

10113949 - X 0 E - X 0 X L F

8-COLUMN DIFFERENTIAL SIGNAL

LEAD-FREE DESIGNATION ONLY WITH APPLICABLE PLATING CODES

LETTER	PLATING (SEE NOTE 2)	
	APPLICATION	TYPE (REFERENCE)
B	TELCORDIA CO	0.76um GOLD or GXT
C	TELCORDIA UE	1.27um GOLD
D	TELCORDIA CO	0.76um GOLD or GXT, LEAD-FREE
E	TELCORDIA UE	1.27um GOLD, LEAD-FREE

MODULE DESCRIPTION	LETTER DESIGNATION REPRESENTED IN DASH NUMBER									BASE MODULE
	J	A	B	C	D	E	F	G	H	
LEFT POLARIZING GUIDANCE MODULE (SEE SHEET 3)										
RIGHT POLARIZING GUIDANCE MODULE (SEE SHEET 4)										
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	Ø 0.55 [0.0217"]
2	3	4	Ø 0.55 [0.0217"]
3	2	4	Ø 0.45 [0.0177"]
4	3	4	Ø 0.45 [0.0177"]
5	2	3	Ø 0.55 [0.0217"]
6	3	3	Ø 0.55 [0.0217"]
7	2	3	Ø 0.45 [0.0177"]
8	3	3	Ø 0.45 [0.0177"]

	GROUNDED	UNGROUNDED
FINISHED	Ø 2.35-2.55	Ø 2.35-2.55
PAD	Ø 5.50	N/A
PLATED	YES	NO
DRILL (mm/in)	2.58 / .1015	2.44 / .096

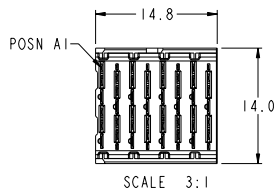
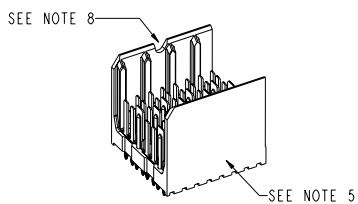
SCREW P/N	DESCRIPTION	BOARD THICKNESS
10104997-002LF	#2-56 X .375" PHILLIPS PANHEAD W/SO CONICAL WASHER	1.60 - 5.00
10104997-003LF	#2-56 X .500" PHILLIPS PANHEAD W/SO CONICAL WASHER	5.00 - 10.00

spec. ref.	SEE NOTES	dr.	KH LEE	2010-06-15	projection	MM	size	A2	scale	2:1
tolerance std.	ASME Y14.5	eng.	NG. R	2011-05-16	chr.	NG. R	2011-05-16	ecn no.		
ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED	appr.	C.H. TAN	2011-05-16	product family		XCode	rel level	Released	
surface	linear 0.1 ±0.2 0.25 ±0.10 0.5 ±0.050	www.fcj.com			cat. no.		Product	Customer Drw	10113949	rev A
ASME Y14.5	angular 0° ±°				SEE PIN TREE					sheet 1 of 6

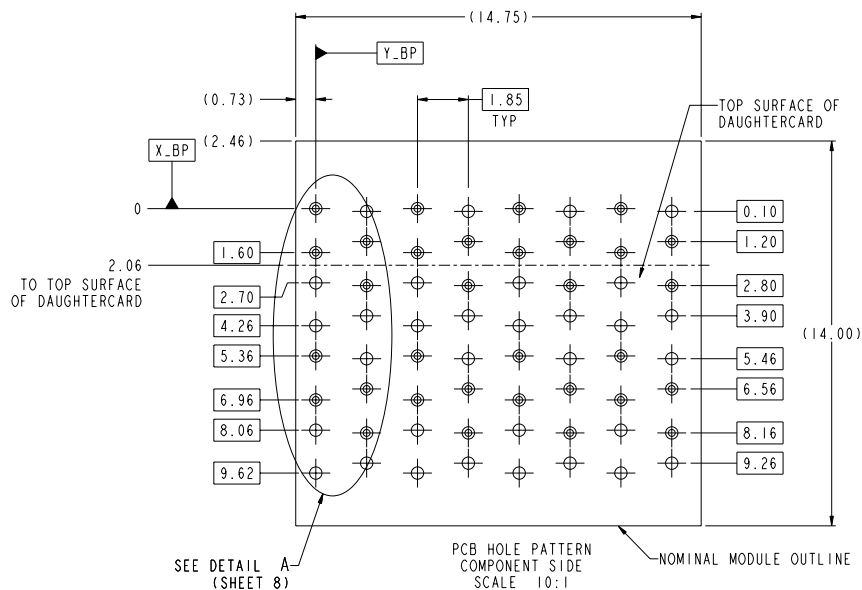
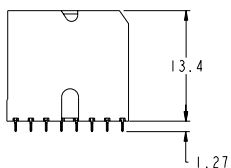
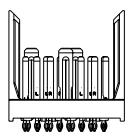
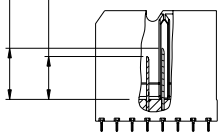
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OPEN (2-WALL) MODULE



- 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)



SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 10:1

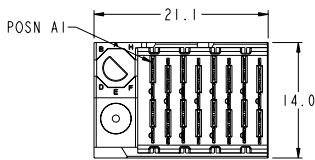
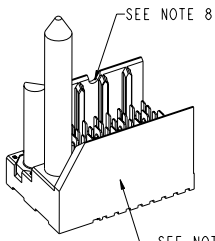
NOMINAL MODULE OUTLINE

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spec ref	SEE NOTES	dr	KH LEE	2010-06-15	projection	MM	size	A2	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	NG. R	2011-05-16	chr	NG. R	2011-05-16	ecn no		Released
ASME Y14.5		appr	C.H. TAN	2011-05-16	product family		XCode	rel level		
surface	linear	0.1	±0.2	0.2X	±0.10	0.2XX	±0.050	ang	0°	±°
ASME Y14.5	angular	0°	±°							

**MODULE ASSEMBLY**  
 VERTICAL HEADER, 8 COLUMN, 2-PAIR  
 SEE P/N TREE Product: Customer Draw  
 PDS: Rev: A STATUS: Released Printed: May 20, 2011  
 10113949 rev A sheet 2 of 6

LEFT POLARIZING/GUIDE MODULE

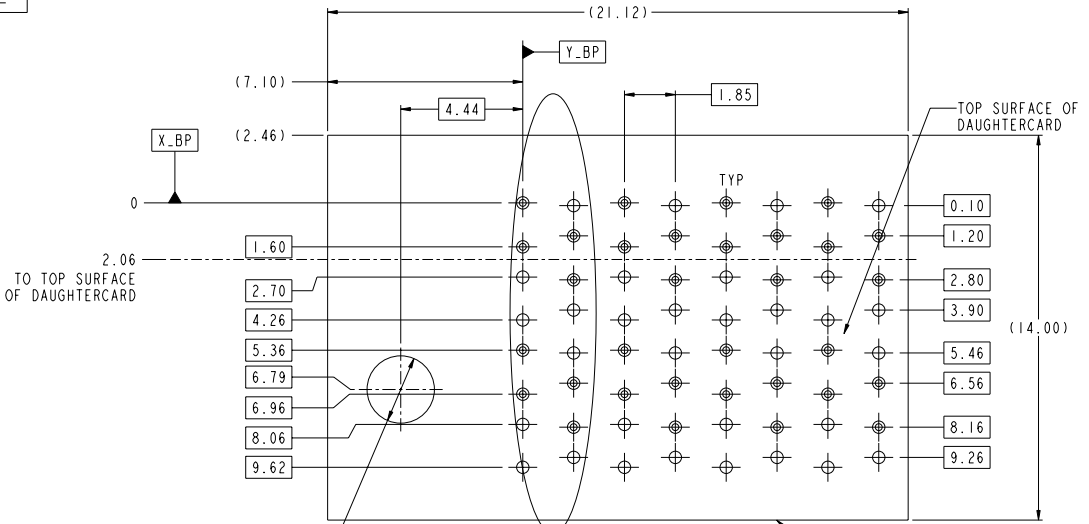
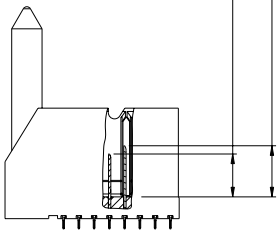


SCALE 3:1

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)

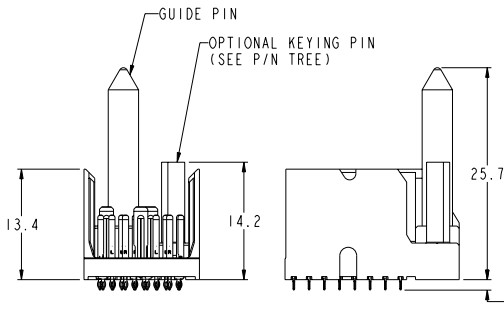


Ø 2.55  
2.35  
⊕ 0.10 X\_BP Y\_BP  
SEE NOTE 11 & TABLE 1

SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 10:1

NOMINAL MODULE OUTLINE



spec ref	SEE NOTES	dr	KH LEE	2010-06-15	projection	MM	size	A2	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	NG, R	2011-05-16	chr	NG, R	2011-05-16	ecn no		
ASME Y14.5		appr	C.H. TAN	2011-05-16	product family		XCode	rel level	Released	
surface	linear	0.1	±0.2	0.25	±0.10	0.25	±0.050	10113949	rev	A
ASME Y14.5	angular	0°	±°						sheet 3 of 6	

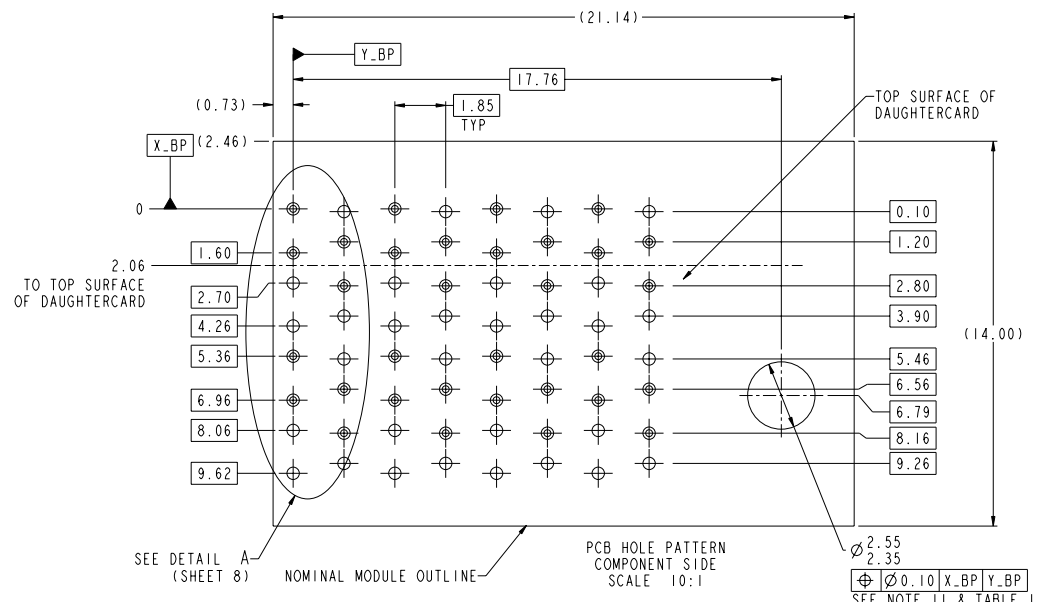
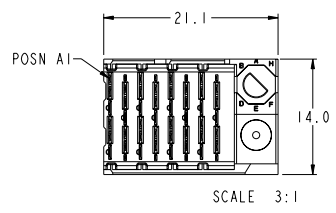
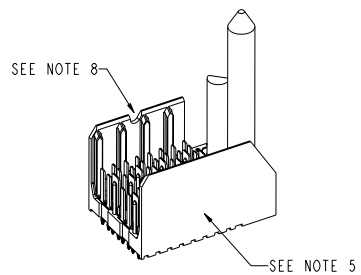
PDS: Rev :A

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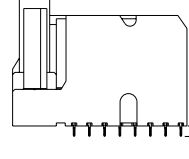
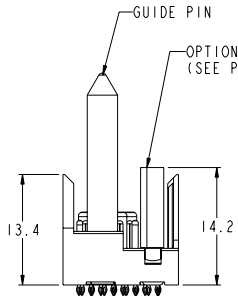
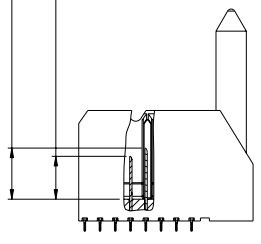
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# RIGHT POLARIZING/GUIDE MODULE



- 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)

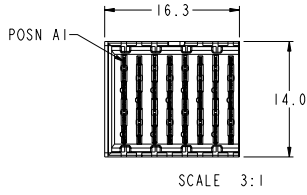
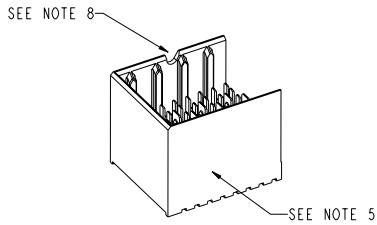


spec ref	SEE NOTES	dr	KH LEE	2010-06-15	projection	MM	size	A2	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	NG. R	2011-05-16	chr	NG. R	2011-05-16	ecn no		Released
ASME Y14.5		appr	C.H. TAN	2011-05-16	product family		XCode	rel level		
surface	linear	0.1	±0.2	0.25	±0.10	0.25	±0.050	10113949		rev
ASME Y14.5	angular	0°	±°							A

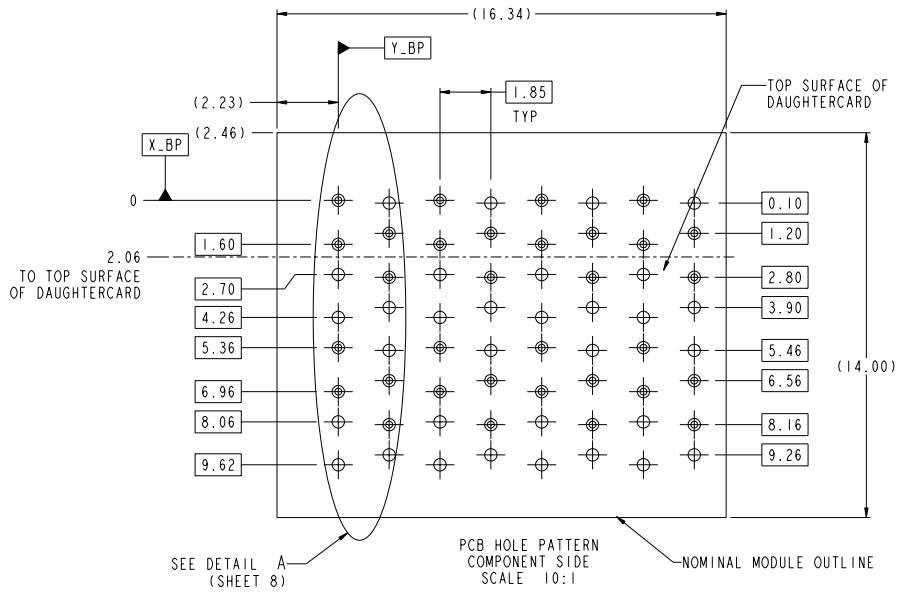
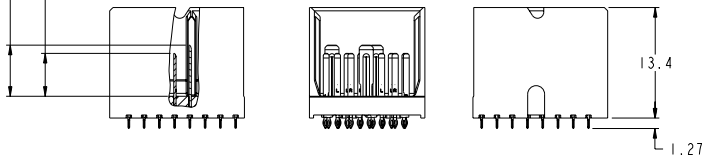
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LEFT WALL MODULE



- 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)



SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 10:1

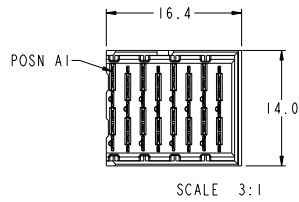
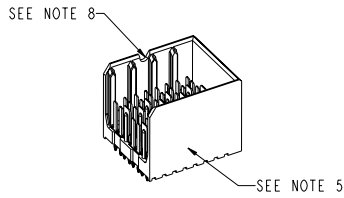
NOMINAL MODULE OUTLINE

spec ref	SEE NOTES	dr	KH LEE	2010-06-15	projection	MM	size	A2	scale	2:1
tolerance std	ASME Y14.5	eng	NG, R	2011-05-16	chr	NG, R	2011-05-16	ecn no		Released
ASME Y14.5	TOLERANCES UNLESS OTHERWISE SPECIFIED	appr	C.H. TAN	2011-05-16	product family		XCode	rel level		Released
surface	linear	0.1	±0.2	0.2X	±0.10	0.2XX	±0.050	rev	10113949	A
ASME Y14.5	angular	0°	±°					sheet 5 of 6		

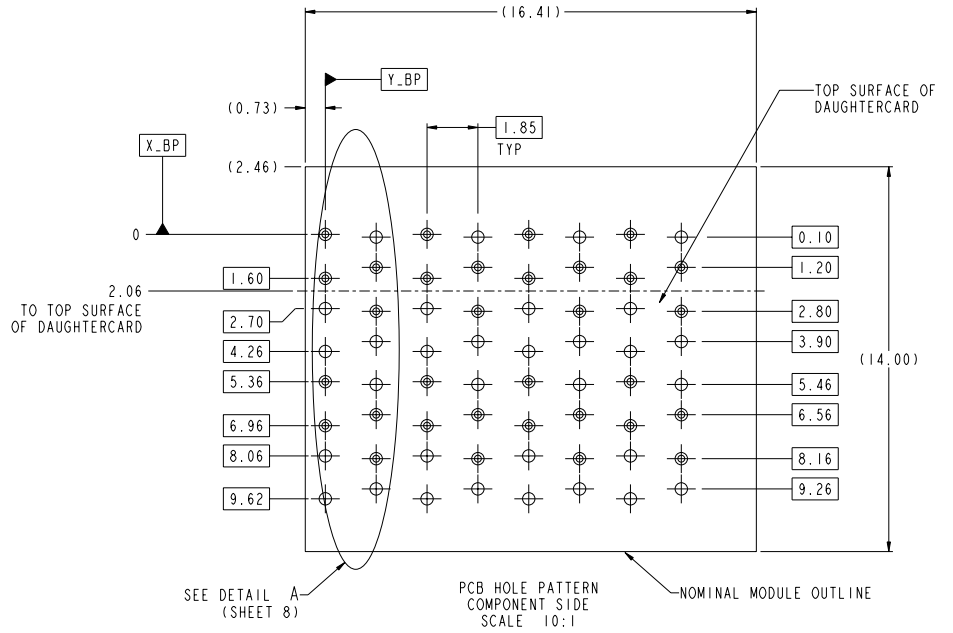
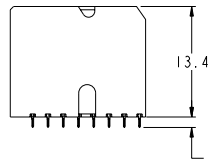
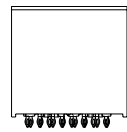
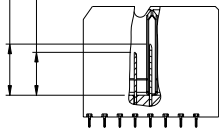
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RIGHT WALL MODULE



- 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)



SEE DETAIL A (SHEET 8)

PCB HOLE PATTERN COMPONENT SIDE SCALE 10:1

NOMINAL MODULE OUTLINE

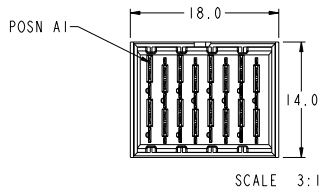
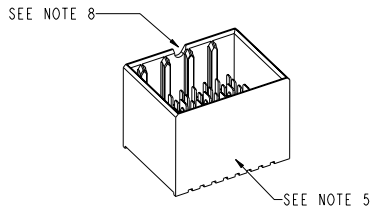
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tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	NG, R	2011-05-16	chr	NG, R	2011-05-16	ecn no		
ASME Y14.5		appr	C.H. TAN	2011-05-16	product family		XCode	rel level	Released	
surface	linear	0.1	±0.2	0.25	±0.10	0.5	±0.050	10113949	rev	A
ASME Y14.5	angular	0°	±°						sheet 6 of 6	

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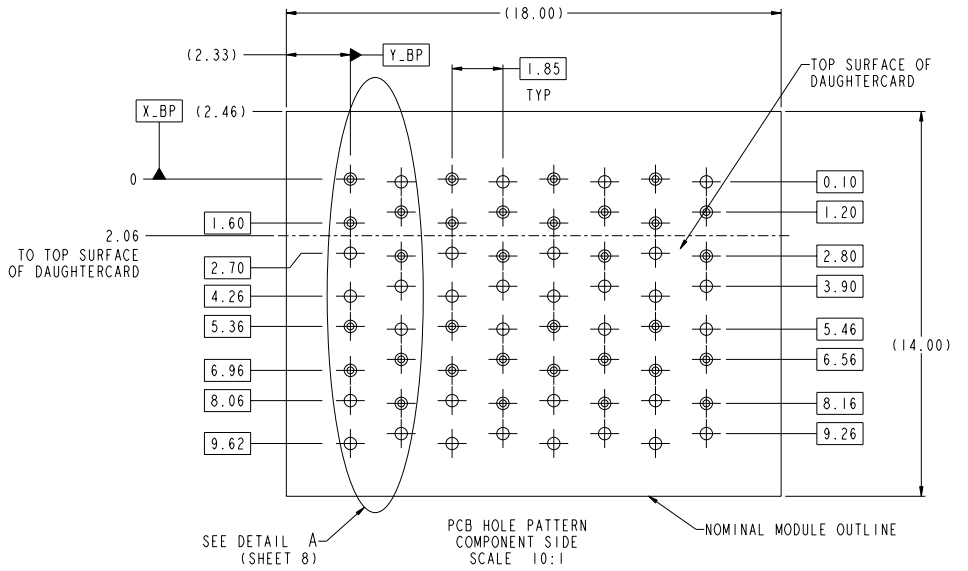
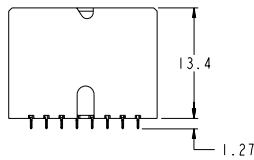
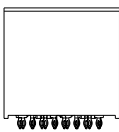
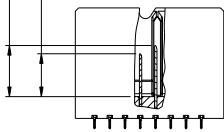
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FOUR WALL MODULE



- 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)



SEE DETAIL A (SHEET 8) PCB HOLE PATTERN COMPONENT SIDE SCALE 10:1 NOMINAL MODULE OUTLINE

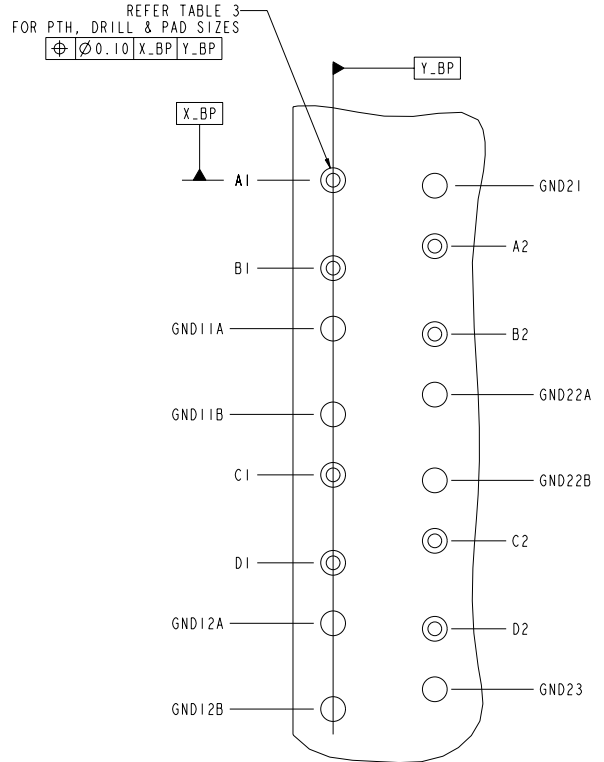
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tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	NG. R	2011-05-16	chr	NG. R	2011-05-16	ecn no		
ASME Y14.5		appr	C.H. TAN	2011-05-16	product family		XCode	rel level	Released	
surface	linear	0.1	±0.2		FCJ	MODULE ASSEMBLY	10113949	rev	A	
		0.2X	±0.10			VERTICAL HEADER, 8 COLUMN, 2-PAIR				
ASME Y14.5	angular	0°	±°		www.fcj.com	cat. no.	SEE P/N TREE	Product	Customer Draw	sheet 7 of 6

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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:
- CONNECTOR MATERIALS  
SHROUD: HIGH-TEMP THERMOPLASTIC, UL94V-0  
CONTACTS: HIGH PERFORMANCE COPPER ALLOY
  - CONTACT PLATING:  
SEPARABLE INTERFACE: PERFORMANCE-BASED PLATING, QUALIFIED TO MEET THE REQUIREMENTS OF FC1 PRODUCT SPECIFICATION GS-12-588, INCLUDING TELCORDIA GR-1217-CORE (NOVEMBER 1995) CENTRAL OFFICE TEST SEQUENCE.  
PRESS-FIT TAILS: TIN OVER NICKEL, OR TIN-LEAD ALLOY OVER NICKEL. SEE P/N TREE.
  - PRODUCT SPECIFICATION: GS-12-588 (PRELIMINARY)
  - APPLICATION SPECIFICATION: GS-20-121 (PRELIMINARY)
  - 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.



DETAIL A  
SCALE 20:1

spec ref	SEE NOTES	dr	KH LEE	2010-06-15	projection	MM	size	A2	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	NG. R	2011-05-16	chr	NG. R	2011-05-16	ecn no		
ASME Y14.5		appr	C.H. TAN	2011-05-16	product family		XCode	rel level	Released	
surface	linear	0.1	±0.2	0.2X	±0.10	0.2XX	±0.050			
ASME Y14.5	angular	0°	±°							
		www.fcj.com	cat. no.	SEE PIN TREE	Product	Customer Draw	10113949	rev	A	sheet 8 of 8

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