

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

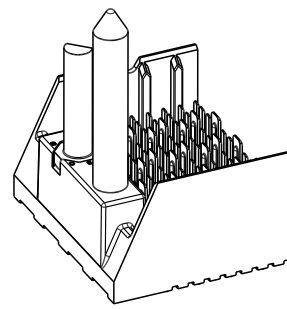
D

E

F

G

H



RIGHT
POLARIZING
GUIDANCE
MODULE
(SEE SHEET 4)

Y

P

Q

R

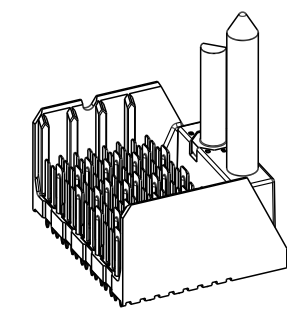
S

T

U

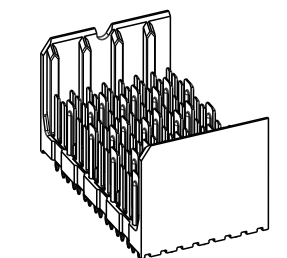
V

W



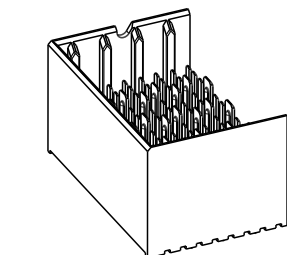
OPEN MODULE
(TWO WALL)
(SEE SHEET 2)

0 (ZERO)



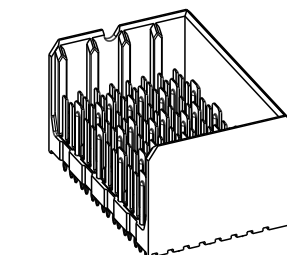
LEFT WALL
MODULE
(SEE SHEET 5)

L



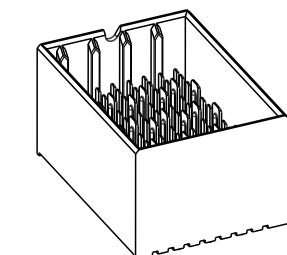
RIGHT WALL
MODULE
(SEE SHEET 6)

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

ASME Y14.5

surface

ASME Y14.5

TOLERANCES UNLESS
OTHERWISE SPECIFIED

linear

angular

0.X ±0.2

0.XX ±0.10

0.XXX ±0.050

0° ±°

dr

eng

chr

appr

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

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FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

www.fci.com

FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

www.fci.com

FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

www.fci.com

FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

www.fci.com

FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

www.fci.com

FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

A2

scale

4:1

ecn no

ELX-S-18843-1

rel level

Released

product family

XCede

cat. no.

SEE P/N TREE

Product - Customer Drw

sheet 1 of 8

rev

E

www.fci.com

FCI

MODULE ASSEMBLY

VERTICAL HEADER, 8-COLUMN, 4-PAIR

2009/07/07

2014/10/02

-

2014/12/10

projection

MM

size

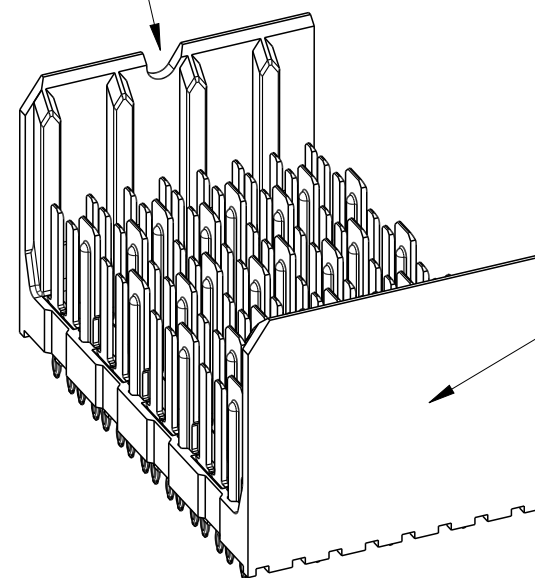
A2

scale

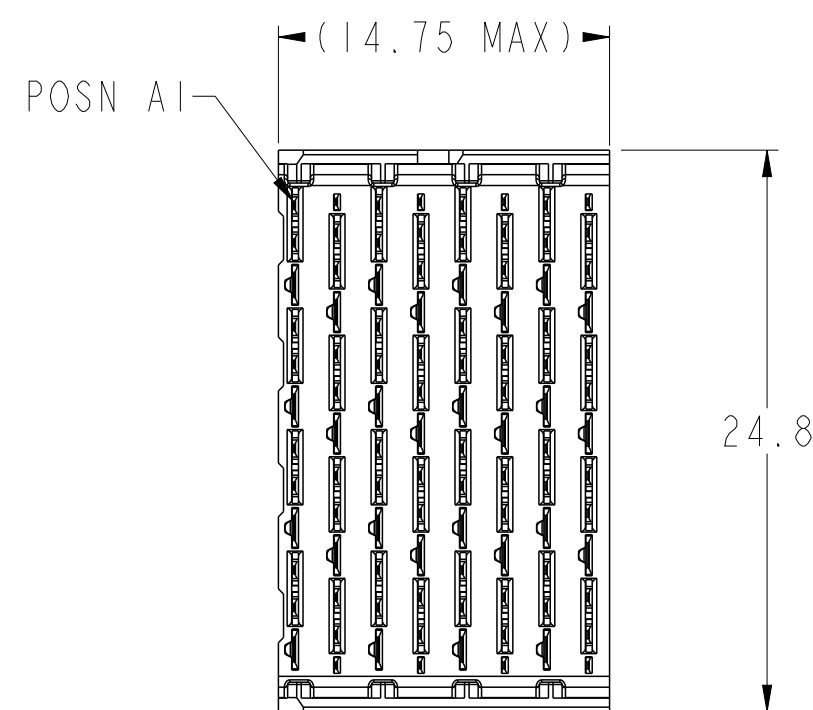
4:1

OPEN (2-WALL) MODULE

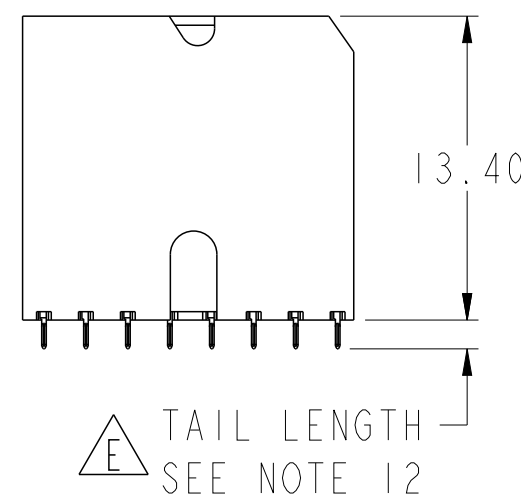
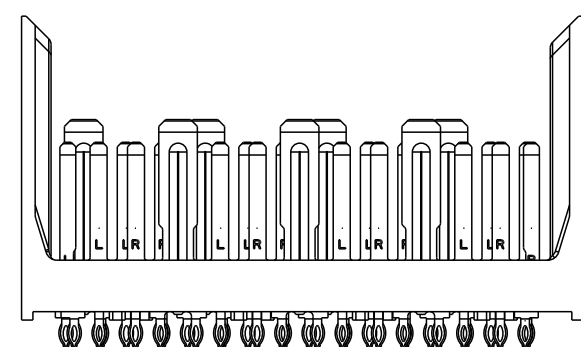
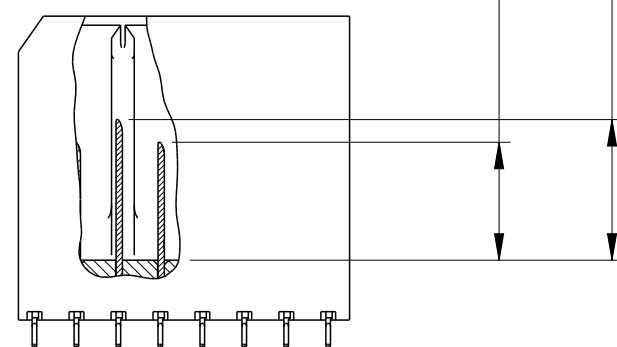
SEE NOTE 8



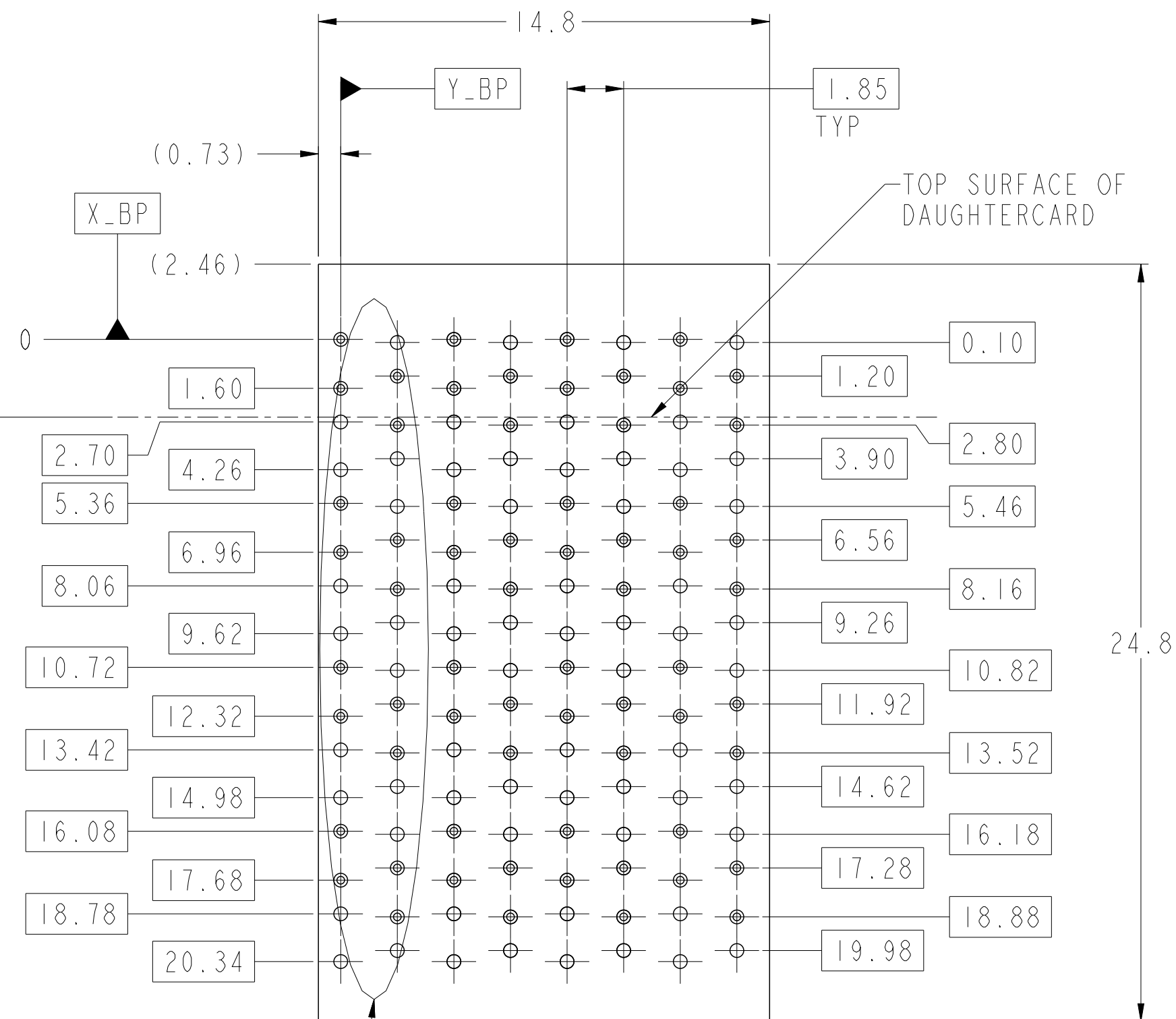
SEE NOTE 5



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

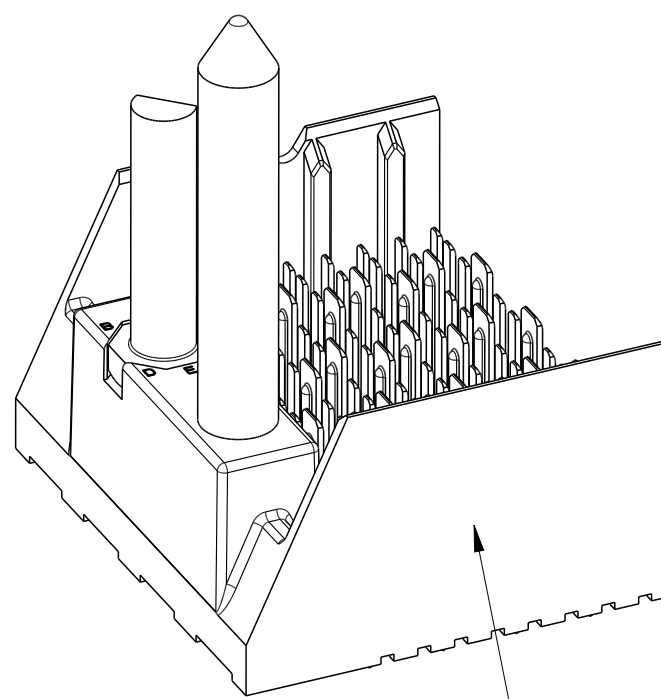
spec ref	SEE NOTES	dr	Jim Swain	2009/07/07	projection	MM	size	A2	scale	4:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
ASME Y14.5		appr	Chen-Hong Tan	2014/12/10	product family	XCede	rel level	Released	rev	E
surface	linear	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 2 of 8				

PDS: Rev :E

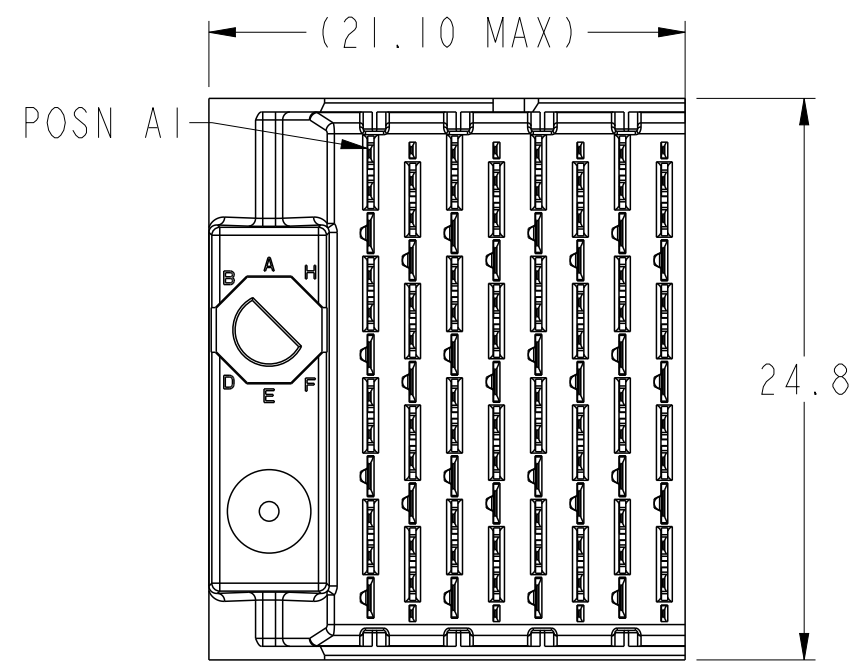
STATUS:Released

Printed: Dec 10, 2014

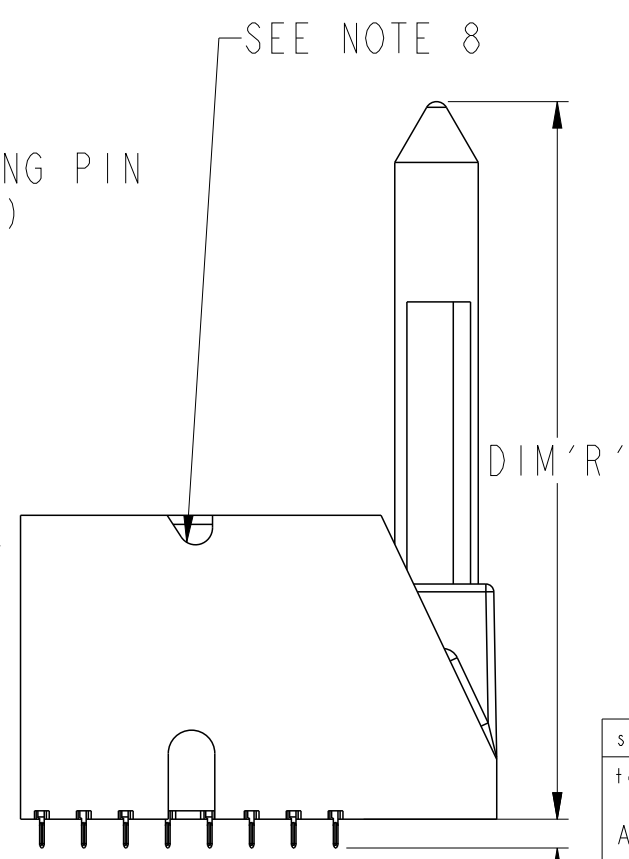
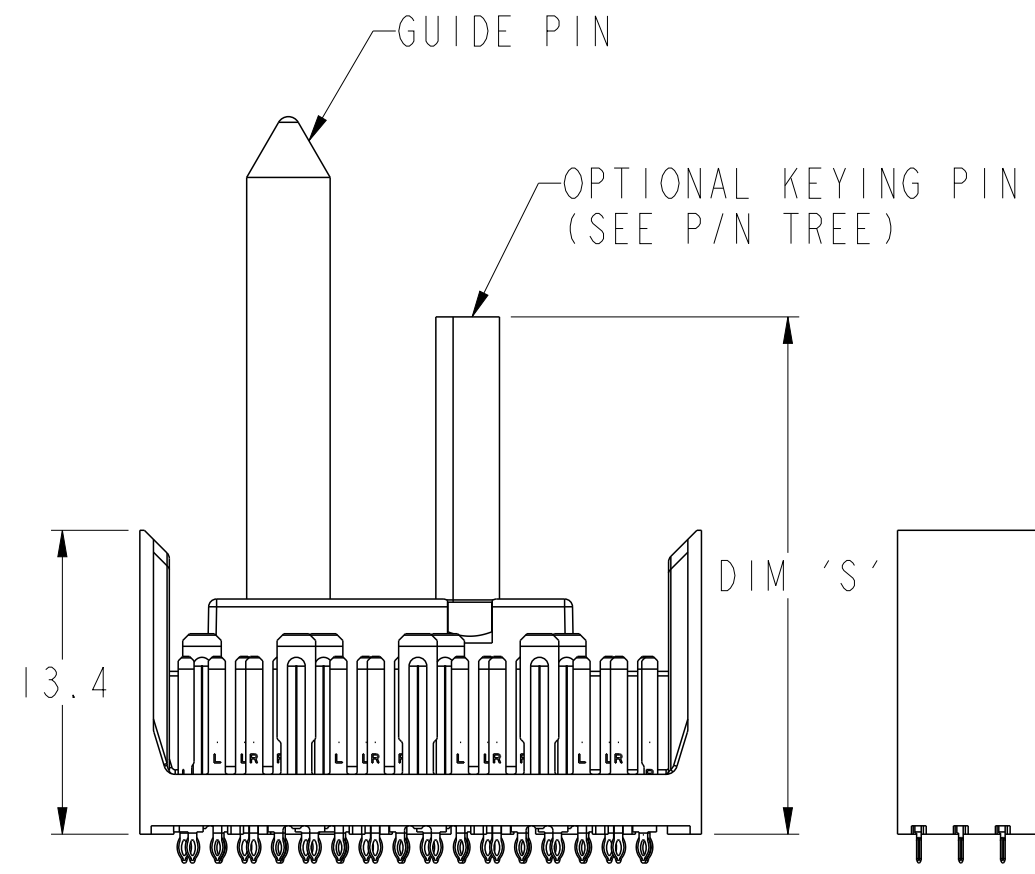
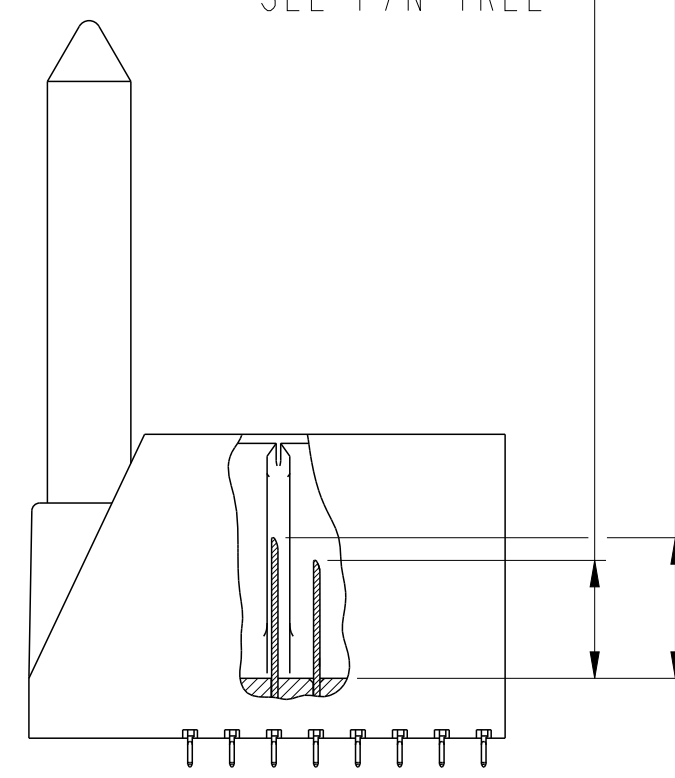
LEFT POLARIZING/GUIDE MODULE



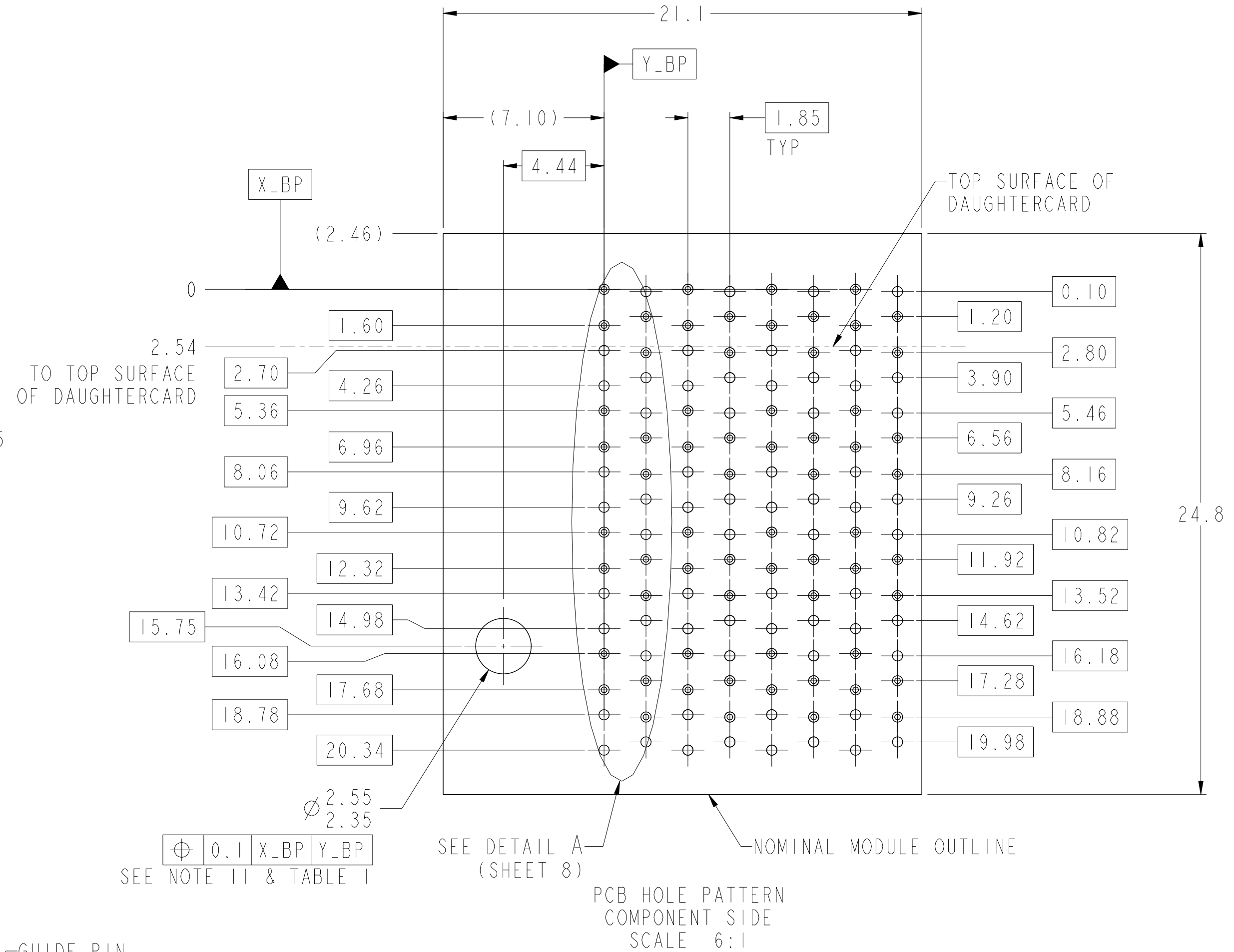
SEE NOTE 5



- 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



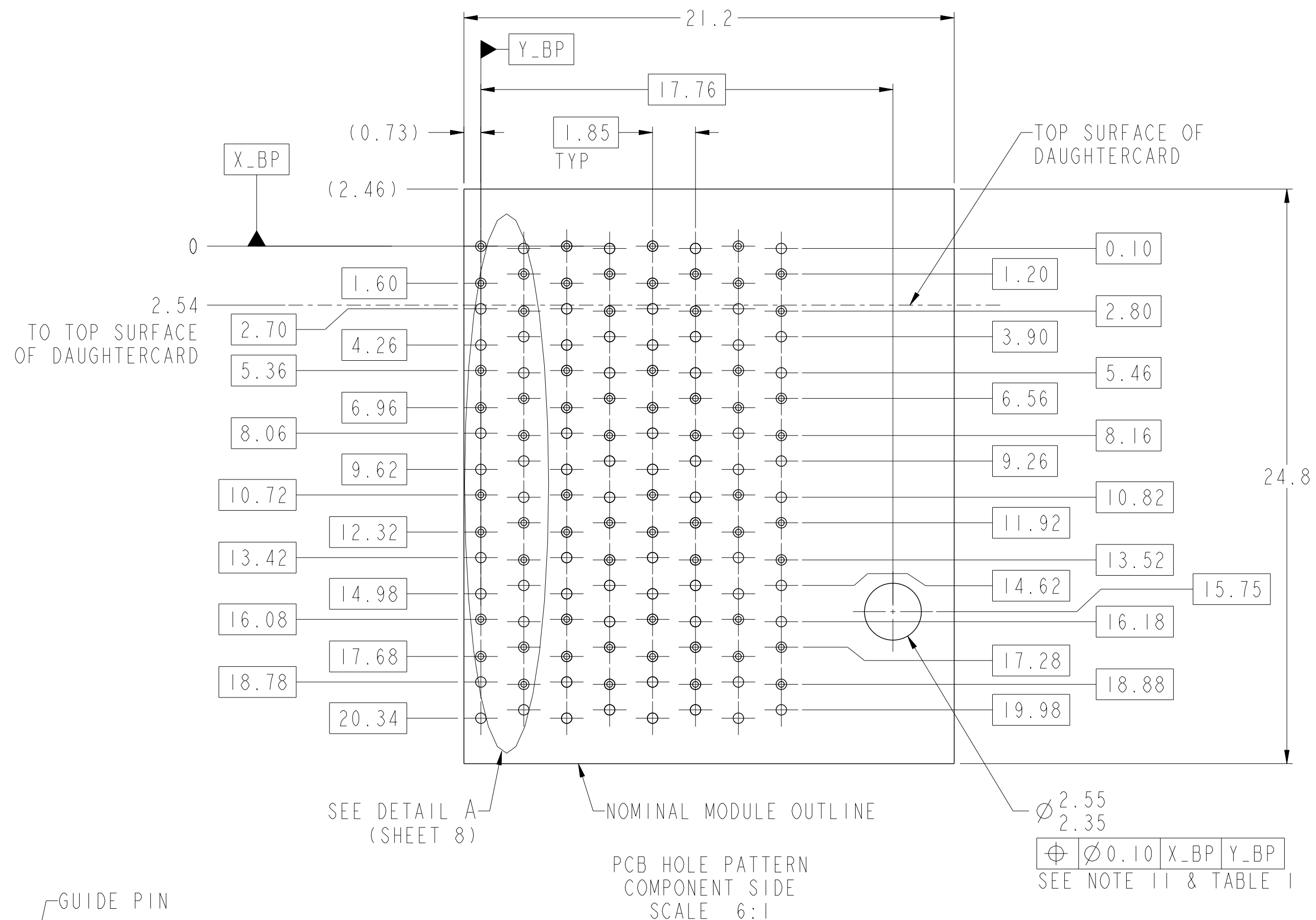
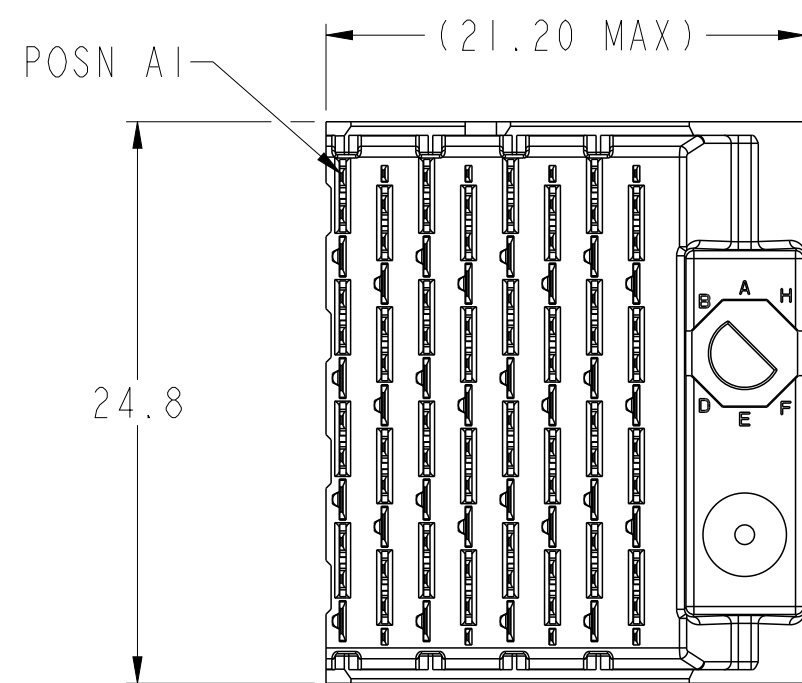
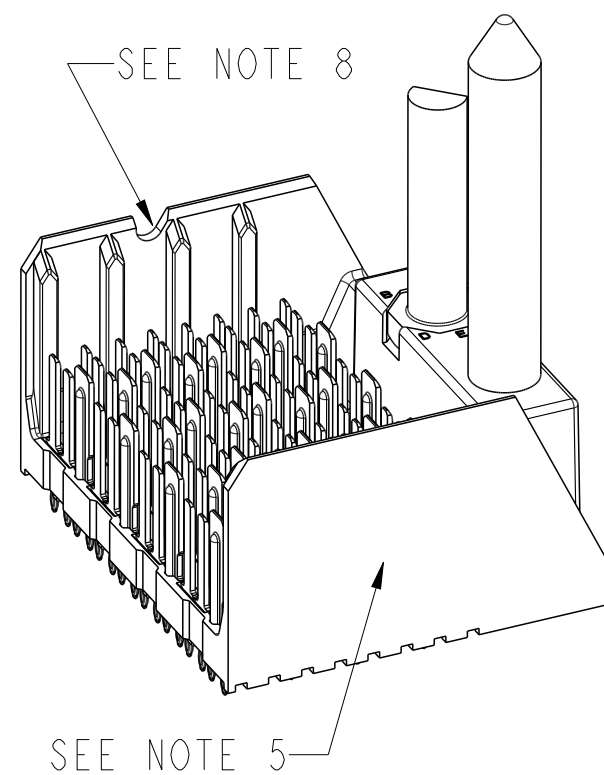
SEE NOTE 11 & TABLE 1

SEE DETAIL A (SHEET 8)
NOMINAL MODULE OUTLINE
PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

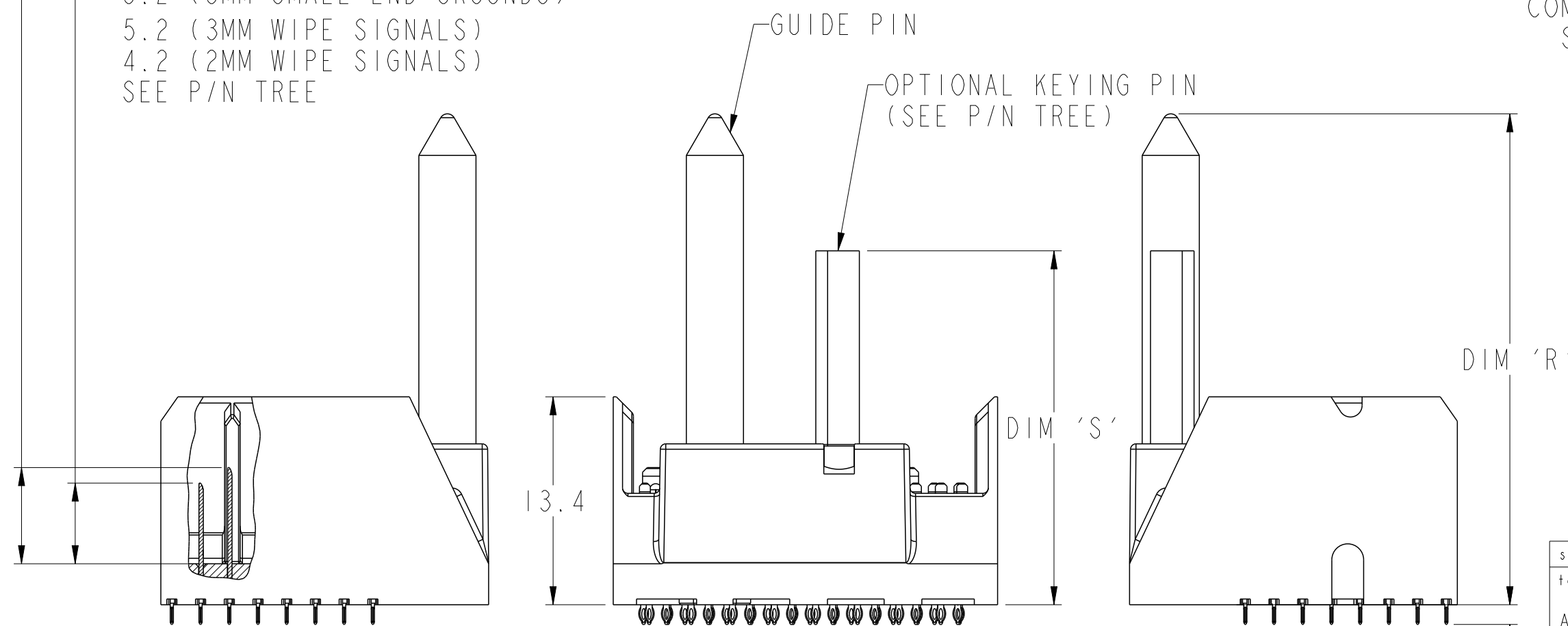
ASSEMBLY BASE CONFIGURATION END DASH NO.	GUIDE PIN	POLARIZING KEY
	DIM 'R'	DIM 'S'
-X0X	31.6mm	22.8mm
-X4X	25.7mm	20.0mm

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	dwg no	10091777	rev	E
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	title	MODULE ASSEMBLY	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 3 of 8			
angular	0° ±°									

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	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	angular	0° ±	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 4 of 8			

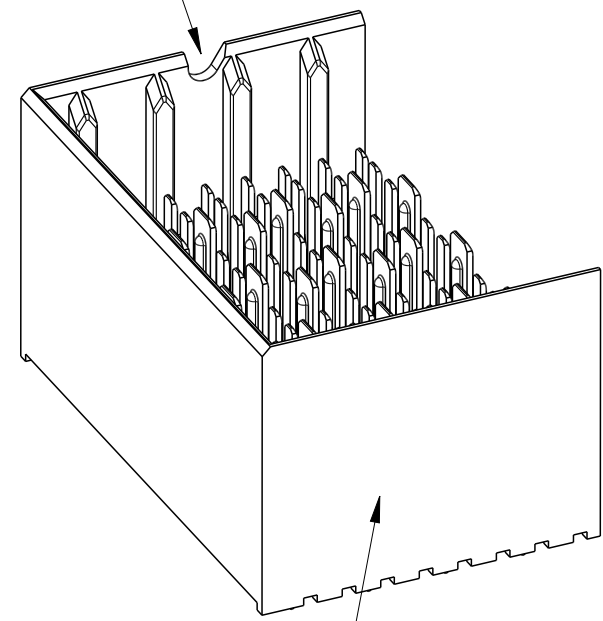
PDS: Rev :E

STATUS:Released

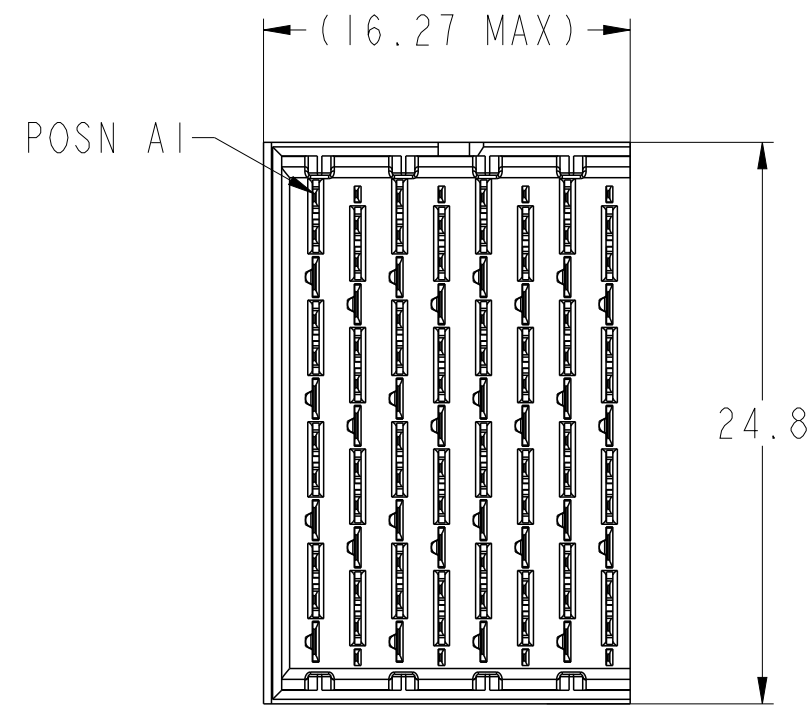
Printed: Dec 10, 2014

LEFT WALL MODULE

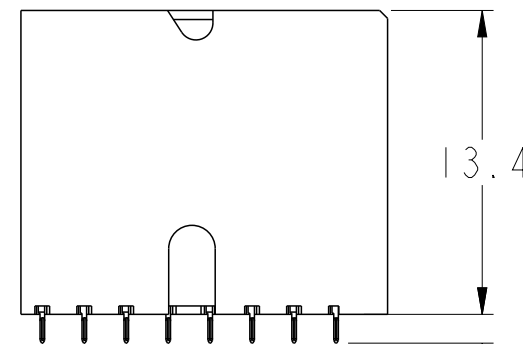
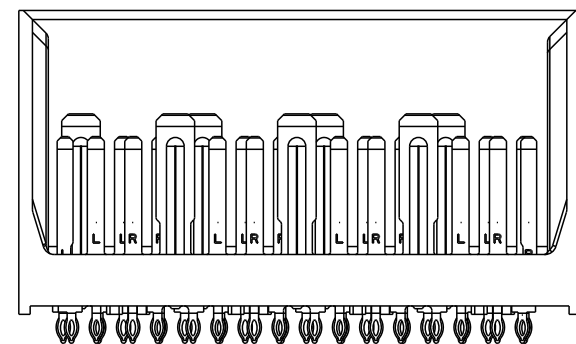
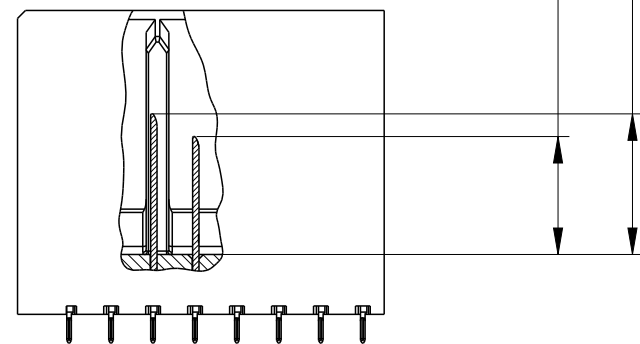
SEE NOTE 8



SEE NOTE 5

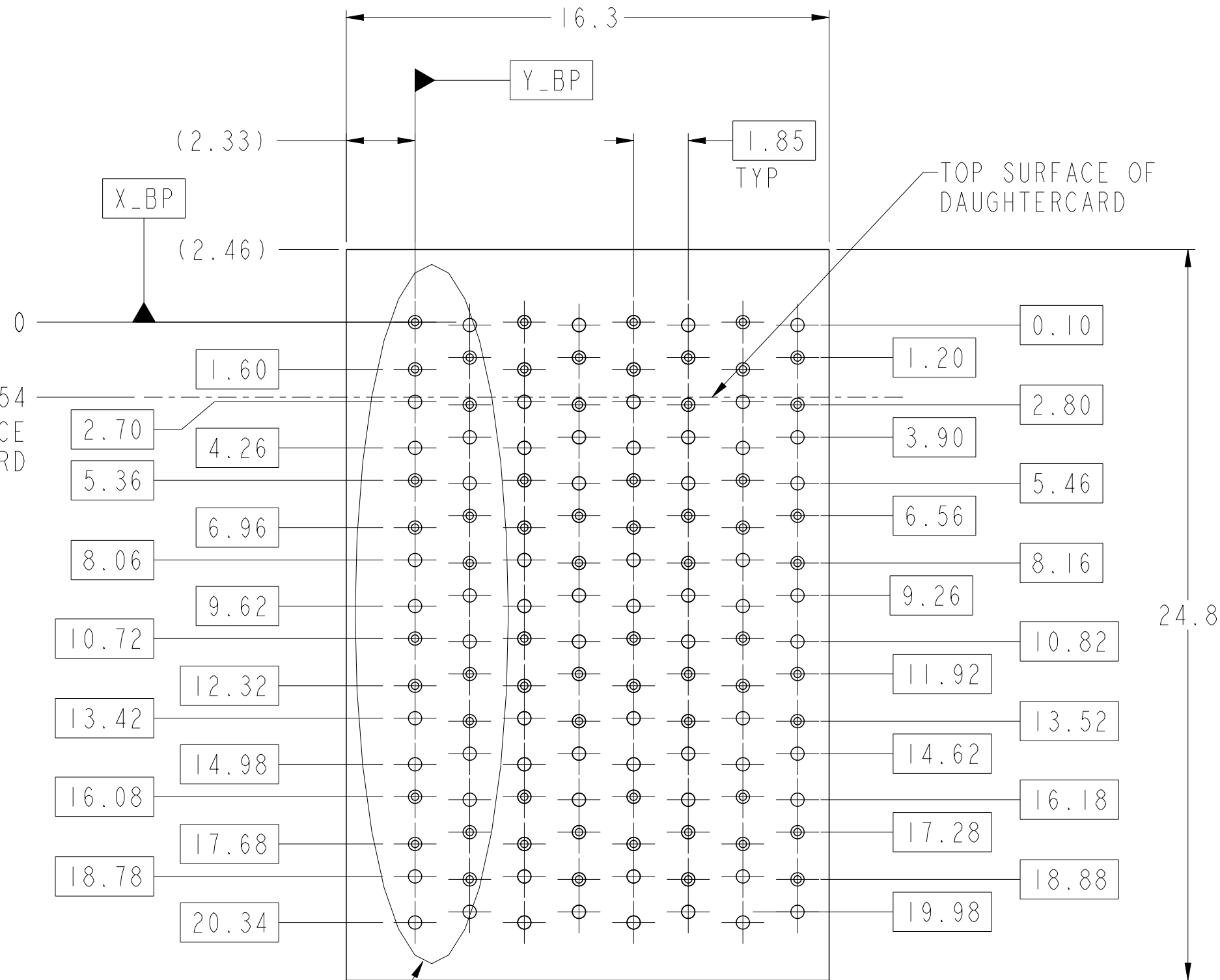


6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)
SEE P/N TREE



TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD



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	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				

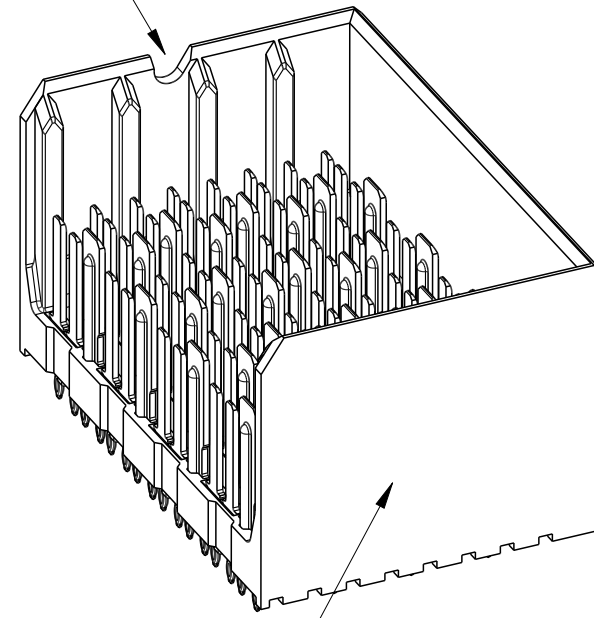
PDS: Rev :E

STATUS:Released

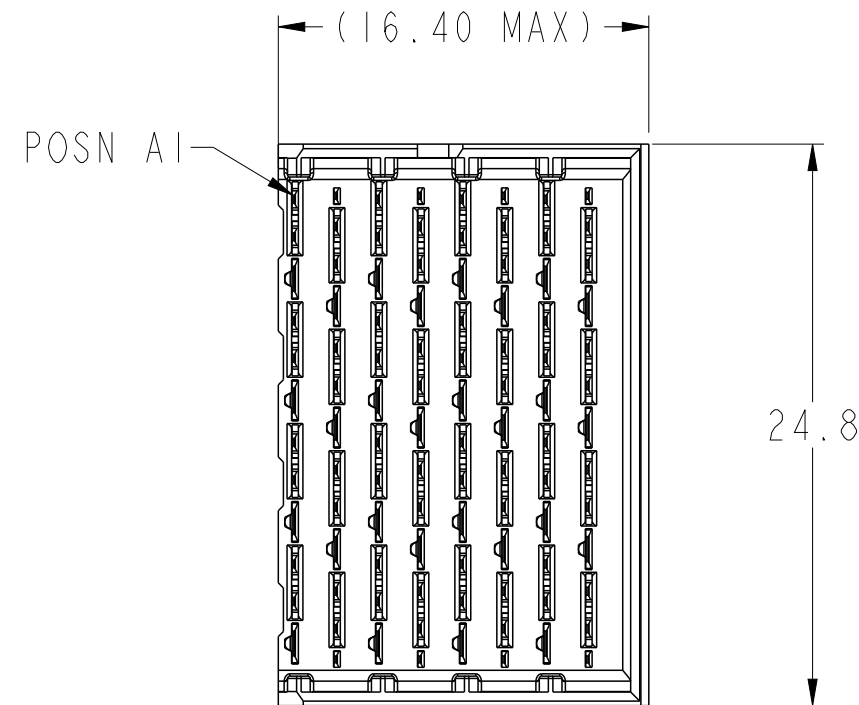
Printed: Dec 10, 2014

RIGHT WALL MODULE

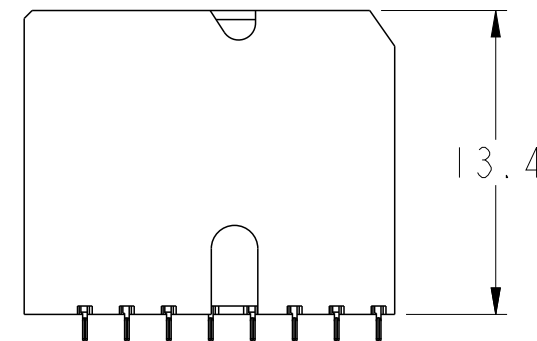
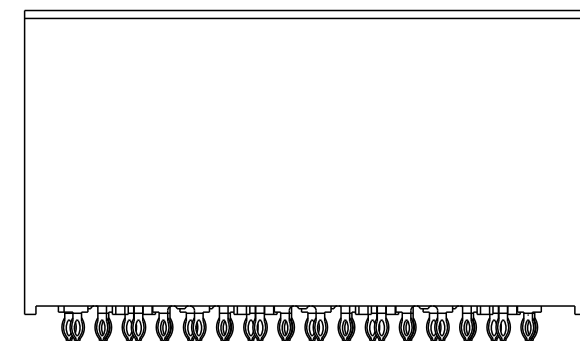
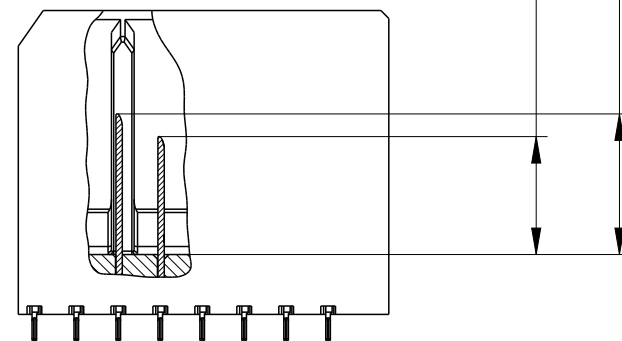
SEE NOTE 8



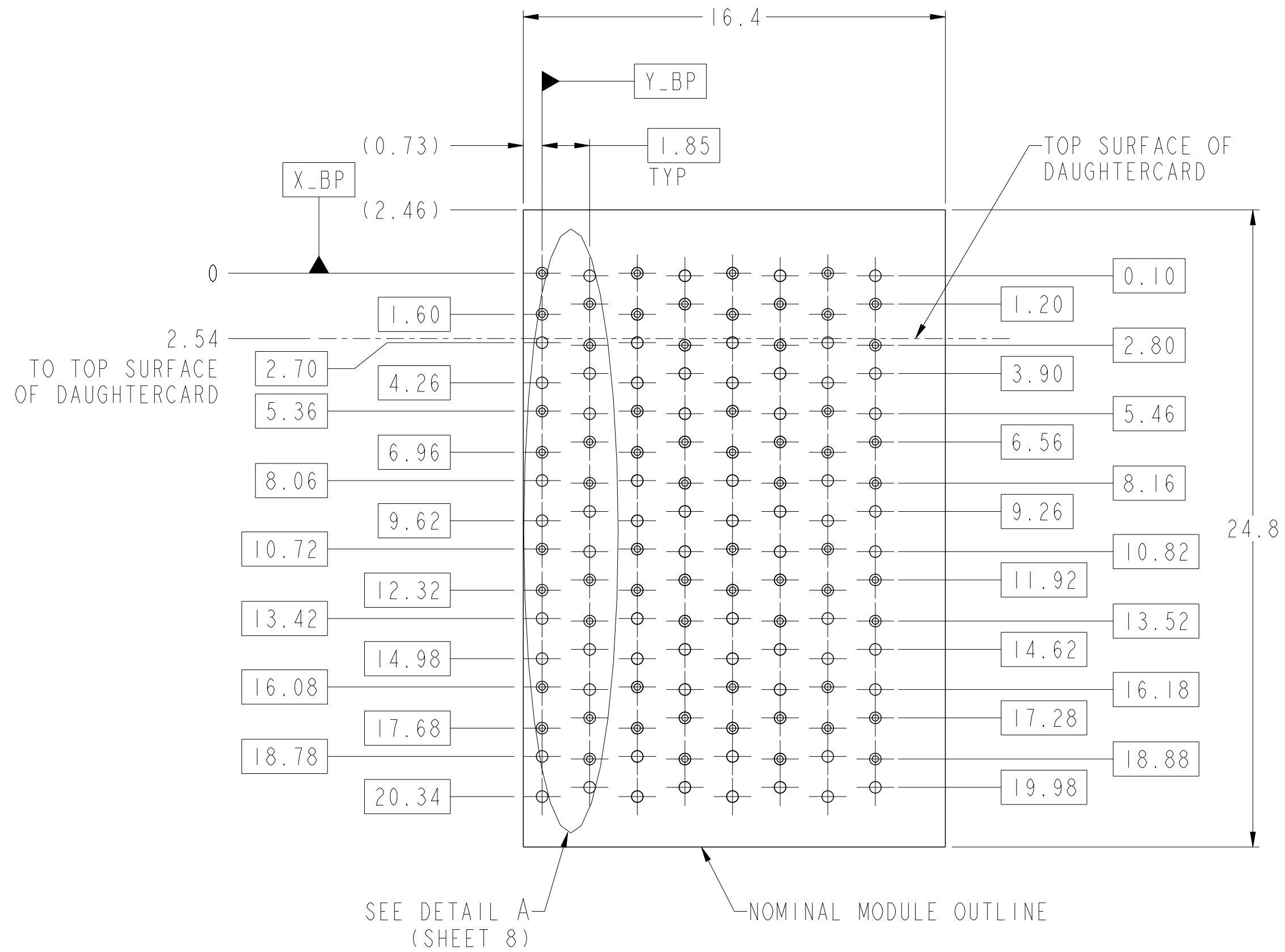
SEE NOTE 5



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		

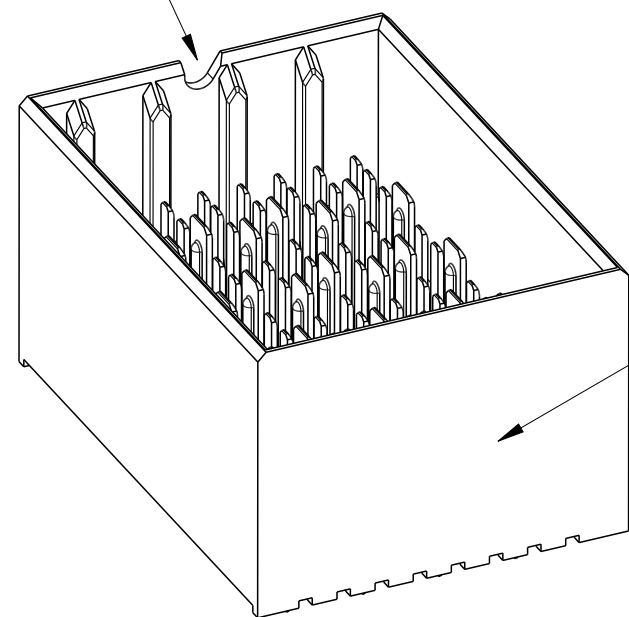
PDS: Rev :E

STATUS:Released

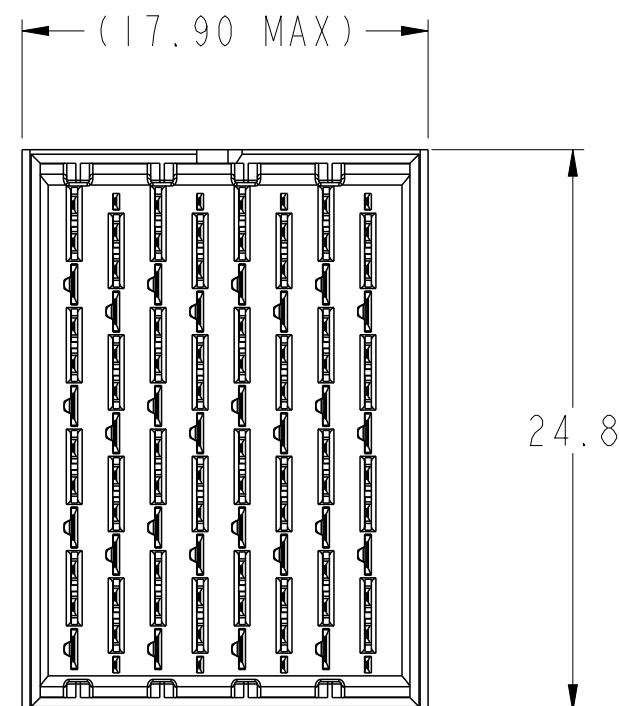
Printed: Dec 10, 2014

FOUR WALL MODULE

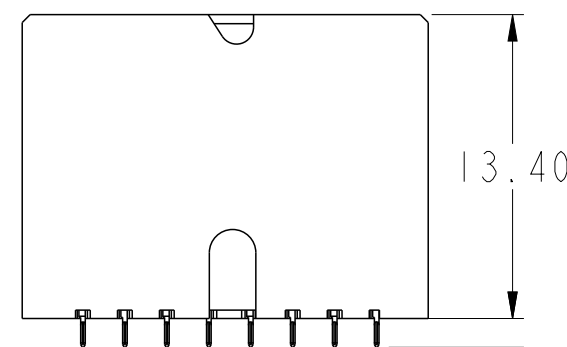
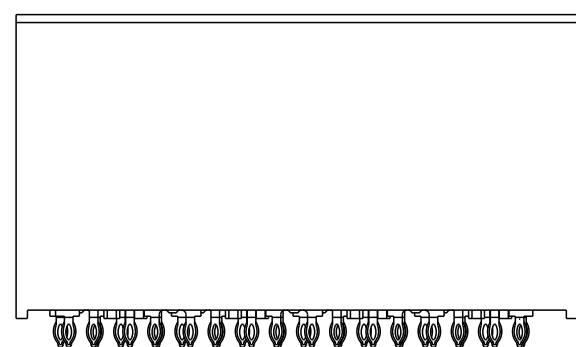
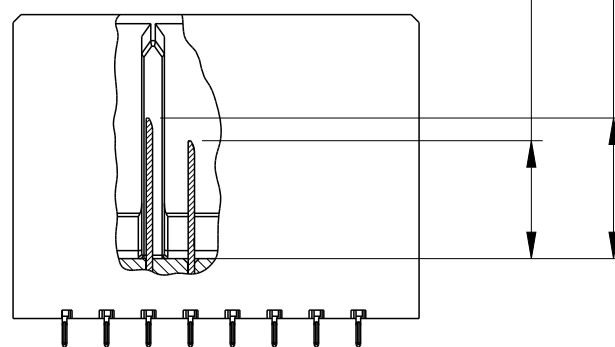
SEE NOTE 8



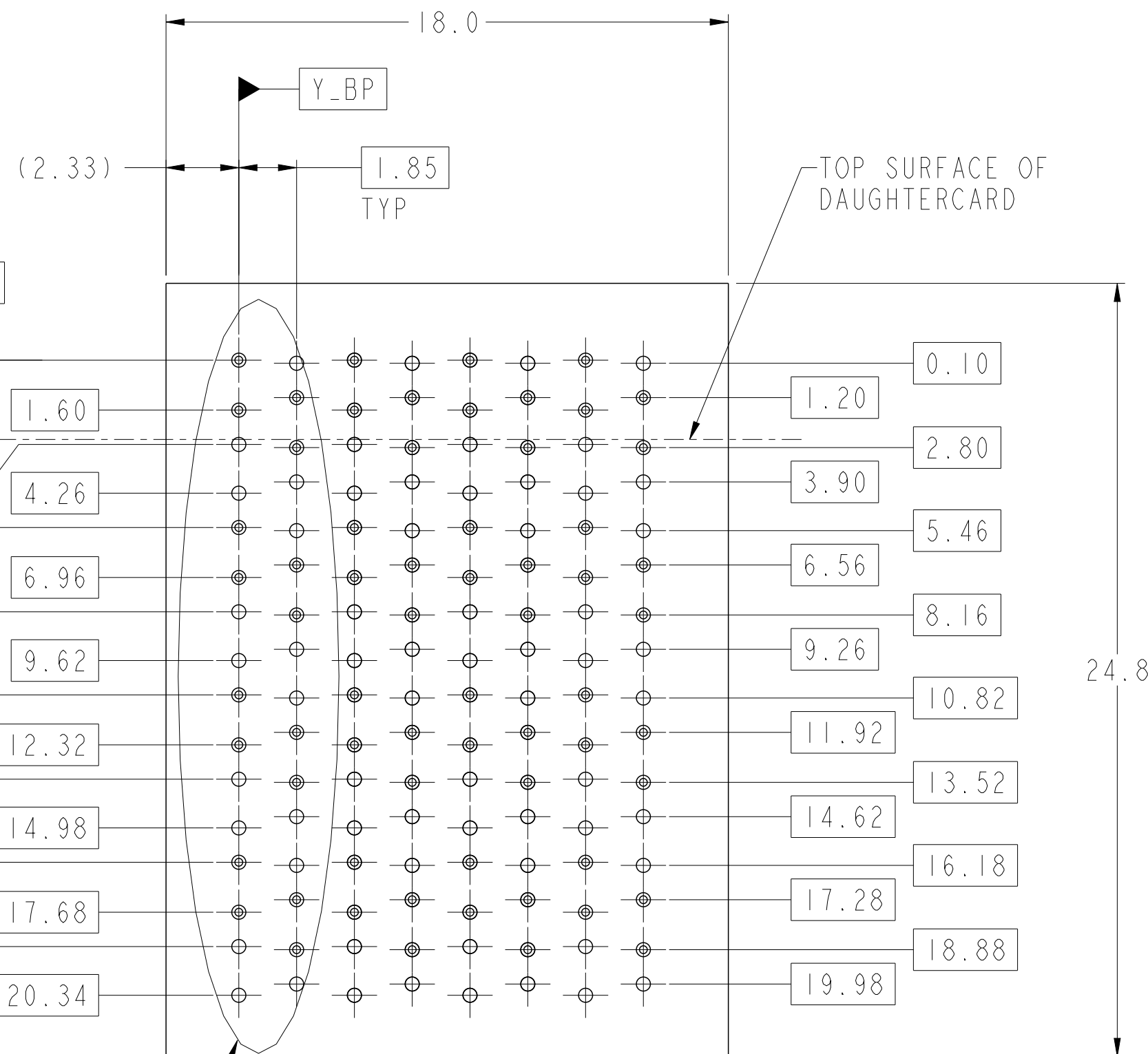
SEE NOTE 5



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)
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	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.

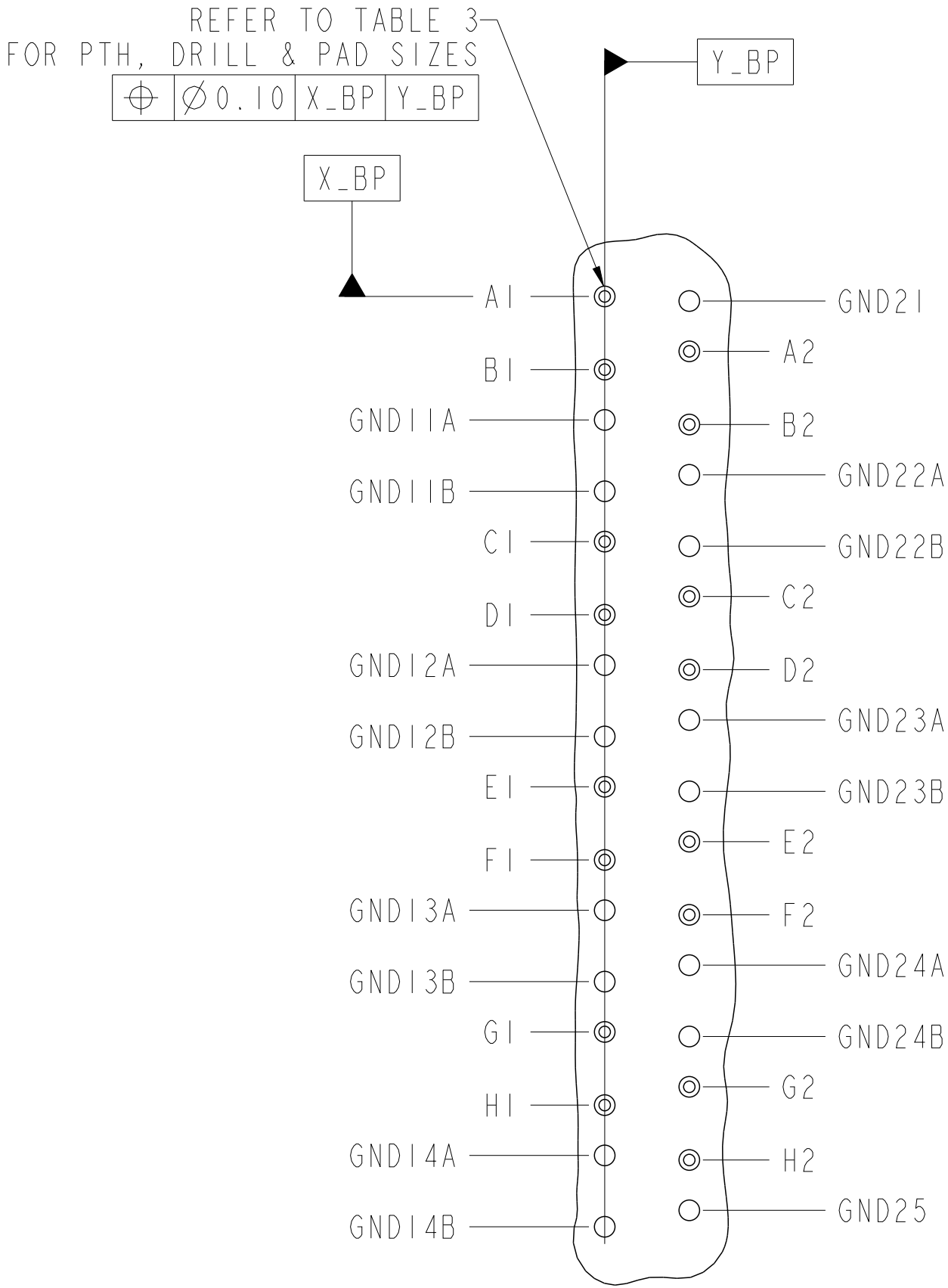
PRESS-FIT TAILS: TIN OVER NICKEL (LF), OR TIN-LEAD ALLOY OVER NICKEL (NON-LF). SEE P/N TREE.
3. PRODUCT SPECIFICATION: GS-12-588
4. APPLICATION SPECIFICATION: GS-20-121
5. PRODUCT MARKING (PART NUMBER AND LOT CODE) ON THESE SURFACES.
6. HOUSING MUST WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 40 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				
ASME Y14.5				chr	-	-								
				appr	Chen-Hong Tan	2014/12/10	product family		XCede		rel level	Released		
surface 	linear	0.X	±0.2		title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 4-PAIR				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			

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