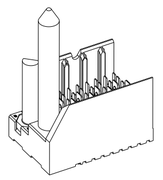
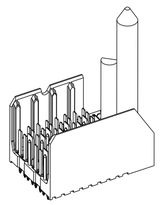
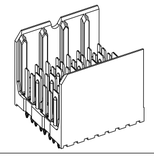
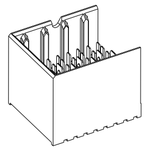
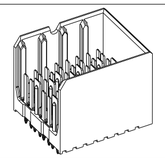
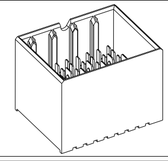
# 10113949 - X X E - X 0 X L F

- E: 8-COLUMN DIFFERENTIAL SIGNAL
- 0: GENERAL LABEL
  E: CUSTOMIZED LABEL
- 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, 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 | ∅0.55 [0.0217"] |
| 2 | 3 | 4 | ∅0.55 [0.0217"] |
| 3 | 2 | 4 | ∅0.45 [0.0177"] |
| 4 | 3 | 4 | ∅0.45 [0.0177"] |
| 5 | 2 | 3 | ∅0.55 [0.0217"] |
| 6 | 3 | 3 | ∅0.55 [0.0217"] |
| 7 | 2 | 3 | ∅0.45 [0.0177"] |
| 8 | 3 | 3 | ∅0.45 [0.0177"] |

TABLE 1: OPTIONAL PCB HOLE SIZE (SEE NOTE 11)

| | GROUNDED | UNGROUNDED |
|---|---|---|
| FINISHED | ∅2.35-2.55 | ∅2.35-2.55 |
| PAD | ∅5.50 | 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 |

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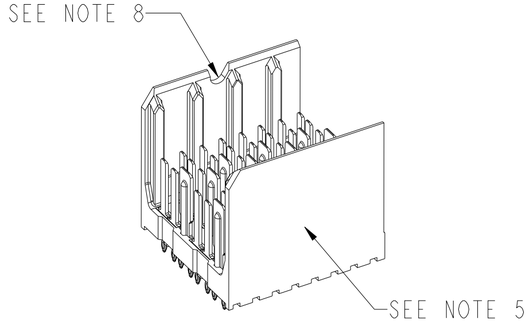
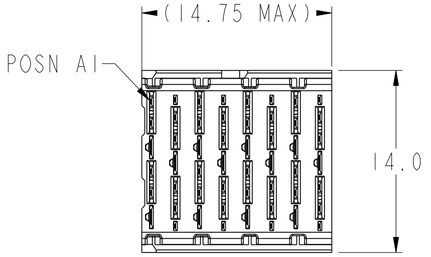
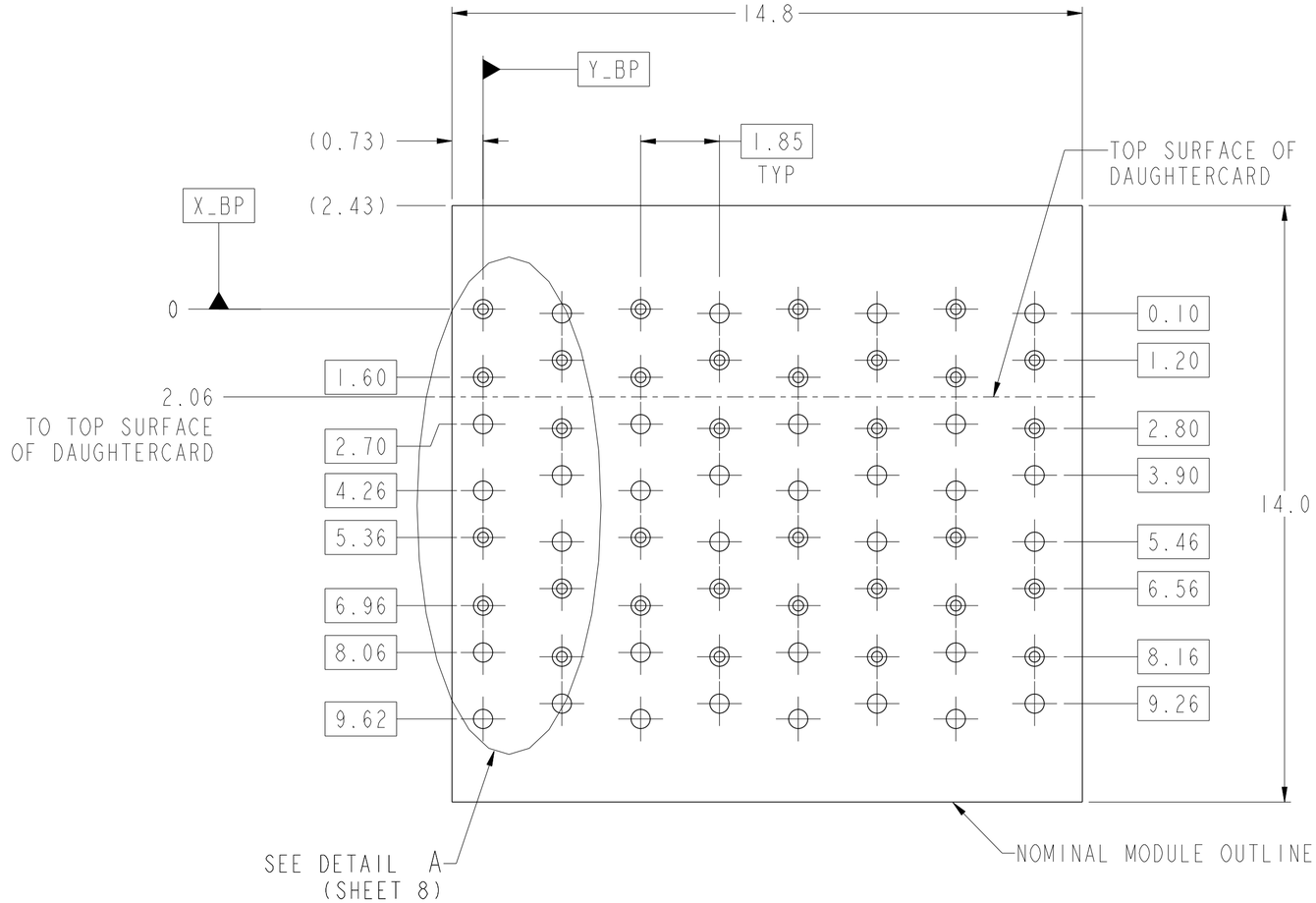
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM | size A2 / scale 6:1 |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | eng | Michael Song | 2017/05/24 | | | |
| | | chr | Stone Li | 2017/06/05 | | | ecn no ELX-DG-27080-1 |
| | | appr | Heaven Cen | 2017/06/05 | product family - | | rel level Released |
| surface - ASME Y14.5 | linear 0.X ±0.2; 0.XX ±0.10; 0.XXX ±0.050 | Amphenol FCi | title: MODULE ASSEMBLY, VERTICAL HEADER, 8-COLUMN, 2-PAIR | | dwg no 10113949 | | rev H |
| | angular 0° ±-° | | cat. no. SEE P/N TREE | Product - Customer Drw | | | sheet 1 of 8 |

# OPEN (2-WALL) MODULE

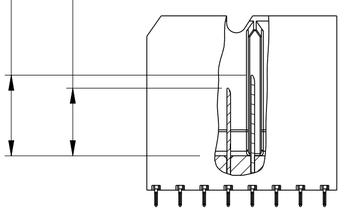


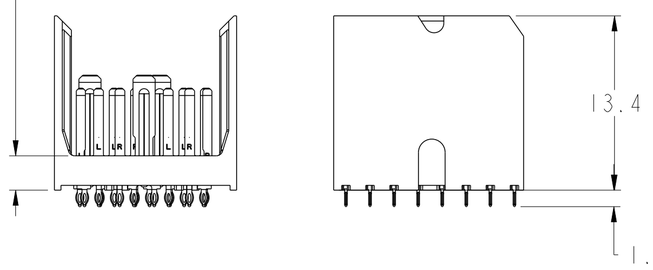




SCALE 3:1




PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM | size A2 / scale 6:1 |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | eng | Michael Song | 2017/05/24 | | | |
| | | | | chr | Stone Li | 2017/06/05 | | | ecn no ELX-DG-27080-1 |
| | | | | appr | Heaven Cen | 2017/06/05 | product family - | | rel level Released |
| surface - ASME Y14.5 | linear | 0.X | ±0.2 | Amphenol FCi | title | MODULE ASSEMBLY | dwg no 10113949 | | rev H |
| | | 0.XX | ±0.10 | | | VERTICAL HEADER, 8-COLUMN, 2-PAIR | | | |
| | | 0.XXX | ±0.050 | | | | | | |
| | angular | 0° | ±-° | | cat. no. | SEE P/N TREE | Product - Customer Drw | | sheet 2 of 8 |

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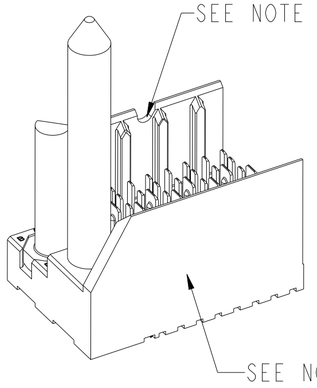
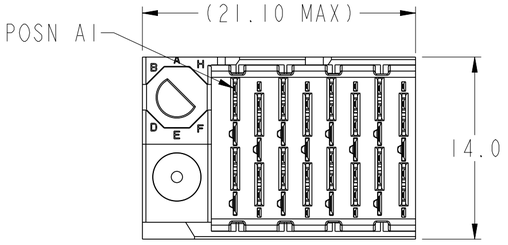
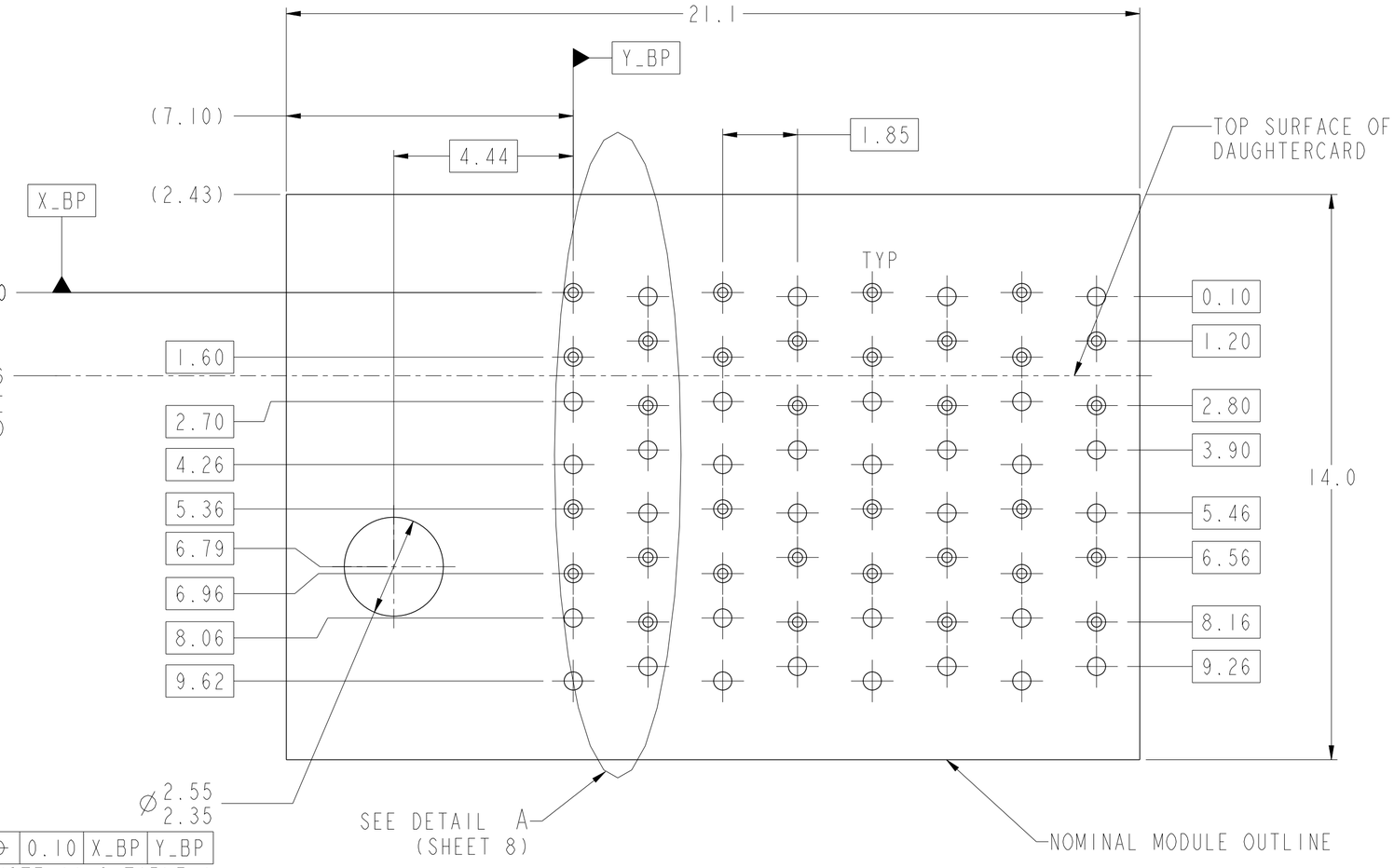
# LEFT POLARIZING/GUIDE MODULE




SCALE 3:1

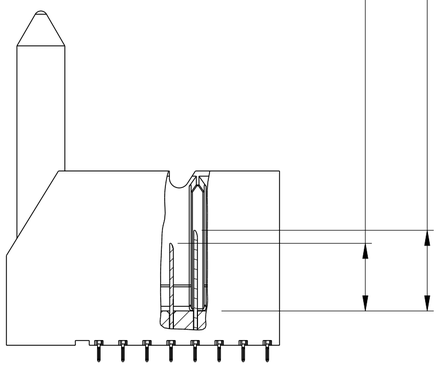


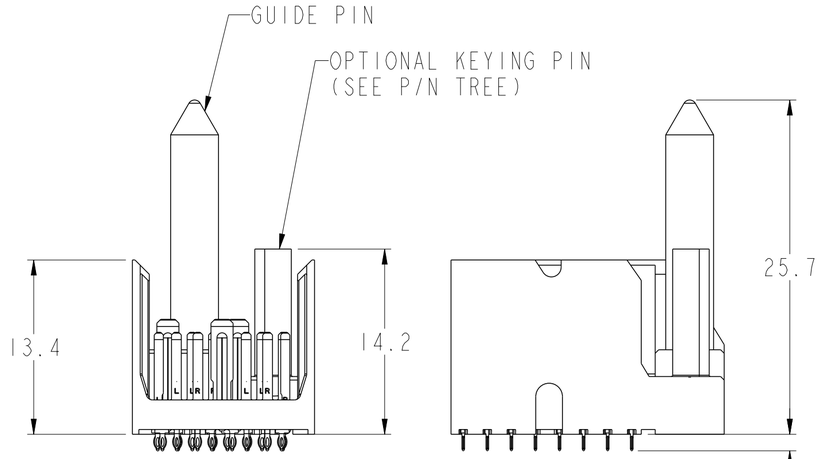

PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1

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)









| | | | | | | | |
|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | | eng | Michael Song | 2017/05/24 | | |
| | | | chr | Stone Li | 2017/06/05 | size A2 | scale 4:1 |
| | | | appr | Heaven Cen | 2017/06/05 | ecn no ELX-DG-27080-1 | |
| | | | | | | product family - | rel level Released |
| surface ASME Y14.5 | linear | 0.X ±0.2 | Amphenol FCi | title | MODULE ASSEMBLY | dwg no 10113949 | rev H |
| | | 0.XX ±0.10 | | | VERTICAL HEADER, 8-COLUMN, 2-PAIR | | |
| | | 0.XXX ±0.050 | | | | | |
| | angular | 0° ±-° | | cat. no. | SEE P/N TREE | Product - Customer Drw | sheet 3 of 8 |

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Amphenol FCi

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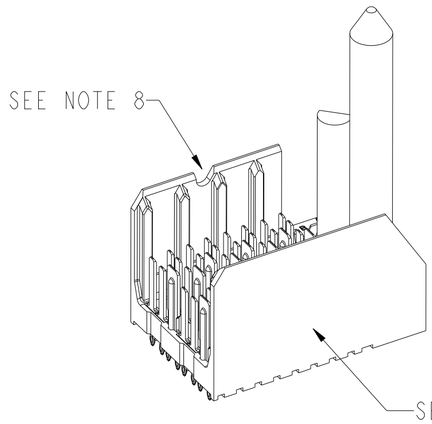
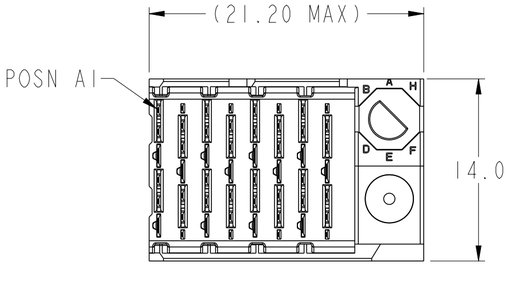
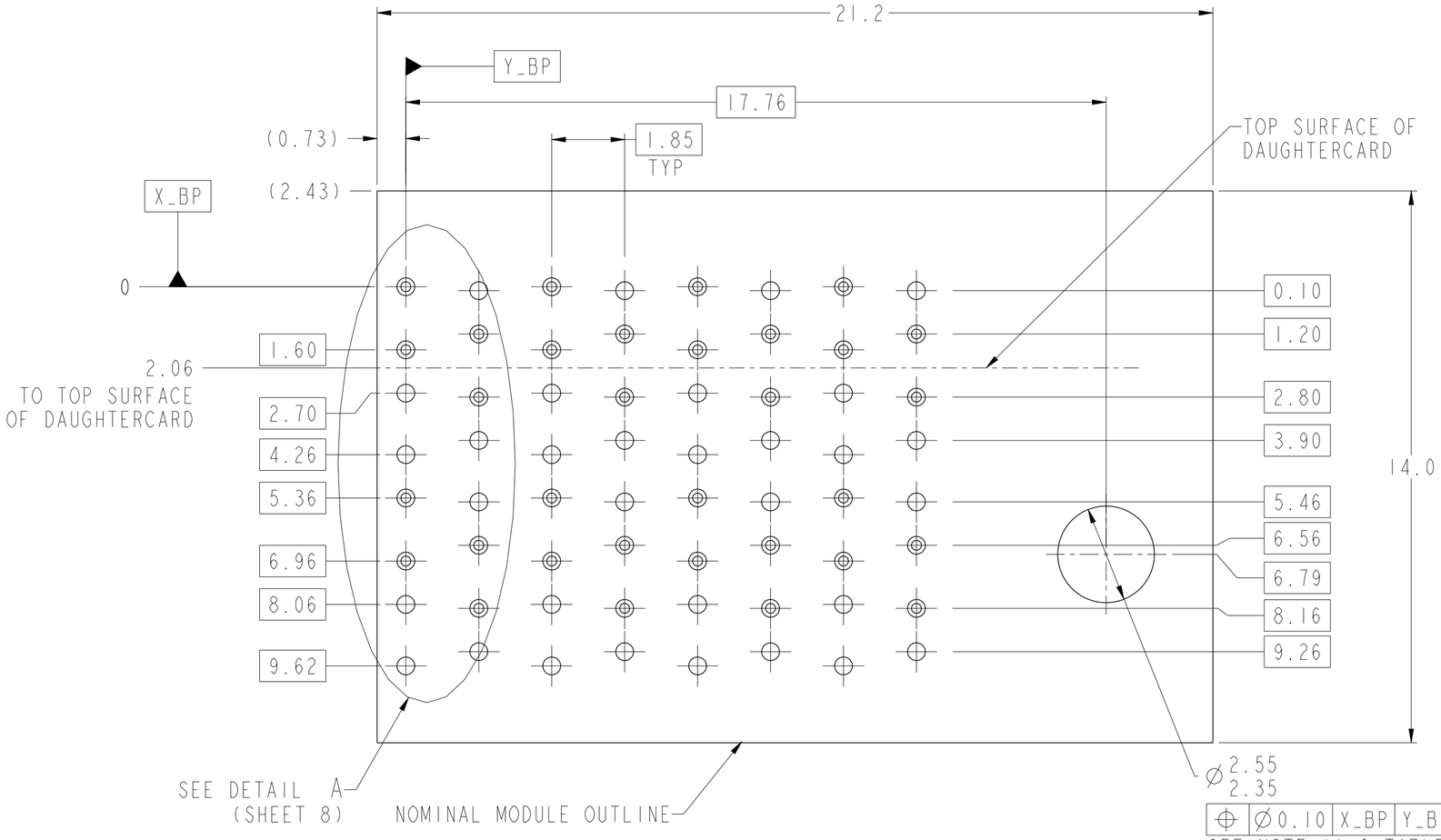
PDS: Rev :H STATUS: Released Printed: Jun 05, 2017

# RIGHT POLARIZING/GUIDE MODULE



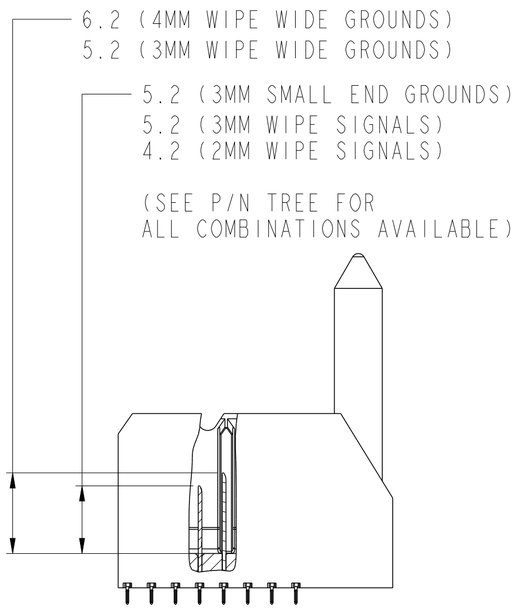



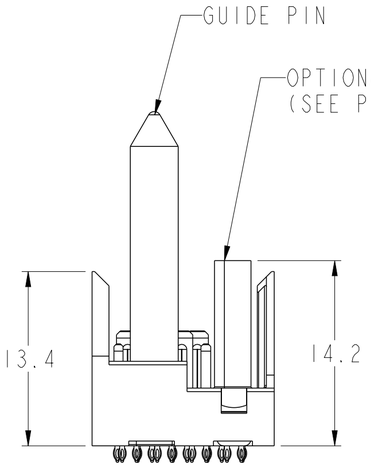

SCALE 3:1

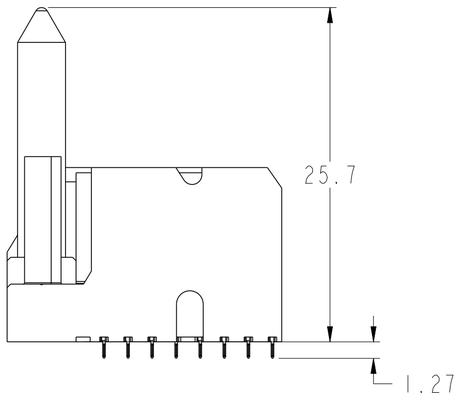



| ⌖ | ∅0.10 | X_BP | Y_BP |
|---|---|---|---|

SEE NOTE 11 & TABLE 1




PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | | dr | Kok-Hoe Lee | 2010/06/25 | projection: MM |
| tolerance std | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | eng | Michael Song | 2017/05/24 | size: A2 |
| ASME Y14.5 | | | | chr | Stone Li | 2017/06/05 | scale: 4:1 |
| | | | | appr | Heaven Cen | 2017/06/05 | ecn no: ELX-DG-27080-1 |
| | | | | | | | product family: - |
| | | | | | | | rel level: Released |
| surface: - | linear | 0.X | ±0.2 | Amphenol FCi | title: MODULE ASSEMBLY | | dwg no: 10113949 |
| | | 0.XX | ±0.10 | | VERTICAL HEADER, 8-COLUMN, 2-PAIR | | rev: H |
| ASME Y14.5 | | 0.XXX | ±0.050 | | | | |
| | angular | 0° | ±-° | | cat. no. SEE P/N TREE | Product - Customer Drw | sheet 4 of 8 |

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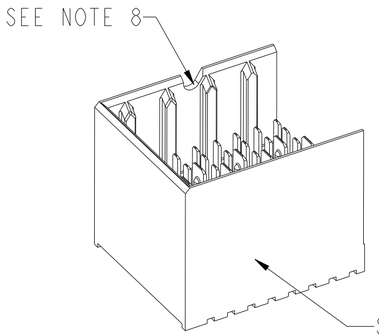
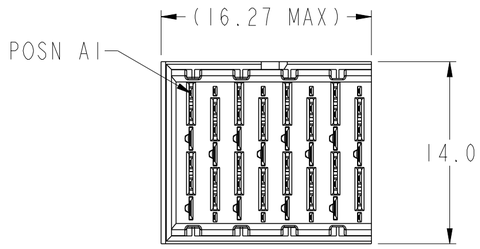
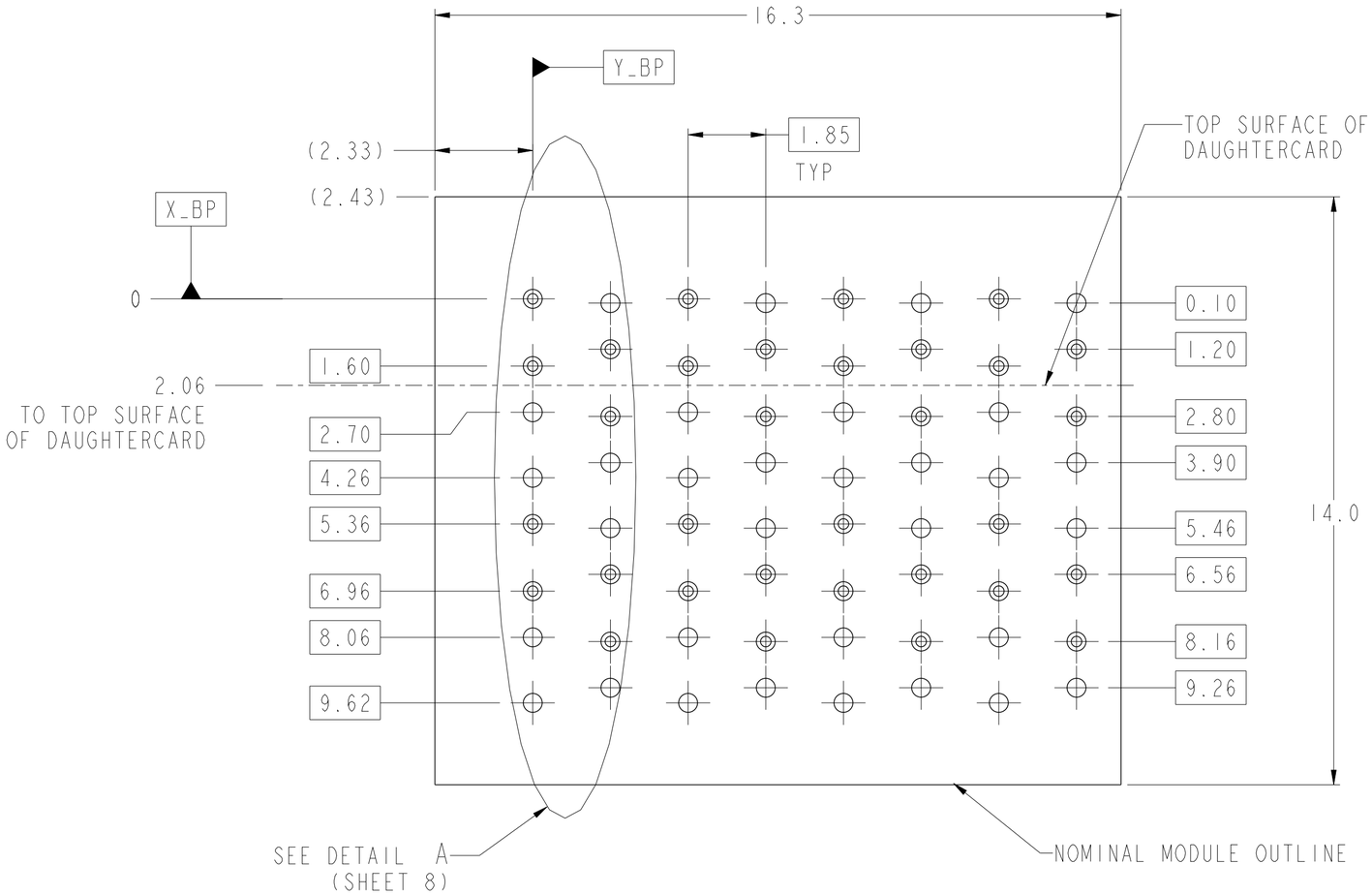
# LEFT WALL MODULE

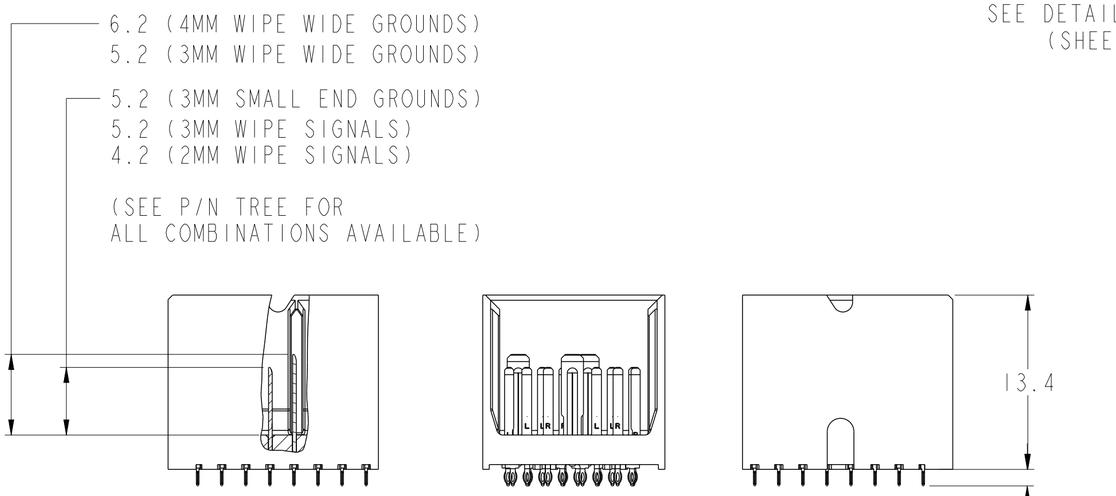



SCALE 3:1




PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | | eng | Michael Song | 2017/05/24 | | |
| | | | chr | Stone Li | 2017/06/05 | | |
| | | | appr | Heaven Cen | 2017/06/05 | product family | - |
| surface - ASME Y14.5 | linear | 0.X ±0.2 | Amphenol FCi | title | MODULE ASSEMBLY | dwg no | 10113949 |
| | | 0.XX ±0.10 | | | VERTICAL HEADER, 8-COLUMN, 2-PAIR | | |
| | | 0.XXX ±0.050 | | | | | |
| | angular | 0° ±-° | | cat. no. | SEE P/N TREE | Product - Customer Drw | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| size | A2 | scale | 6:1 | rev | H | sheet 5 of 8 | | | |
| ecn no | ELX-DG-27080-1 | | | | | | | | |
| rel level | Released | | | | | | | | |

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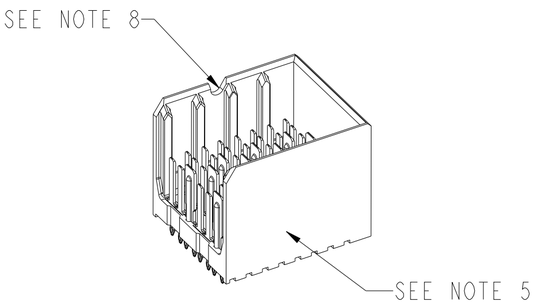
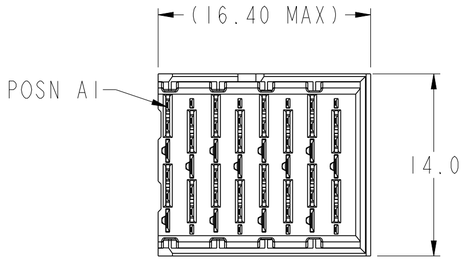
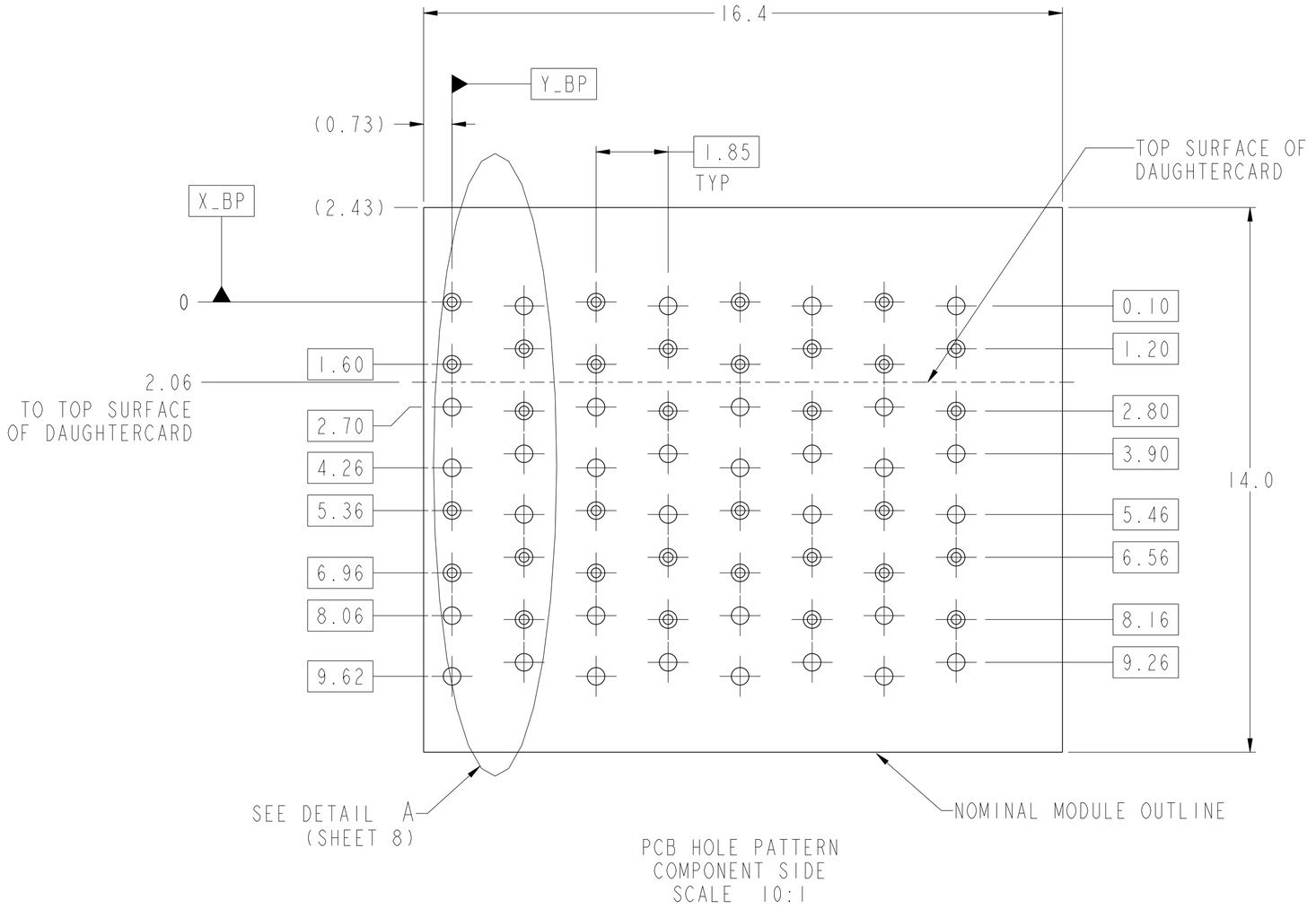
# RIGHT WALL MODULE




SCALE 3:1

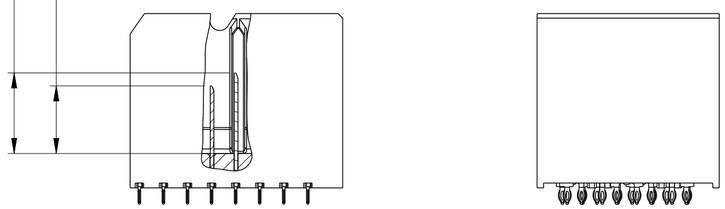



PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1

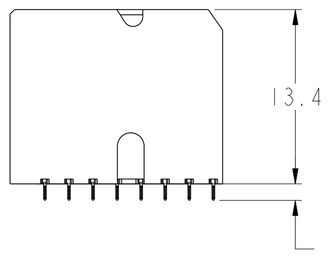
6.2 (4MM WIPE WIDE GROUNDS)
5.2 (3MM WIPE WIDE GROUNDS)

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

(SEE P/N TREE FOR
ALL COMBINATIONS AVAILABLE)








| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM | size A2 / scale 6:1 |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | eng | Michael Song | 2017/05/24 | | | |
| | | | | chr | Stone Li | 2017/06/05 | | | ecn no ELX-DG-27080-1 |
| | | | | appr | Heaven Cen | 2017/06/05 | product family - | | rel level Released |
| surface - ASME Y14.5 | linear | 0.X | ±0.2 | Amphenol FCi | title: MODULE ASSEMBLY, VERTICAL HEADER, 8-COLUMN, 2-PAIR | | | dwg no 10113949 | rev H |
| | | 0.XX | ±0.10 | | | | | | |
| | | 0.XXX | ±0.050 | | | | | | |
| | angular | 0° | ±-° | | cat. no. SEE P/N TREE | Product - Customer Drw | | | sheet 6 of 8 |

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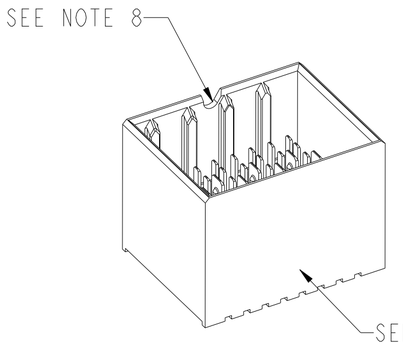
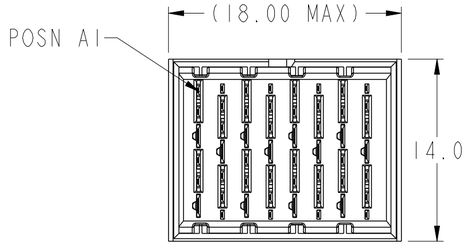
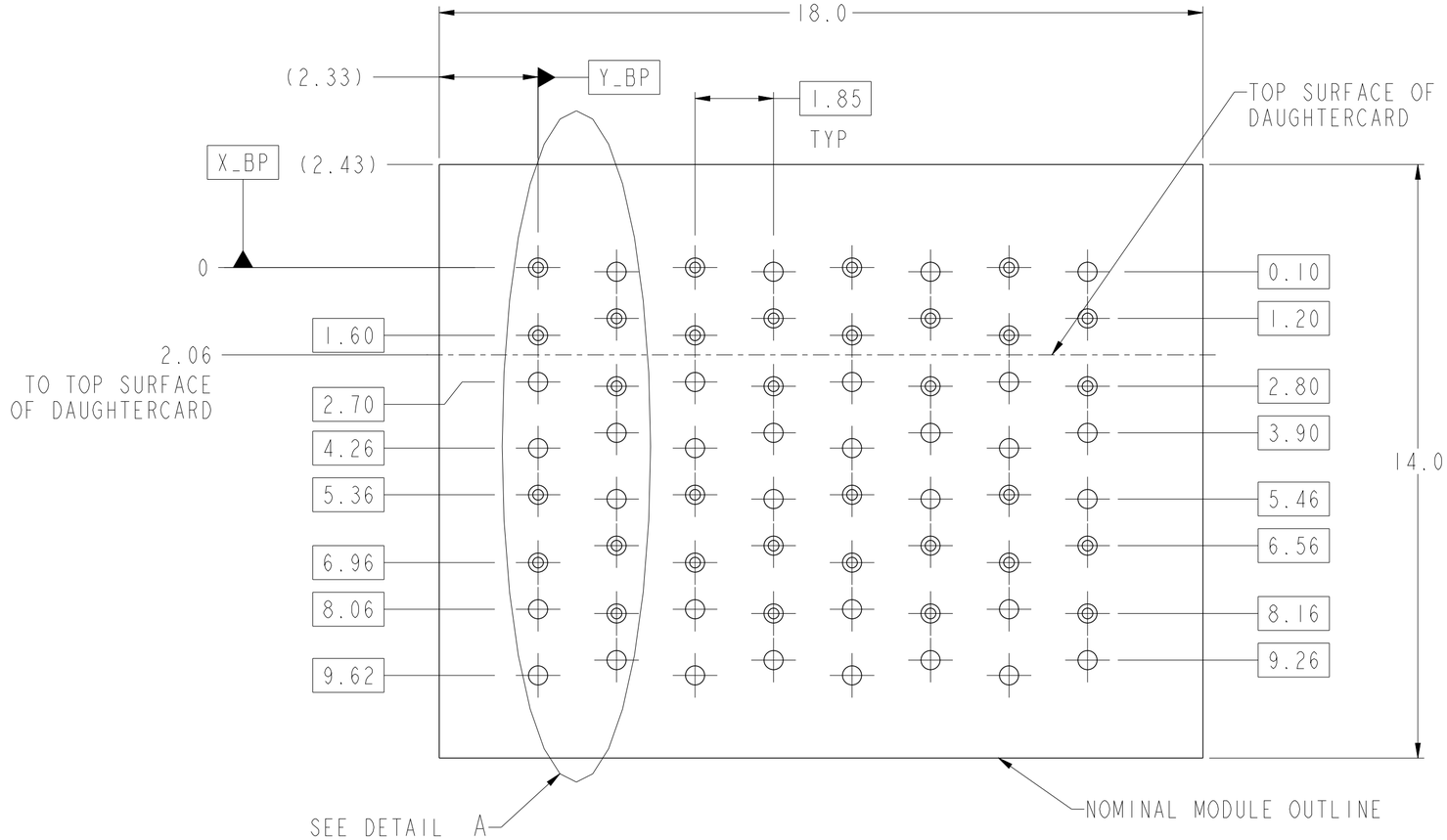
# FOUR WALL MODULE

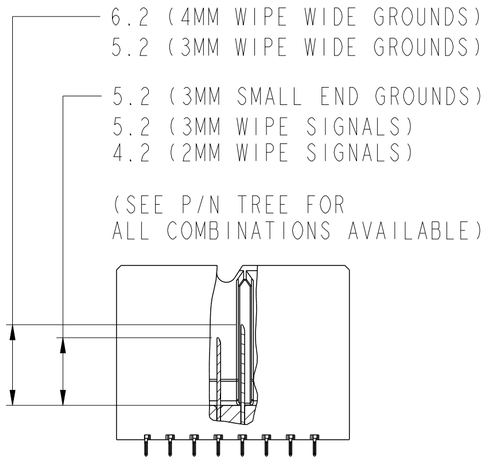


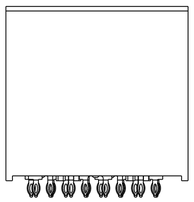



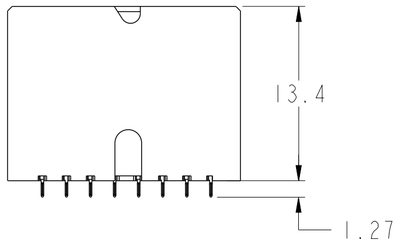

SCALE 3:1




PCB HOLE PATTERN
COMPONENT SIDE
SCALE 10:1






| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM | size A2 | scale 5:1 |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | eng | Michael Song | 2017/05/24 | | | | |
| | | | | chr | Stone Li | 2017/06/05 | | | ecn no | ELX-DG-27080-1 |
| | | | | appr | Heaven Cen | 2017/06/05 | product family | - | rel level | Released |
| surface - ASME Y14.5 | linear | 0.X | ±0.2 | Amphenol FCi | title | MODULE ASSEMBLY | dwg no | 10113949 | rev | H |
| | | 0.XX | ±0.10 | | | VERTICAL HEADER, 8-COLUMN, 2-PAIR | | | | |
| | | 0.XXX | ±0.050 | | | | | | | |
| | angular | 0° | ±-° | | cat. no. | SEE P/N TREE | Product - Customer Drw | | sheet 7 of 8 | |

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| TABLE 3: PTH AND PAD SIZES WITH REFERENCE TO COMPLIANT PIN DRILL | | |
|---|---|---|
| COMPLIANT PIN DRILL | PTH | PAD |
| ∅0.55 [0.0217"] | ∅0.45±0.05 | ∅0.85 |
| ∅0.45 [0.0177"] | ∅0.36±0.05 | ∅0.75 |

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.

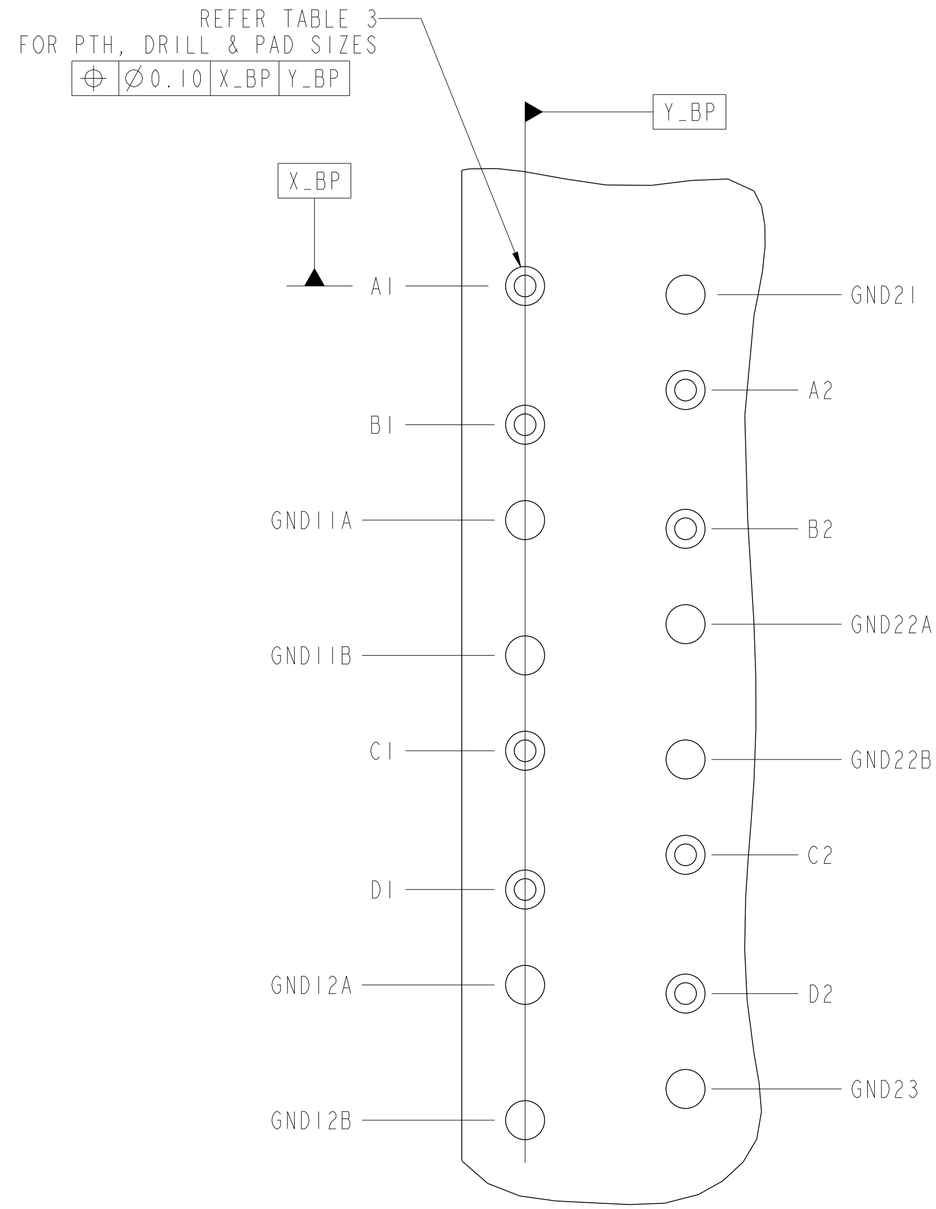
7. PACKAGING MEETS GS-14-920 LEAD-FREE LABELING SPECIFICATION.

(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.




DETAIL A
SCALE 20:1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| spec ref | SEE NOTES | | | dr | Kok-Hoe Lee | 2010/06/25 | projection | MM | size A2 / scale 6:1 |
| tolerance std ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | | | eng | Michael Song | 2017/05/24 | | | |
| | | | | chr | Stone Li | 2017/06/05 | | | ecn no ELX-DG-27080-1 |
| | | | | appr | Heaven Cen | 2017/06/05 | product family XCede | | rel level Released |
| surface ASME Y14.5 | linear | 0.X | ±0.2 | Amphenol FCi | title: MODULE ASSEMBLY<br>VERTICAL HEADER, 8-COLUMN, 2-PAIR | | dwg no 10113949 | | rev H |
| | | 0.XX | ±0.10 | | | | | | |
| | | 0.XXX | ±0.050 | | | | | | |
| | angular | 0° | ±-° | www.fci.com | cat. no. SEE P/N TREE | | Product - Customer Drw | | sheet 8 of 8 |

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