

1 0 1 0 4 9 9 9 - 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

MODULE
DESCRIPTION

LETTER DESIGNATION REPRESENTED IN DASH NUMBER

BASE
MODULE

LEFT
POLARIZING
GUIDANCE
MODULE
(SEE SHEET 3)

J

A

B

C

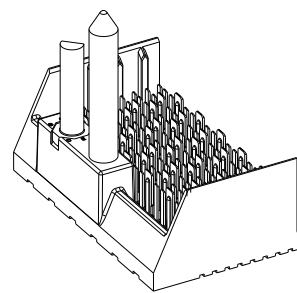
D

E

F

G

H



RIGHT
POLARIZING
GUIDANCE
MODULE
(SEE SHEET 4)

Y

P

Q

R

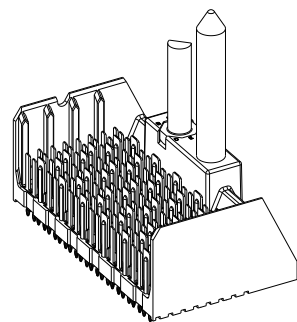
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T

U

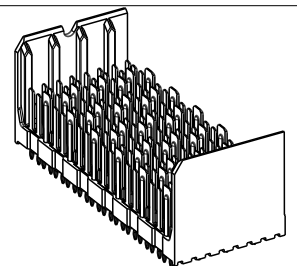
V

W



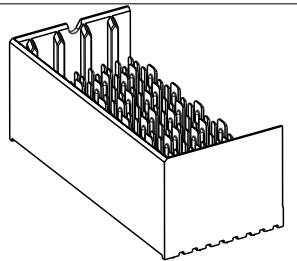
OPEN MODULE
(TWO WALL)
(SEE SHEET 2)

0 (ZERO)



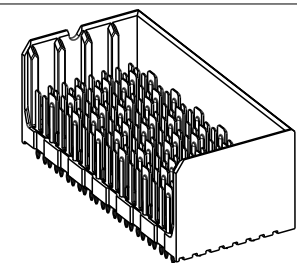
LEFT WALL
MODULE
(SEE SHEET 5)

L



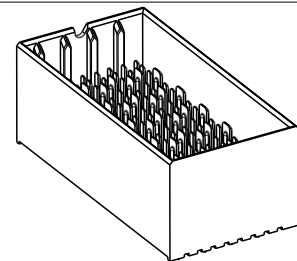
RIGHT WALL
MODULE
(SEE SHEET 6)

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 TOLERANCES UNLESS
OTHERWISE SPECIFIED

surface ✓
ASME Y14.5 linear 0.X ±0.2
0.XX ±0.10
0.XXX ±0.050
angular 0° ±°

dr Kok-Hoe Lee 2010/06/24
eng Sandar Soe 2014/10/02
chr -
appr Chen-Hong Tan 2014/12/10

www.fci.com

projection
MM
size A2
scale 3:1

product family
cat. no.

ecn no
ELX-S-18843-1

rel level
Released

title
MODULE ASSEMBLY
VERTICAL HEADER, 8-COLUMN, 6-PAIR

cat. no.

Product - Customer Drw

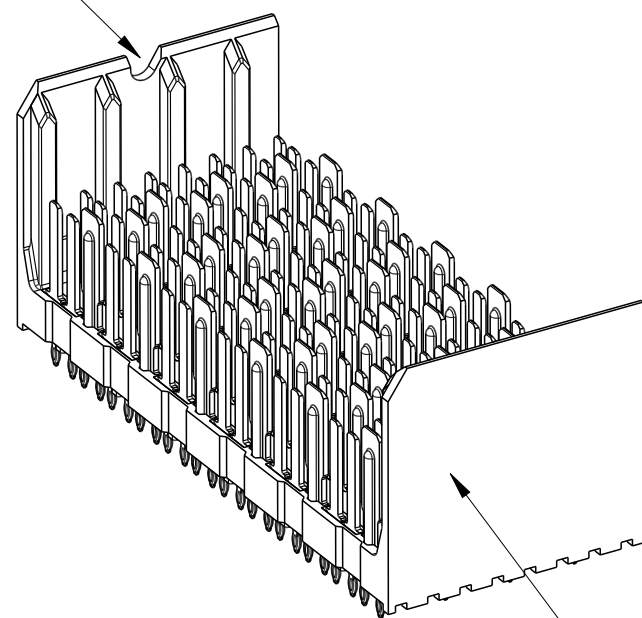
sheet 1 of 8

dwg no
10104999

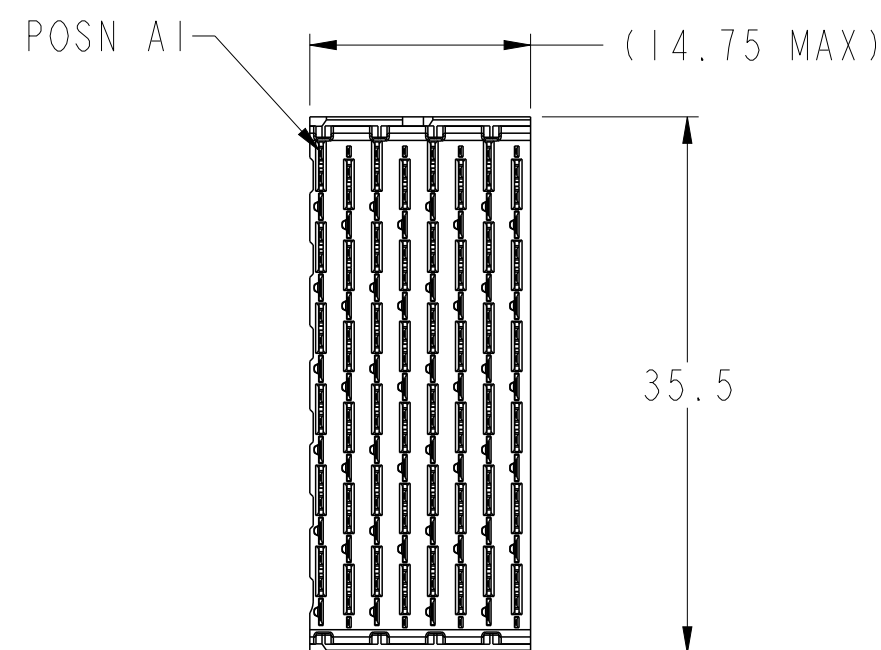
rev
D

OPEN (2-WALL) MODULE

SEE NOTE 8

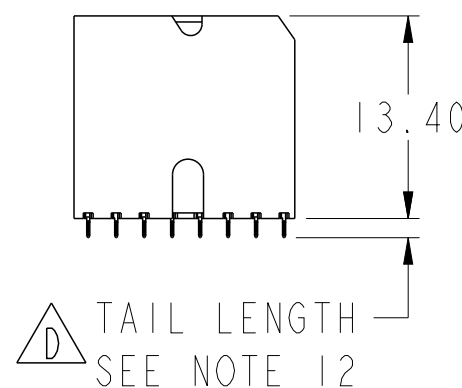
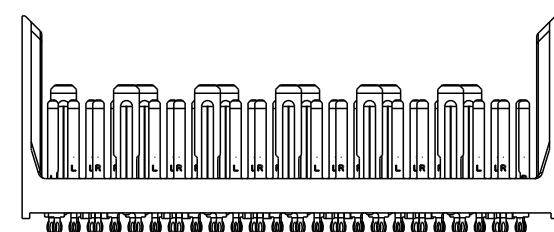
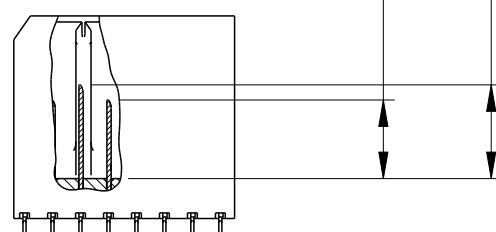


SEE NOTE 5



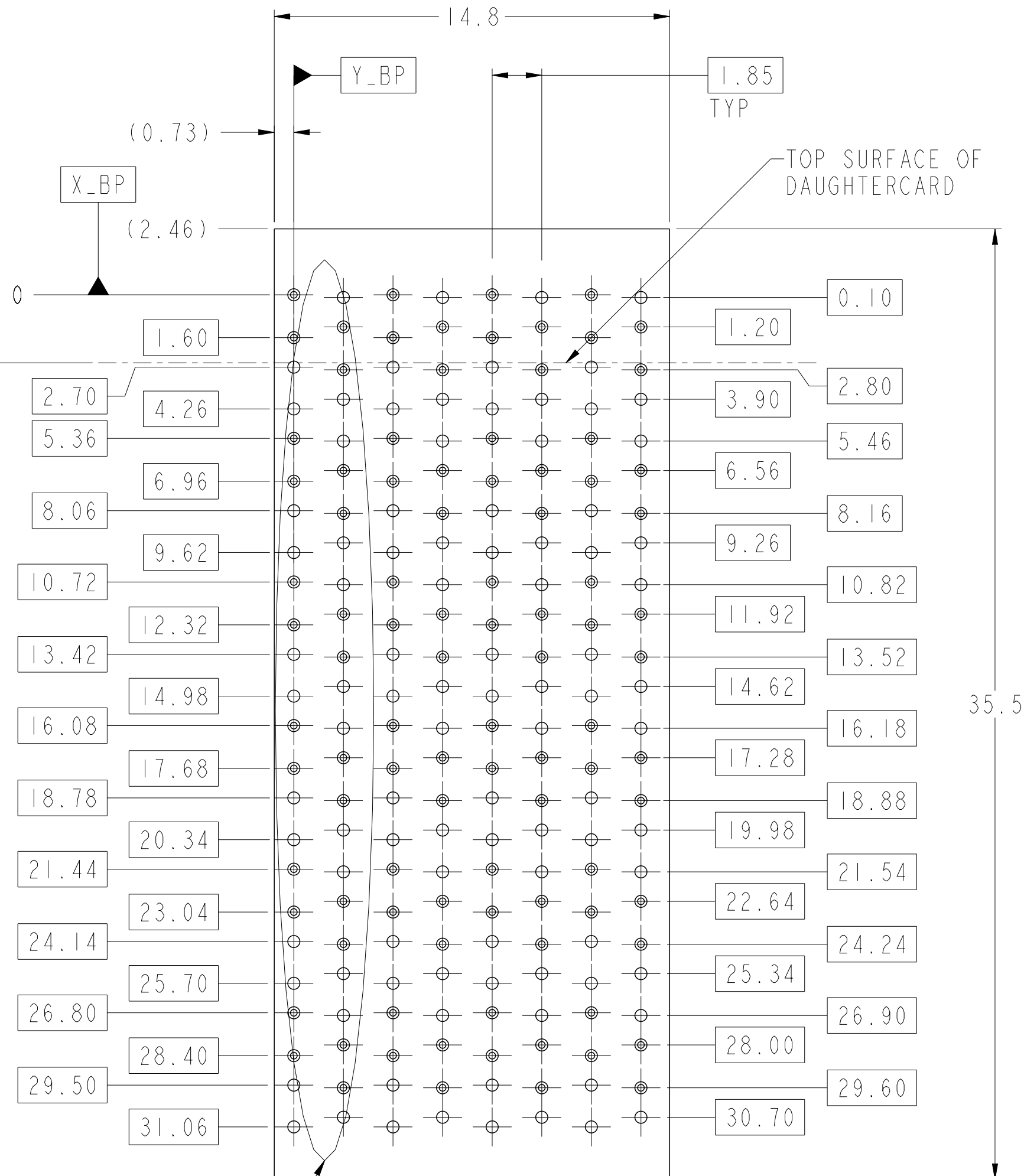
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR
ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD



SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE
PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

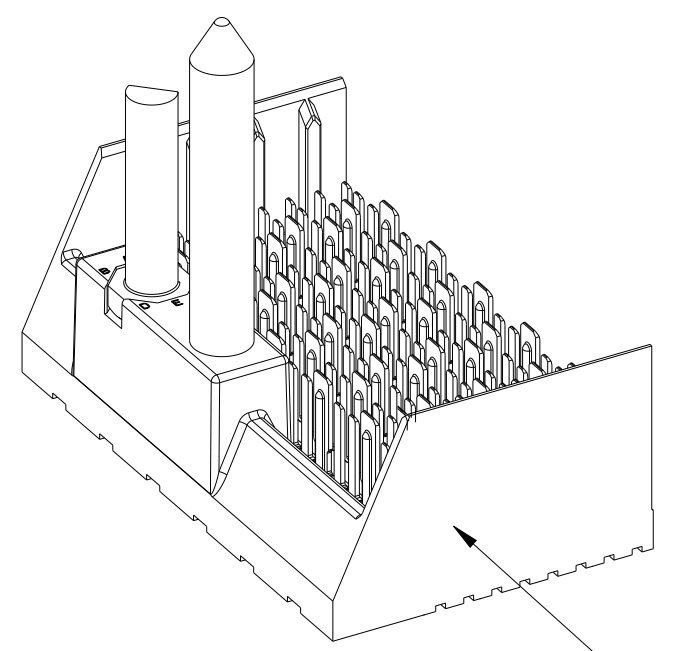
spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	-	dwg no	10104999	rev	D
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	www.fci.com	cat. no.	SEE P/N TREE	Product	- Customer Drw	sheet 2 of 8			
angular	0° ±°									

PDS: Rev :D

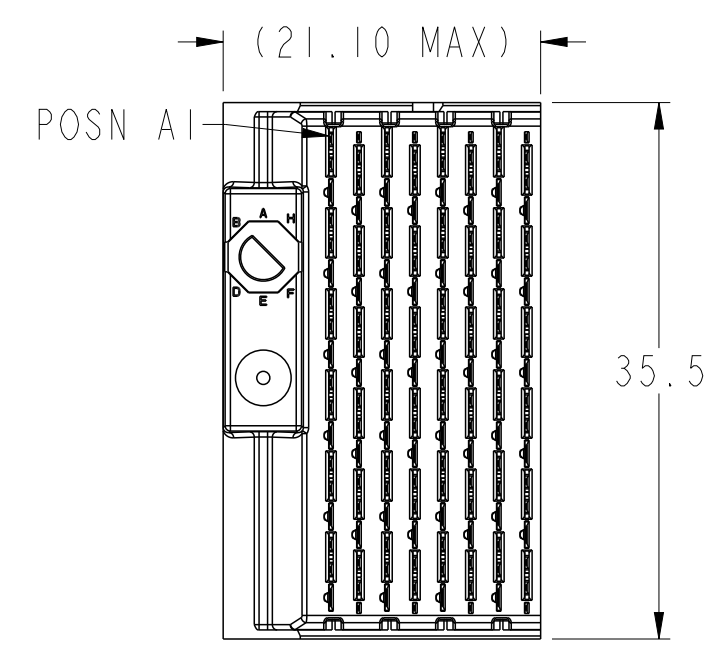
STATUS:Released

Printed: Dec 10, 2014

LEFT POLARIZING/GUIDE MODULE

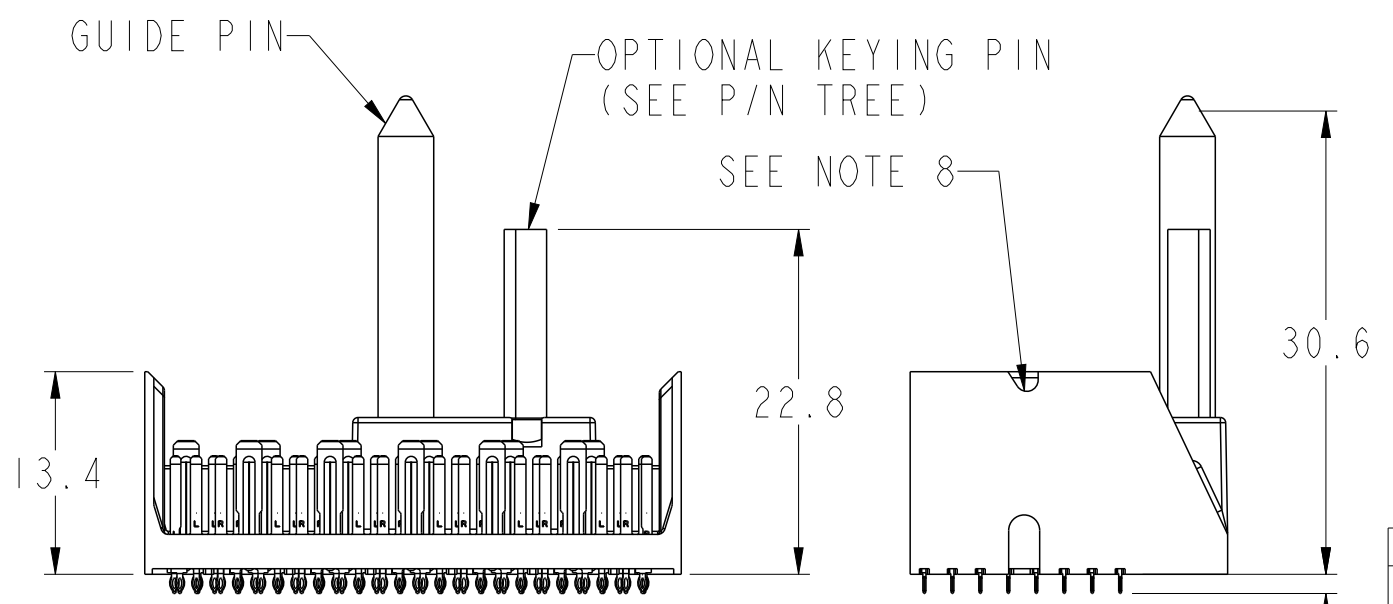
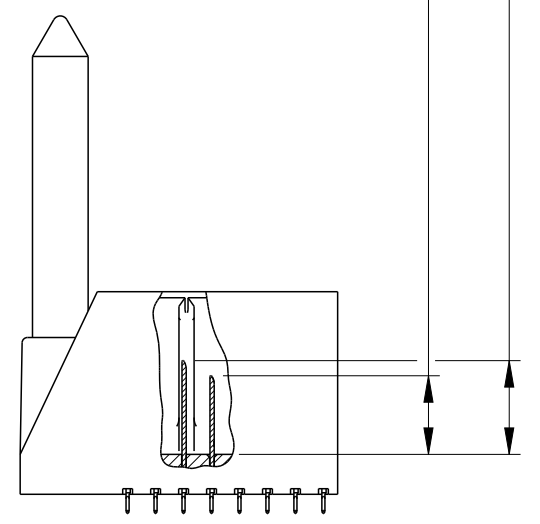


SEE NOTE 5

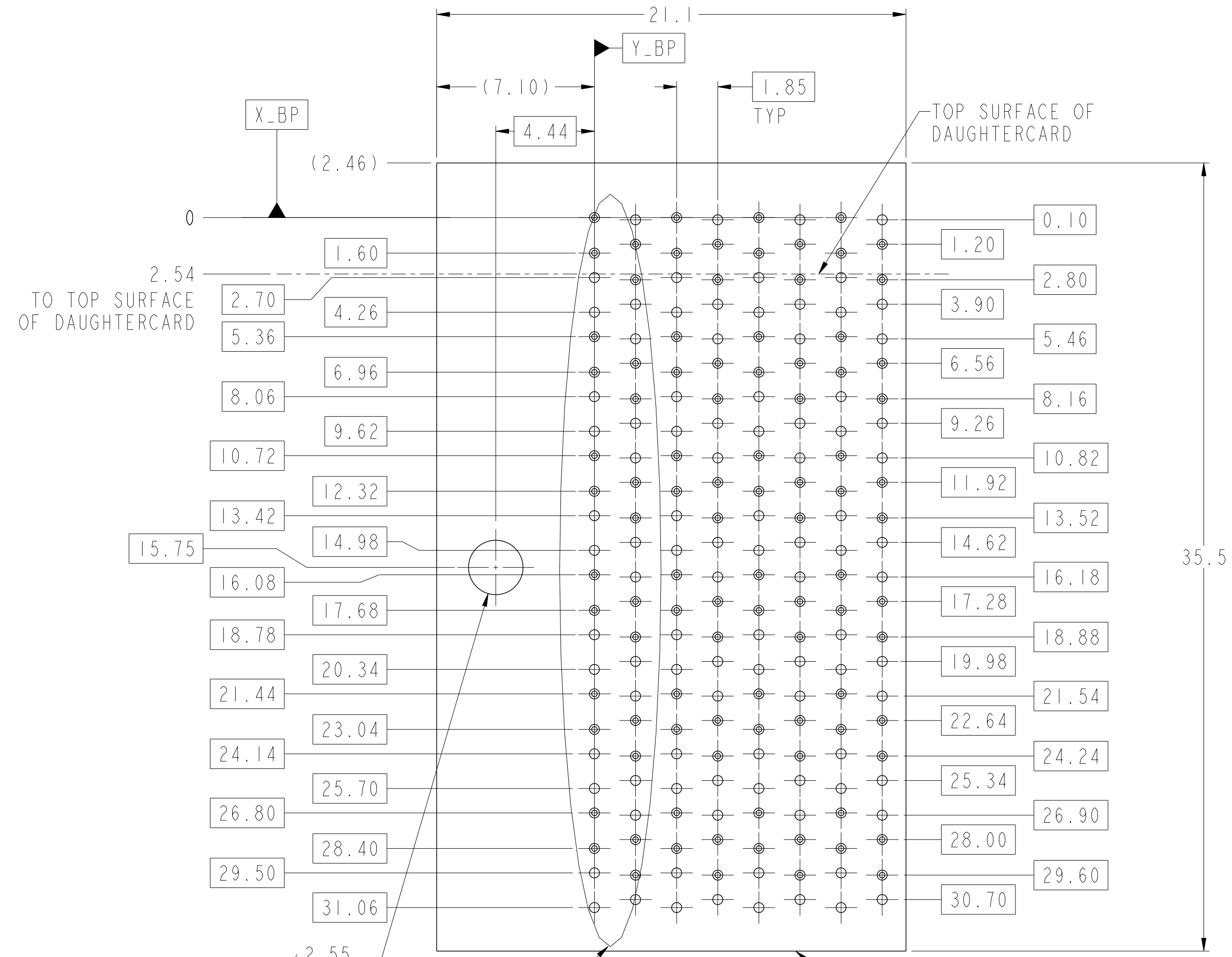


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH SEE NOTE 12



0.10	X_BP	Y_BP
------	------	------

SEE NOTE 11 & TABLE 1

SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 6:1

NOMINAL MODULE OUTLINE

spec ref		SEE NOTES			dr	Kok-Hoe Lee	2010/06/24	projection 	MM 	size	A2	scale	3:1	
tolerance std		ASME Y14.5			eng	Sandar Soe	2014/10/02			ecn no		ELX-S-18843-1		
		TOLERANCES UNLESS OTHERWISE SPECIFIED			chr	-	-			rel level		Released		
					appr	Chen-Hong Tan	2014/12/10	product family		-				
surface		linear	0.X	±0.2		title	MODULE ASSEMBLY				dwg no	10104999		rev
			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 3 of 8			

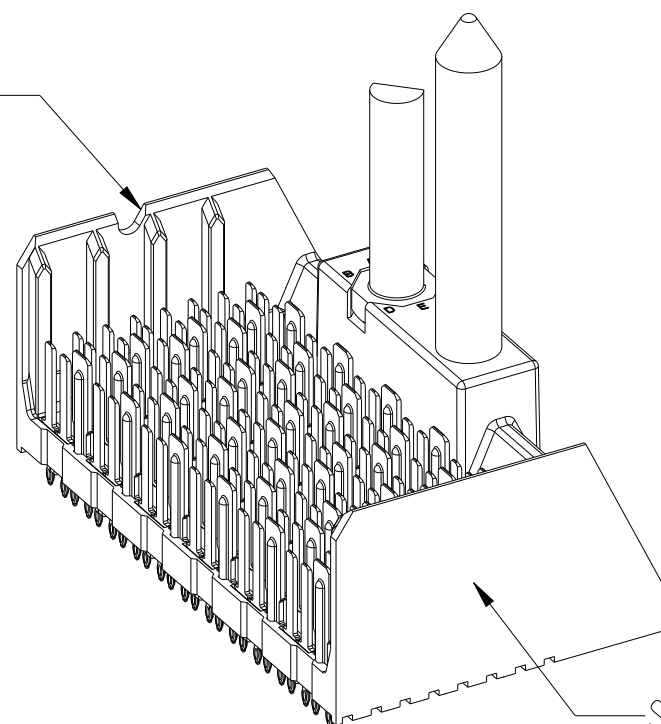
PDS: Rev :D

STATUS:Released

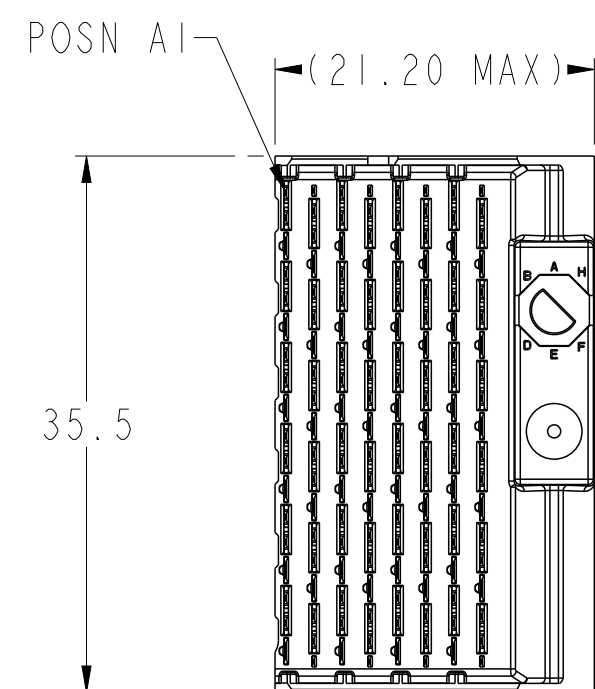
Printed: Dec 10, 2014

RIGHT POLARIZING/GUIDE MODULE

SEE NOTE 8



SEE NOTE 5



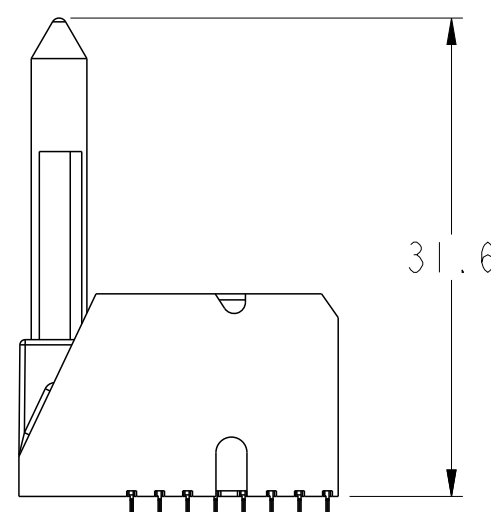
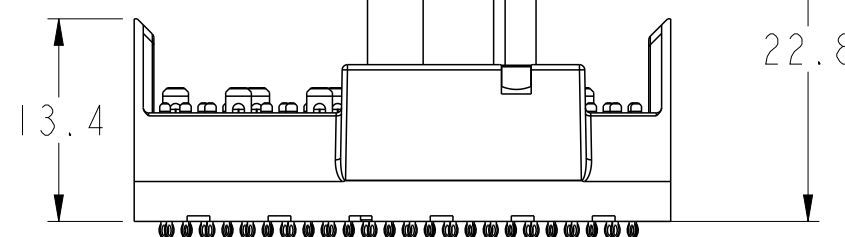
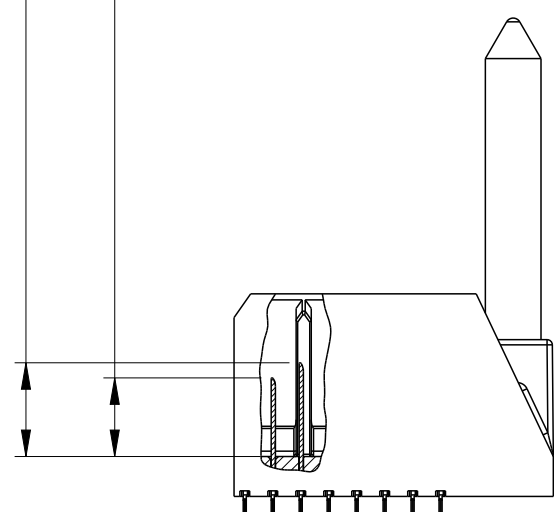
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR
ALL COMBINATIONS AVAILABLE)

GUIDE PIN

OPTIONAL KEYING PIN
(SEE P/N TREE)



TAIL LENGTH
SEE NOTE 12

2.54
TO TOP SURFACE
OF DAUGHTERCARD

X_BP

(0.73)
(2.46)

Y_BP

17.76

1.85
TYP

TOP SURFACE OF
DAUGHTERCARD

1.60

2.70

5.36

8.06

10.72

13.42

16.08

18.78

21.44

24.14

26.80

29.50

4.26

6.96

9.62

12.32

14.98

17.68

20.34

23.04

25.70

28.40

31.06

0.10

1.20

3.90

6.56

9.26

11.92

14.62

17.28

19.98

22.64

25.34

28.00

30.70

2.80

5.46

8.16

10.82

13.52

16.18

18.88

21.54

24.24

26.90

29.60

15.75

35.5

SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE
PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

Ø 2.55
Ø 2.35

Ø 0.10 X_BP Y_BP
SEE NOTE 11 & TABLE 1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	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	-	rel level			
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 4 of 8	rev	D		

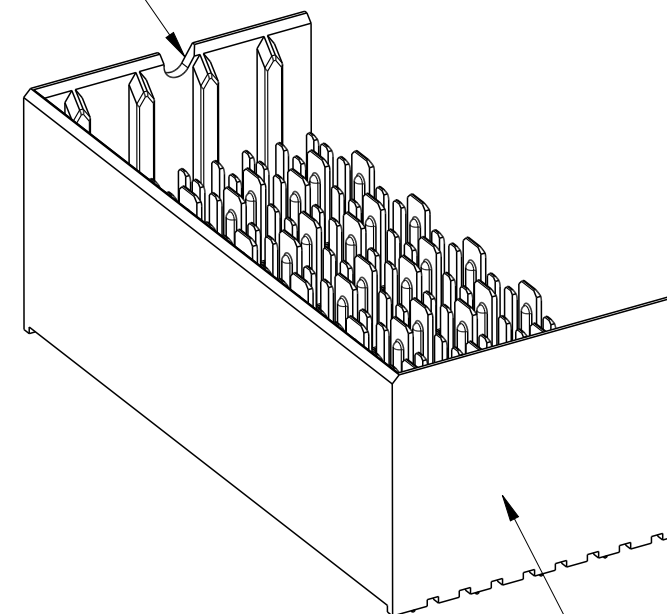
PDS: Rev D

STATUS: Released

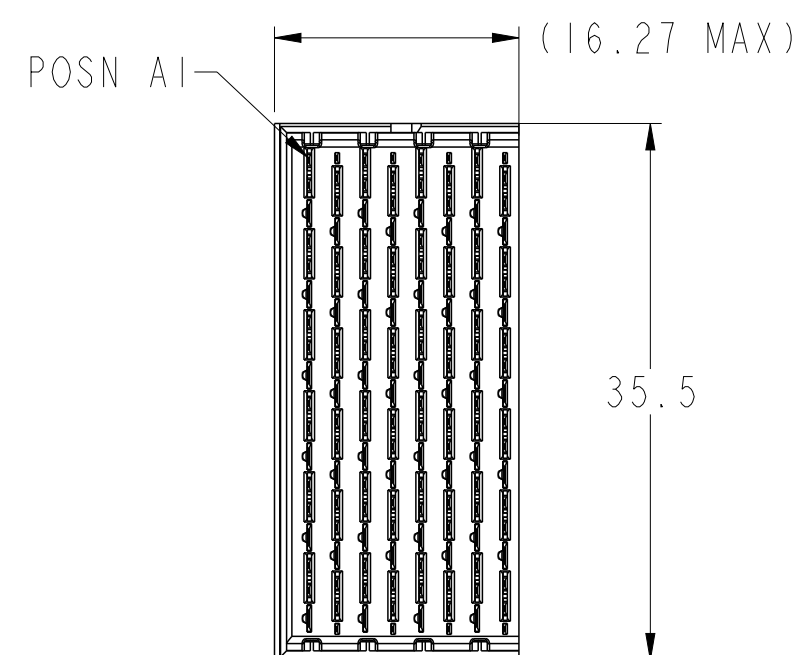
Printed: Dec 10, 2014

LEFT WALL MODULE

SEE NOTE 8



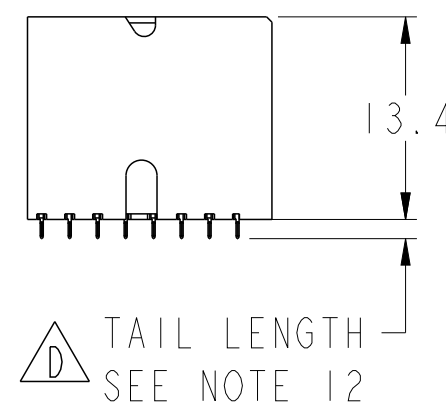
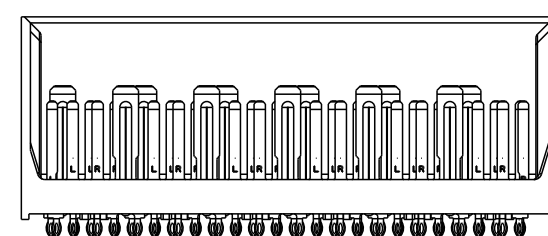
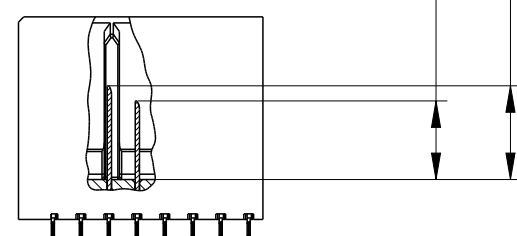
SEE NOTE 5



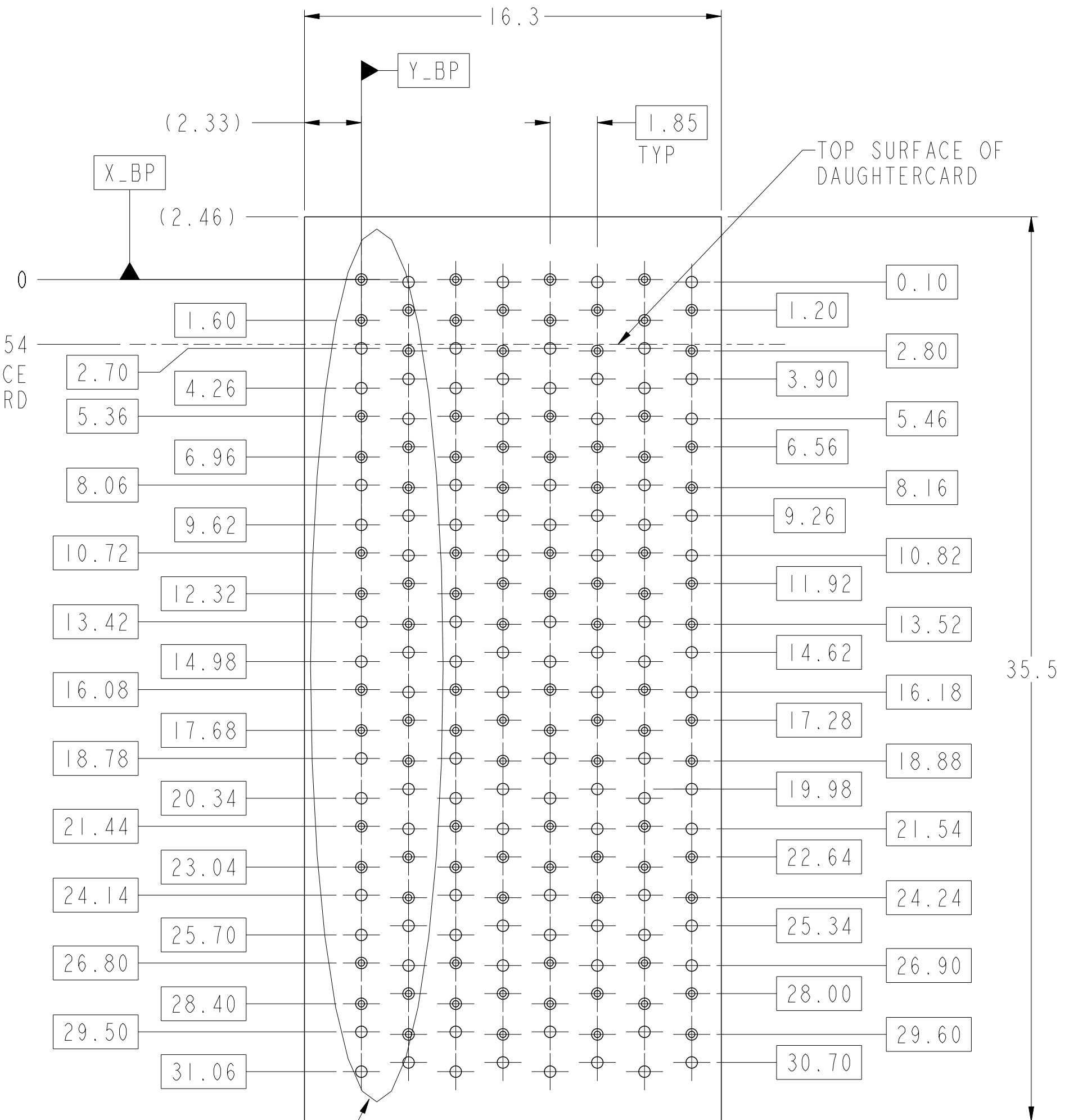
SCALE 2:1

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)



2.54
TO TOP SURFACE
OF DAUGHTERCARD



SEE DETAIL A
(SHEET 8)

NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

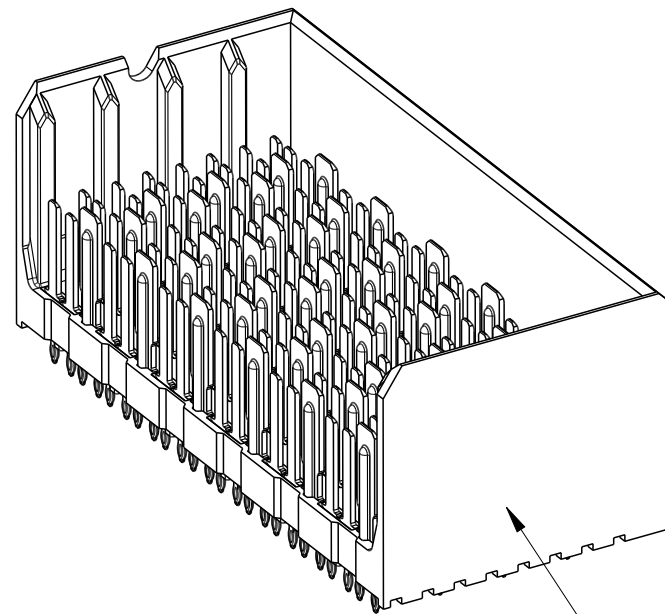
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tolerance std	ASME Y14.5	eng	Sandar Soe	2014/10/02	chr	-	ecn no	ELX-S-18843-1	rel level	Released
surface	✓	appr	Chen-Hong Tan	2014/12/10	product family	-	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 5 of 8
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR	dwg no	10104999	rev	D			
angular	0° ±°	www.fci.com								

PDS: Rev :D

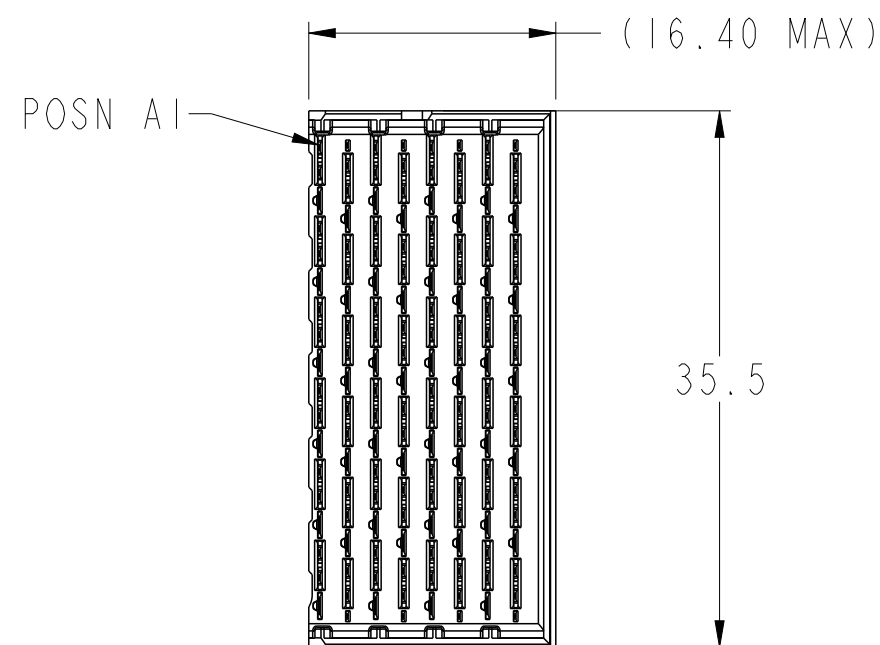
STATUS:Released

Printed: Dec 10, 2014

RIGHT WALL MODULE



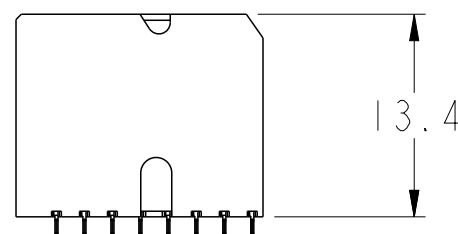
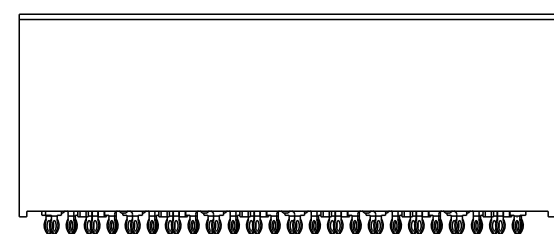
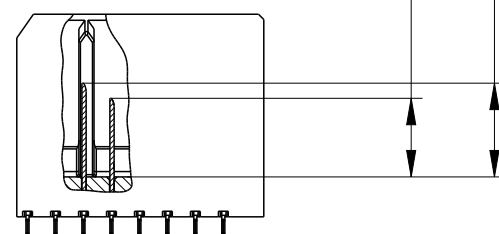
SEE NOTE 5



SCALE 2:1

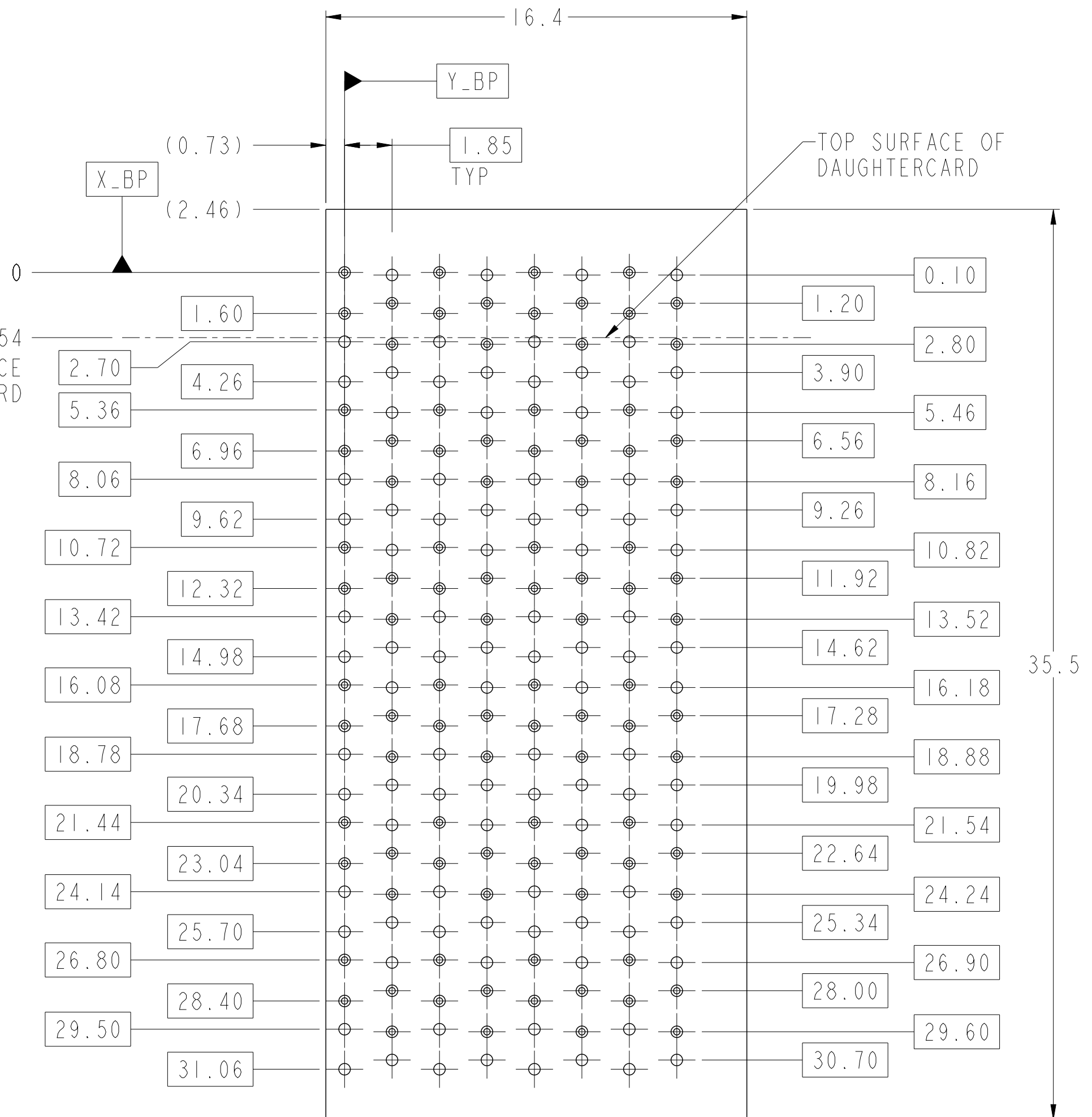
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12

TO TOP SURFACE
OF DAUGHTERCARD



NOMINAL MODULE OUTLINE

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
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	-	rel level	Released	rev	D
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	title	MODULE ASSEMBLY	VERTICAL HEADER, 8-COLUMN, 6-PAIR	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8		
angular	0° ±	www.fci.com								

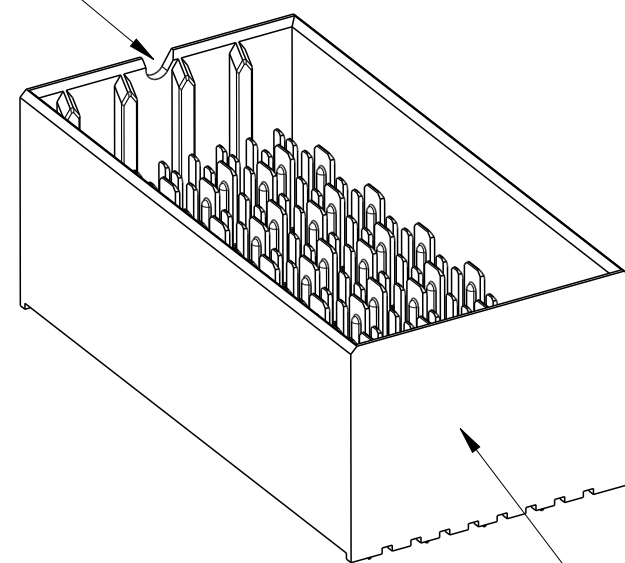
PDS: Rev :D

STATUS:Released

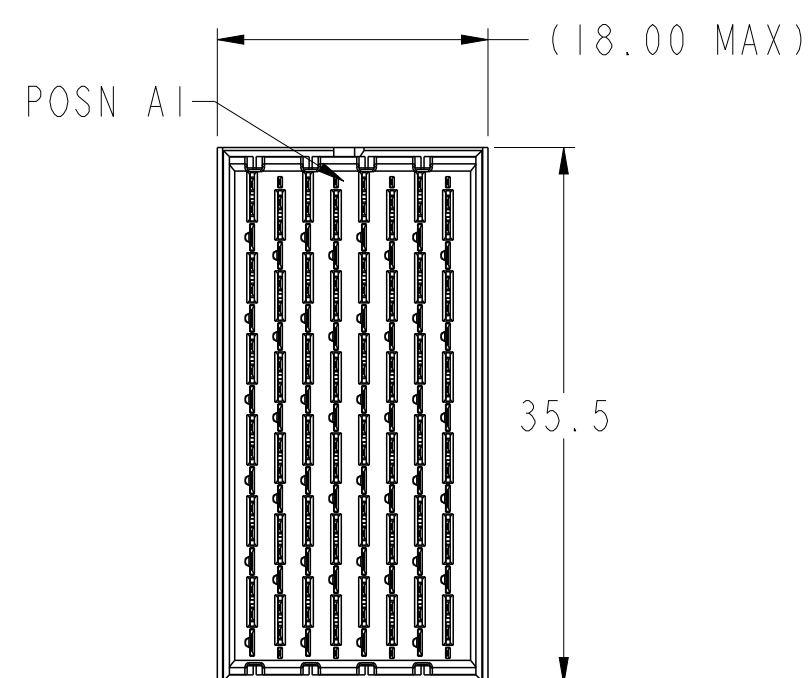
Printed: Dec 10, 2014

FOUR WALL MODULE

SEE NOTE 8



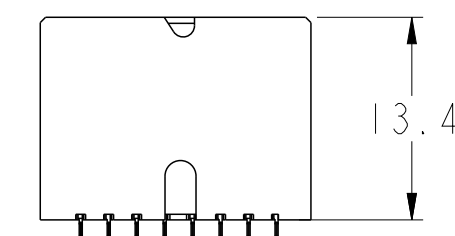
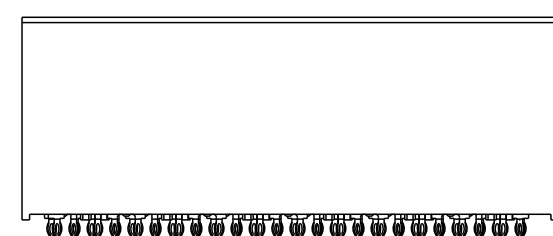
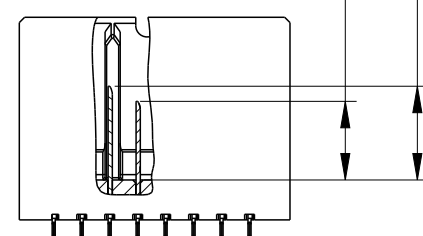
SEE NOTE 5



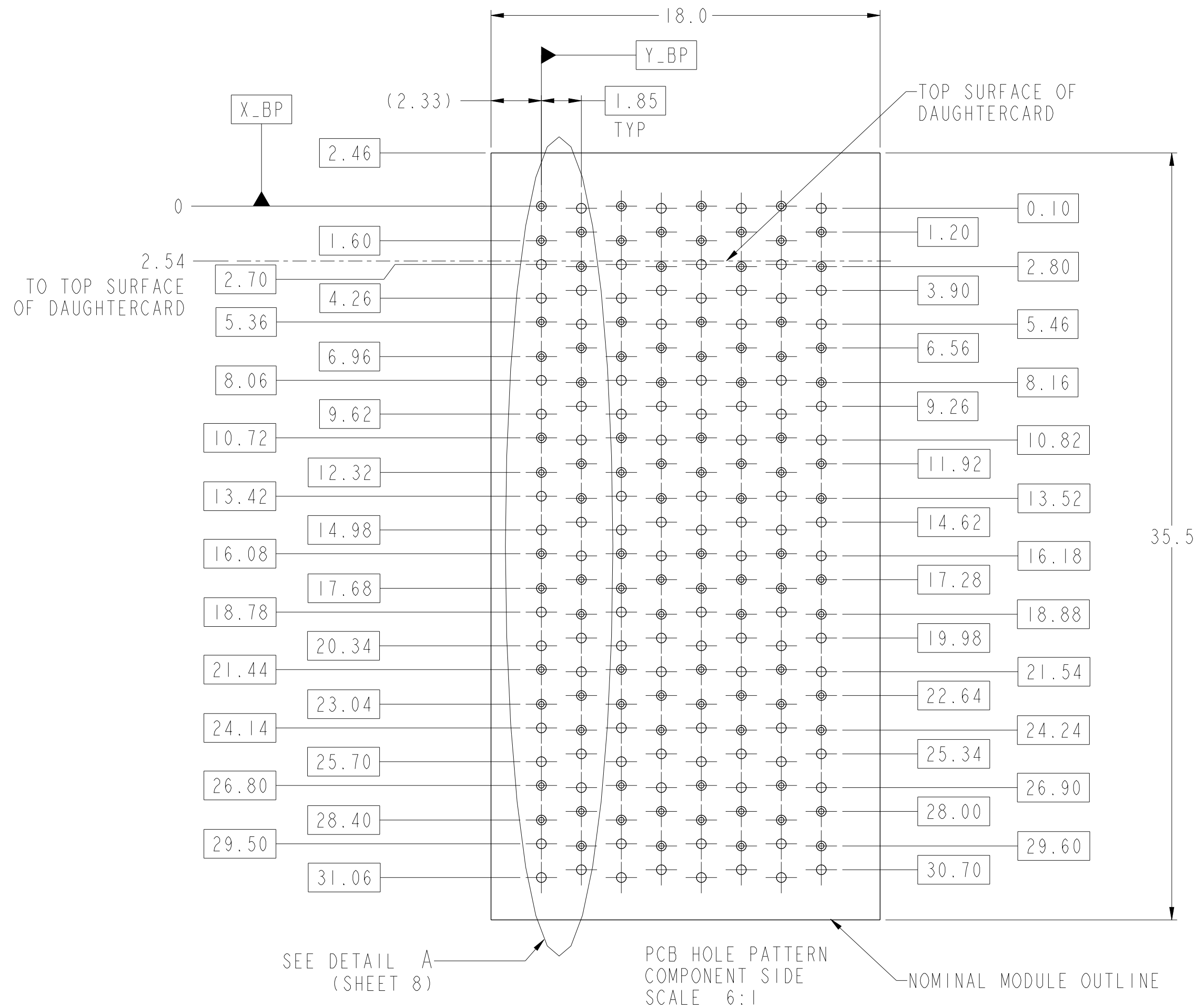
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR
ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12



spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	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	-	rel level	Released		
surface	linear	0.X	±0.2	0.XX	±0.10	0.XXX	±0.050	angular	0°	±°
ASME Y14.5										
www.fci.com		PDS: Rev :D		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 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, 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 1 ON SHEET 1 FOR ADDITIONAL DETAILS.
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  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW OR NOTE THAT HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

REFER TABLE 3
FOR PTH, DRILL & PAD SIZES

	Ø0.10	X_BP	Y_BP
---	-------	------	------

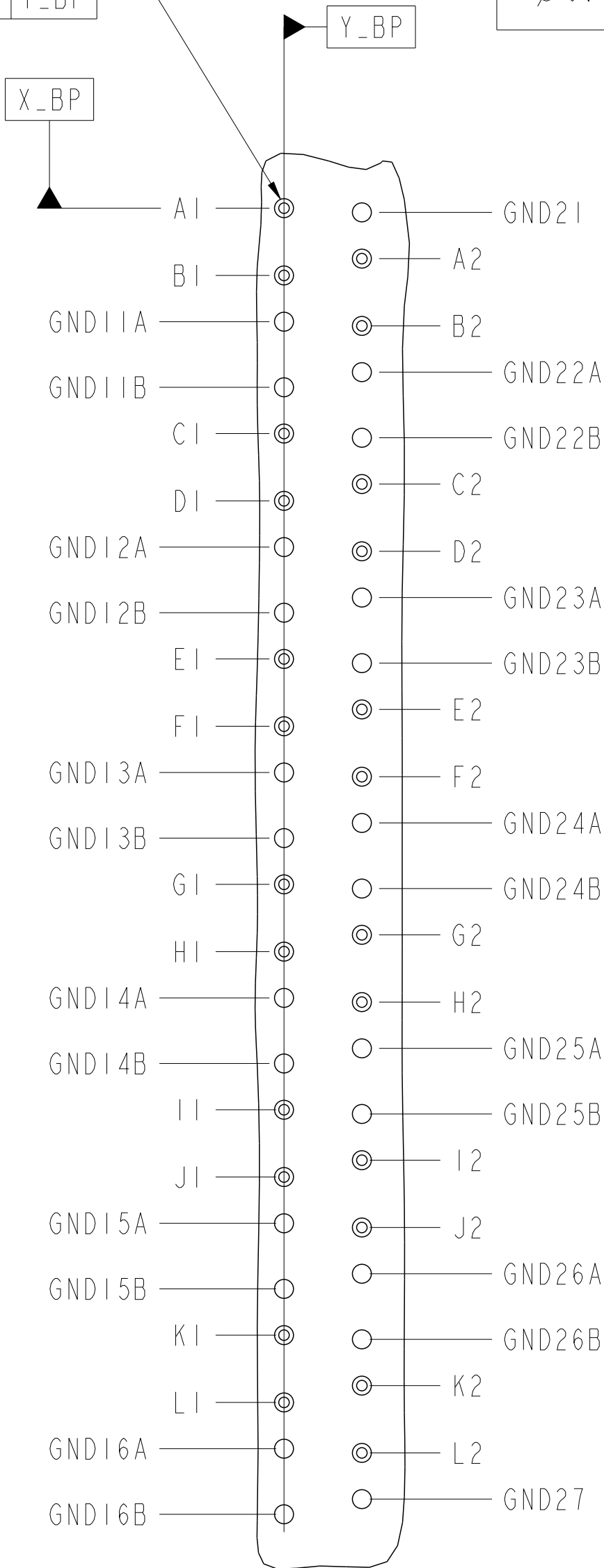
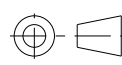


TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL

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

spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Sandar Soe	2014/10/02		←→	ecn no	ELX-S-18843-1		
ASME Y14.5		chr	-	-	product family	-	rel level	Released		
		appr	Chen-Hong Tan	2014/12/10						
surface	linear	0.X	±0.2				title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR		rev
		0.XX	±0.10				dwg no	10104999		D
		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	