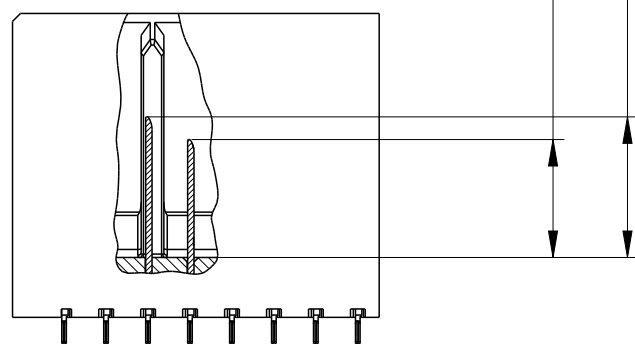
SEE NOTE 8



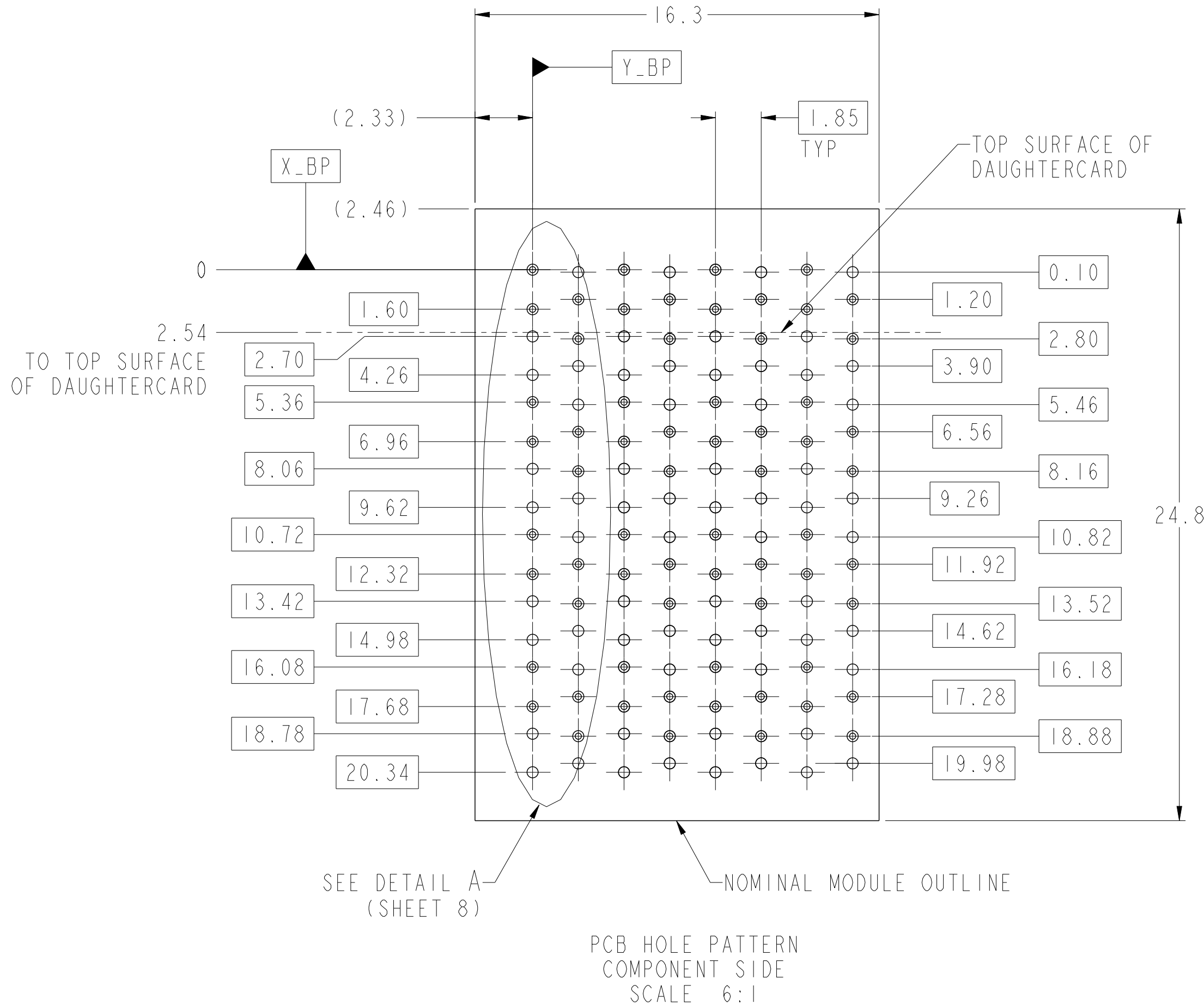
SEE NOTE 5



- 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	2009/07/07	projection	MM	size	A2	scale	4:1
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 5 of 8	dwg no	10091777	rev	E

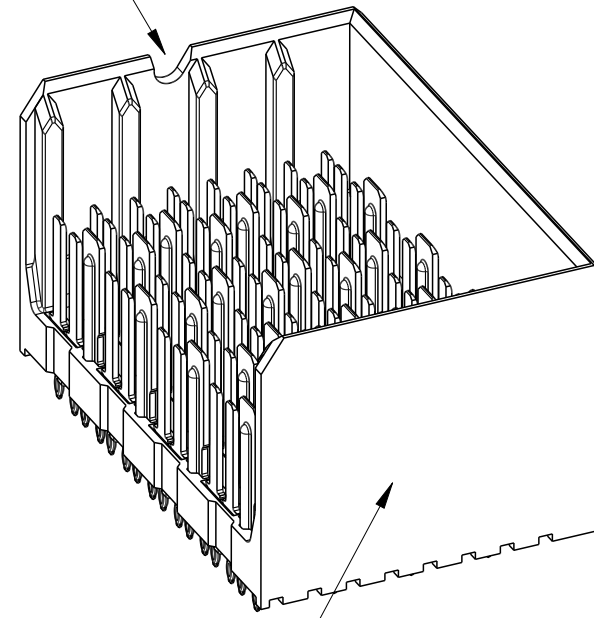
PDS: Rev :E

STATUS:Released

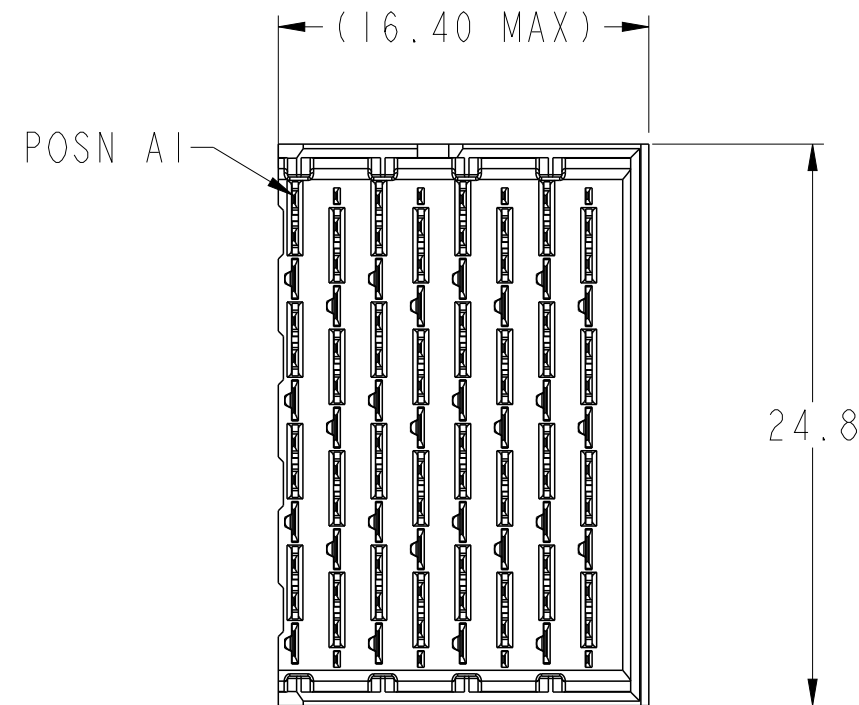
Printed: Dec 10, 2014

RIGHT WALL MODULE

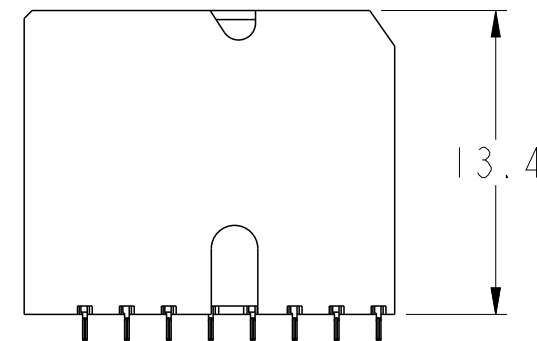
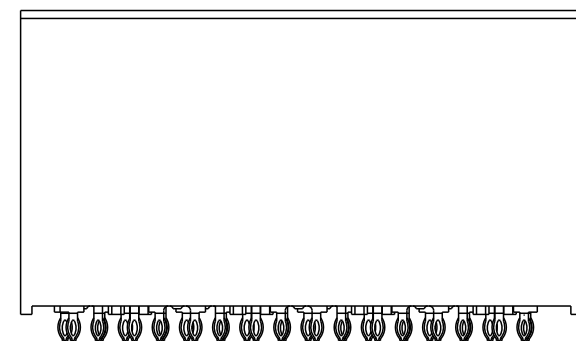
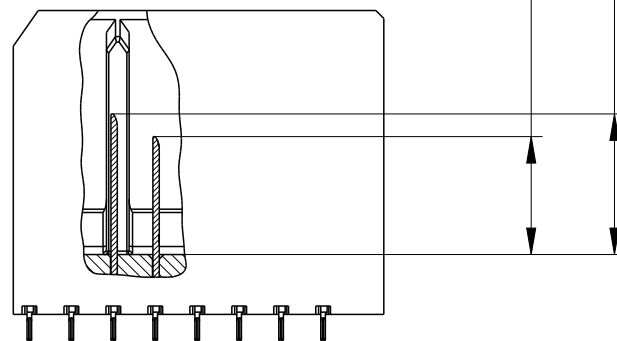
SEE NOTE 8



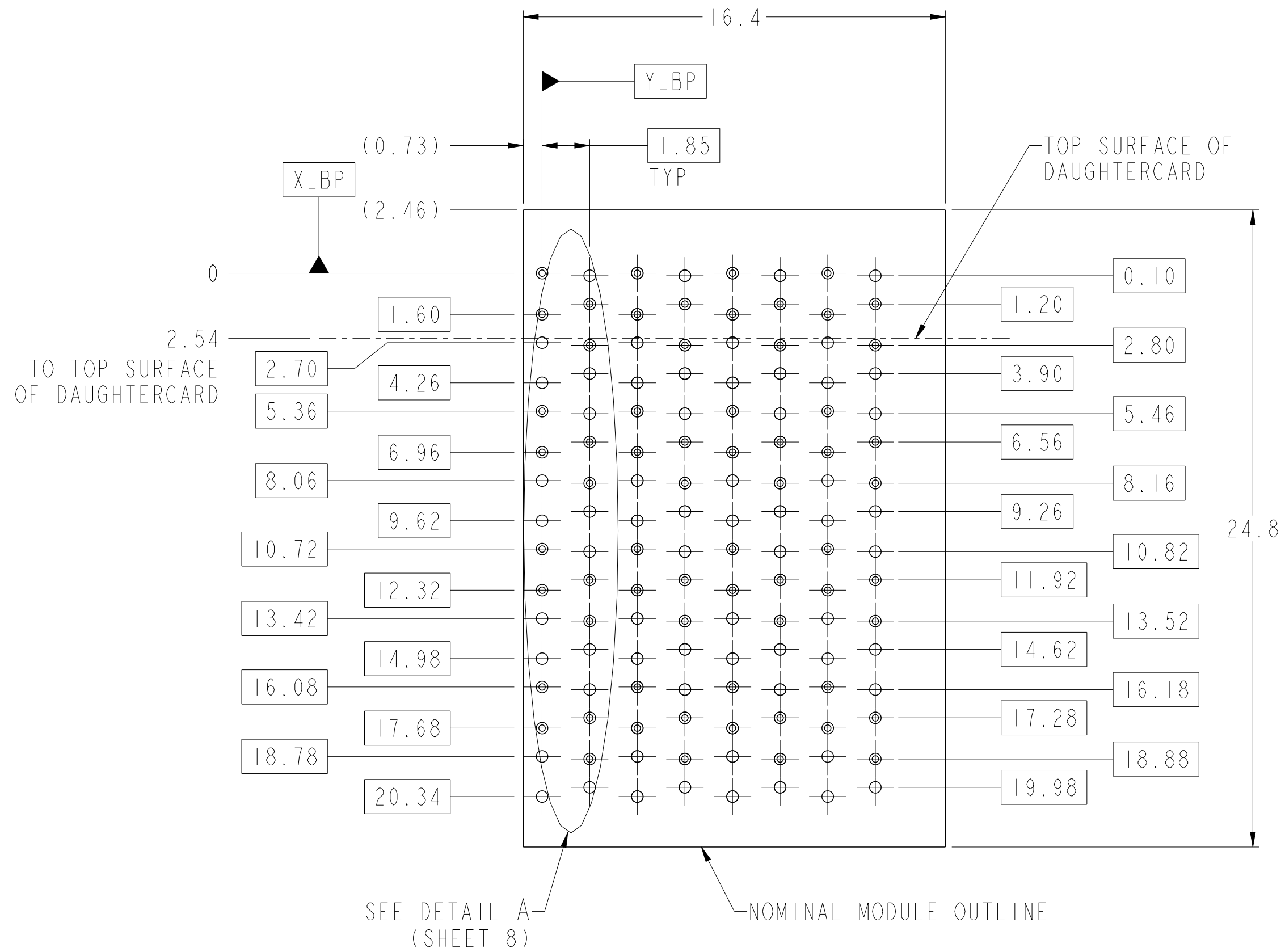
SEE NOTE 5



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	2009/07/07	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02	chr	-	ecm 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 6 of 8	rev	E		

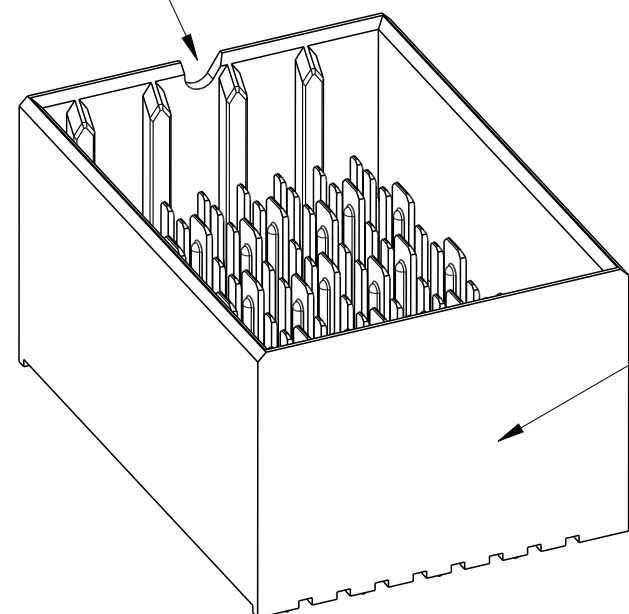
PDS: Rev :E

STATUS:Released

Printed: Dec 10, 2014

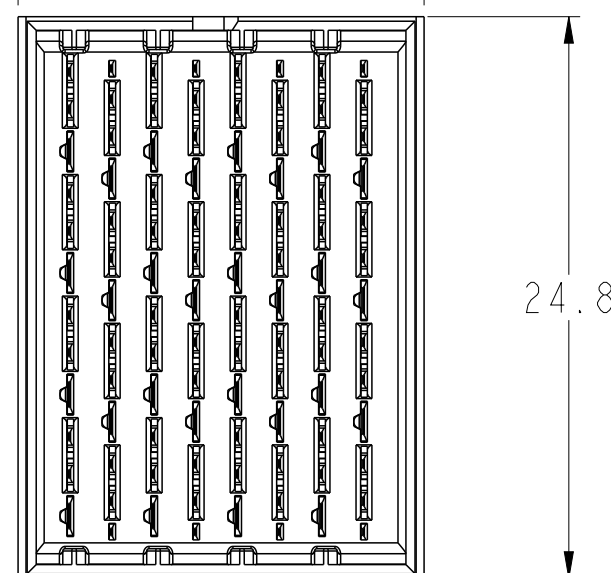
FOUR WALL MODULE

SEE NOTE 8



SEE NOTE 5

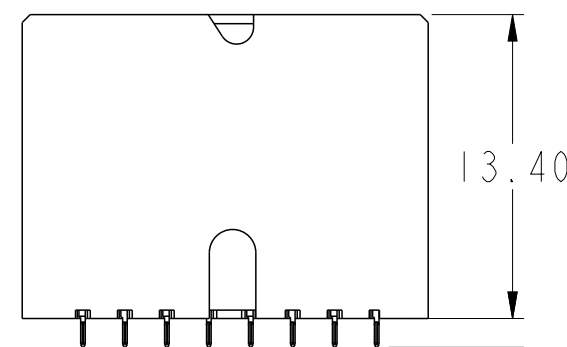
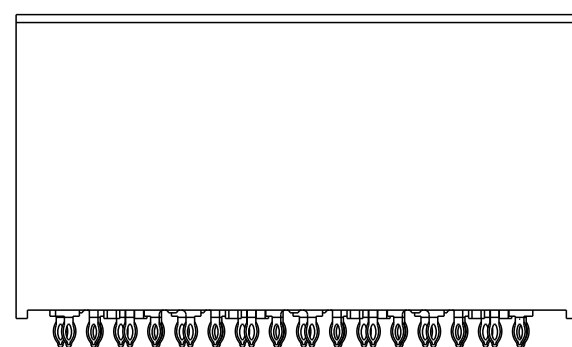
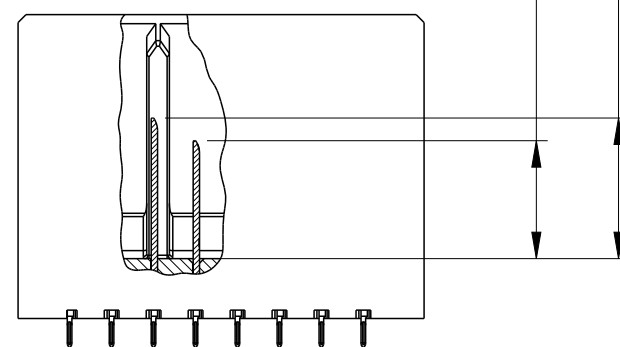
(17.90 MAX)



24.8

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

18.0

Y_BP

(2.33)

1.85
TYP

X_BP

2.54
TO TOP SURFACE
OF DAUGHTERCARD

0

1.60

2.70

5.36

6.96

8.06

9.62

10.72

12.32

13.42

14.98

16.08

17.68

18.78

20.34

TOP SURFACE OF
DAUGHTERCARD

0.10

1.20

2.80

3.90

5.46

6.56

8.16

9.26

10.82

11.92

13.52

14.62

16.18

17.28

18.88

19.98

24.8

SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Jim Swain	2009/07/07	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	dwg no	10091777	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.
- E

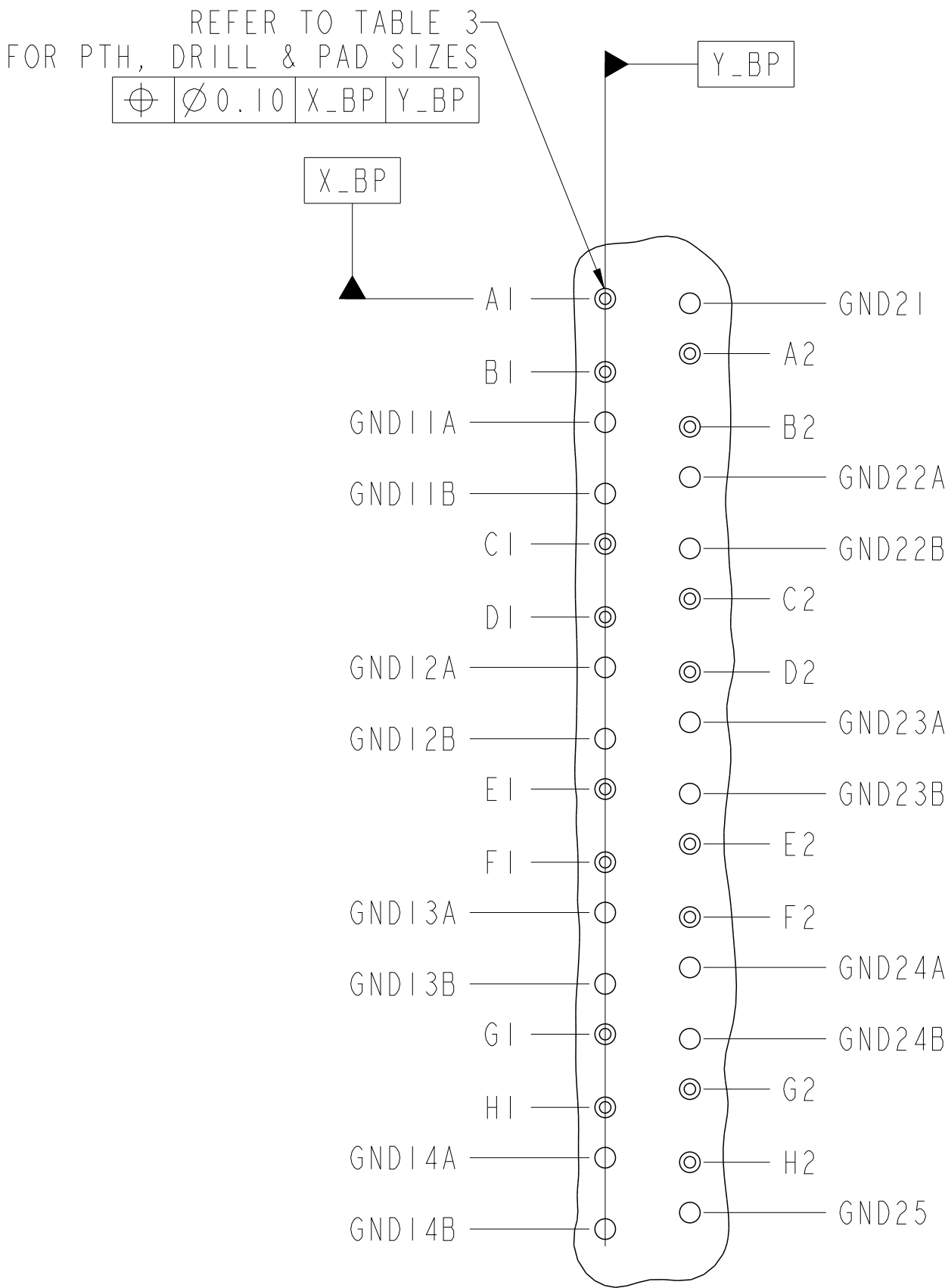
12. TAIL LENGTH=1.3mm FOR Ø0.55[0.0217"]COMPLIANT PIN DRILL
TAIL LENGTH=1.5mm FOR Ø0.45[0.0177"]COMPLIANT PIN DRILL
13. A

E

 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



DETAIL A
SCALE 8:1

spec ref		SEE NOTES		dr		Jim Swain		2009/07/07		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		-		-						rel level							
				appr		Chen-Hong Tan		2014/12/10						product family		XCede					
surface		linear		0.X		±0.2				title		MODULE ASSEMBLY		dwg no		10091777		rev		E	
		0.XX		±0.10																	
		0.XXX		±0.050																	
ASME Y14.5		angular		0°		±°		www.fci.com		cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 8 of 8					