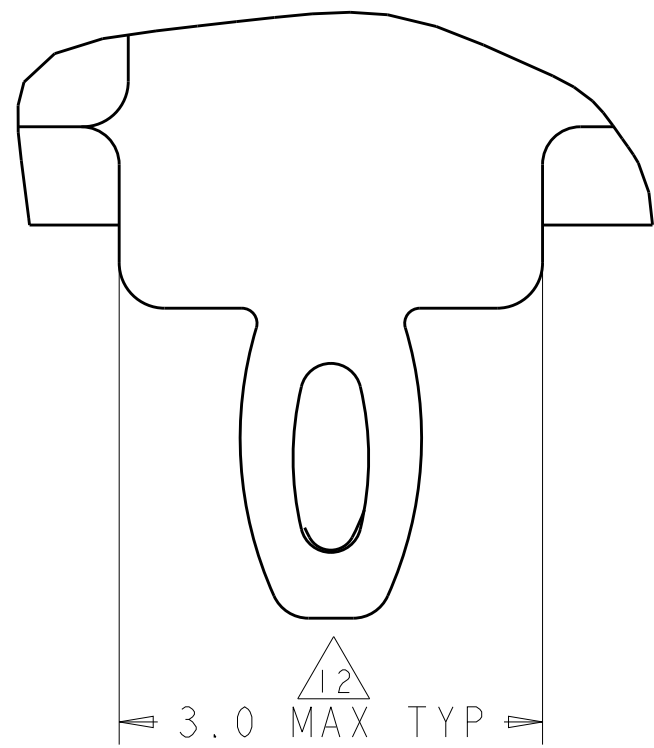


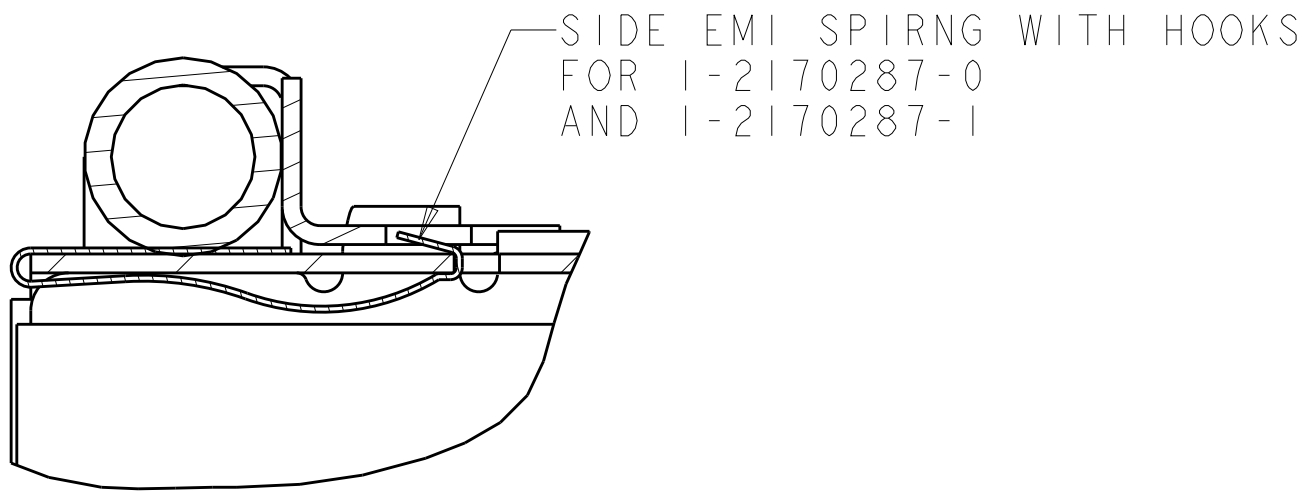
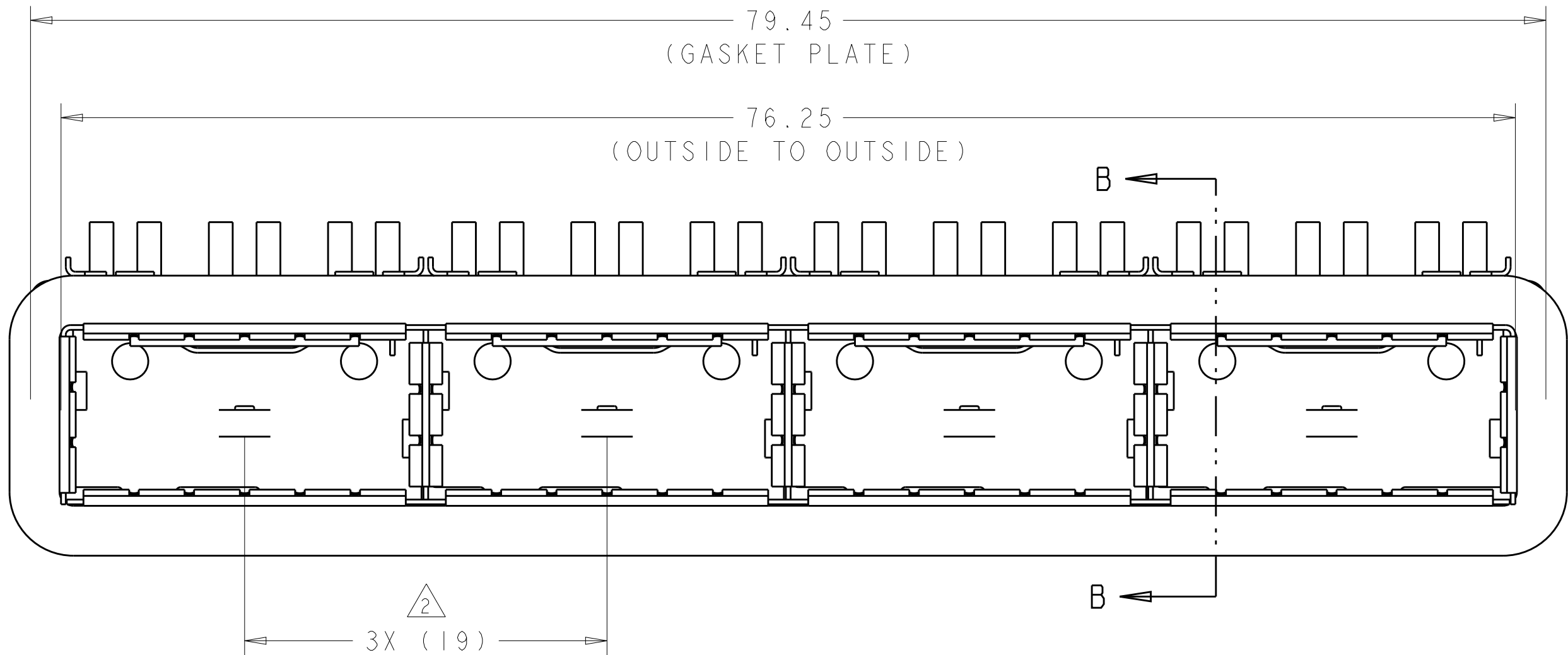
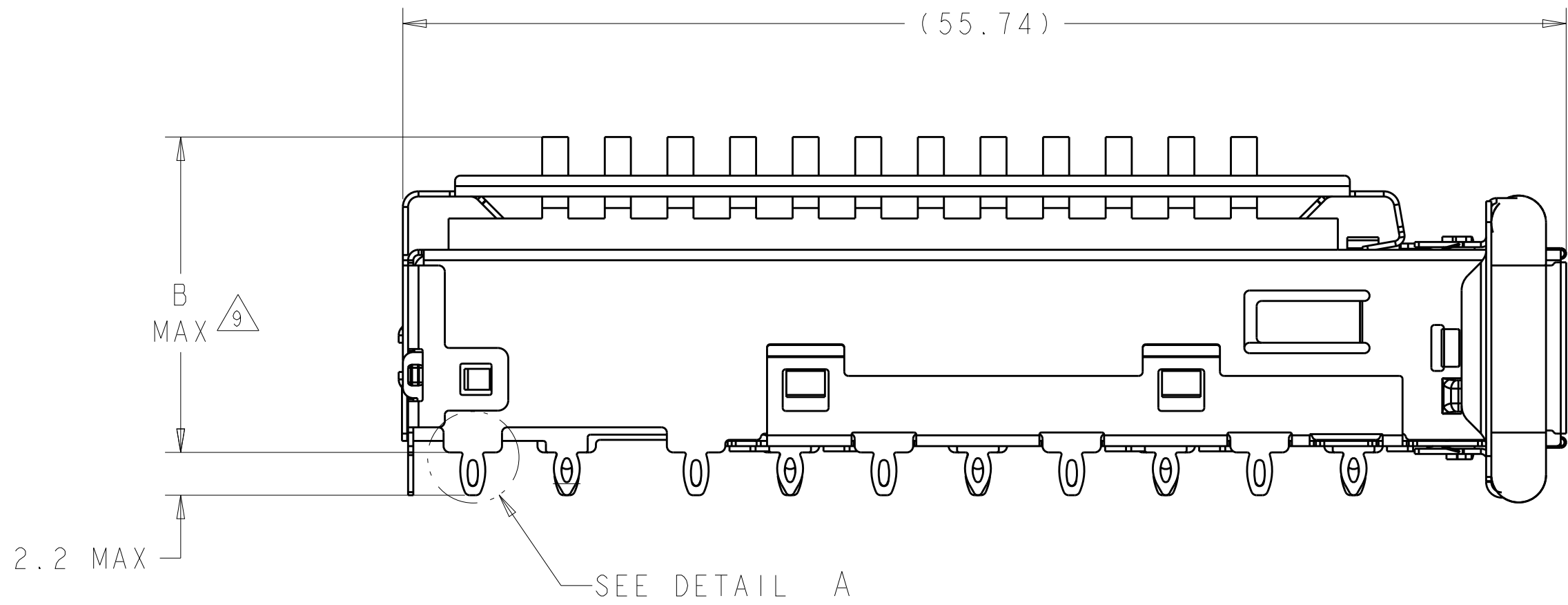
| LOC | DIST | REVISIONS |     |                           |          |     |      |
|-----|------|-----------|-----|---------------------------|----------|-----|------|
| GP  | 00   | P         | LTR | DESCRIPTION               | DATE     | DWN | APVD |
|     |      |           | A   | RELEASE PER ECO-16-002978 | 3MAR2016 | RG  | SH   |
|     |      |           |     |                           |          |     |      |
|     |      |           |     |                           |          |     |      |
|     |      |           |     |                           |          |     |      |
|     |      |           |     |                           |          |     |      |



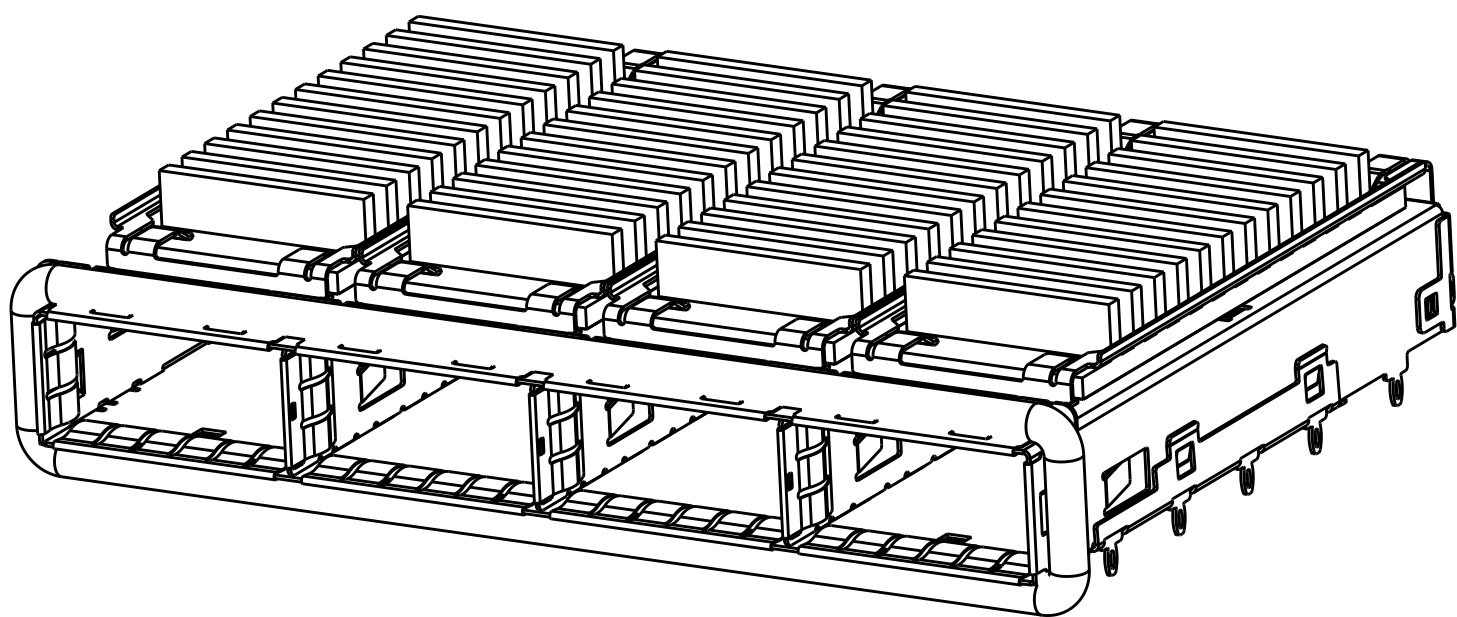
DETAIL A  
SCALE 20:1

- ⚠ CAGE ASSEMBLY MATERIAL: NICKEL SILVER, 0.25 THICK  
HEAT SINK MATERIAL: ALUMINUM  
HEAT SINK CLIP MATERIAL: STAINLESS STEEL  
EMI SPRING MATERIAL: COPPER ALLOY  
EMI GASKET MATERIAL: CONDUCTIVE RUBBER,UL 94V-0 RATED  
EMI GASKET PLATE MATERIAL: STAINLESS STEEL
- ⚠ PITCH BETWEEN PORTS OF ONE 1X4 CAGE ASSEMBLY.
- ⚠ SPACING BETWEEN CAGES ON THE SAME PC BOARD, TO BE SPECIFIED BY CUSTOMER, MUST COMPLY WITH MINIMUM DIMENSIONS SHOWN.
- ⚠ REFERENCE APPLICATION SPEC 114-13217 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- ⚠ DATUMS AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.
- ⚠ DIMENSION F IS THE NOMINAL THICKNESS OF CUSTOMER SUPPLIED PC BOARD,  
SINGLE SIDED PC BOARD MINIMUM THICKNESS = 1.45mm  
DOUBLE SIDED PC BOARD MINIMUM THICKNESS = 5.0mm PER CUSTOM.
- ⚠ HEAT SINKS, LIGHT PIPES, AND HEAT SINK CLIPS SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED.
- ⚠ DATUM **-A-** IS TOP SURFACE OF PC BOARD.
- ⚠ DIMENSION APPLIES WITH MODULE INSERTED IN CAGE.
- ⚠ UNPLATED THRU HOLE.

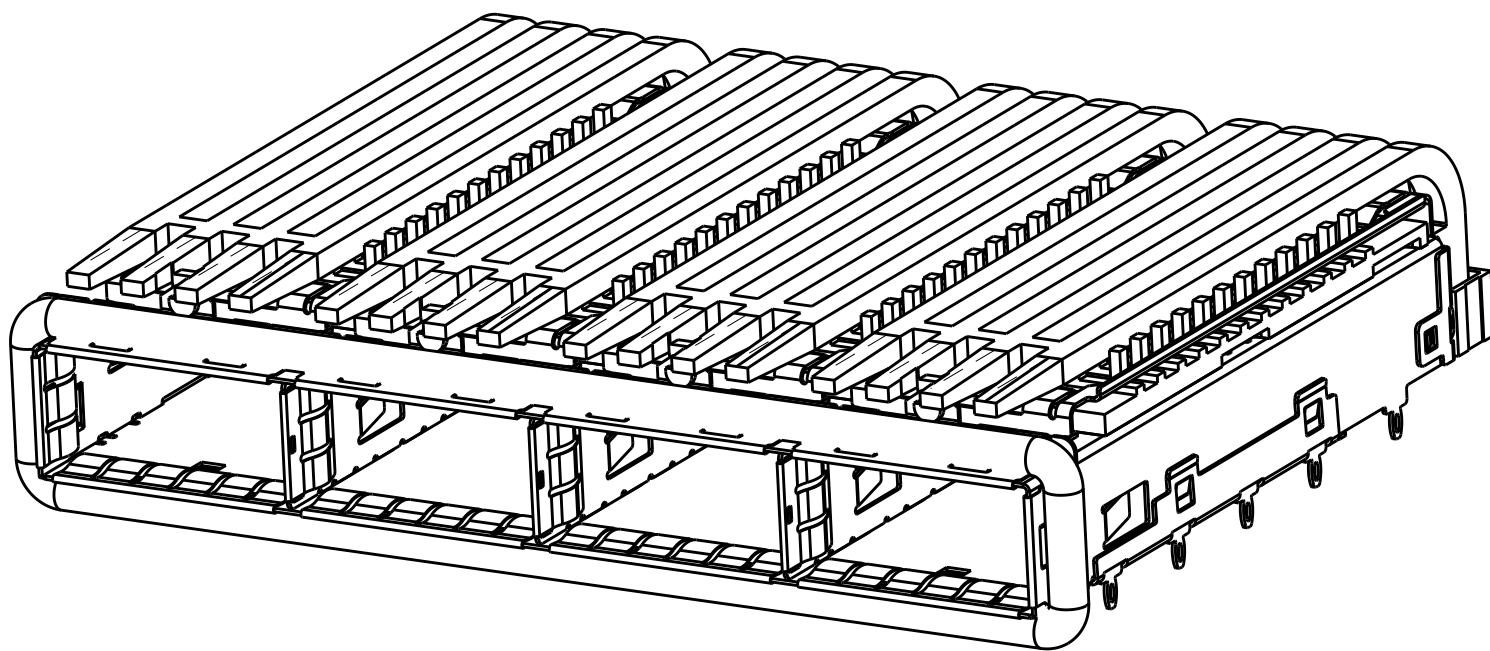
11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.
- ⚠ SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL A, CONTACT PC BOARD.
- ⚠ BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.
- ⚠ DATE CODE (YYWWD) MARKED ON TOP OF CAGE AND CONCEALED BY HEAT SINKS APPLIES TO CAGE ASSEMBLY ONLY.
- ⚠ REFERENCE APP SPEC 114-13217 FOR GASKET THICKNESS CALCULATION.
- ⚠ EMI SPRING FINISH: TIN PLATING OVER NICKEL  
HEAT SINK FINISH: ANODIZED OR NICKEL PLATING.



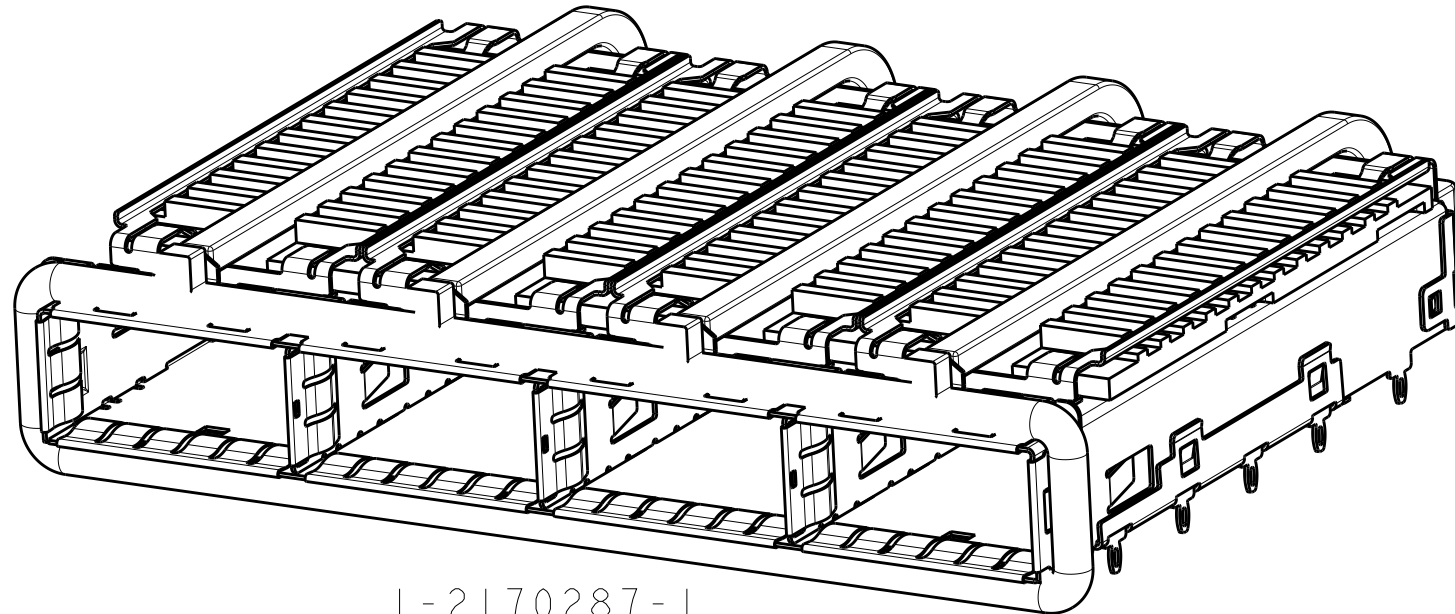
SECTION B-B  
SCALE 10:1



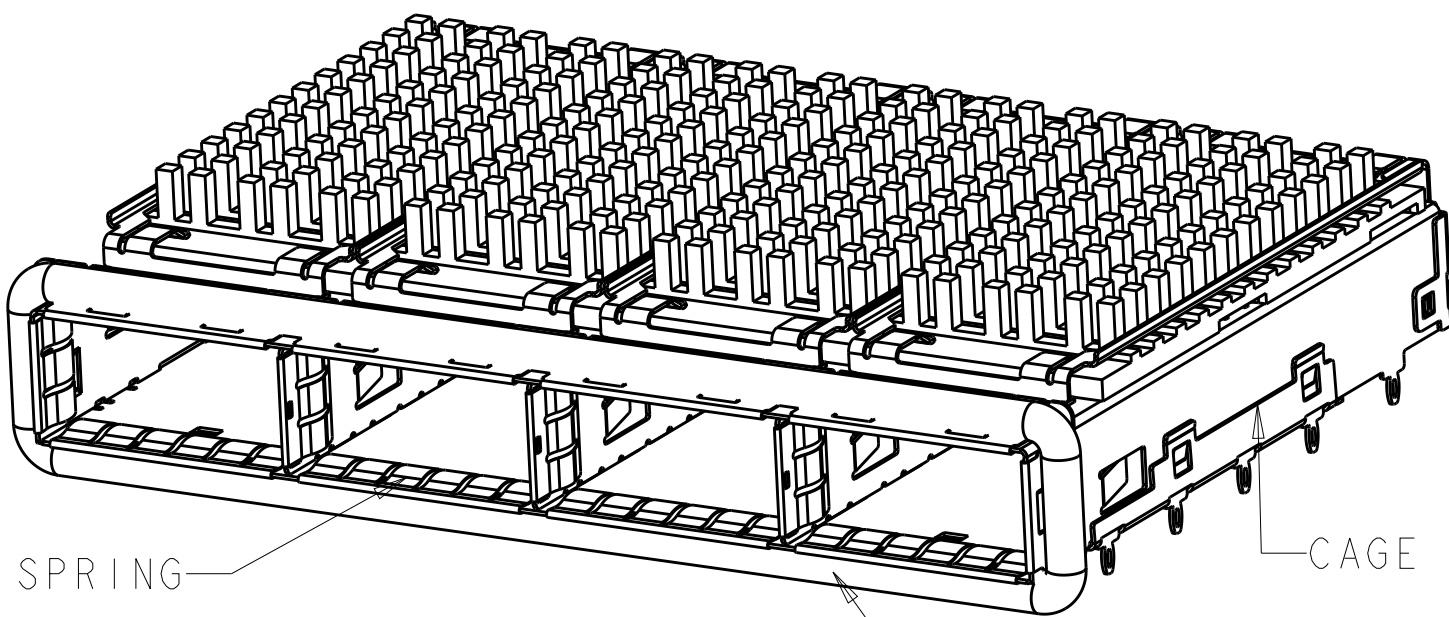
2170287-4, 2170287-5, 2170287-6  
SCALE 2:1



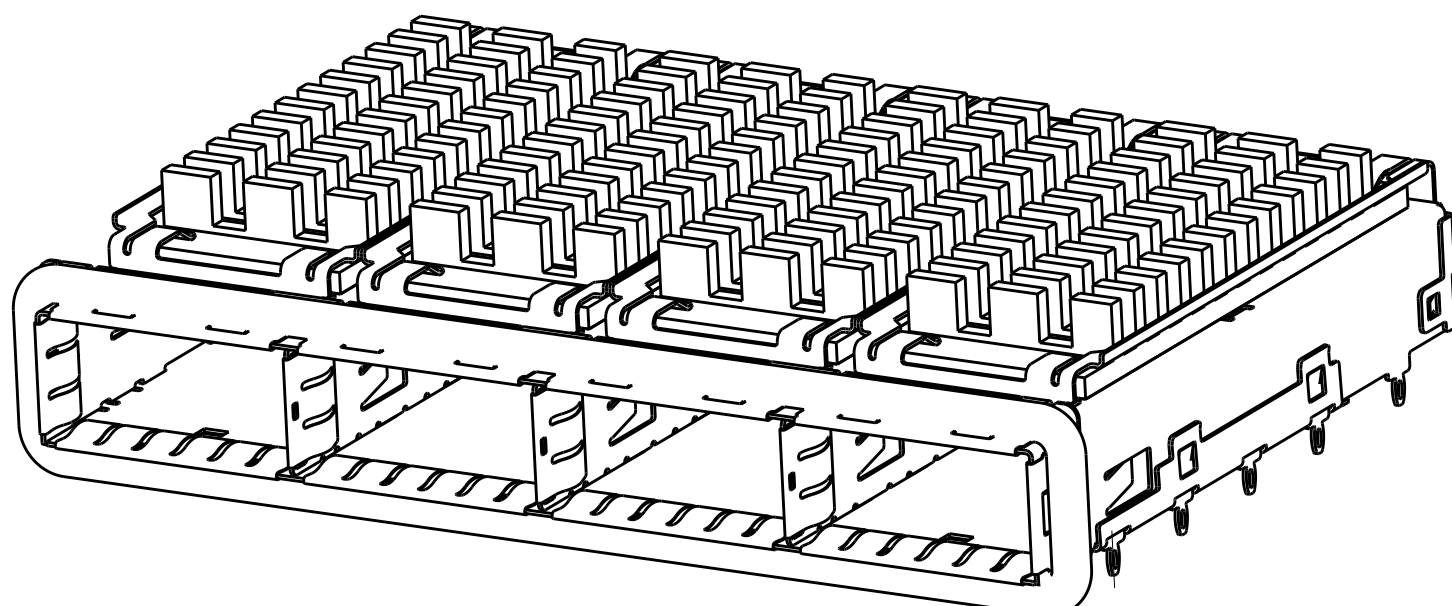
1-2170287-0  
SCALE 2:1



1-2170287-1  
SCALE 2:1



2170287-1, 2170287-2, 2170287-3  
SCALE 2:1

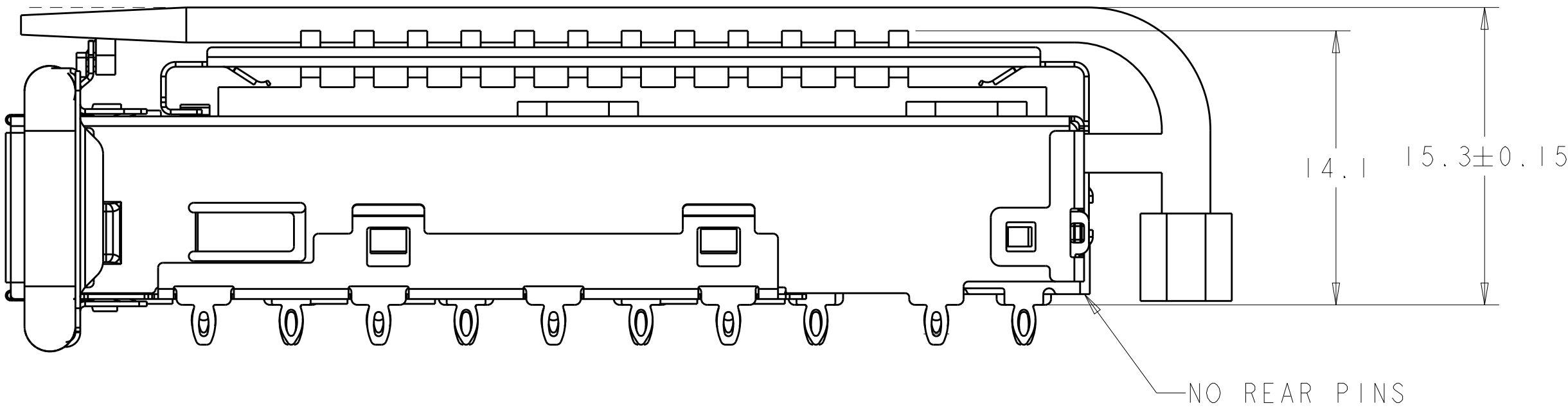
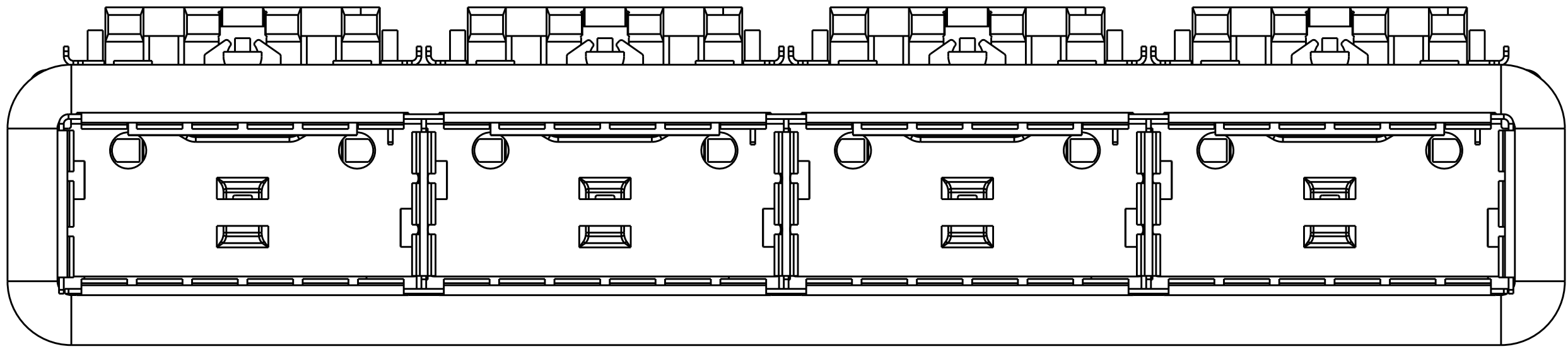


2170287-7, 2170287-8, 2170287-9  
SCALE 2:1

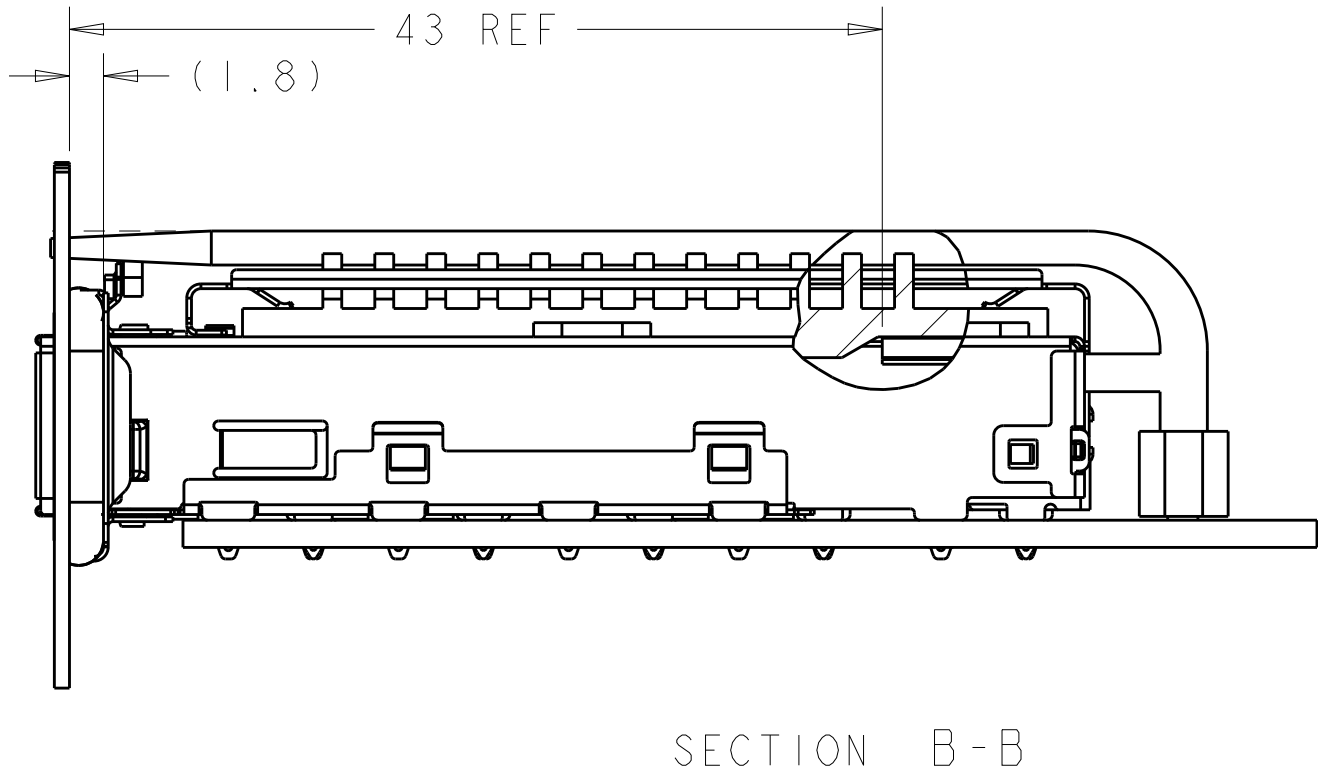
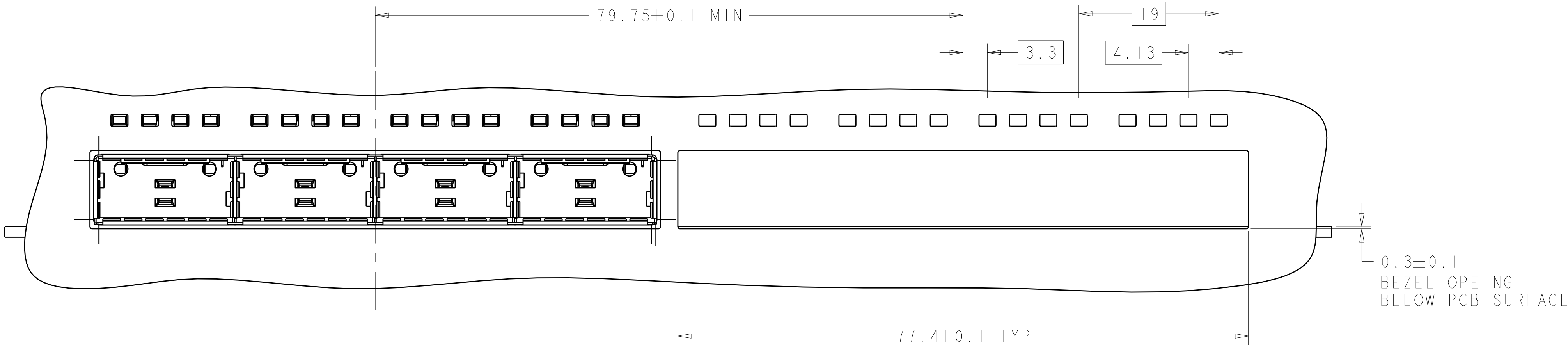
| ⚠    |                      |             |
|------|----------------------|-------------|
| 13.7 | PCI(FIN TYPE)        | 1-2170287-1 |
| 15.0 | CUSTOMIZED HEAT SINK | 1-2170287-0 |
| 23.0 | NETWORKING(FIN TYPE) | 2170287-9   |
| 16.0 | SAN(FIN TYPE)        | 2170287-8   |
| 13.7 | PCI(FIN TYPE)        | 2170287-7   |
| 23.0 | NETWORKING(FIN TYPE) | 2170287-6   |
| 16.0 | SAN(FIN TYPE)        | 2170287-5   |
| 13.7 | PCI(FIN TYPE)        | 2170287-4   |
| 23.0 | NETWORKING(PIN TYPE) | 2170287-3   |
| 16.0 | SAN(PIN TYPE)        | 2170287-2   |
| 13.7 | PCI(PIN TYPE)        | 2170287-1   |
| B    | HEAT SINK PROFILE    | PART NUMBER |

|                                                               |  |                                                           |                                     |                                                                                  |  |
|---------------------------------------------------------------|--|-----------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                        |  | DWN<br>KINSEN SUN<br>CHK<br>DENNY ZHU<br>APVD<br>ALEX CAI | 29FEB2012<br>29FEB2012<br>29FEB2012 | TE Connectivity                                                                  |  |
| DIMENSIONS:<br>mm                                             |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                    |                                     | NAME<br>1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP |  |
| 0 PLC<br>1 PLC<br>2 PLC<br>3 PLC<br>4 PLC<br>ANGLES<br>FINISH |  | ±<br>±0.35<br>±0.25<br>±<br>±<br>±                        |                                     | SIZE<br>A1                                                                       |  |
| MATERIAL                                                      |  | 114-13217                                                 |                                     | SHEET 1 OF 8                                                                     |  |
| CUSTOMER DRAWING                                              |  | SCALE 4:1                                                 |                                     | REV A                                                                            |  |

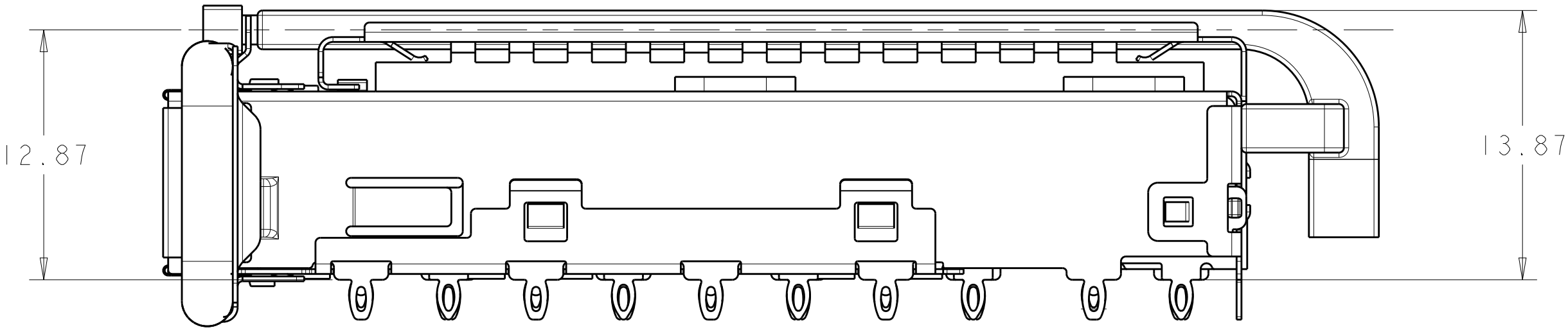
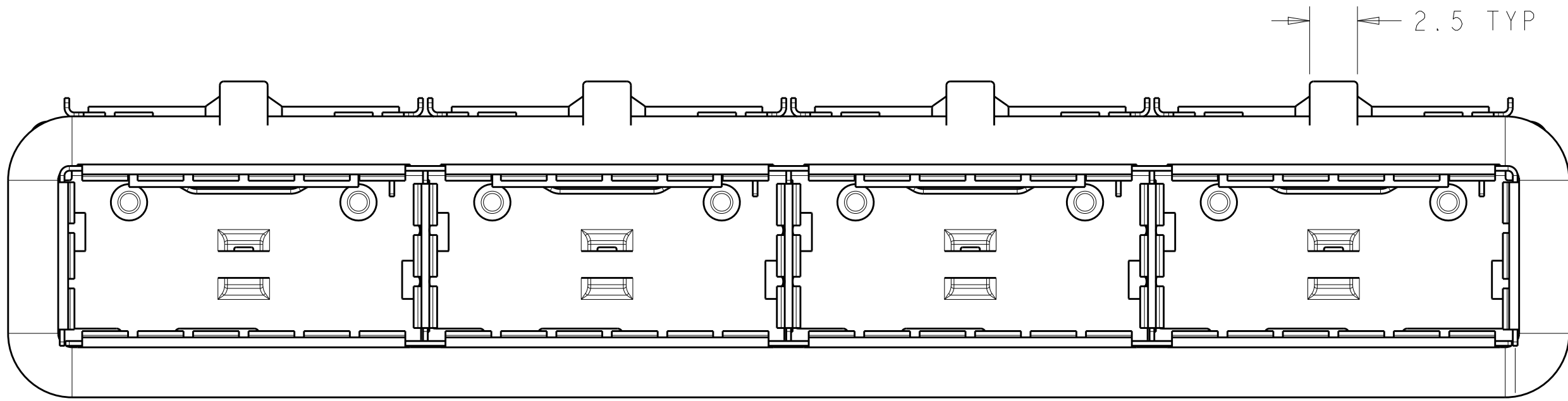
| LOC | DIST | REVISIONS |     |             |      |     |      |
|-----|------|-----------|-----|-------------|------|-----|------|
|     |      | P         | LTR | DESCRIPTION | DATE | DWN | APVD |
| GP  | 00   | -         | -   | SEE SHEET 1 | -    | -   | -    |
|     |      |           |     |             |      |     |      |
|     |      |           |     |             |      |     |      |
|     |      |           |     |             |      |     |      |



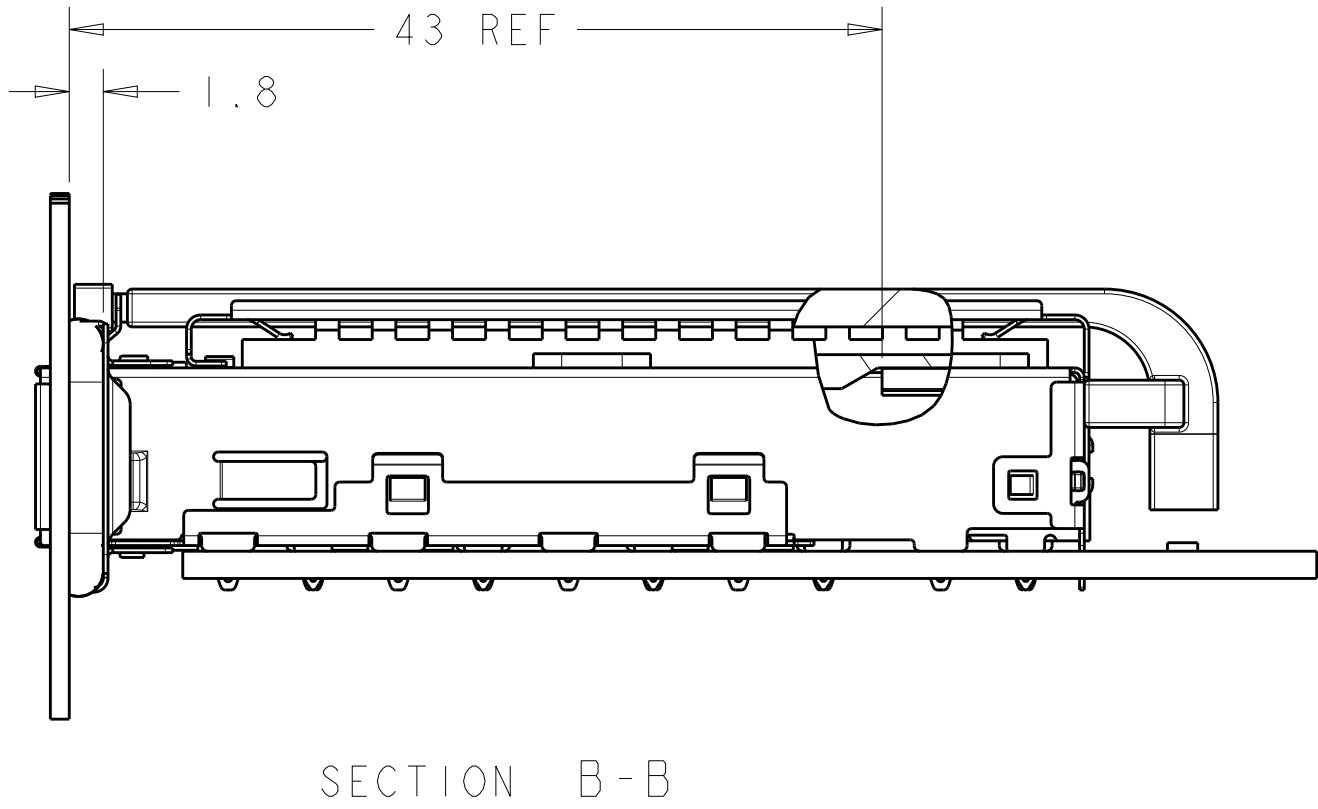
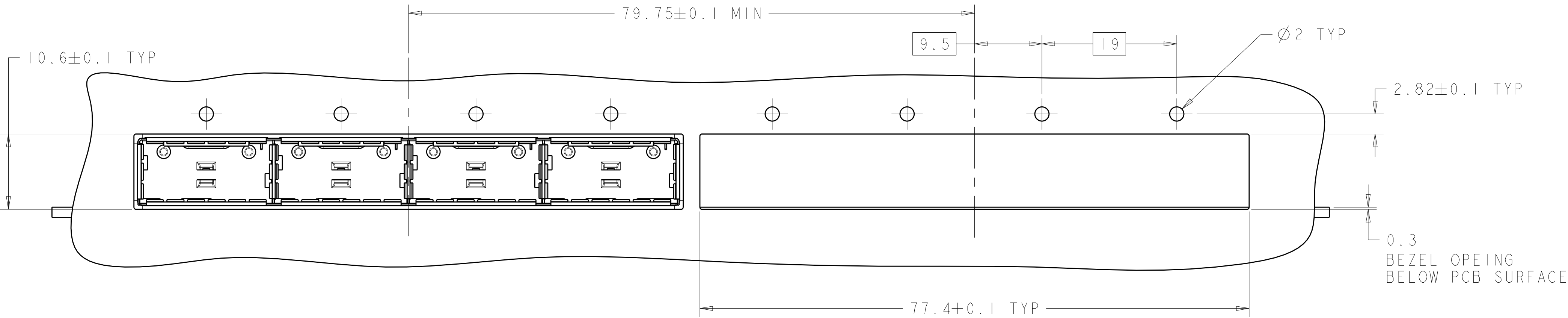
1-2170287-0 shown  
SCALE 4:1



1-2170287-0  
ONE SIDED CONFIGURATION  
SCALE 5:2



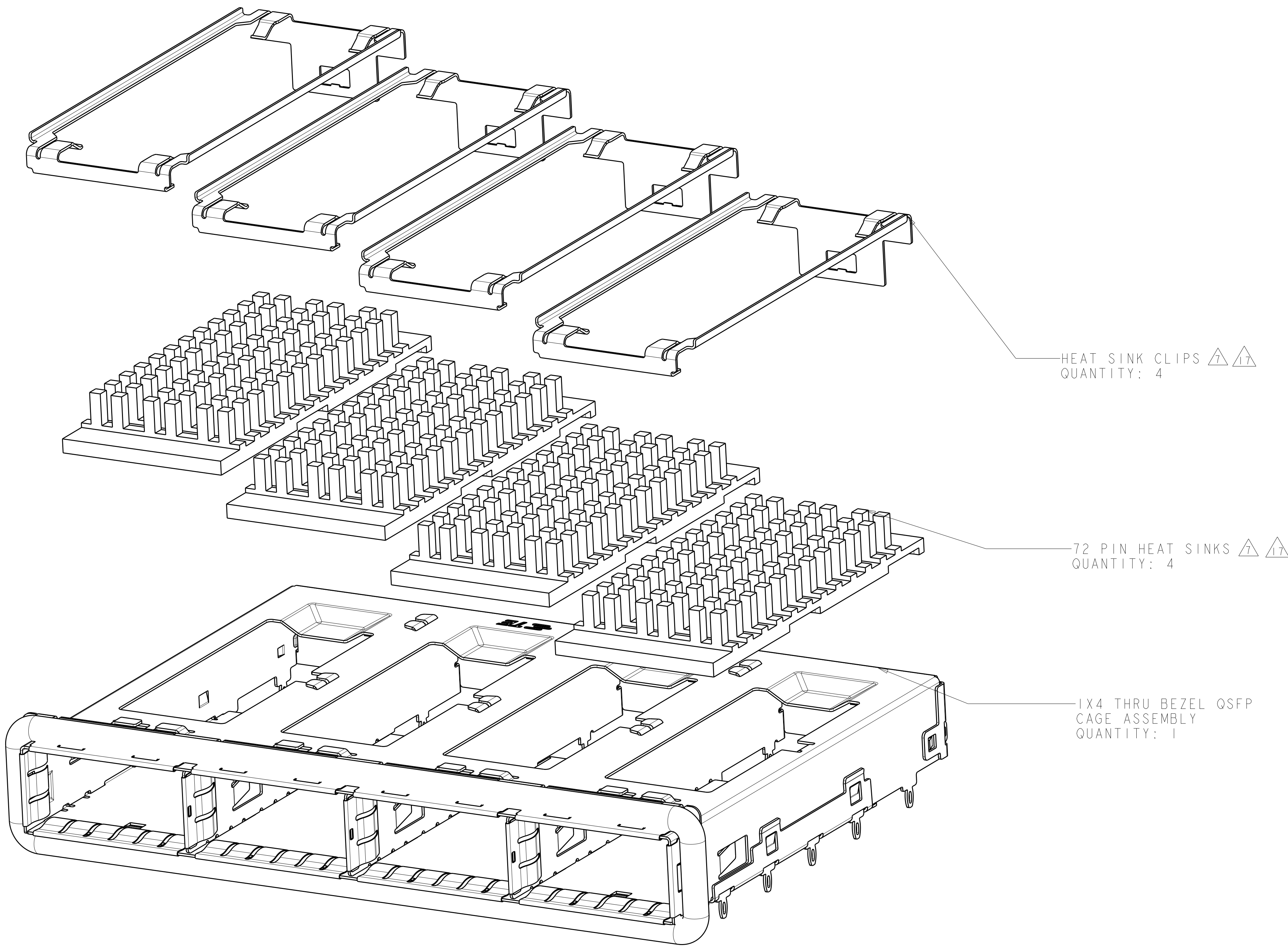
1-2170287-1 SHOWN  
SCALE 4:1



1-2170287-1  
ONE SIDED CONFIGURATION  
SCALE 5:2

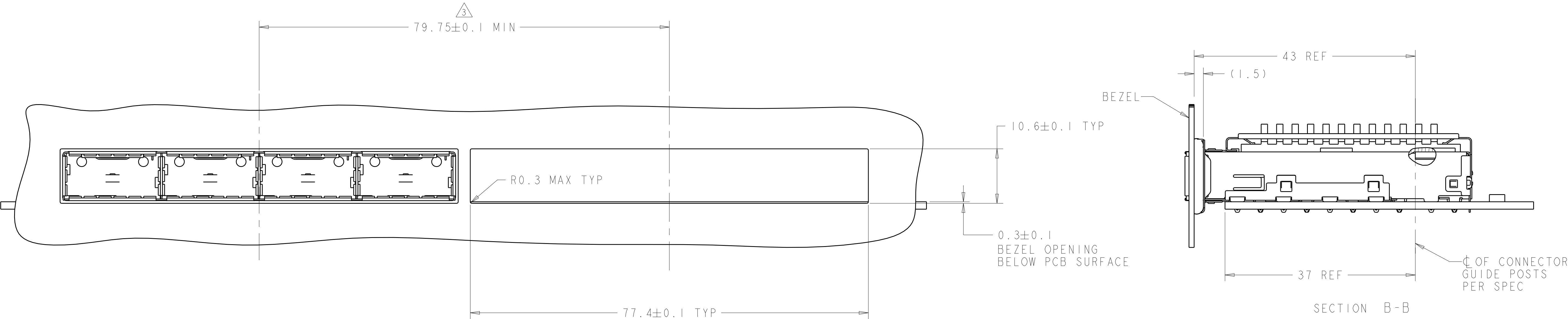
|                                        |  |                                                                                               |                                     |                                                                          |  |
|----------------------------------------|--|-----------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN<br>KINSEN SUN<br>CHK<br>DENNY ZHU<br>APVD<br>ALEX CAI                                     | 29FEB2012<br>29FEB2012<br>29FEB2012 | TE Connectivity                                                          |  |
| DIMENSIONS:                            |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                        |                                     | NAME                                                                     |  |
| mm                                     |  | 0 PLC ±.35<br>1 PLC ±0.35<br>2 PLC ±0.25<br>3 PLC ±.35<br>4 PLC ±.35<br>ANGLES ±.35<br>FINISH |                                     | 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP |  |
| MATERIAL                               |  | WEIGHT                                                                                        |                                     | SIZE CAGE CODE DRAWING NO                                                |  |
| -                                      |  | -                                                                                             |                                     | A100779C=2170287                                                         |  |
| CUSTOMER DRAWING                       |  | SCALE                                                                                         |                                     | SHEET 2 OF 8                                                             |  |
|                                        |  | 1:1                                                                                           |                                     | REV A                                                                    |  |

| LOC | DIST | REVISIONS |     |             |      |     |      |
|-----|------|-----------|-----|-------------|------|-----|------|
|     |      | P         | LTR | DESCRIPTION | DATE | DWN | APVD |
| GP  | 00   | -         |     | SEE SHEET 1 | -    | -   | -    |
|     |      |           |     |             |      |     |      |
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|     |      |           |     |             |      |     |      |

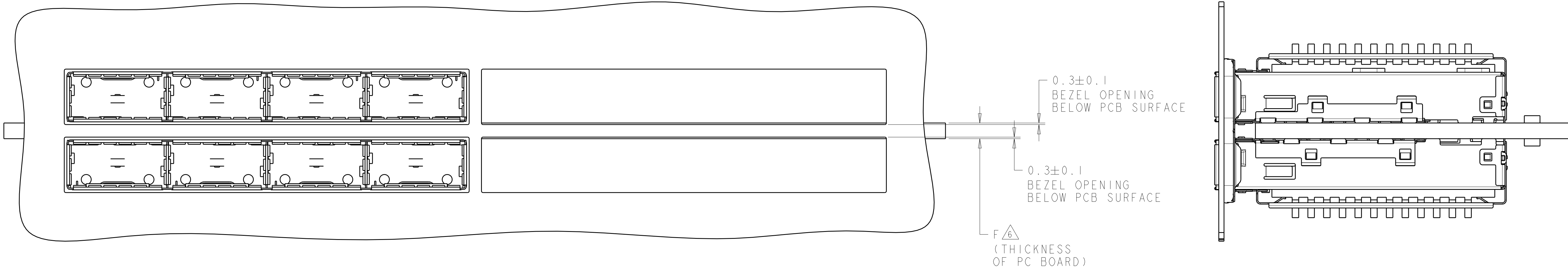


|                                        |  |      |            |           |                                                                                                       |  |  |
|----------------------------------------|--|------|------------|-----------|-------------------------------------------------------------------------------------------------------|--|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN  | KINSEN SUN | 29FEB2012 |  TE Connectivity |  |  |
|                                        |  | CHK  | DENNY ZHU  | 29FEB2012 |                                                                                                       |  |  |
|                                        |  | APVD | ALEX CAI   | 29FEB2012 | NAME                                                                                                  |  |  |
|                                        |  |      |            |           | 1X4 CAGE ASSEMBLY, THRU BEZEL, W/ELASTOMERIC GASKET AND HEAT SINKS, QSFP                              |  |  |
|                                        |  |      |            |           | SIZE                                                                                                  |  |  |
|                                        |  |      |            |           | A100779C=2170287                                                                                      |  |  |
|                                        |  |      |            |           | RESTRICTED TO                                                                                         |  |  |
|                                        |  |      |            |           | -                                                                                                     |  |  |
|                                        |  |      |            |           | CUSTOMER DRAWING                                                                                      |  |  |
|                                        |  |      |            |           | SCALE                                                                                                 |  |  |
|                                        |  |      |            |           | 1:1                                                                                                   |  |  |
|                                        |  |      |            |           | SHEET                                                                                                 |  |  |
|                                        |  |      |            |           | 3                                                                                                     |  |  |
|                                        |  |      |            |           | OF                                                                                                    |  |  |
|                                        |  |      |            |           | 8                                                                                                     |  |  |
|                                        |  |      |            |           | REV                                                                                                   |  |  |
|                                        |  |      |            |           | A                                                                                                     |  |  |

| LOC |    | DIST |     | REVISIONS   |      |     |      |  |  |
|-----|----|------|-----|-------------|------|-----|------|--|--|
| GP  | 00 | P    | LTR | DESCRIPTION | DATE | DWN | APVD |  |  |
|     |    | -    |     | SEE SHEET 1 | -    | -   | -    |  |  |
|     |    |      |     |             |      |     |      |  |  |
|     |    |      |     |             |      |     |      |  |  |
|     |    |      |     |             |      |     |      |  |  |

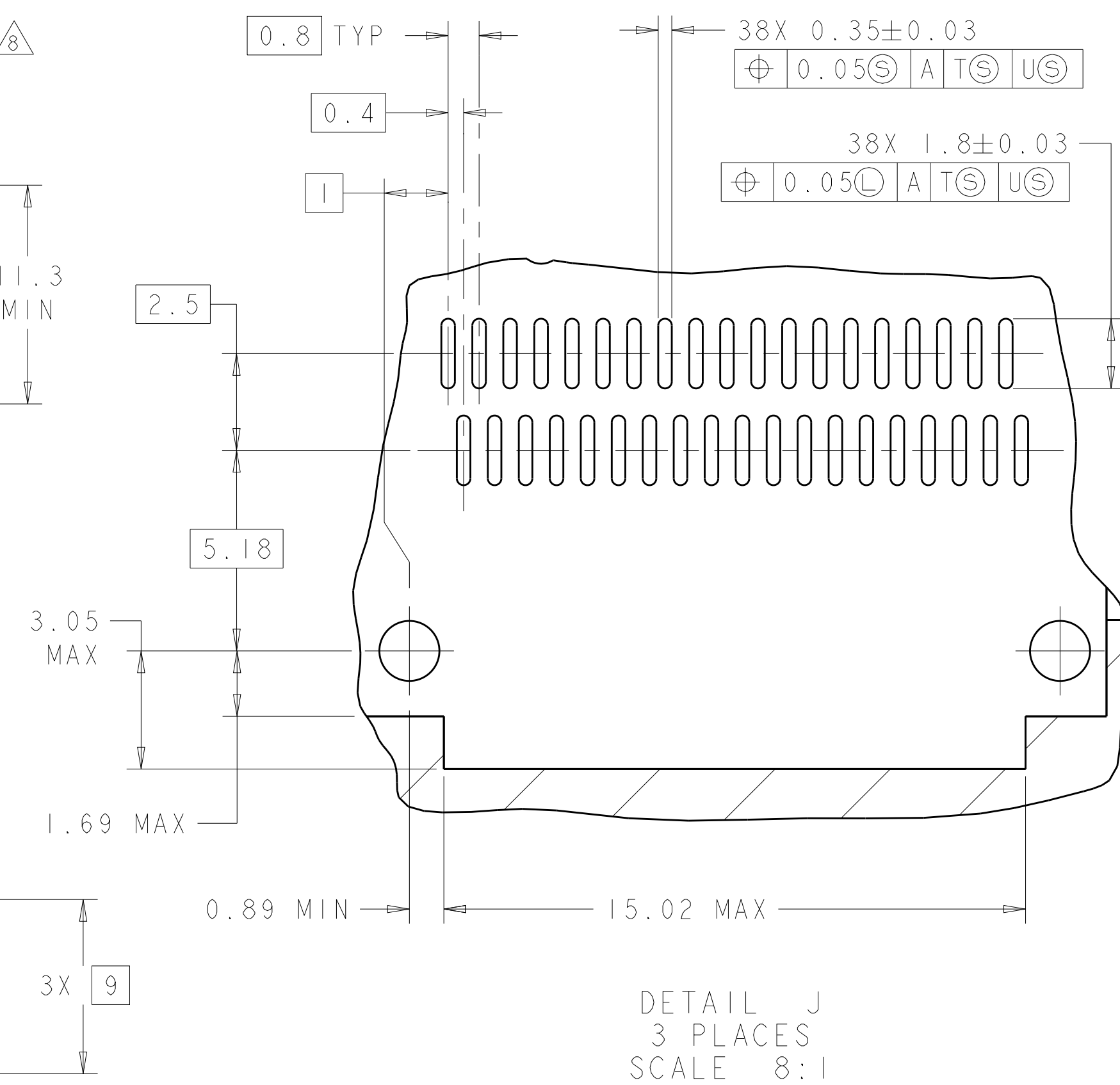
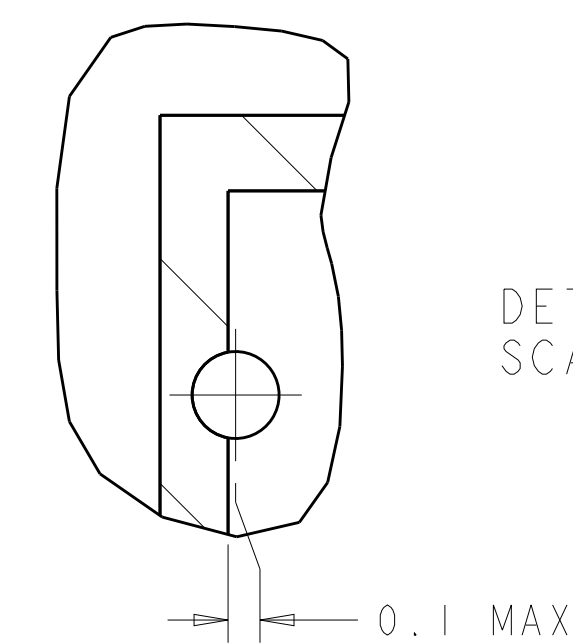


ONE SIDED CONFIGURATION  
SCALE 5:2



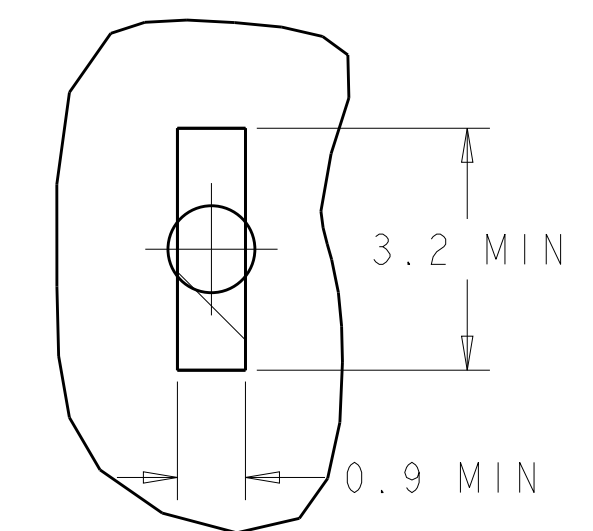
BELLY TO BELLY CONFIGURATION  
SIMILAR TO ONE SIDED  
EXCEPT WHERE NOTED  
SCALE 5:2

|                                        |  |                                                                                      |                                     |                                                           |  |
|----------------------------------------|--|--------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN<br>KINSEN SUN<br>CHK<br>DENNY ZHU<br>APVD<br>ALEX CAI                            | 29FEB2012<br>29FEB2012<br>29FEB2012 | TE Connectivity                                           |  |
| DIMENSIONS:                            |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                               |                                     | NAME                                                      |  |
| mm                                     |  | 0 PLC ±.35<br>1 PLC ±0.35<br>2 PLC ±0.25<br>3 PLC ±<br>4 PLC ±<br>ANGLES ±<br>FINISH |                                     | PRODUCT SPEC<br>108-2286<br>APPLICATION SPEC<br>114-13217 |  |
| MATERIAL                               |  | WEIGHT                                                                               |                                     | SIZE CAGE CODE DRAWING NO                                 |  |
| -                                      |  | -                                                                                    |                                     | A100779C=2170287                                          |  |
| CUSTOMER DRAWING                       |  | SCALE                                                                                |                                     | SHEET 4 OF 8                                              |  |
|                                        |  | 1:1                                                                                  |                                     | REV A                                                     |  |



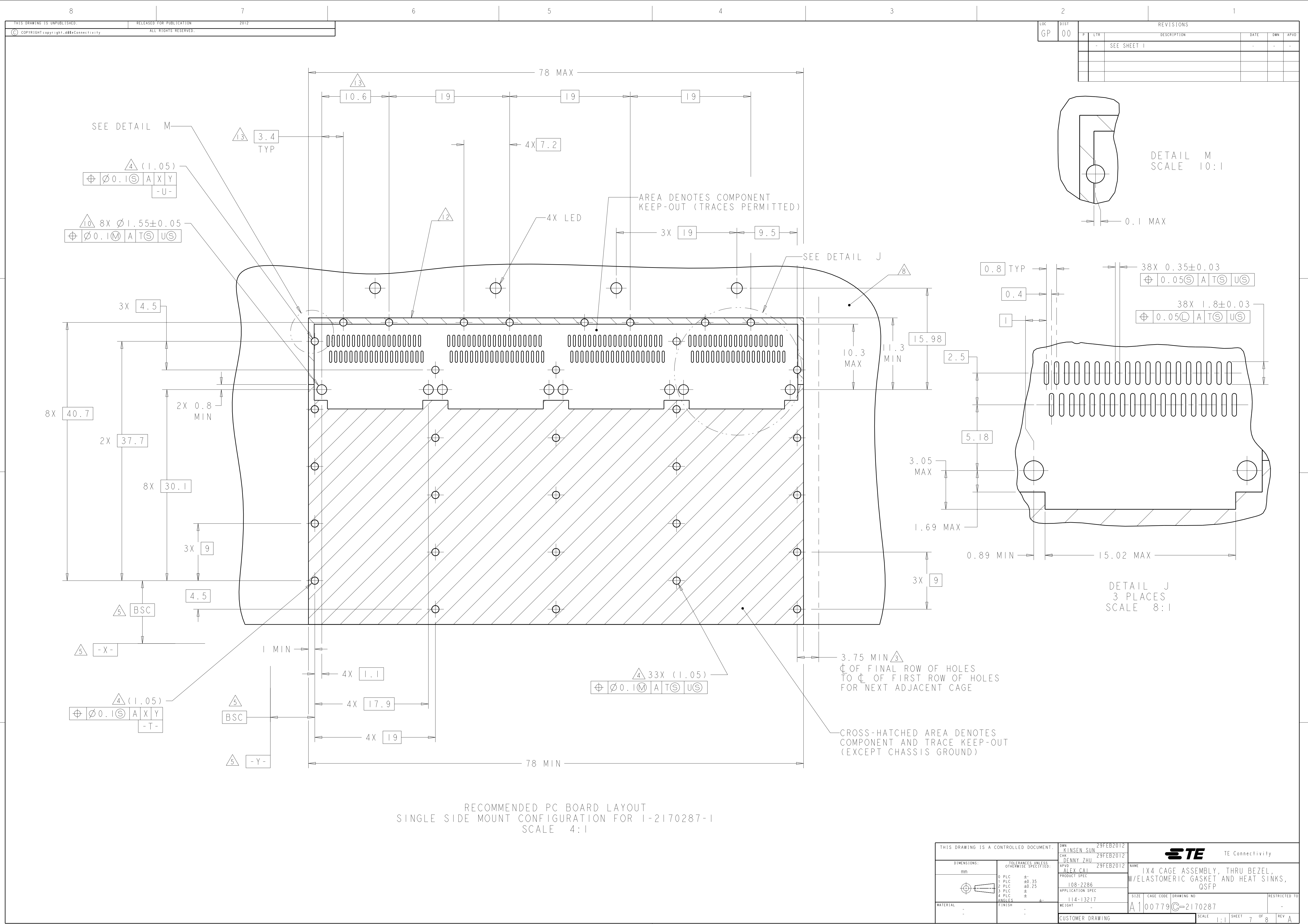
DETAIL J  
3 PLACES  
SCALE 8:1

4805 (3/11)

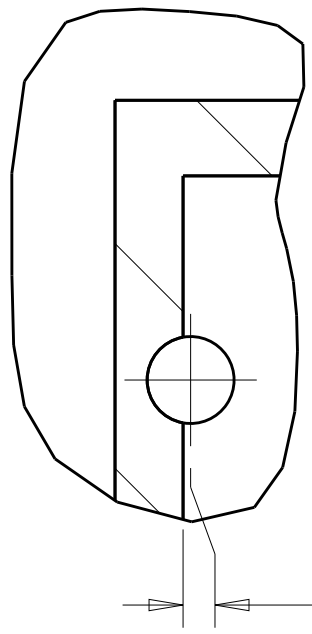
[illegible]

THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

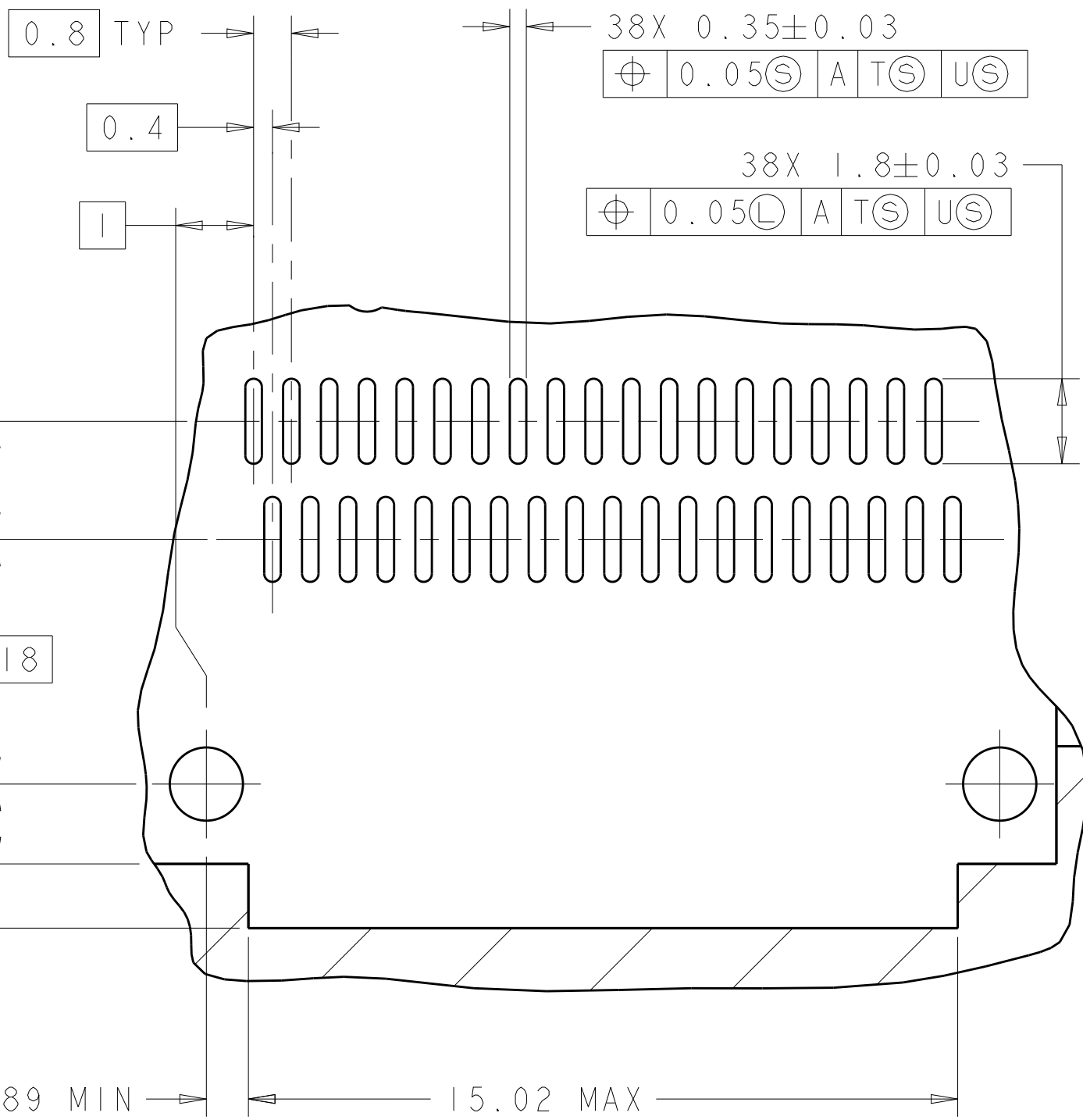
4805 (3/11)



| LOC |    | DIST |     | REVISONS    |      |     |      |
|-----|----|------|-----|-------------|------|-----|------|
| GP  | 00 | P    | LTR | DESCRIPTION | DATE | DWN | APVD |
|     |    | -    |     | SEE SHEET 1 | -    | -   | -    |
|     |    |      |     |             |      |     |      |
|     |    |      |     |             |      |     |      |



DETAIL M  
SCALE 10:1

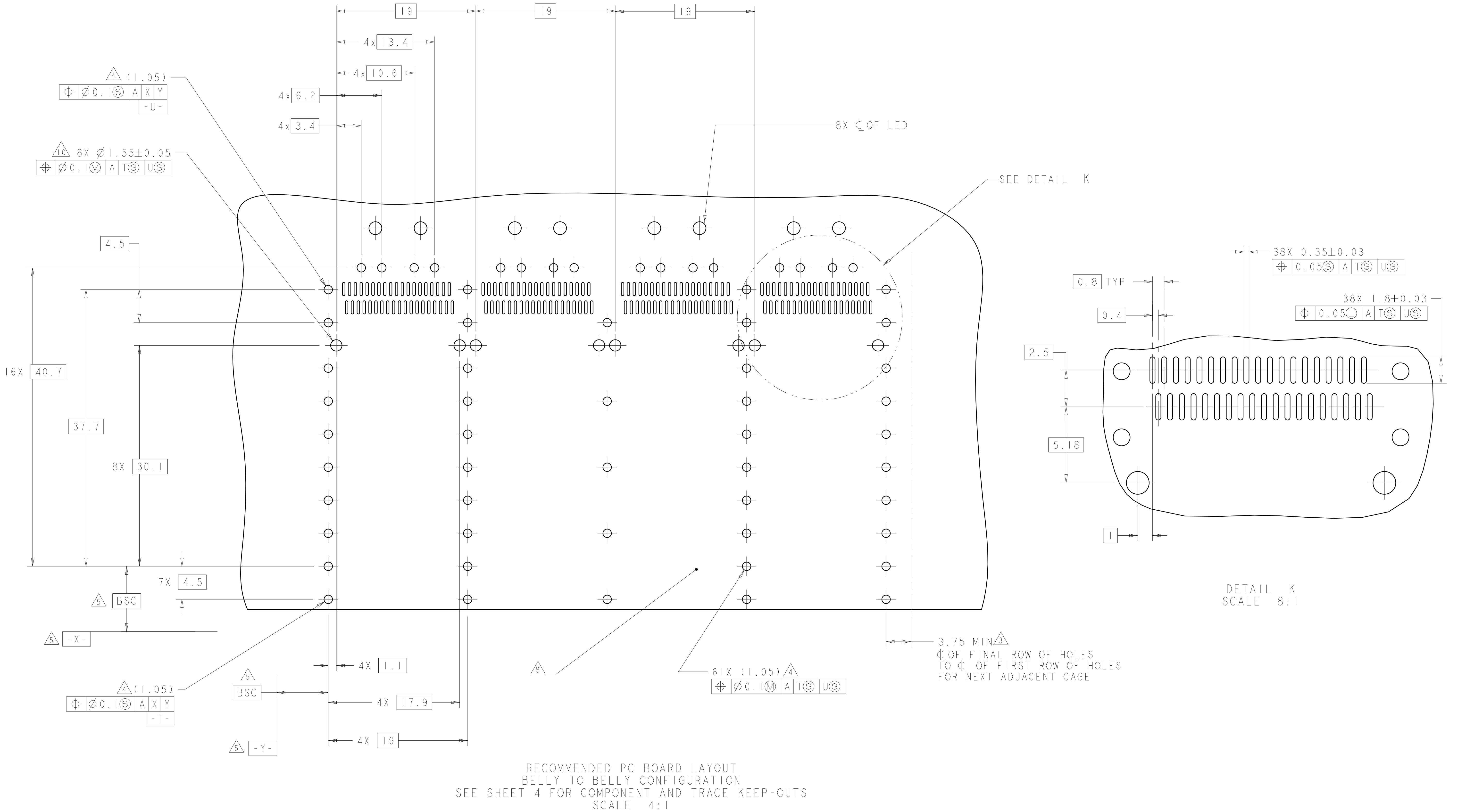


DETAIL J  
3 PLACES  
SCALE 8:1

RECOMMENDED PC BOARD LAYOUT  
SINGLE SIDE MOUNT CONFIGURATION FOR 1-2170287-1  
SCALE 4:1

|                                        |                                                                                                   |                                                           |                                     |                                                                                        |               |
|----------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------|---------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |                                                                                                   | DWN<br>KINSEN SUN<br>CHK<br>DENNY ZHU<br>APVD<br>ALEX CAI | 29FEB2012<br>29FEB2012<br>29FEB2012 | NAME<br>1X4 CAGE ASSEMBLY, THRU BEZEL,<br>W/ELASTOMERIC GASKET AND HEAT SINKS,<br>QSFP |               |
| DIMENSIONS:                            | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                            | PRODUCT SPEC                                              | 108-2286                            | SIZE                                                                                   | CAGE CODE     |
| mm                                     | 0 PLC ±0.35<br>1 PLC ±0.25<br>2 PLC ±0.25<br>3 PLC ±0.25<br>4 PLC ±0.25<br>ANGLES ±0.25<br>FINISH | APPLICATION SPEC                                          | 114-13217                           | DRAWING NO                                                                             | RESTRICTED TO |
| MATERIAL                               | -                                                                                                 | WEIGHT                                                    | -                                   | A100779C=2170287                                                                       | -             |
| CUSTOMER DRAWING                       |                                                                                                   | SCALE                                                     | 1:1                                 | SHEET                                                                                  | 7 OF 8        |
|                                        |                                                                                                   | REV                                                       | A                                   |                                                                                        |               |

| LOC |  | DIST |  | REVISIONS |     |             |      |     |      |
|-----|--|------|--|-----------|-----|-------------|------|-----|------|
| GP  |  | 00   |  | P         | LTR | DESCRIPTION | DATE | DWN | APVD |
|     |  |      |  | -         |     | SEE SHEET 1 | -    | -   | -    |
|     |  |      |  |           |     |             |      |     |      |
|     |  |      |  |           |     |             |      |     |      |
|     |  |      |  |           |     |             |      |     |      |



THIS PRODUCT HAS NOT COMPLETED VALIDATION/QUALIFICATION TESTING

|                                        |  |                                                                                                                  |                                     |                                                           |  |
|----------------------------------------|--|------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | DWN<br>KINSEN SUN<br>CHK<br>DENNY ZHU<br>APVD<br>ALEX CAI                                                        | 29FEB2012<br>29FEB2012<br>29FEB2012 | <b>TE</b> Connectivity                                    |  |
| DIMENSIONS:                            |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                                           |                                     | NAME                                                      |  |
| mm                                     |  | 0 PLC $\pm$ 0.35<br>1 PLC $\pm$ 0.35<br>2 PLC $\pm$ 0.25<br>3 PLC $\pm$<br>4 PLC $\pm$<br>ANGLES $\pm$<br>FINISH |                                     | PRODUCT SPEC<br>108-2286<br>APPLICATION SPEC<br>114-13217 |  |
| MATERIAL                               |  | WEIGHT                                                                                                           |                                     | SIZE CAGE CODE DRAWING NO                                 |  |
| -                                      |  | -                                                                                                                |                                     | A100779C=2170287                                          |  |
| CUSTOMER DRAWING                       |  | SCALE 1:1                                                                                                        |                                     | SHEET 8 OF 8 REV A                                        |  |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.