

10091836 - X 0 J - X X X L F

4-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)  | <b>J</b>                                      | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> | <b>F</b> | <b>G</b> | <b>H</b> |  |             |
|  |   |          |          |          |          |          |          |          |          |  |             |
| RIGHT POLARIZING GUIDANCE MODULE (SEE SHEET 4) | <b>Y</b>                                      | <b>P</b> | <b>Q</b> | <b>R</b> | <b>S</b> | <b>T</b> | <b>U</b> | <b>V</b> | <b>W</b> |  |             |
|  |   |          |          |          |          |          |          |          |          |  |             |
| OPEN MODULE (TWO WALL) (SEE SHEET 2)           | <b>0 (ZERO)</b>                               |          |          |          |          |          |          |          |          |  |             |
| LEFT WALL MODULE (SEE SHEET 5)                 | <b>L</b>                                      |          |          |          |          |          |          |          |          |  |             |
| RIGHT WALL MODULE (SEE SHEET 6)                | <b>M</b>                                      |          |          |          |          |          |          |          |          |  |             |
| FOUR WALL MODULE (SEE SHEET 7)                 | <b>1</b>                                      |          |          |          |          |          |          |          |          |  |             |

| 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"]          |

|               | 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 |

| 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    |

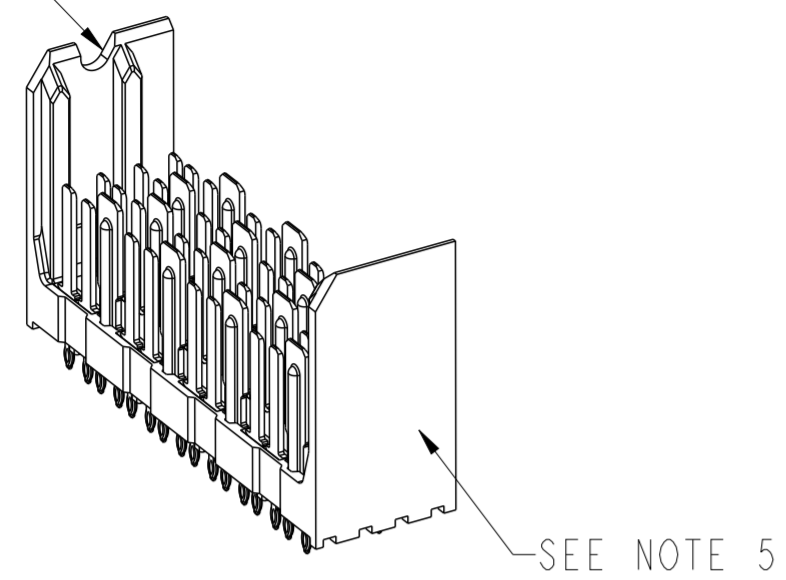
|               |              |              |                |                                   |                 |          |                        |                |              |     |   |
|---------------|--------------|--------------|----------------|-----------------------------------|-----------------|----------|------------------------|----------------|--------------|-----|---|
| spec ref      | SEE NOTES    | dr           | Jim Swain      | 2010/04/13                        | projection      | MM       | size                   | A2             | scale        | 4:1 |   |
| tolerance std | ASME Y14.5   | eng          | Michael Song   | 2016/06/06                        |                 |          | ecn no                 | ELX-DG-24191-1 |              |     |   |
| surface       | linear       | chr          | Heaven Cen     | 2016/06/08                        | product family  |          | rel level              | Released       |              |     |   |
| ASME Y14.5    | angular      | appr         | Pai-Ming Zheng | 2016/06/15                        | MODULE ASSEMBLY |          | cat. no.               | 10091836       |              |     |   |
|               | 0.X ±0.2     | Amphenol FCI |                | VERTICAL HEADER, 4-COLUMN, 4-PAIR |                 | cat. no. | Product - Customer Drw |                | sheet 1 of 8 |     |   |
|               | 0.XX ±0.10   |              |                |                                   |                 |          |                        |                |              | rev | G |
|               | 0.XXX ±0.050 |              |                |                                   |                 |          |                        |                |              |     |   |
|               | 0° ±°        |              |                |                                   |                 |          |                        |                |              |     |   |

Amphenol FCI

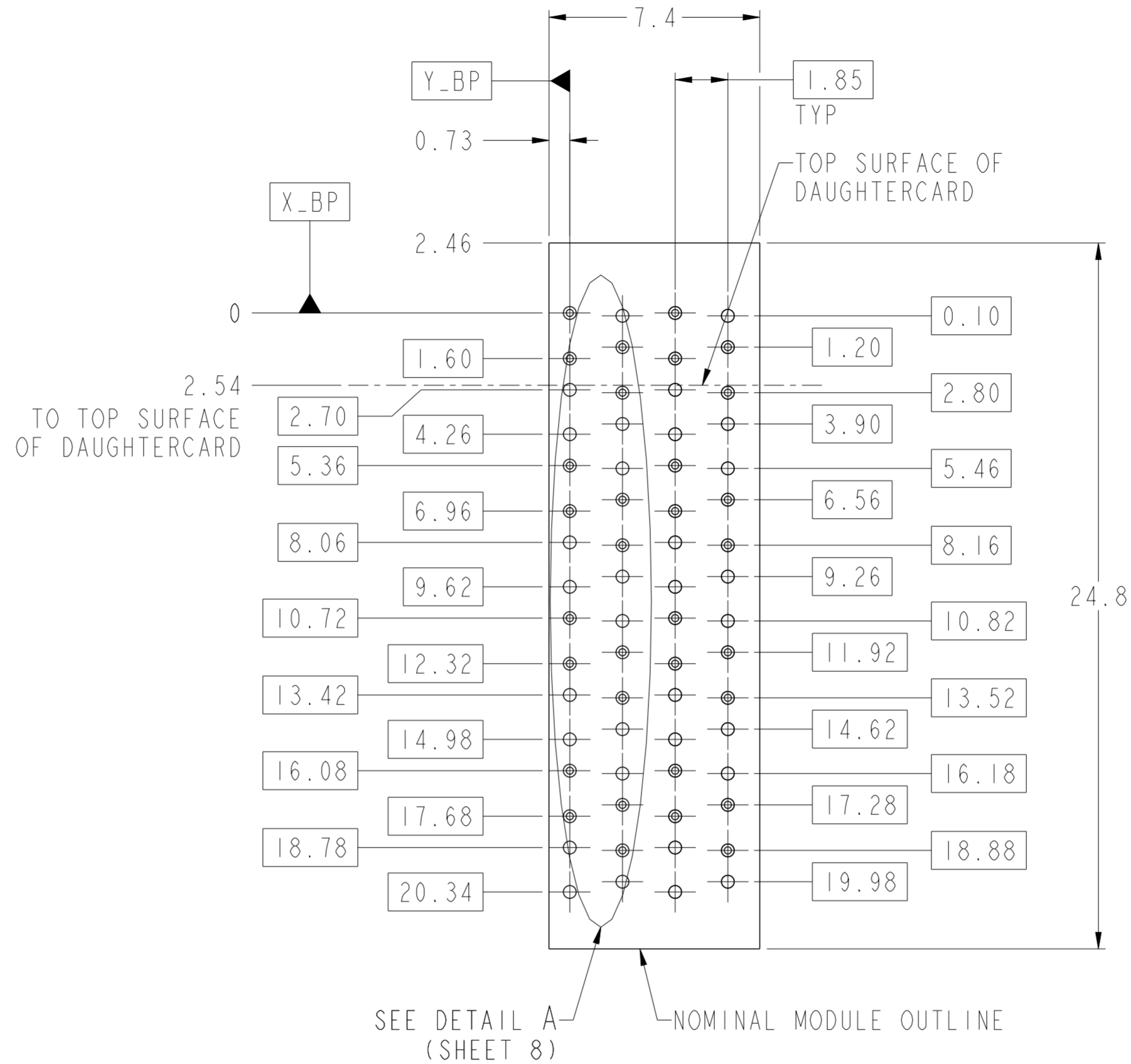
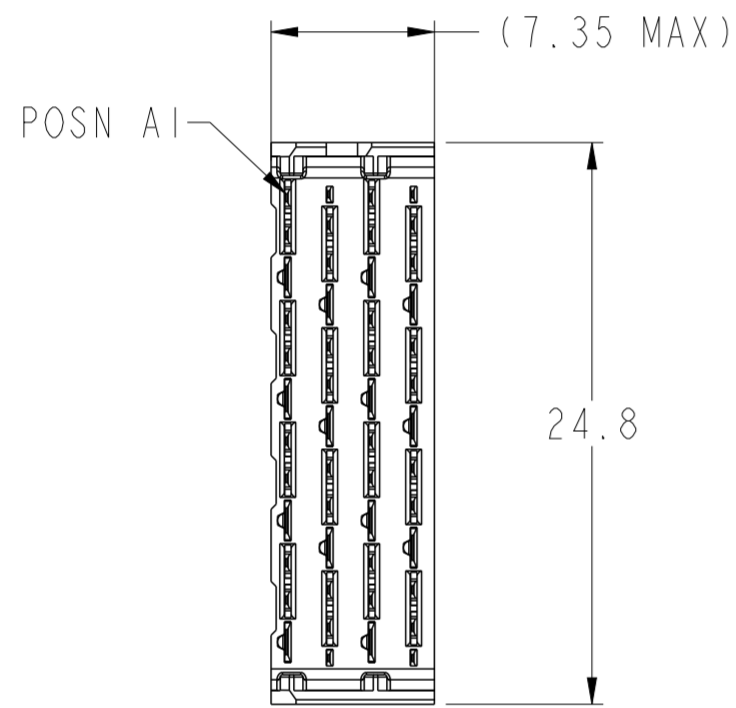
© 2016 AFCI

# OPEN (2-WALL) MODULE

SEE NOTE 8



SEE NOTE 5

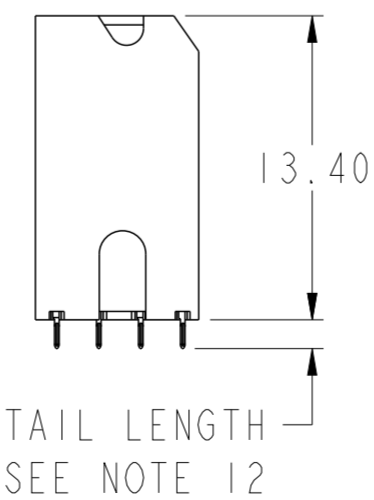
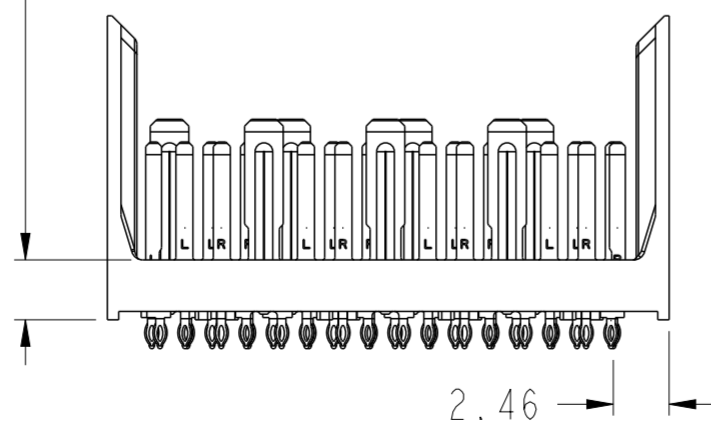
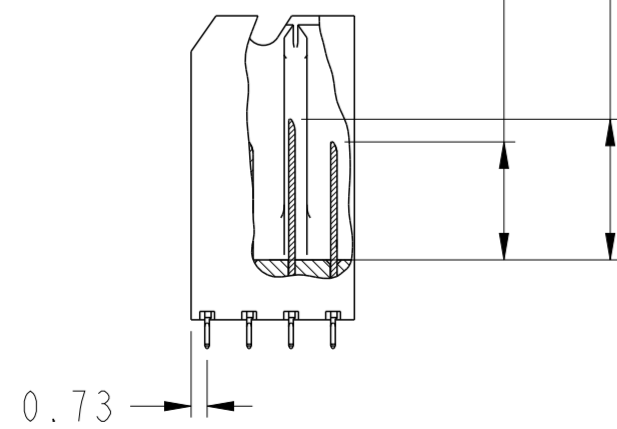


SEE DETAIL A (SHEET 8) NOMINAL MODULE OUTLINE

PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

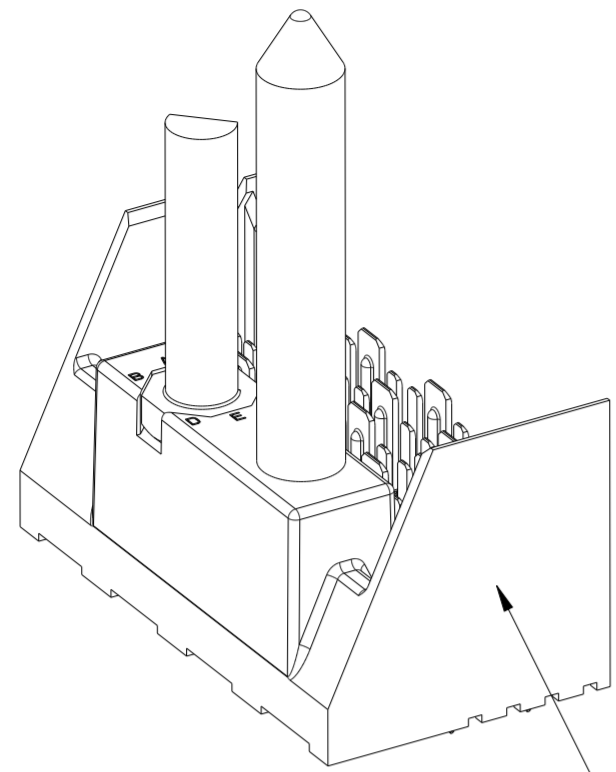
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE

2.64±0.10 FROM STANDOFF SURFACE TO MATING SURFACE

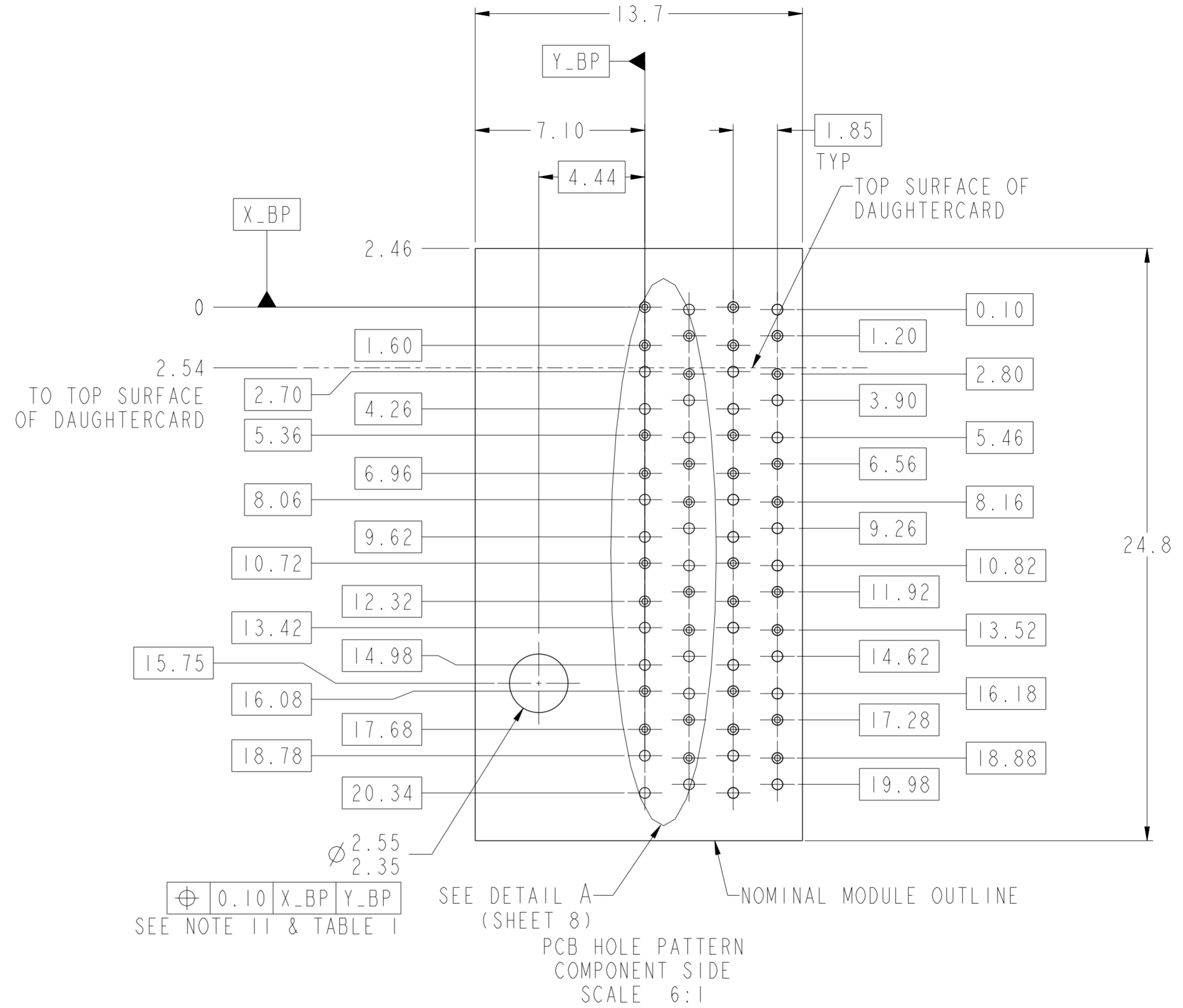
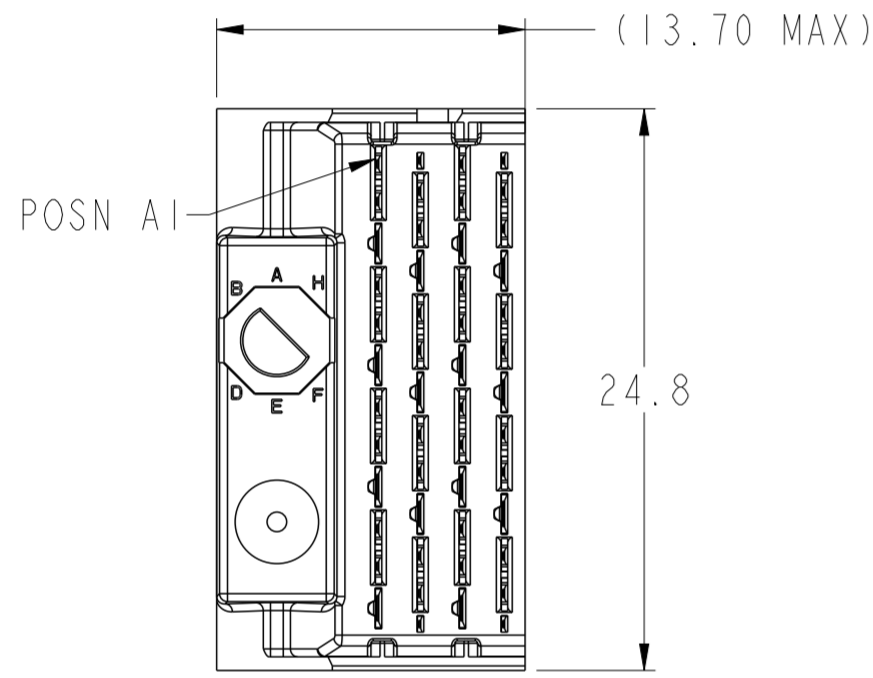


|               |                                       |       |              |            |  |          |                        |                |           |          |
|---------------|---------------------------------------|-------|--------------|------------|--|----------|------------------------|----------------|-----------|----------|
| spec ref      | SEE NOTES                             | dr    | Jim Swain    | 2010/04/13 | 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 | rel level | Released |
| ASME Y14.5    |                                       | chr   | Heaven Cen   | 2016/06/08 |  |          |                        |                |           |          |
| surface       | linear                                | 0.X   | ±0.2         |            | MODULE ASSEMBLY<br>VERTICAL HEADER, 4-COLUMN, 4-PAIR | cat. no. | Product - Customer Drw | sheet 2 of 8   | rev<br>G  |          |
|               |                                       | 0.XX  | ±0.10        |            |  |          |                        |                |           |          |
|               |                                       | 0.XXX | ±0.050       |            |  |          |                        |                |           |          |
| ASME Y14.5    | angular                               | 0°    | ±°           |            |  |          |                        |                |           |          |

# LEFT POLARIZING/GUIDE MODULE



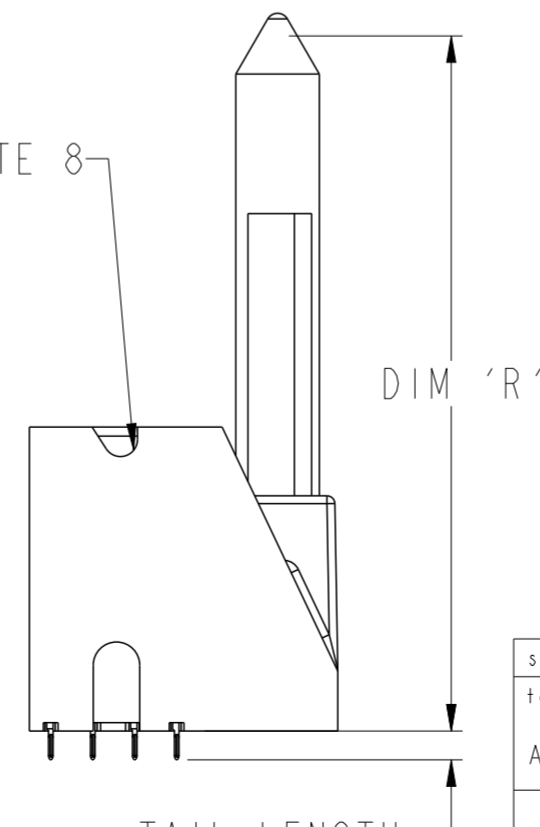
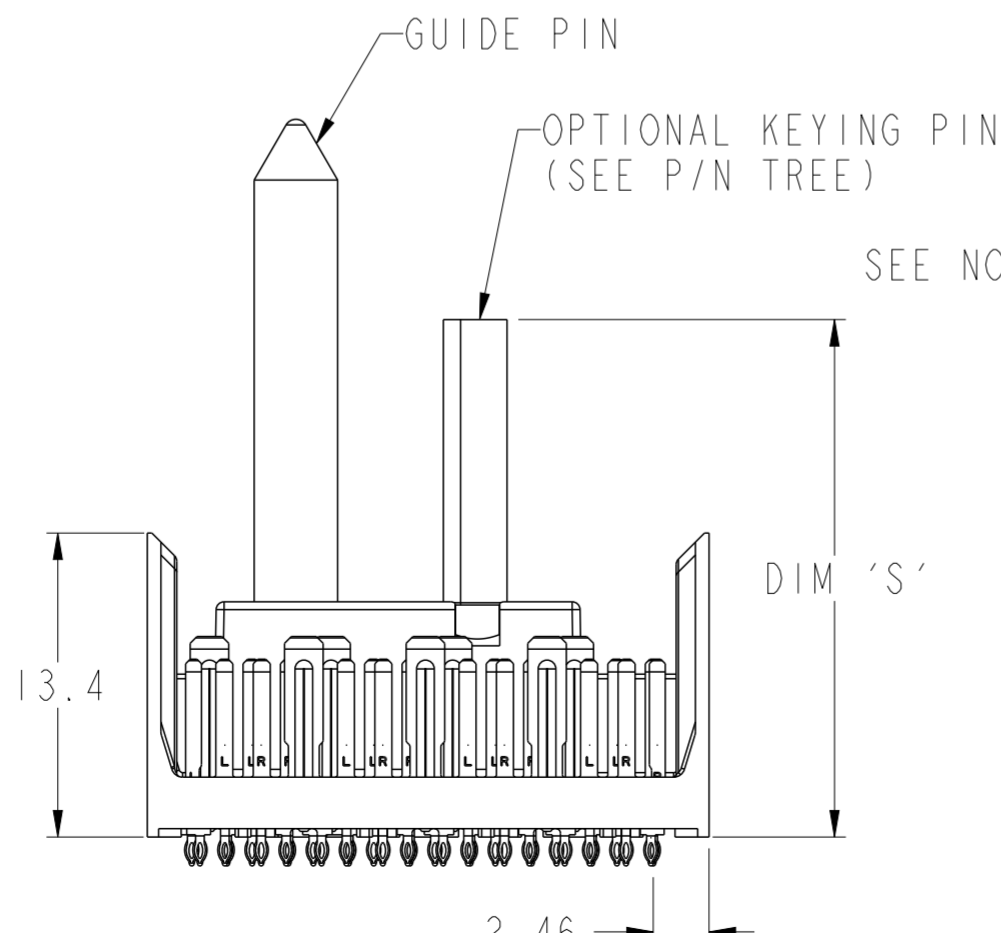
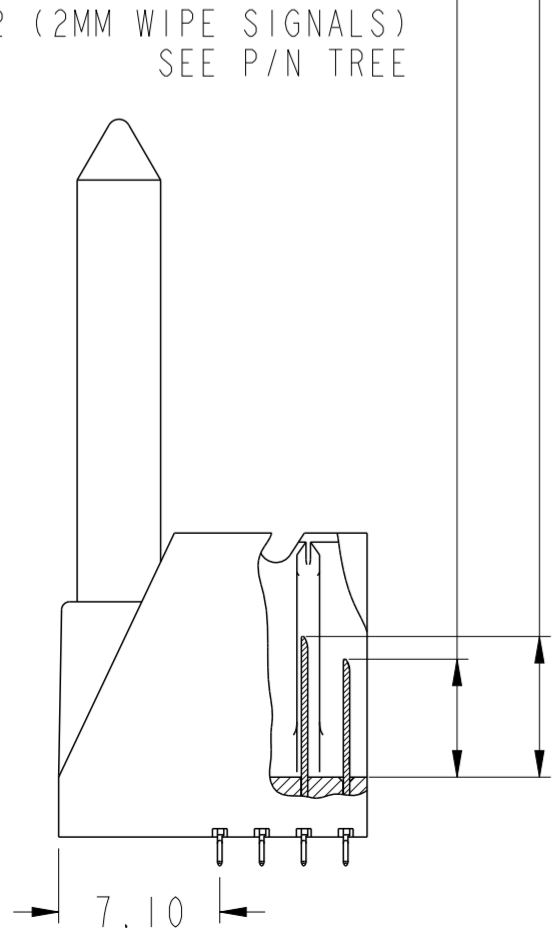
SEE NOTE 5



|                    |      |      |
|--------------------|------|------|
| $\varnothing$ 0.10 | X_BP | Y_BP |
|--------------------|------|------|

SEE NOTE 11 & TABLE 1

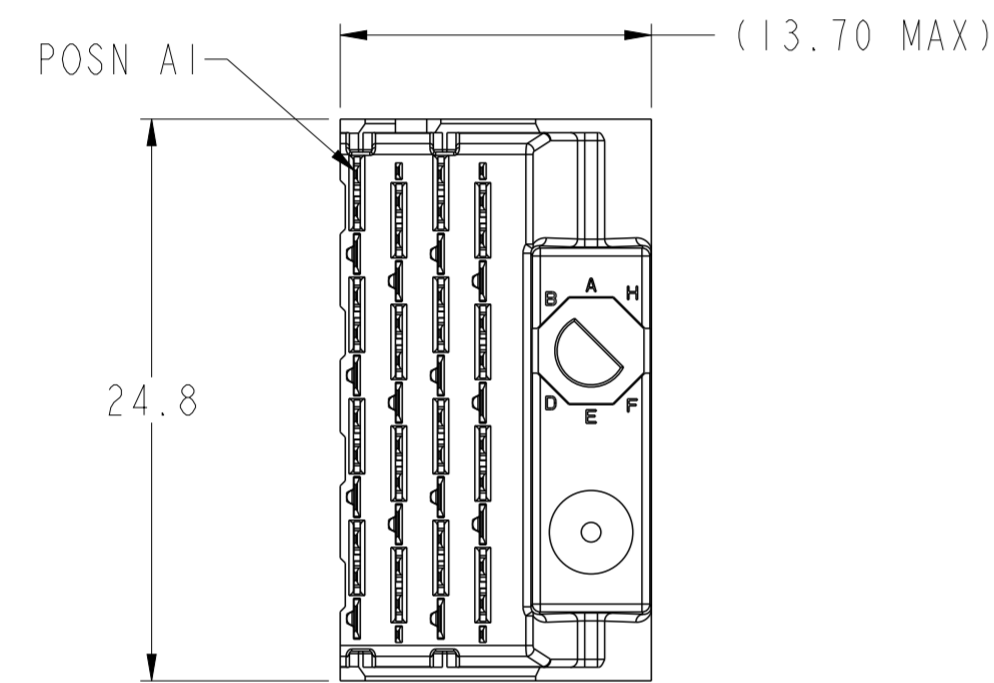
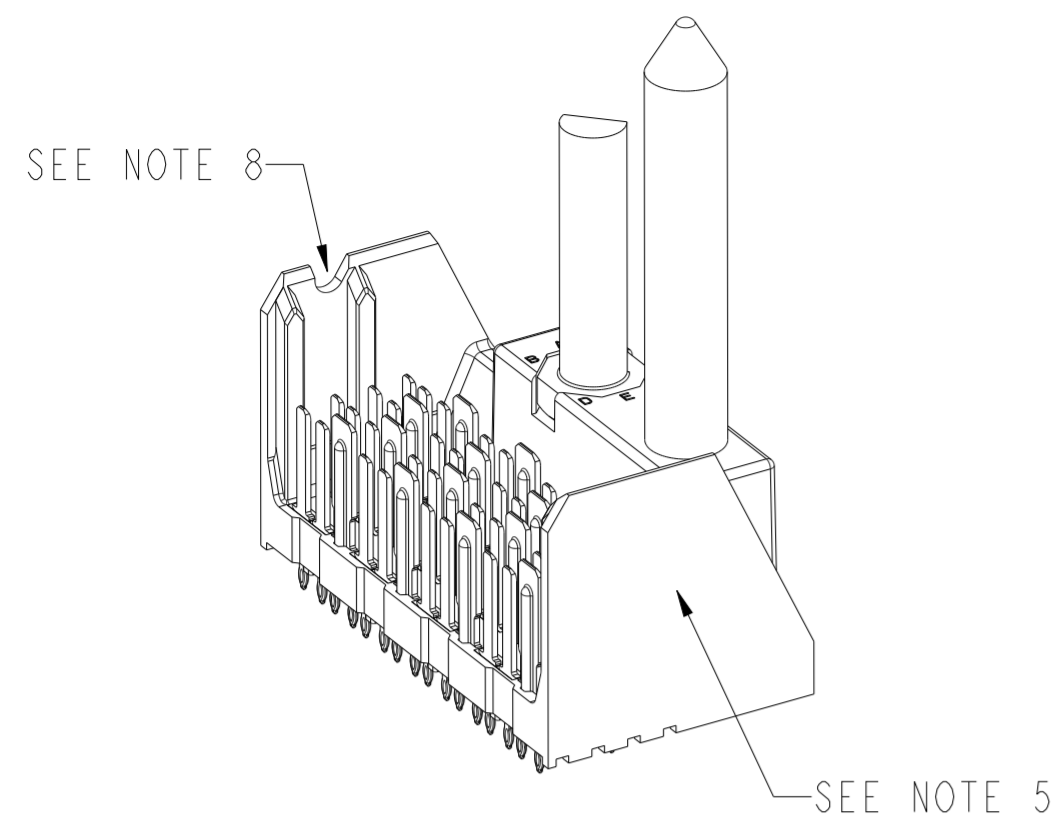
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE



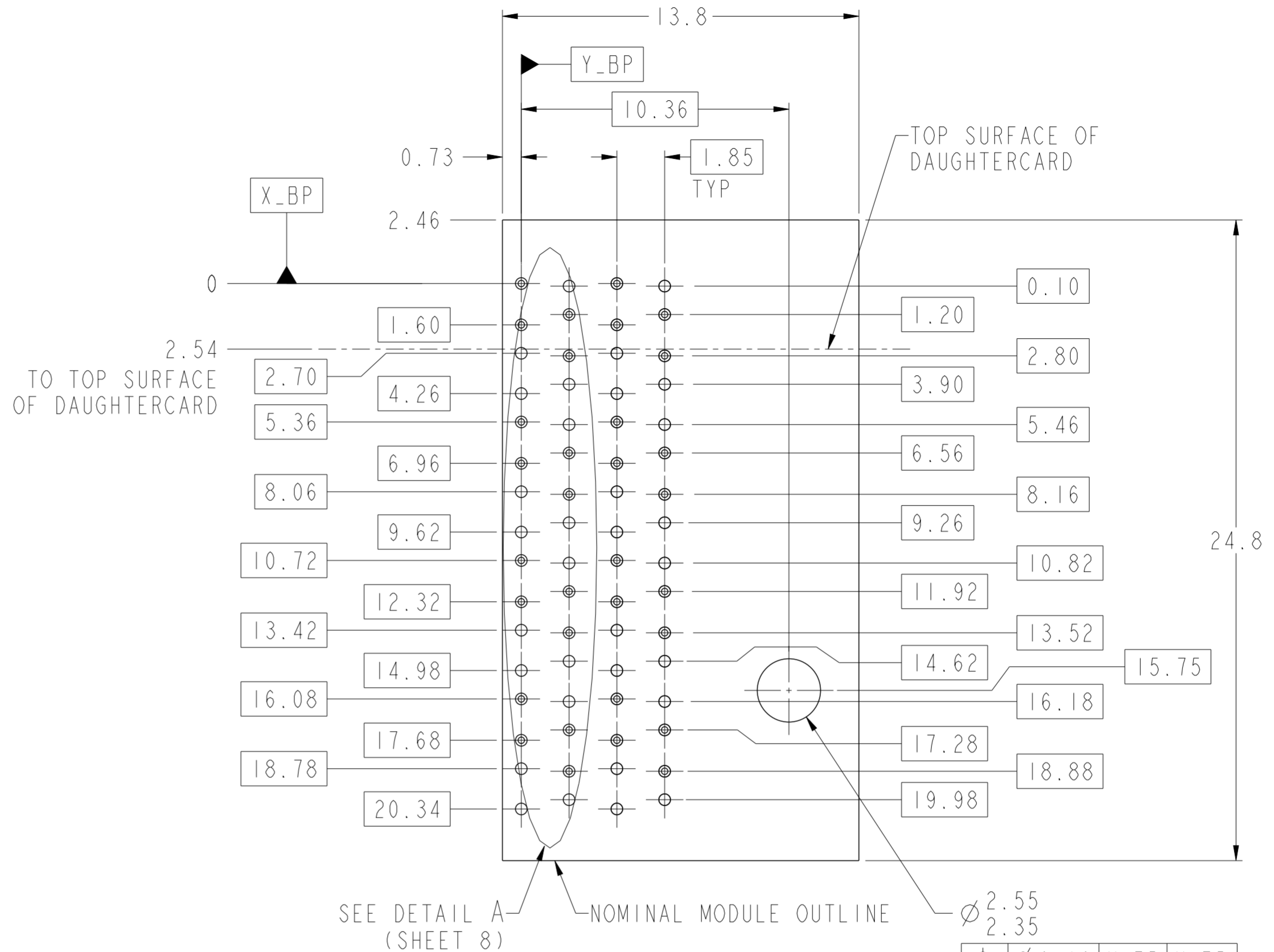
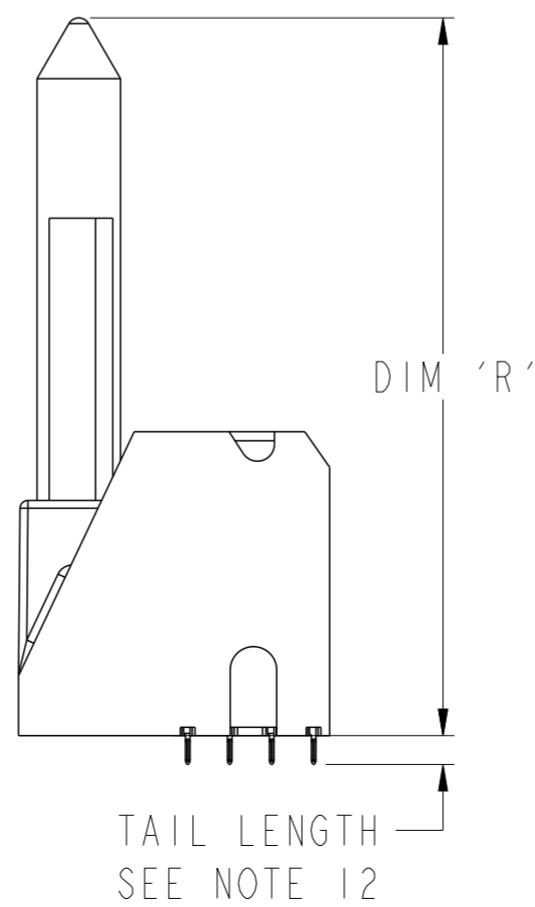
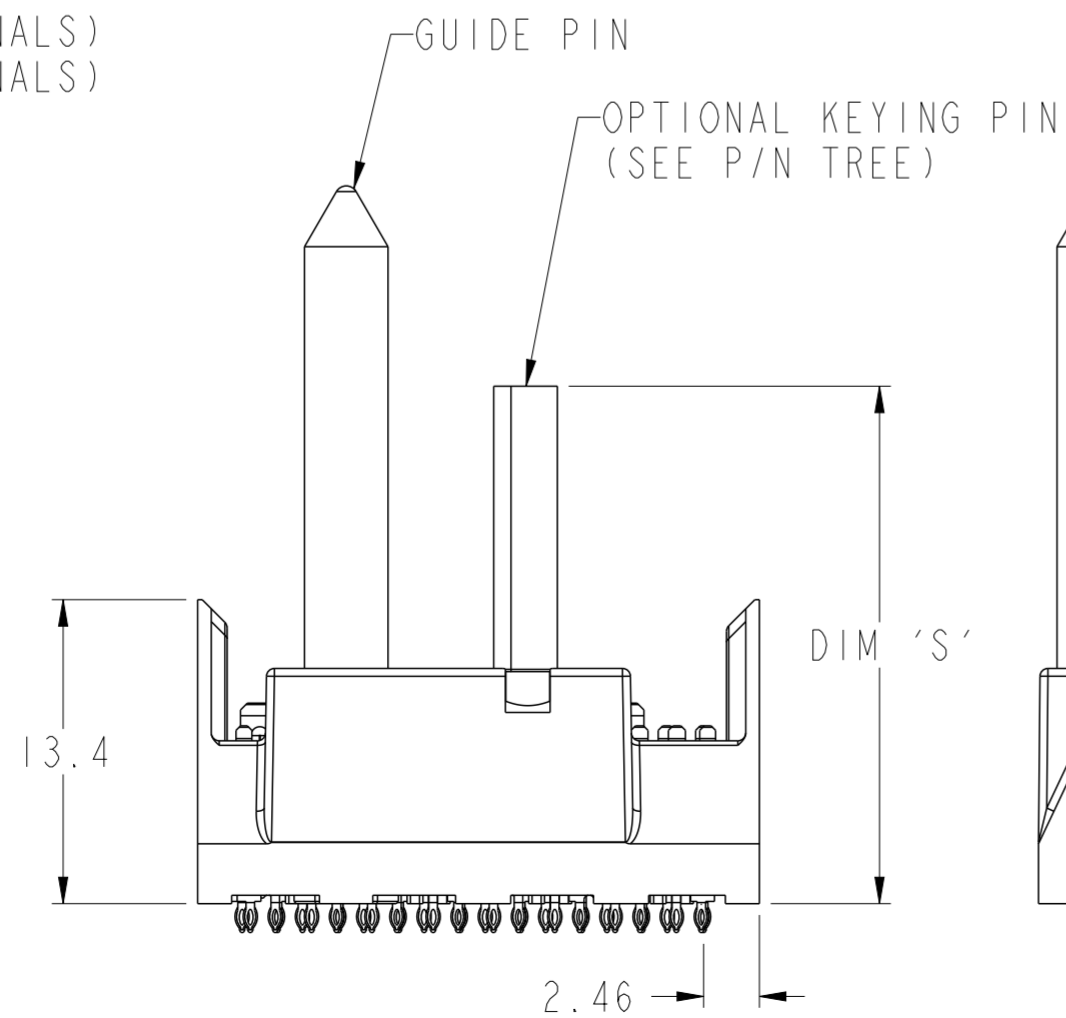
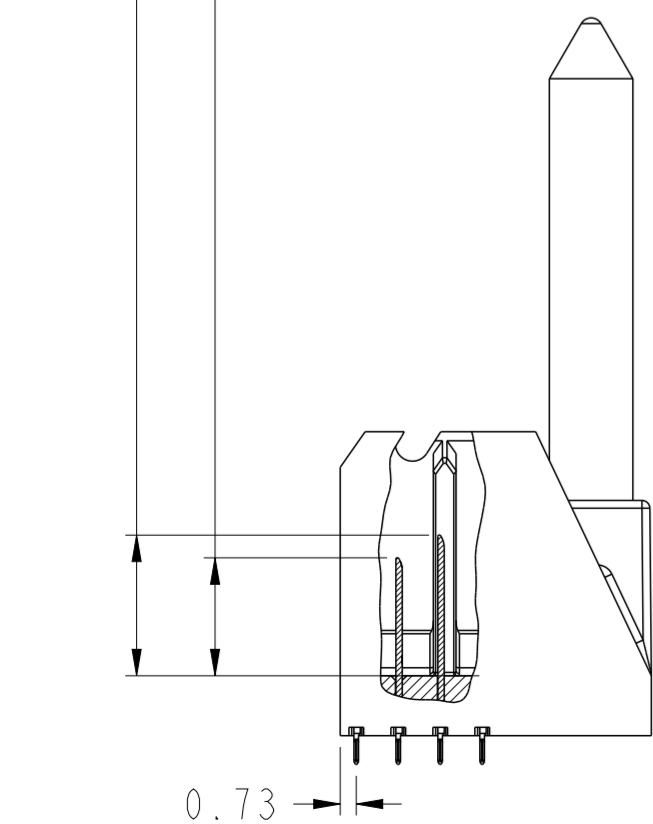
| ASSEMBLY<br>BASE CONFIGURATION<br>END DASH NO. | GUIDE PIN | POLARIZING KEY |
|--|-----------|----------------|
|  | DIM 'R'   | DIM 'S'        |
| -X0X   | 31.6mm    | 22.8mm         |
| -X4X   | 25.7mm    | 20.0mm         |

|               |                                       |       |              |                     |                                   |                |          |           |          |        |                |
|---------------|---------------------------------------|-------|--------------|---------------------|-----------------------------------|----------------|----------|-----------|----------|--------|----------------|
| spec ref      | SEE NOTES                             | dr    | Jim Swain    | 2010/04/13          | projection                        | MM             | size     | A2        | scale    | 3:1    |                |
| tolerance std | TOLERANCES UNLESS OTHERWISE SPECIFIED | eng   | Michael Song | 2016/06/06          |                                   | Product family | XCede    | rel level | Released | ecn no | ELX-DG-24191-1 |
| ASME Y14.5    |                                       | chr   | Heaven Cen   | 2016/06/08          |                                   |                |          |           |          |        | cat. no.       |
| surface       | linear                                | 0.X   | ±0.2         | <b>Amphenol FCI</b> | MODULE ASSEMBLY                   |                | 10091836 | G         | rev      |        |                |
|               |                                       | 0.XX  | ±0.10        |                     | VERTICAL HEADER, 4-COLUMN, 4-PAIR |                |          |           |          |        |                |
| ASME Y14.5    | angular                               | 0.XXX | ±0.050       |                     |                                   |                |          |           |          |        |                |
|               |                                       | 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



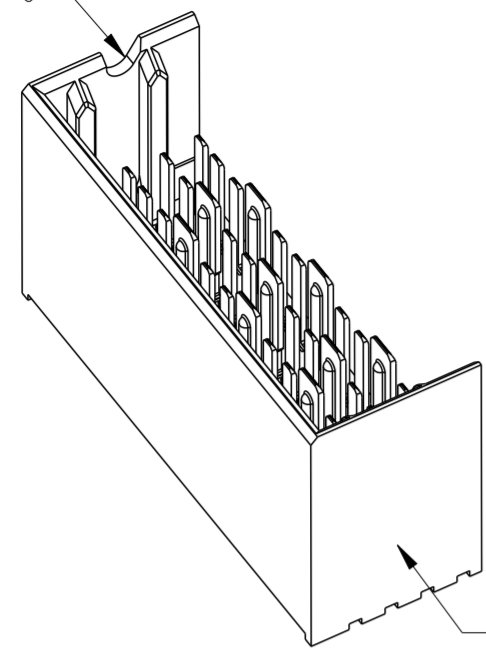
|                    |      |      |
|--------------------|------|------|
| $\varnothing$ 0.10 | X_BP | Y_BP |
|--------------------|------|------|

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

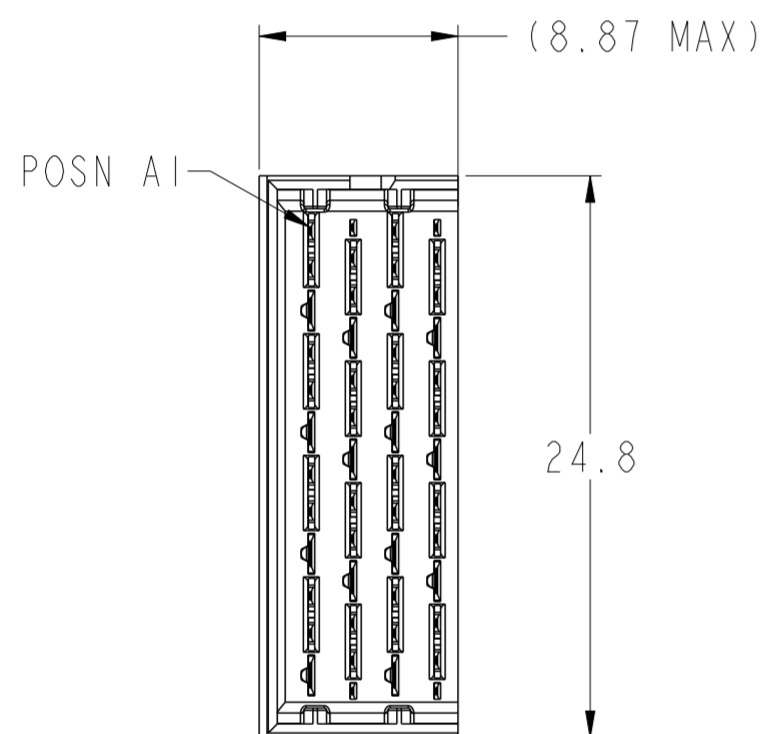
|               |                                       |      |              |                     |                                   |                |          |              |                        |              |                |
|---------------|---------------------------------------|------|--------------|---------------------|-----------------------------------|----------------|----------|--------------|------------------------|--------------|----------------|
| spec ref      | SEE NOTES                             | dr   | Jim Swain    | 2010/04/13          | projection                        | MM             | size     | A2           | scale                  | 3:1          |                |
| tolerance std | TOLERANCES UNLESS OTHERWISE SPECIFIED | eng  | Michael Song | 2016/06/06          |                                   | Product family | XCede    | rel level    | Released               | ecn no       | ELX-DG-24191-1 |
| ASME Y14.5    |                                       | chr  | Heaven Cen   | 2016/06/08          |                                   |                |          |              |                        |              | rel level      |
| surface       | linear                                | 0.X  | ±0.2         | <b>Amphenol FCI</b> | MODULE ASSEMBLY                   |                | cat. no. | SEE P/N TREE | Product - Customer Drw | sheet 4 of 8 | 10091836       |
|               |                                       | 0.XX | ±0.10        |                     | VERTICAL HEADER, 4-COLUMN, 4-PAIR | rev            |          |              |                        |              | G              |
| ASME Y14.5    | angular                               | 0°   | ±°           |                     |                                   |                |          |              |                        |              |                |

# LEFT WALL MODULE

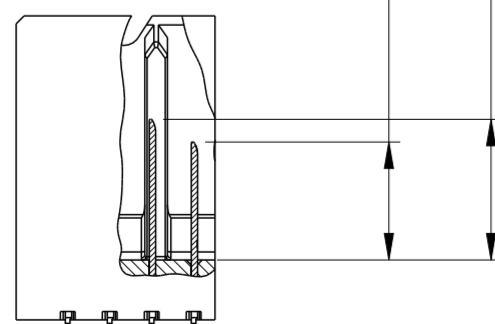
SEE NOTE 8



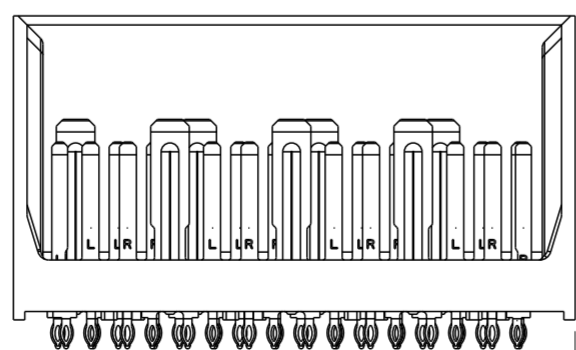
SEE NOTE 5



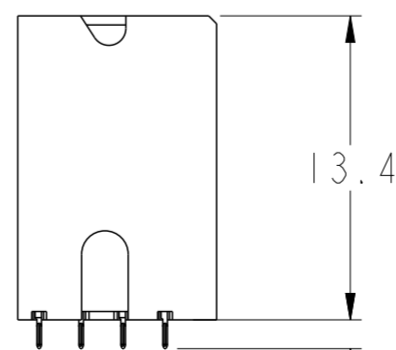
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE



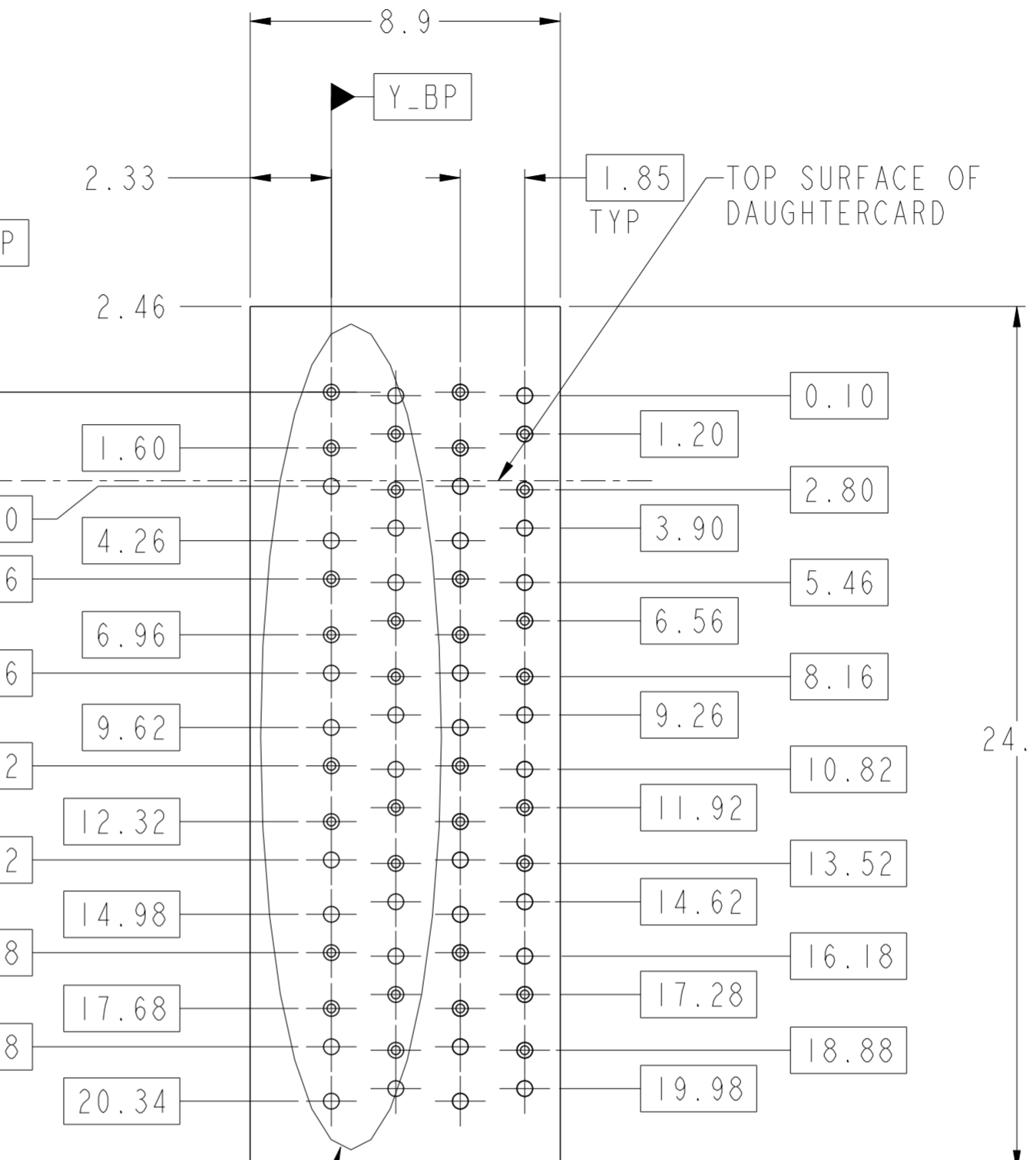
2.33



2.46



TAIL LENGTH  
SEE NOTE 12



2.54  
TO TOP SURFACE  
OF DAUGHTERCARD

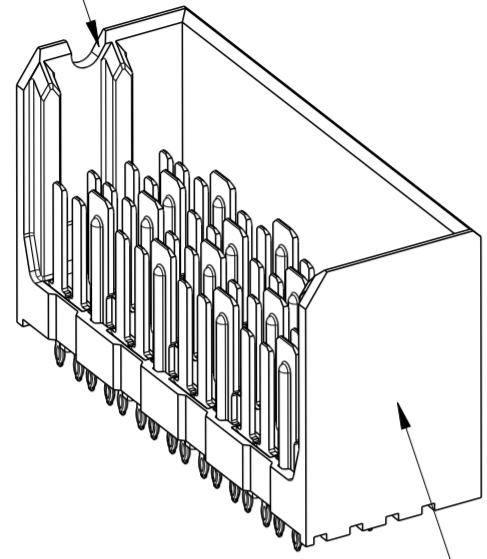
SEE DETAIL A  
(SHEET 8)

PCB HOLE PATTERN  
COMPONENT SIDE  
SCALE 6:1

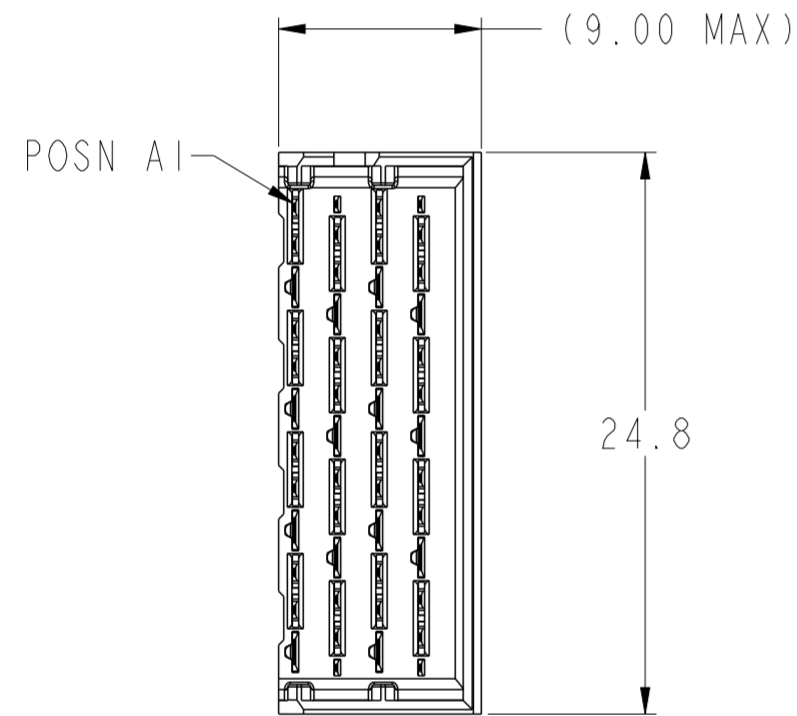
|               |  |      |                |            |            |   |                    |                |           |           |              |
|---------------|--|------|----------------|------------|------------|---|--------------------|----------------|-----------|-----------|--------------|
| spec ref      | SEE NOTES  | dr   | Jim Swain      | 2010/04/13 | projection | MM  | size               | A2             | scale     | 3:1       |              |
| tolerance std | ASME Y14.5                                       | eng  | Michael Song   | 2016/06/06 |            |   | ecn no             | ELX-DG-24191-1 | rel level | Released  |              |
| surface       | linear<br>0.X ±0.2<br>0.XX ±0.10<br>0.XXX ±0.050 | chr  | Heaven Cen     | 2016/06/08 |            |   | product family     | XCede          |           | rel level | Released     |
|               |  | appr | Pai-Ming Zheng | 2016/06/15 |            |   | MODULE ASSEMBLY    |                |           | cat. no.  | SEE P/N TREE |
| ASME Y14.5    | angular  | 0°   | ±°             |            |            | TITLE<br>MODULE ASSEMBLY<br>VERTICAL HEADER, 4-COLUMN, 4-PAIR | dwg no<br>10091836 | rev<br>G       |           |           |              |

# RIGHT WALL MODULE

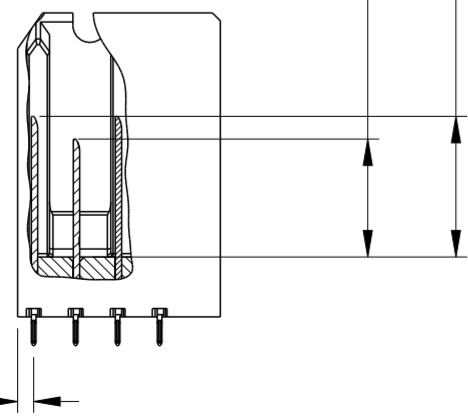
SEE NOTE 8



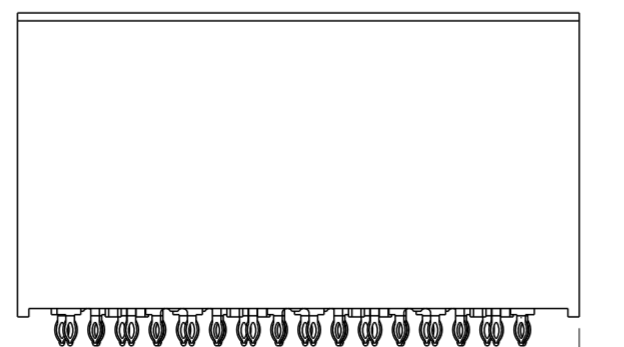
SEE NOTE 5



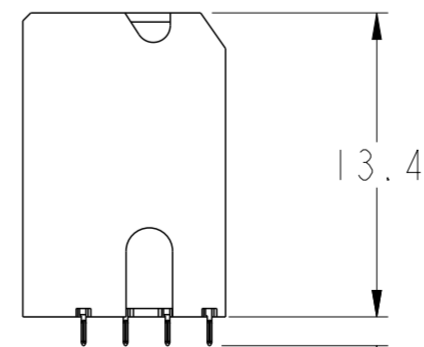
- 6.2 (4MM WIPE WIDE GROUNDS)
- 5.2 (3MM WIPE WIDE GROUNDS)
- 5.2 (3MM SMALL END GROUNDS)
- 5.2 (3MM WIPE SIGNALS)
- 4.2 (2MM WIPE SIGNALS)
- SEE P/N TREE



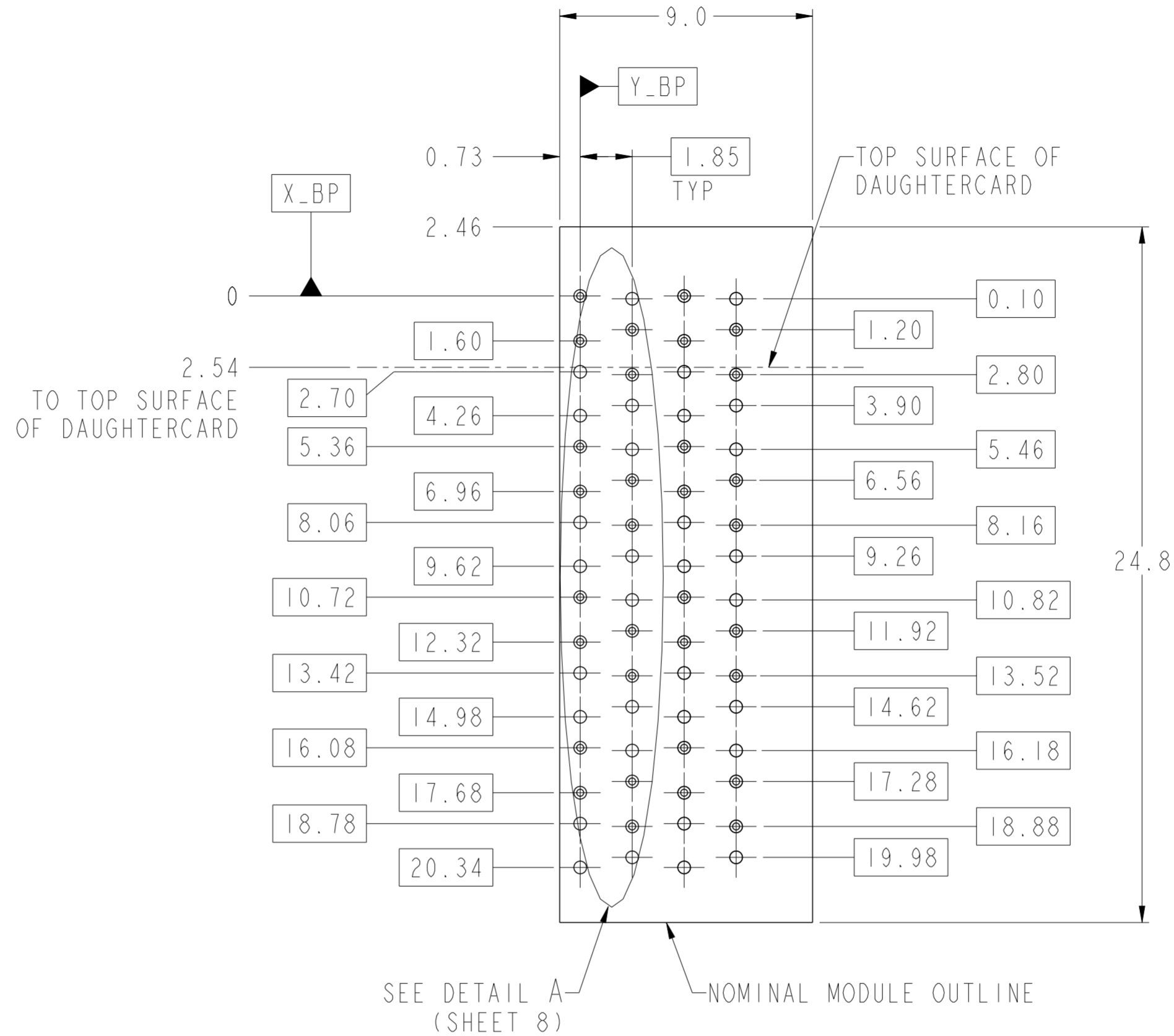
0.73



2.46



TAIL LENGTH  
SEE NOTE 12



|                                       |            |       |              |                        |                                   |              |                    |                |           |          |
|---------------------------------------|------------|-------|--------------|------------------------|-----------------------------------|--------------|--------------------|----------------|-----------|----------|
| spec ref                              | SEE NOTES  | dr    | Jim Swain    | 2010/04/13             | projection                        | MM           | size               | A2             | scale     | 3:1      |
| tolerance std                         | ASME Y14.5 | eng   | Michael Song | 2016/06/06             |                                   |              | ecn no             | ELX-DG-24191-1 | rel level | Released |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |            | chr   | Heaven Cen   | 2016/06/08             |                                   |              |                    |                |           |          |
| surface                               | linear     | 0.X   | ±0.2         |                        | <b>MODULE ASSEMBLY</b>            |              | dwg no<br>10091836 | rev<br>G       |           |          |
|                                       |            | 0.XX  | ±0.10        |                        | VERTICAL HEADER, 4-COLUMN, 4-PAIR |              |                    |                |           |          |
|                                       |            | 0.XXX | ±0.050       |                        | cat. no. SEE P/N TREE             |              |                    |                |           |          |
| ASME Y14.5                            | angular    | 0°    | ±°           | Product - Customer Drw |                                   | sheet 6 of 8 |                    |                |           |          |

PDS: Rev :G

STATUS:Released

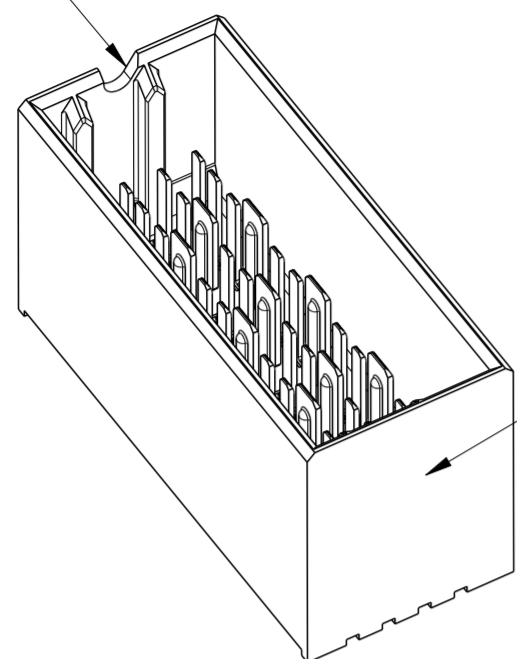
Printed: Jun 15, 2016

Amphenol FCI

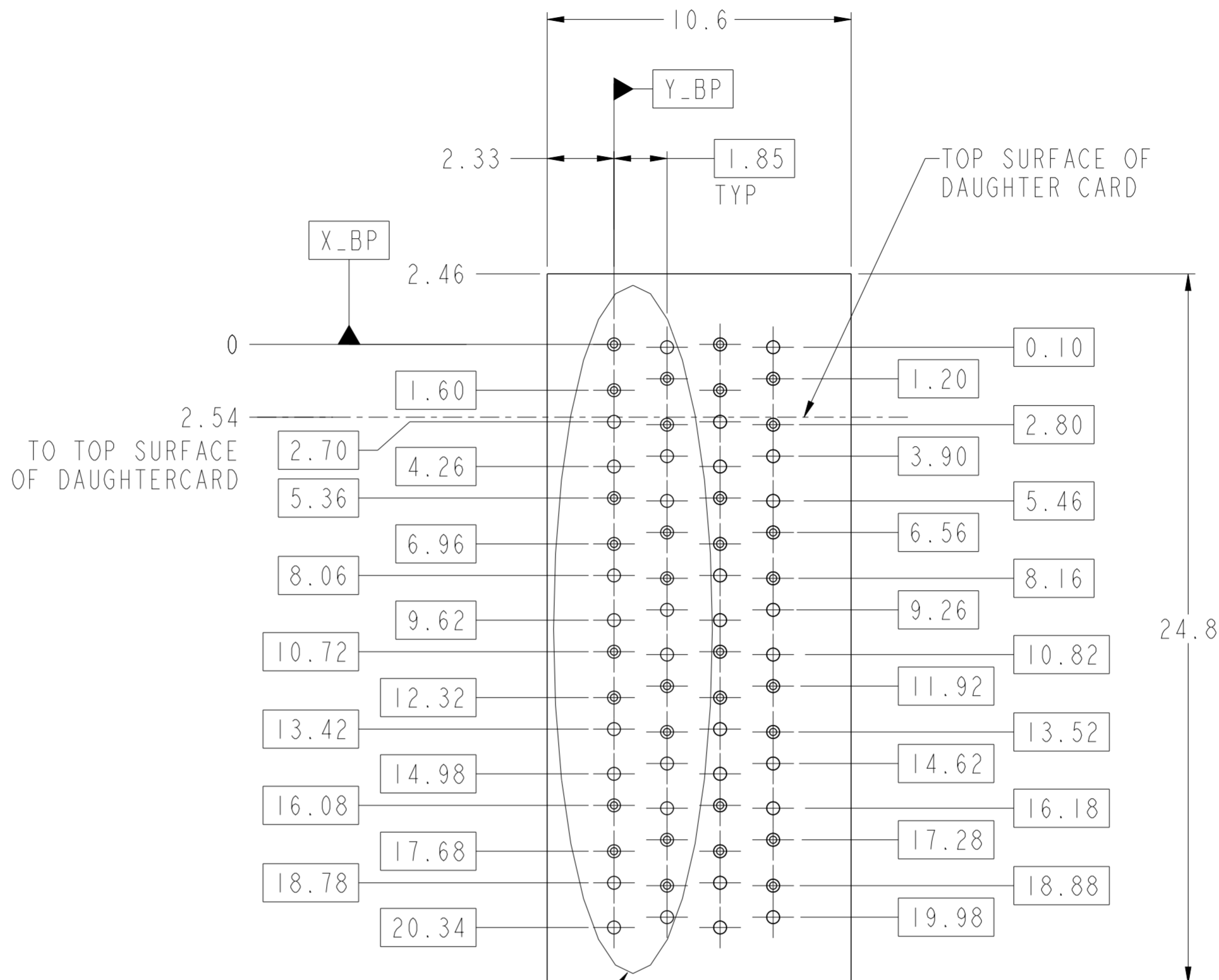
© 2016 AFCI

# 4-WALL MODULE

SEE NOTE 8

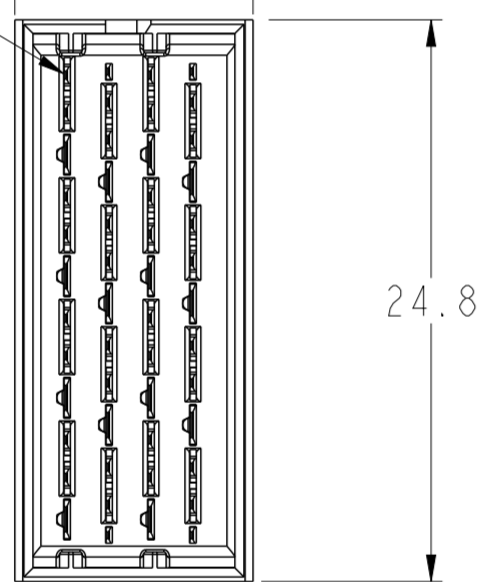


SEE NOTE 5



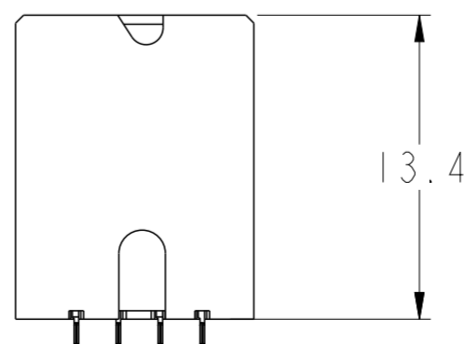
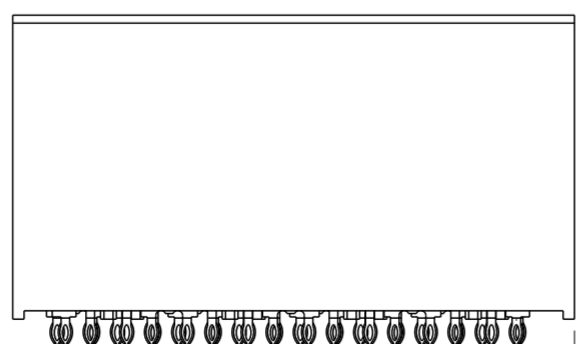
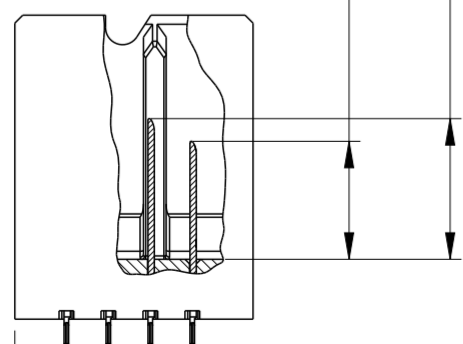
(10.50 MAX)

POSN A1



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



|                                       |            |      |              |            |  |                        |              |                |       |     |
|---------------------------------------|------------|------|--------------|------------|--|------------------------|--------------|----------------|-------|-----|
| spec ref                              | SEE NOTES  | dr   | Jim Swain    | 2010/04/13 | projection   | MM                     | size         | A2             | scale | 4:1 |
| tolerance std                         | ASME Y14.5 | eng  | Michael Song | 2016/06/06 |  |                        | ecn no       | ELX-DG-24191-1 |       |     |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |            | chr  | Heaven Cen   | 2016/06/08 |  |                        | rel level    | Released       |       |     |
| surface                               | linear     | 0.X  | ±0.2         |            | product family                                       | -                      |              |                |       |     |
|                                       |            | 0.XX | ±0.10        |            | MODULE ASSEMBLY<br>VERTICAL HEADER, 4-COLUMN, 4-PAIR | cat. no.               | -            |                |       |     |
|                                       | angular    | 0°   | ±°           |            |  | Product - Customer Drw | sheet 7 of 8 |                |       |     |
| ASME Y14.5                            |            |      |              |            |  |                        | 10091836     | rev            | G     |     |

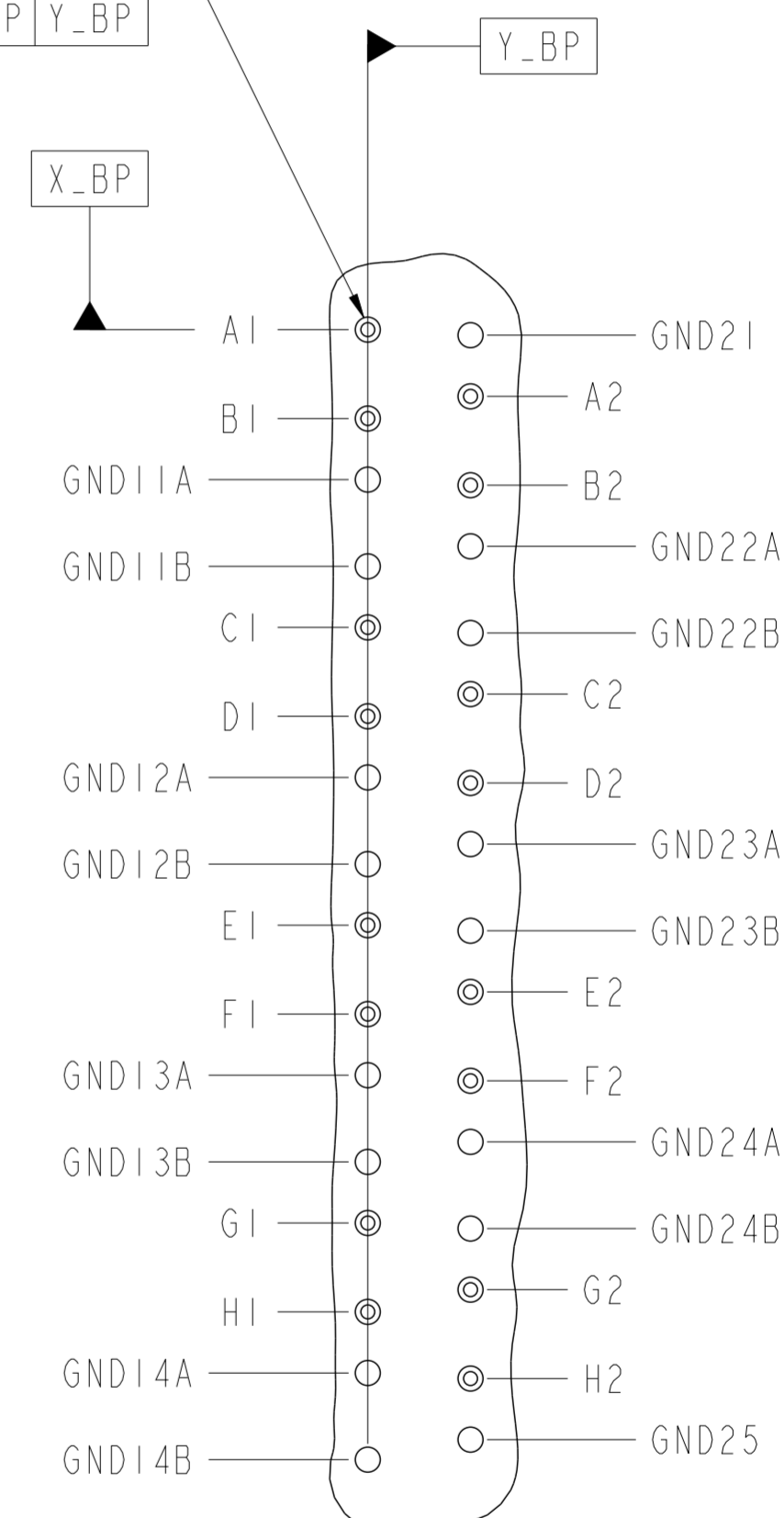
NOTES:

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.
12. 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

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"] | $\varnothing 0.36 \pm 0.05$ | $\varnothing 0.75$ |

SEE TABLE 3 FOR PTH, DRILL & PAD SIZES



DETAIL A  
SCALE 8:1

Amphenol FCI

© 2016 AFCI

|               |                                       |       |                |                     |            |  |          |                |                        |              |
|---------------|---------------------------------------|-------|----------------|---------------------|------------|--|----------|----------------|------------------------|--------------|
| spec ref      | SEE NOTES                             | dr    | Jim Swain      | 2010/04/13          | 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 | rel level              | Released     |
| ASME Y14.5    |                                       | chr   | Heaven Cen     | 2016/06/08          |            |  |          |                |                        |              |
|               |                                       | appr  | Pai-Ming Zheng | 2016/06/15          |            |  |          |                |                        |              |
| surface       | linear                                | 0.X   | ±0.2           | <b>Amphenol FCI</b> |            | MODULE ASSEMBLY<br>VERTICAL HEADER, 4-COLUMN, 4-PAIR |          | cat. no.       | Product - Customer Drw | sheet 8 of 8 |
|               |                                       | 0.XX  | ±0.10          |                     |            |  |          |                |                        |              |
| ASME Y14.5    | angular                               | 0.XXX | ±0.050         |                     |            |  |          |                |                        |              |
|               |                                       | 0°    | ±°             |                     |            | title<br>10091836                                    | rev<br>G |                |                        |              |



Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)