

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

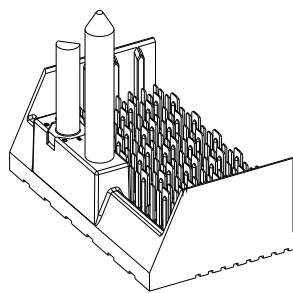
D

E

F

G

H



RIGHT
POLARIZING
GUIDANCE
MODULE
(SEE SHEET 4)

Y

P

Q

R

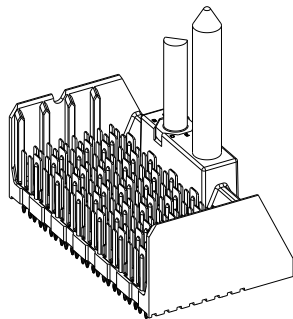
S

T

U

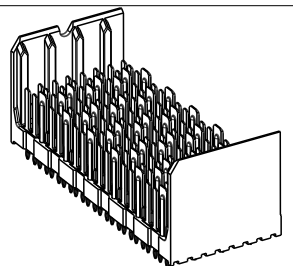
V

W



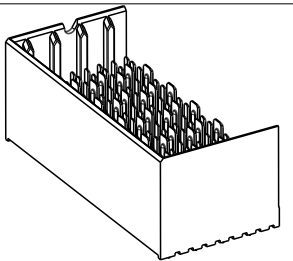
OPEN MODULE
(TWO WALL)
(SEE SHEET 2)

0 (ZERO)



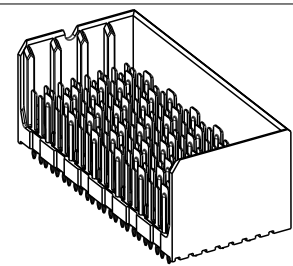
LEFT WALL
MODULE
(SEE SHEET 5)

L



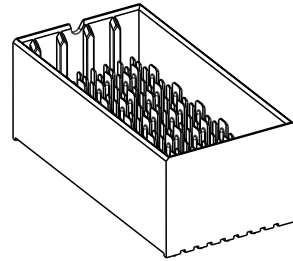
RIGHT WALL
MODULE
(SEE SHEET 6)

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)

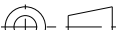
	GROUNDED	UNGROUNDED
FINISHED	Ø2.35-2.55	Ø2.35-2.55
PAD	Ø5.50	N/A
PLATED	YES	NO
DRILL (mm/in)	2.58 /.1015	2.44 /.096

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

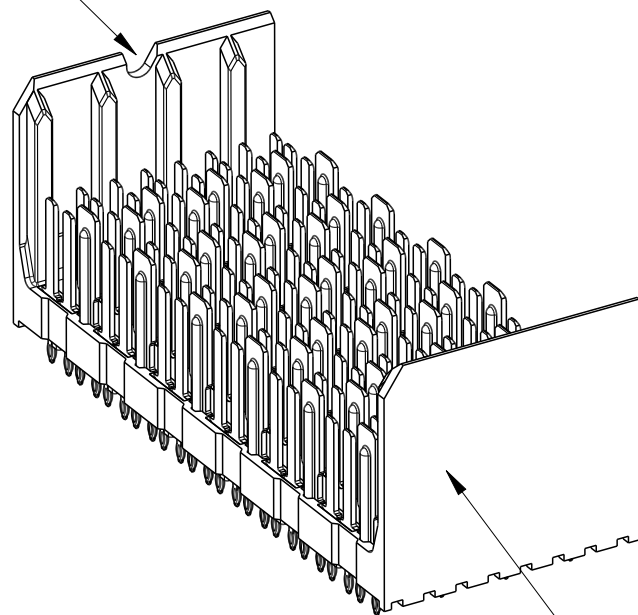
spec ref	SEE NOTES		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		
ASME Y14.5	linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	
surface	angular	0° ±°	
ASME Y14.5			

dr	Kok-Hoe Lee	2010/06/24
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			XCede	ecn no ELX-DG-24191-1	Released
MBLY			rel level		
8-COLUMN, 6-PAIR			dwg no 10104999	rev E	
P/N TREE	Product - Customer Drw			sheet 1 of 8	

OPEN (2-WALL) MODULE

SEE NOTE 8



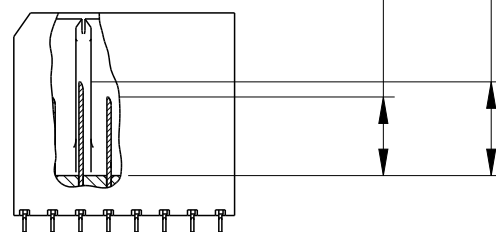
SEE NOTE 5

POSN A1 (14.75 MAX)

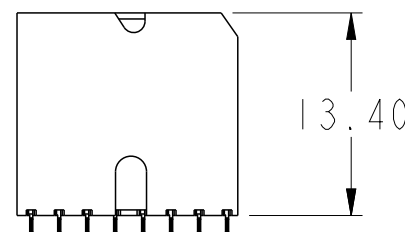
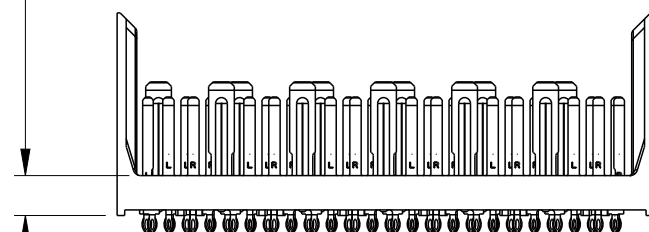
35.5

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)

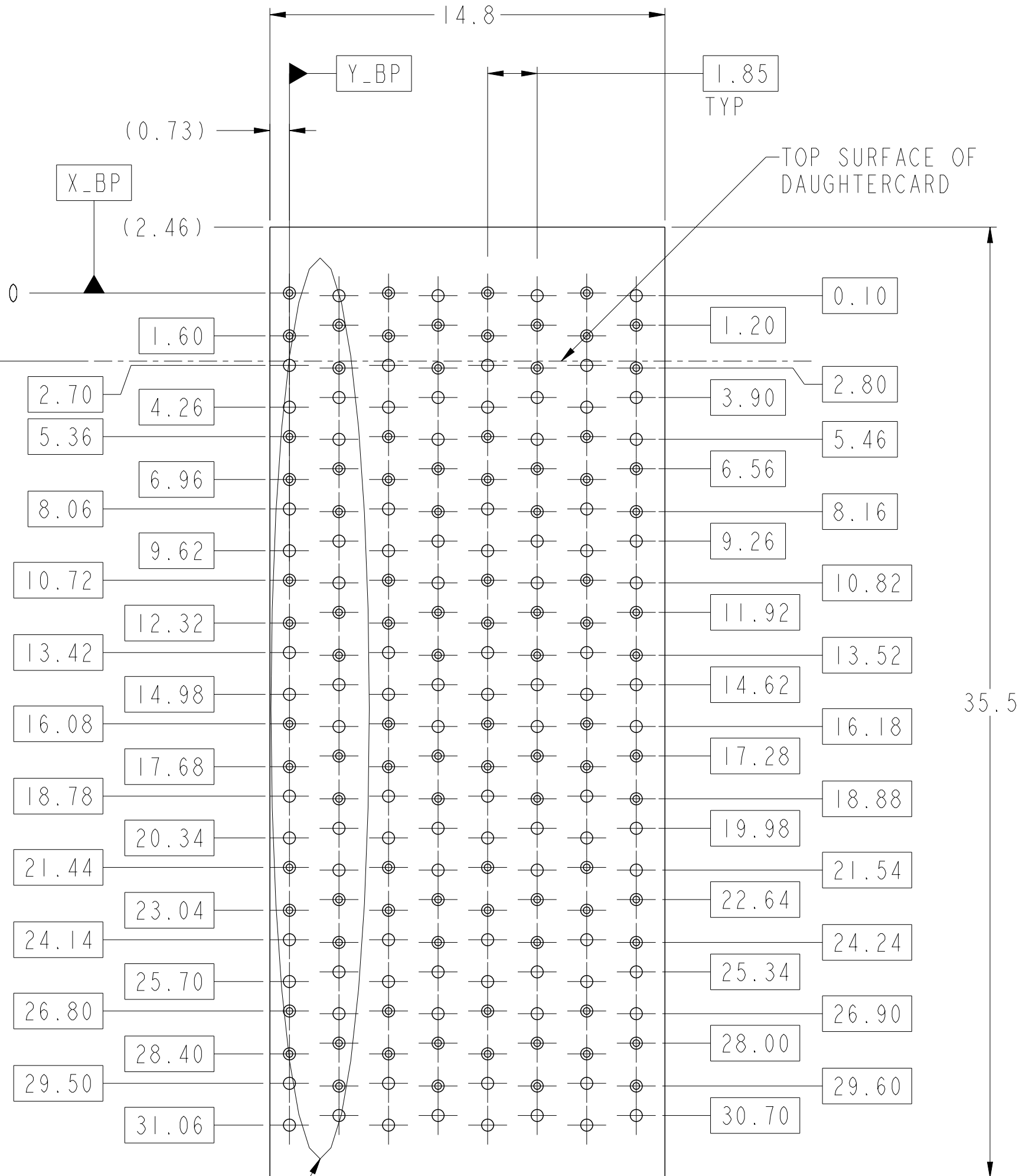


2.64±0.10 FROM STANDOFF SURFACE TO MATING SURFACE



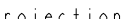
TAIL LENGTH
SEE NOTE 12

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			size	A2	scale	3:1		
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Michael Song	2016/06/06			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				XCede			
surface		linear	0.X	±0.2		title	MODULE ASSEMBLY			dwg no	10104999		rev	E
			0.XX	±0.10										
			0.XXX	±0.050										
ASME Y14.5		angular	0°	±°	cat. no.		SEE P/N TREE		Product - Customer Drw			sheet 2 of 8		

PDS: Rev :E

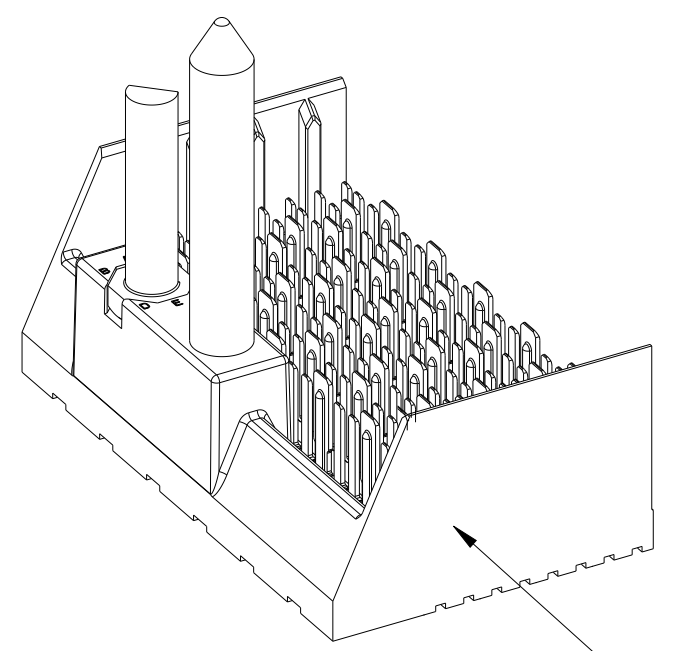
STATUS:Released

Printed: Jun 15, 2016

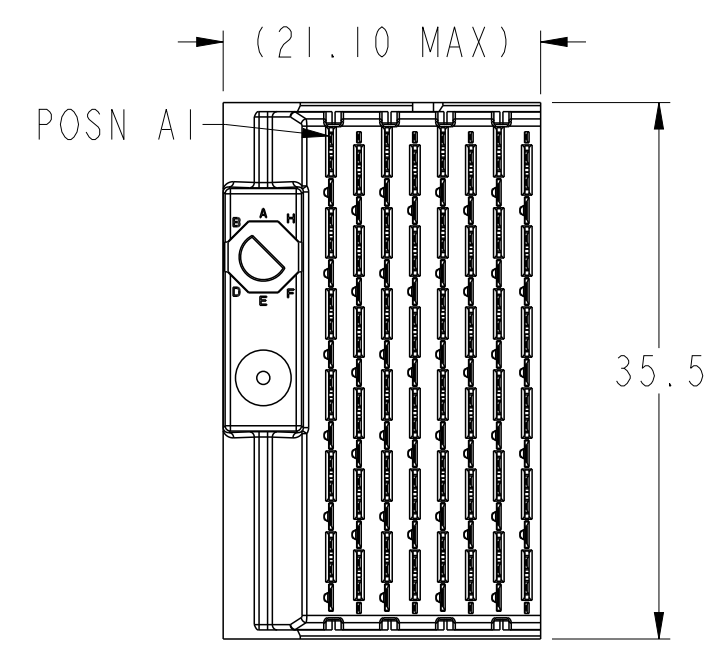
Amphenol
FCI

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LEFT POLARIZING/GUIDE MODULE

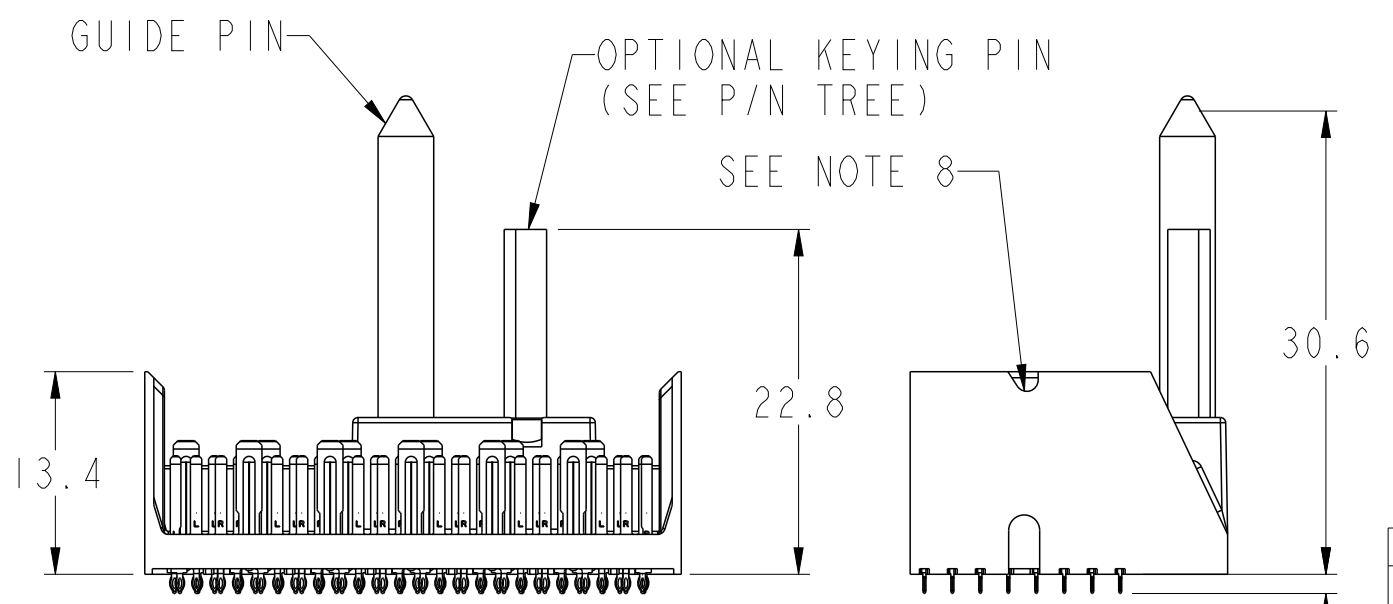
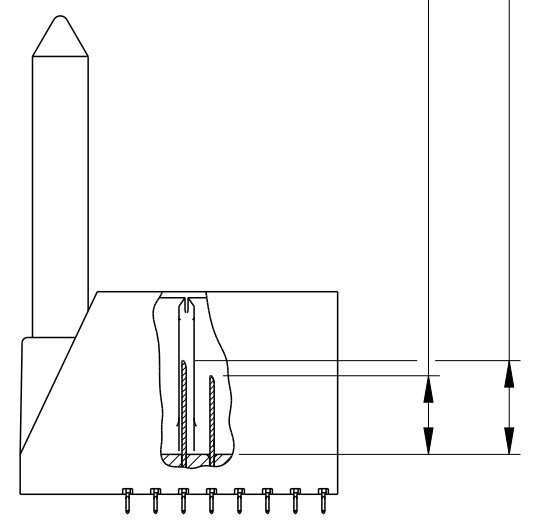


SEE NOTE 5

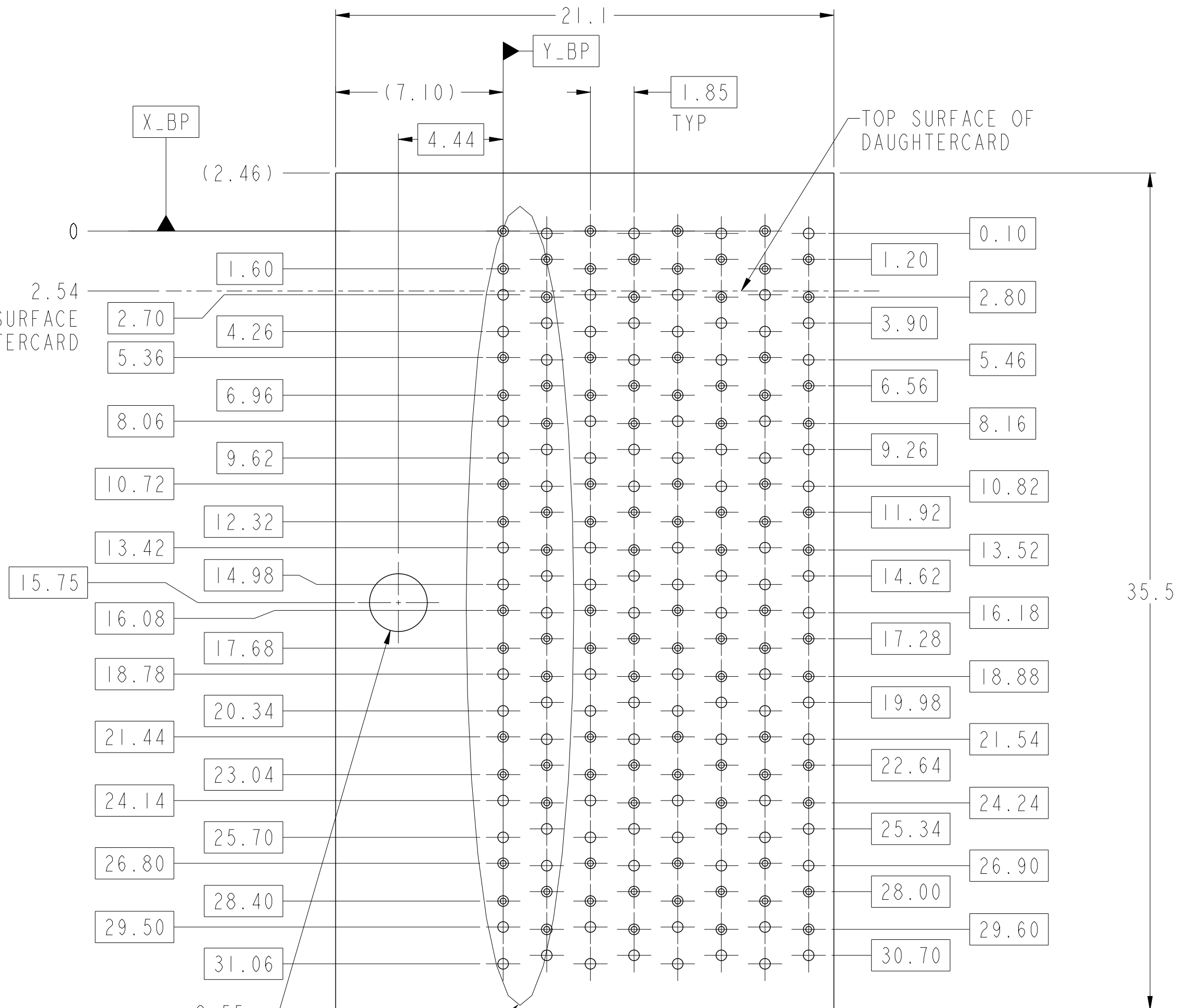


- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12

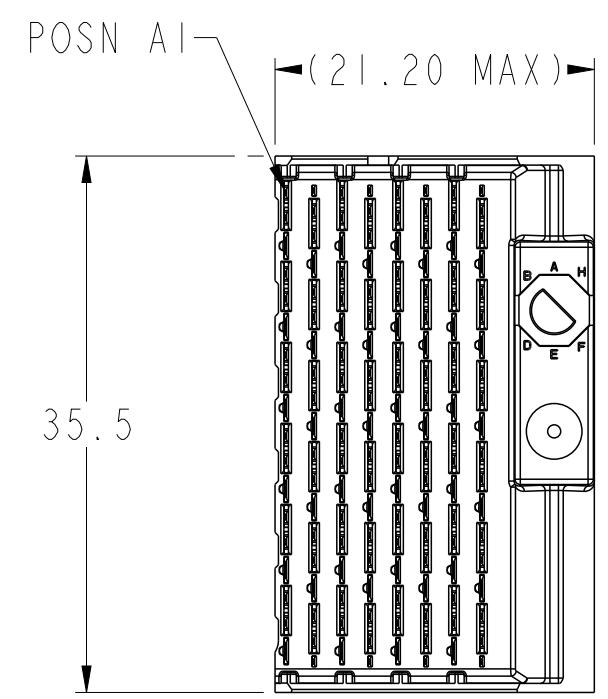
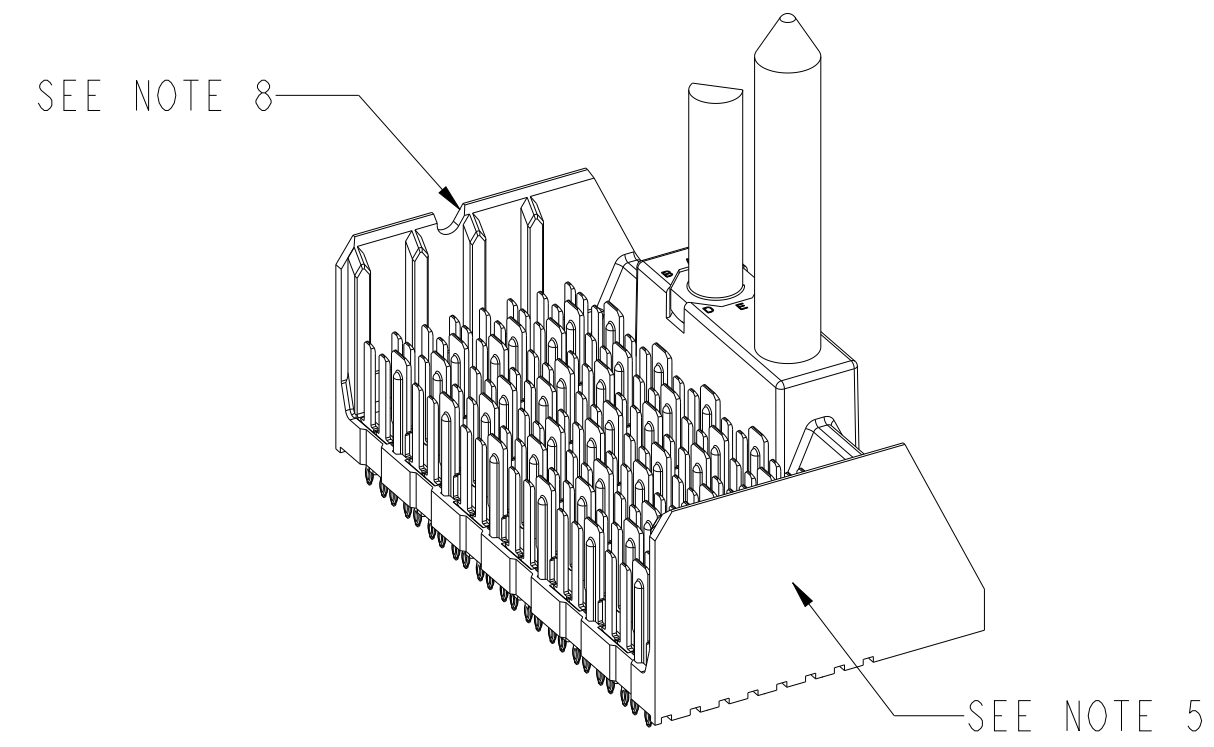


0.10	X_BP	Y_BP
------	------	------

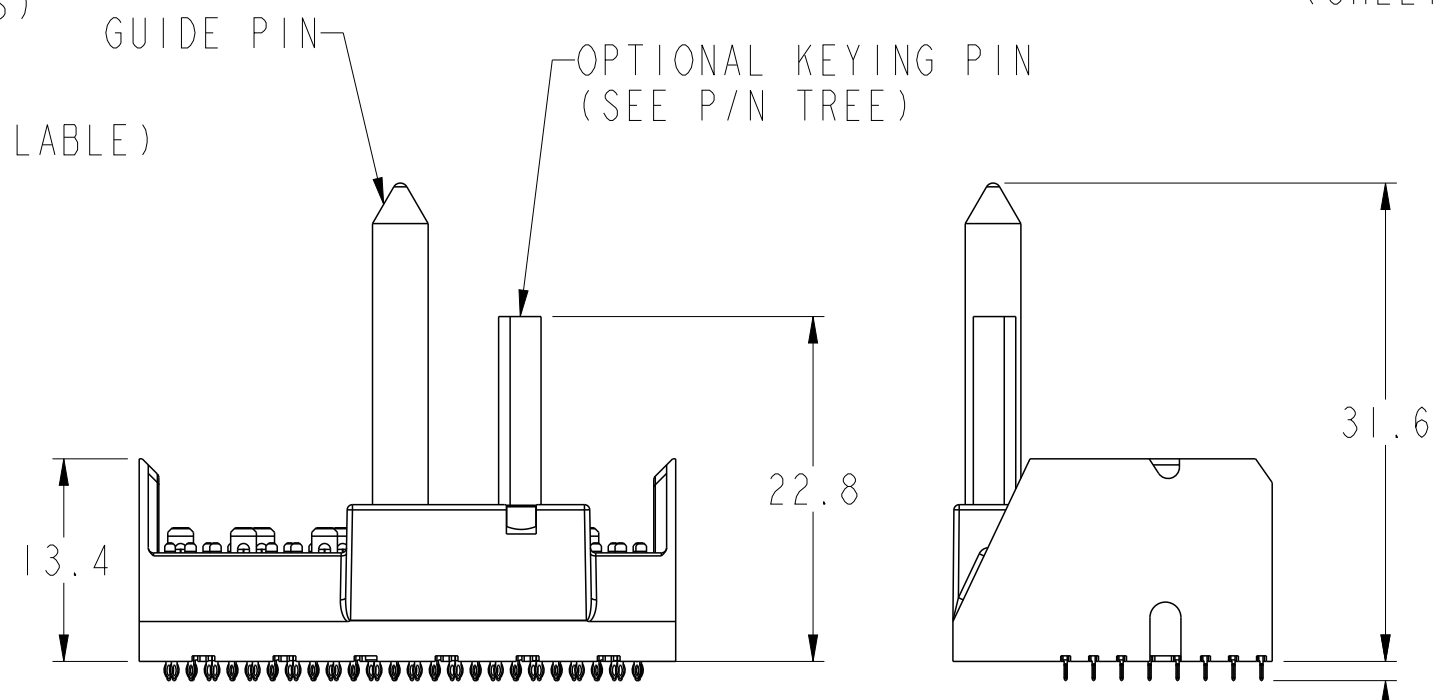
SEE NOTE 11 & TABLE 1

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	Michael Song	2016/06/06	chr	Heaven Cen	ecm no	ELX-DG-24191-1	rel level	Released
ASME Y14.5		app	Pei-Ming Zheng	2016/06/15	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		cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 3 of 8					

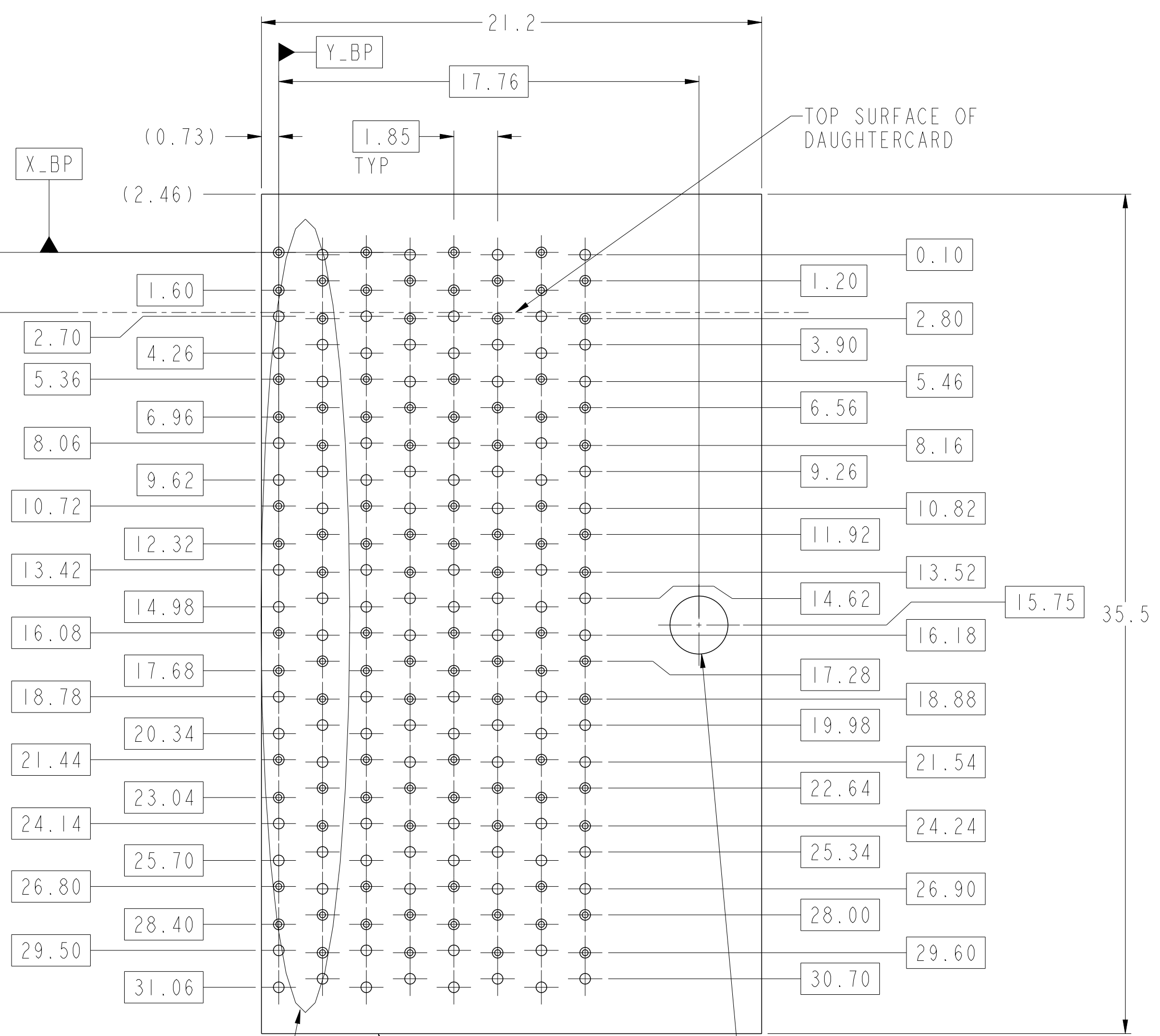
RIGHT POLARIZING/GUIDE MODULE



- 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)



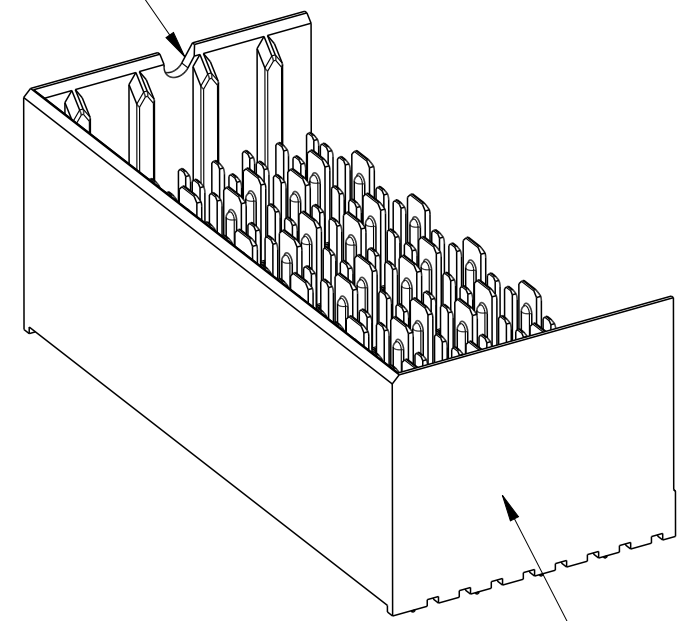
2.54
TO TOP SURFACE
OF DAUGHTERCARD



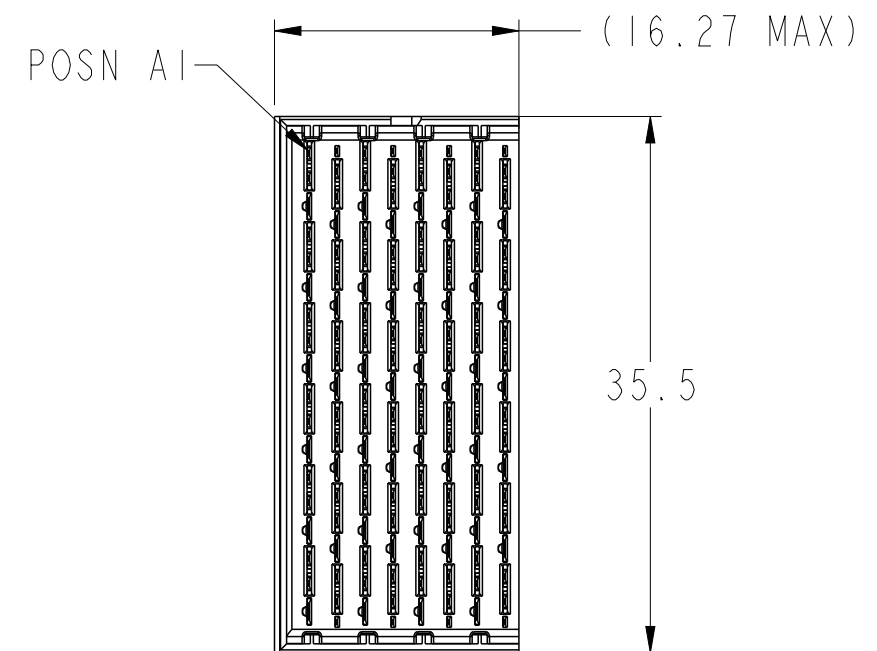
spec ref		SEE NOTES		dr	Kok-Hoe Lee	2010/06/24	projection 	MM 	size	A2	scale	3:1		
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Michael Song	2016/06/06			ecm no	ELX-DG-24191-1				
ASME Y14.5				chr	Heaven Cen	2016/06/08			rel level	Released				
				appr	Pei-Ming Zheng	2016/06/15	product family		XCede					
surface		linear 	0.X	±0.2	Amphenol FCI	title	MODULE ASSEMBLY VERTICAL HEADER, 8-COLUMN, 6-PAIR			dwg no	10104999		rev	E
			0.XX	±0.10										
			0.XXX	±0.050										
ASME Y14.5		angular	0°	±°	cat. no.		SEE P/N TREE		Product - Customer Drw		sheet 4 of 8			

LEFT WALL MODULE

SEE NOTE 8



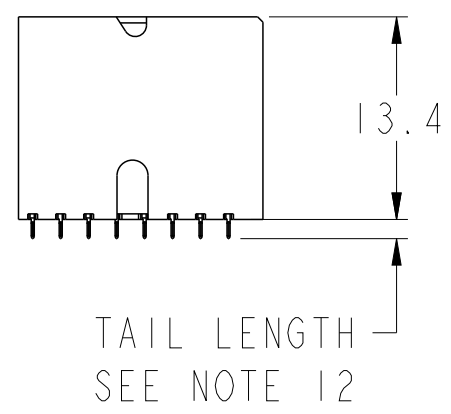
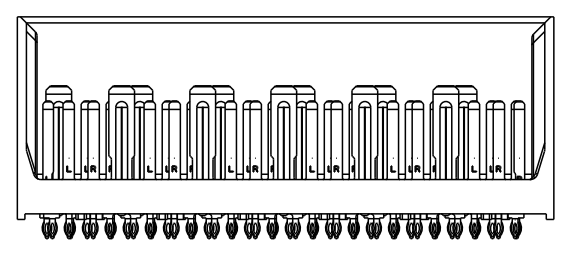
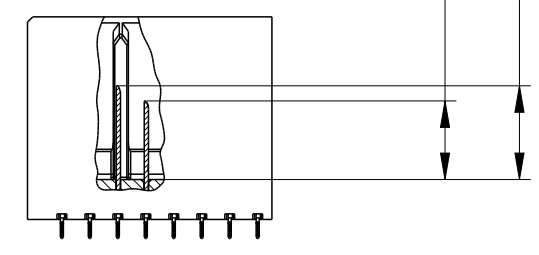
SEE NOTE 5



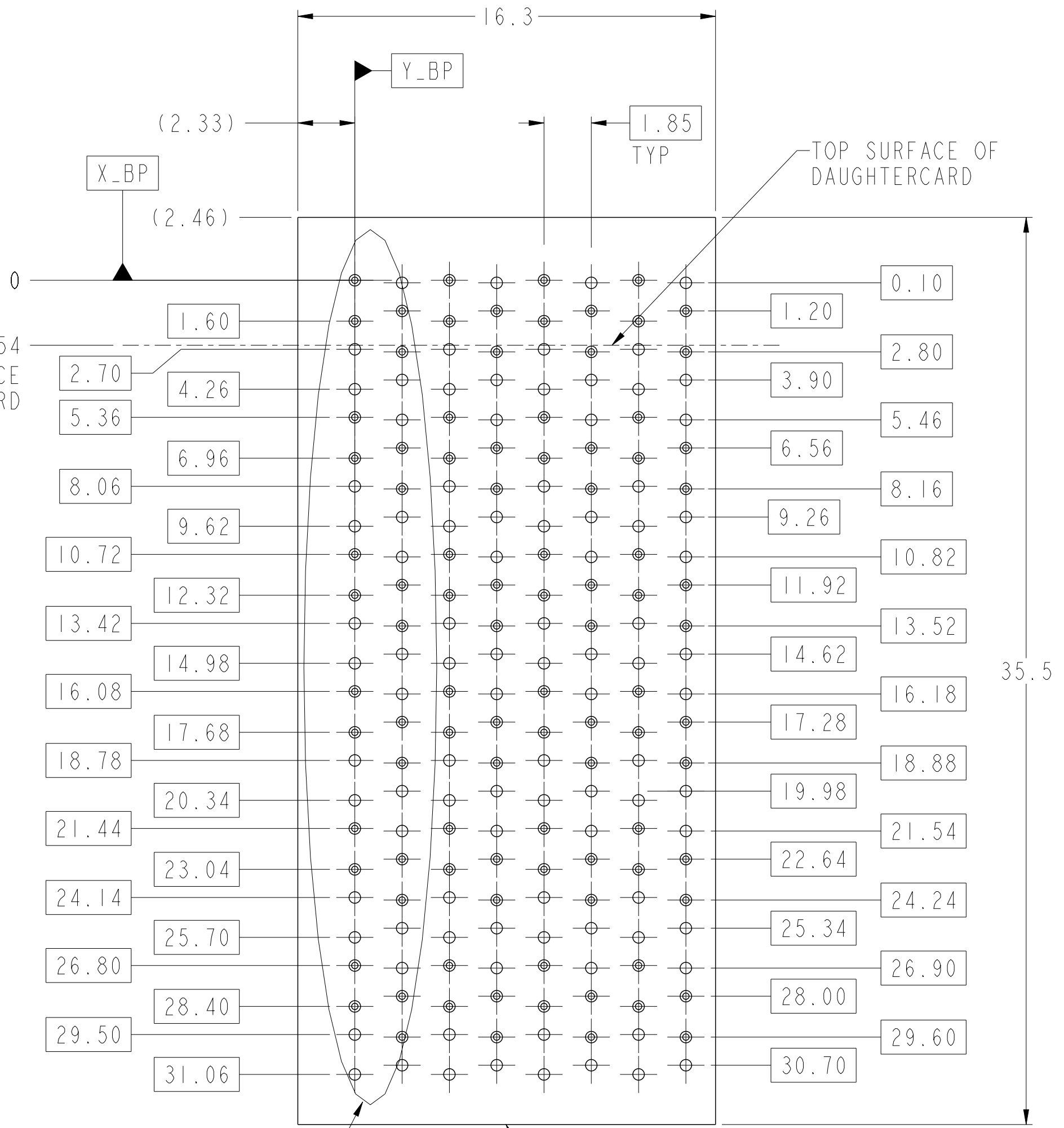
SCALE 2:1

- 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)



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	Michael Song	2016/06/06	chr	Heaven Cen	2016/06/08	ecn no	ELX-DG-24191-1	
surface	ASME Y14.5	appr	Pei-Ming Zheng	2016/06/15	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, 6-PAIR	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 5 of 8			
angular	0° ±°									

PDS: Rev :E

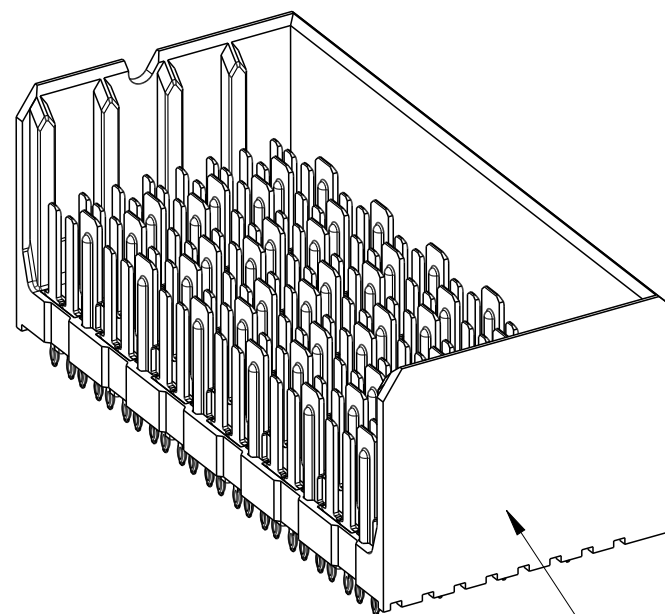
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Printed: Jun 15, 2016

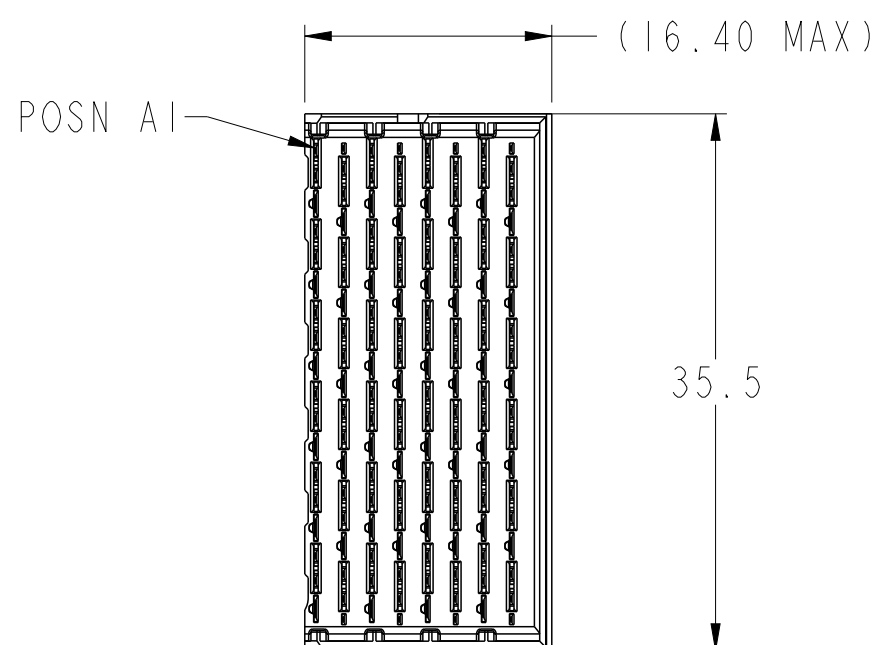
Amphenol
FCi

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RIGHT WALL MODULE



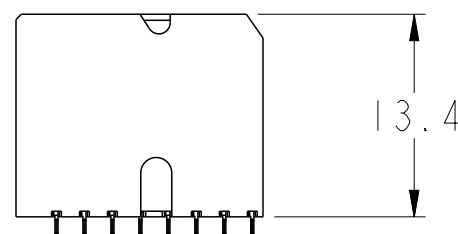
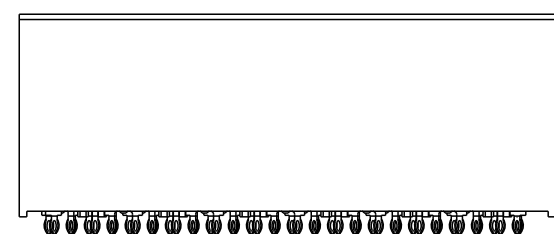
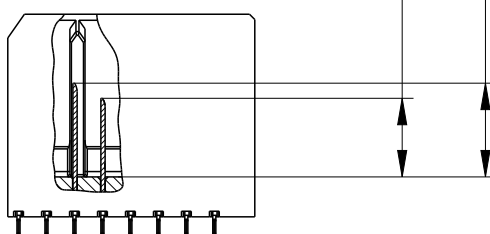
SEE NOTE 5



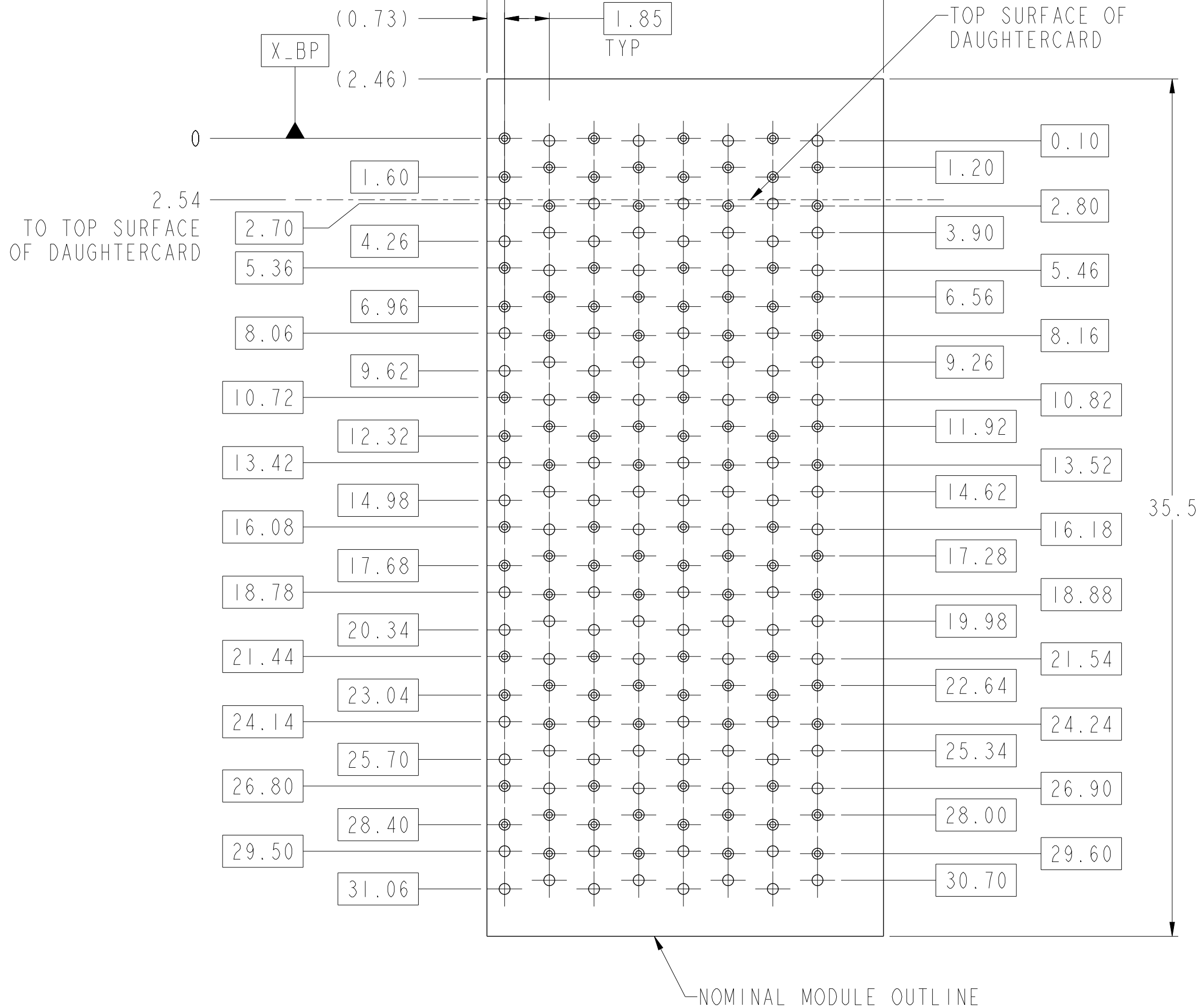
SCALE 2:1

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



spec ref	SEE NOTES	dr	Kok-Hoe Lee	2010/06/24	projection	MM	size	A2	scale	3:1
tolerance std	ASME Y14.5	eng	Michael Song	2016/06/06	chr	Heaven Cen	2016/06/08	ecn no	ELX-DG-24191-1	
surface	ASME Y14.5	appr	Pei-Ming Zheng	2016/06/15	product family	XCede	rel level	Released		
linear	0.X ±0.2 0.XX ±0.10 0.XXX ±0.050	Amphenol FCI	MODULE ASSEMBLY	cat. no.	SEE P/N TREE	Product - Customer Drw	sheet 6 of 8			
angular	0° ±°									

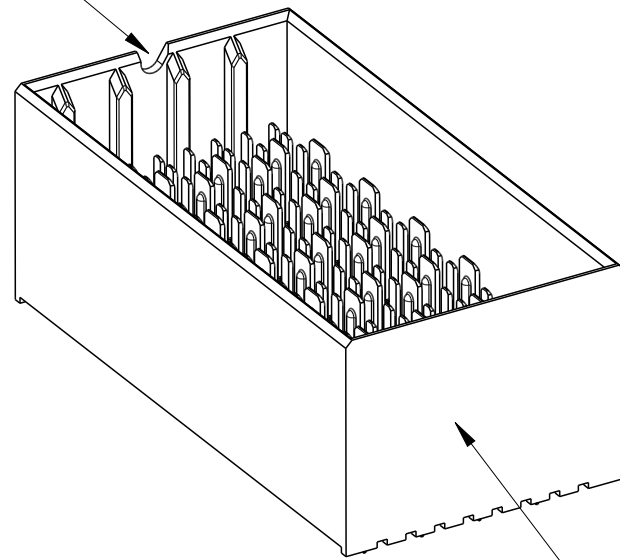
PDS: Rev :E

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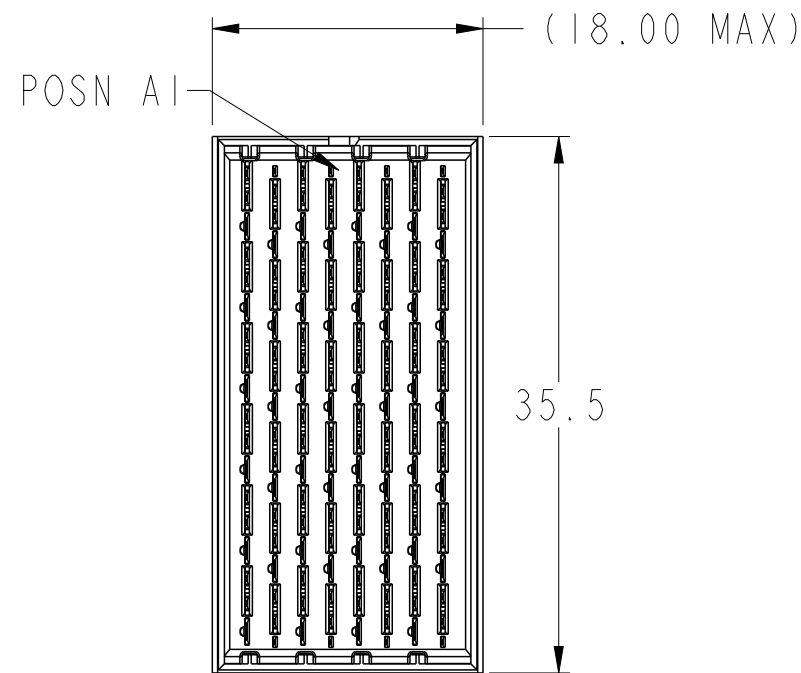
Printed: Jun 15, 2016

FOUR WALL MODULE

SEE NOTE 8

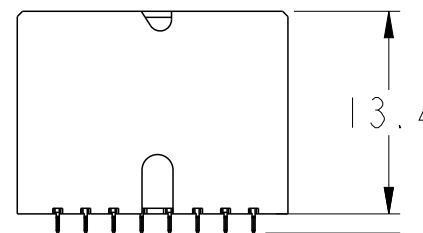
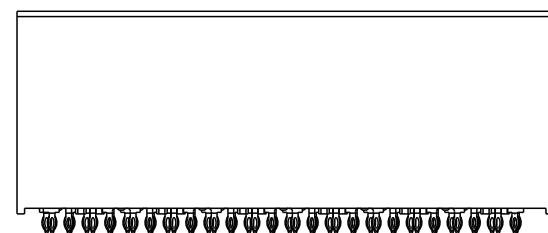
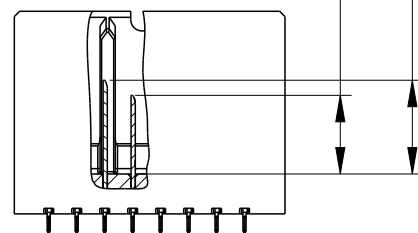


SEE NOTE 5

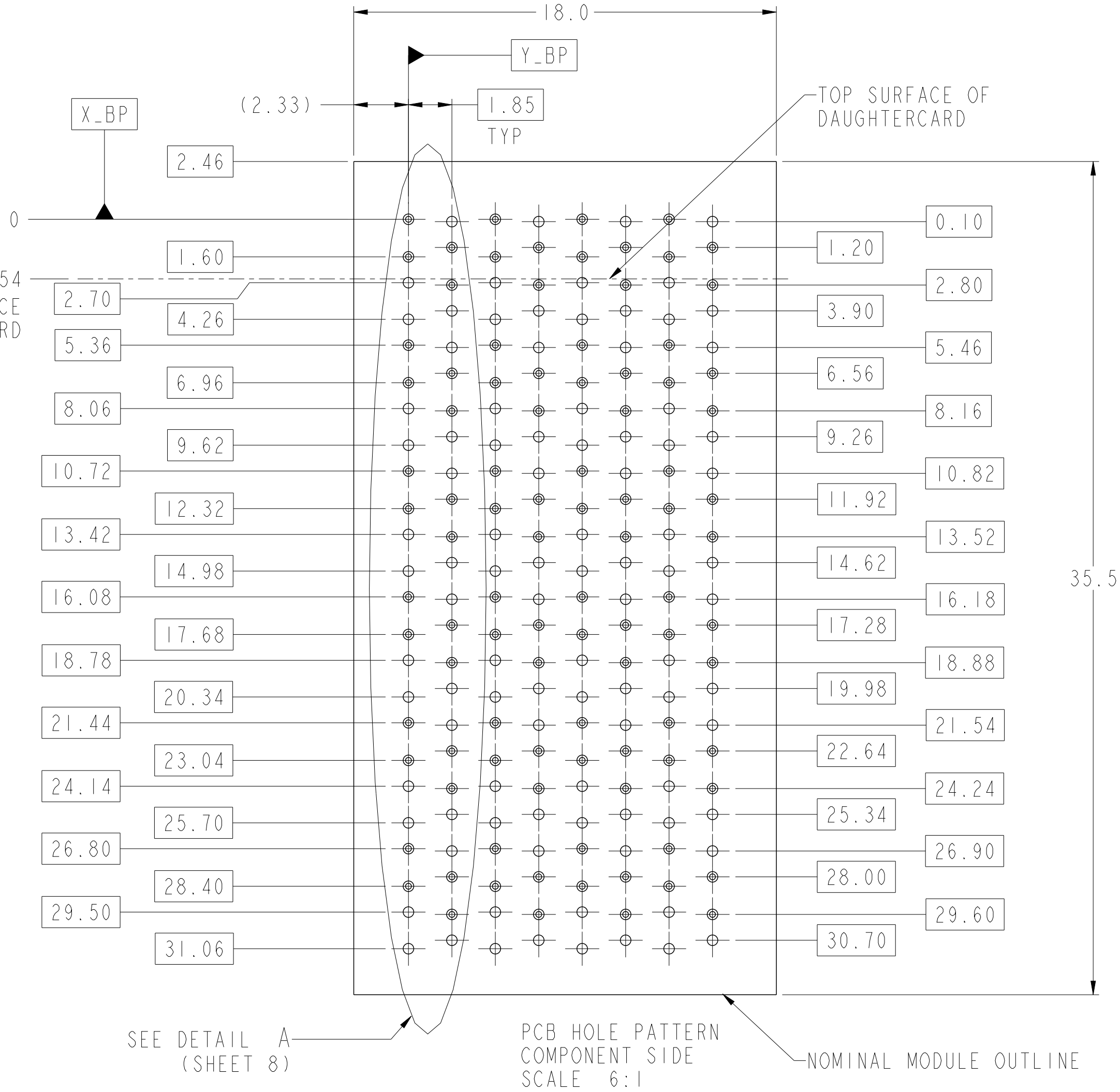


6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)
5.2 (3MM SMALL END GROUNDS)
5.2 (3MM WIPE SIGNALS)
4.2 (2MM WIPE SIGNALS)

(SEE P/N TREE FOR ALL COMBINATIONS AVAILABLE)



TAIL LENGTH
SEE NOTE 12



PCB HOLE PATTERN
COMPONENT SIDE
SCALE 6:1

NOMINAL MODULE OUTLINE

spec ref		SEE NOTES		dr	Kok-Hoe Lee	2010/06/24			MM	size	A2	scale	3:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Michael Song	2016/06/06				ecn no	ELX-DG-24191-1			
ASME Y14.5				chr	Heaven Cen	2016/06/08								
				appr	Pei-Ming Zheng	2016/06/15				product family		-	rel level	Released
surface	✓	linear	0.X	±0.2	Amphenol FCI	title	MODULE ASSEMBLY			dwg no	10104999		rev	E
			0.XX	±0.10										
			0.XXX	±0.050										
ASME Y14.5		angular	0°	±°	cat. no.		SEE P/N TREE	Product - Customer Drw			sheet 7 of 8			

PDS: Rev :E

STATUS:Released

Printed: Jun 15, 2016

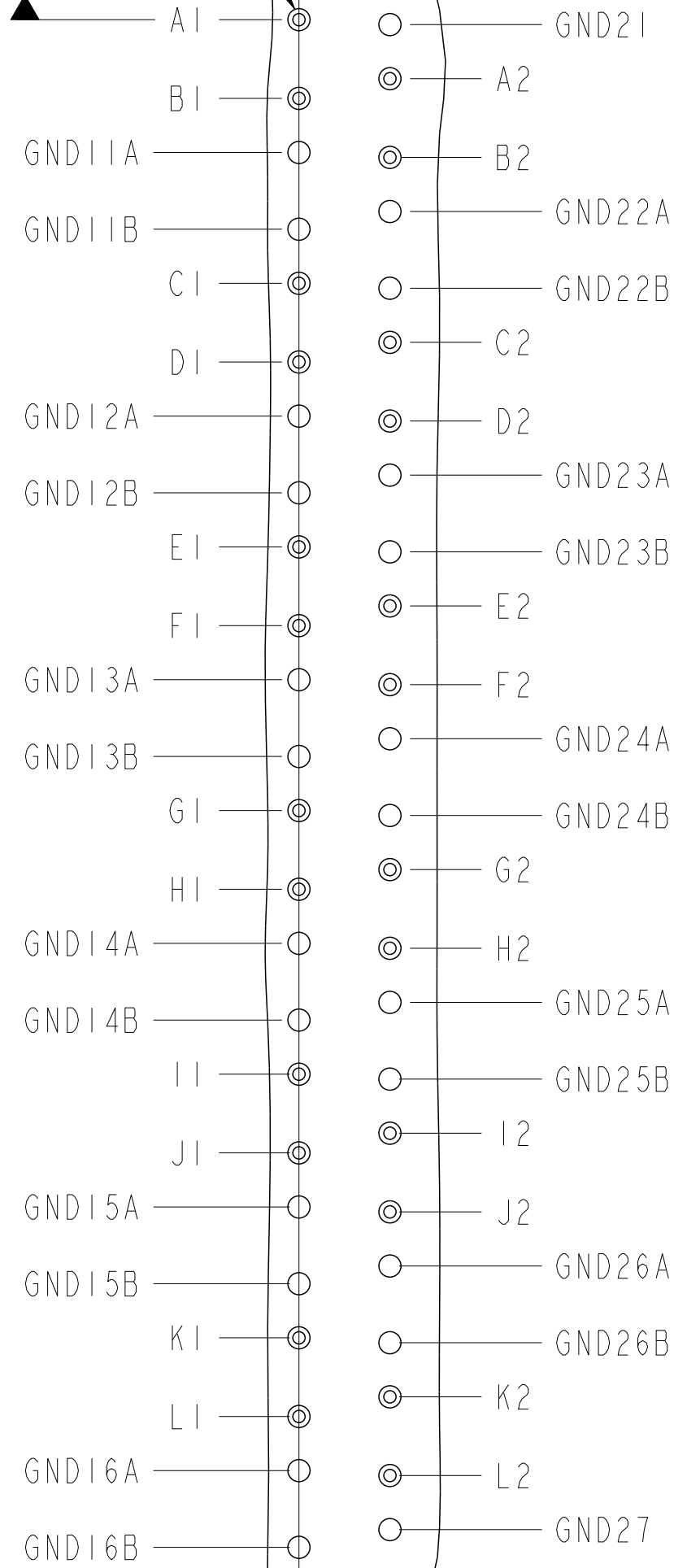
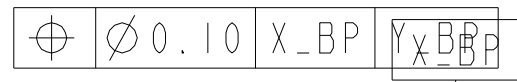
NOTES:

- CONNECTOR MATERIALS
SHROUD: HIGH-TEMP THERMOPLASTIC, GRAY, UL94V-0
CONTACTS: HIGH PERFORMANCE COPPER ALLOY
- 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.
- PRODUCT SPECIFICATION: GS-12-588
- APPLICATION SPECIFICATION: GS-20-121
- PRODUCT MARKING (PART NUMBER AND LOT CODE) ON THESE SURFACES.
- HOUSING MUST WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 40 SECONDS IN A CONVECTION, INFRA-RED, OR VAPOR-PHASE REFLOW OVEN.
- PACKAGING MEETS GS-14-920 LEAD-FREE LABELING SPECIFICATION.
- NOTCH INDICATES "ROW A" SIDE OF CONNECTOR.
- SEE APPLICATION SPECIFICATION FOR ROUTING GUIDELINES, ADDITIONAL PTH GUIDELINES, MATED DIMENSIONS, GUIDE PN SELECTION, ETC.
- SCREW IS OPTIONAL AND ENGAGES WITH BOTTOM OF GUIDE-PIN FROM BENEATH THE PCB FOR ADDITIONAL GUIDE-PIN SUPPORT.
- OPTIONAL HOLE LOCATION FOR GROUNDED PIN OR ADDITIONAL GUIDE-PIN SUPPORT. SEE TABLE 1 ON SHEET 1 FOR ADDITIONAL DETAILS.
- TAIL LENGTH=1.3mm FOR $\varnothing 0.55$ [0.0217"]COMPLIANT PIN DRILL
TAIL LENGTH=1.5mm FOR $\varnothing 0.45$ [0.0177"]COMPLIANT PIN DRILL

REFER TABLE 3
FOR PTH, DRILL & PAD SIZES



DETAIL A
SCALE 8:1

TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL		
COMPLIANT PIN DRILL	PTH	PAD
$\varnothing 0.55$ [0.0217"]	$\varnothing 0.45 \pm 0.05$	$\varnothing 0.85$
$\varnothing 0.45$ [0.0177"]	$\varnothing 0.36 \pm 0.05$	$\varnothing 0.75$

spec ref		SEE NOTES		dr	Kok-Hoe Lee	2010/06/24	projection 	MM 	size	A2	scale	4:1		
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Michael Song	2016/06/06			ecn no	ELX-DG-24191-1				
ASME Y14.5				chr	Heaven Cen	2016/06/08								
				appr	Pei-Ming Zheng	2016/06/15	product family		-	rel level	Released			
surface		linear	0.X	±0.2	Amphenol FCi	title	MODULE ASSEMBLY			dwg no	10104999		rev	E
			0.XX	±0.10										
			0.XXX	±0.050										
ASME Y14.5		angular	0°	±°		cat. no.	SEE P/N TREE	Product - Customer Drw			sheet 8 of 8			

Mouser Electronics

Authorized Distributor

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[10104999-00E-10B](#) [10104999-00E-10DLF](#) [10104999-00E-20B](#) [10104999-00E-20DLF](#) [10104999-00E-30B](#)
[10104999-00E-30DLF](#) [10104999-00E-40B](#) [10104999-00E-40DLF](#) [10104999-00E-50B](#) [10104999-00E-50DLF](#)
[10104999-00E-60B](#) [10104999-00E-60DLF](#) [10104999-00E-70B](#) [10104999-00E-70DLF](#) [10104999-00E-80B](#) [10104999-](#)
[00E-80DLF](#) [10104999-10E-10B](#) [10104999-10E-10DLF](#) [10104999-10E-20B](#) [10104999-10E-20DLF](#) [10104999-10E-](#)
[30B](#) [10104999-10E-30DLF](#) [10104999-10E-40B](#) [10104999-10E-40DLF](#) [10104999-10E-50B](#) [10104999-10E-50DLF](#)
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[30B](#) [10104999-A0E-30DLF](#) [10104999-A0E-40B](#) [10104999-A0E-40DLF](#) [10104999-A0E-50B](#) [10104999-A0E-50DLF](#)
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[10104999-B0E-80B](#) [10104999-B0E-80DLF](#) [10104999-C0E-10B](#) [10104999-C0E-10DLF](#) [10104999-C0E-20B](#)
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