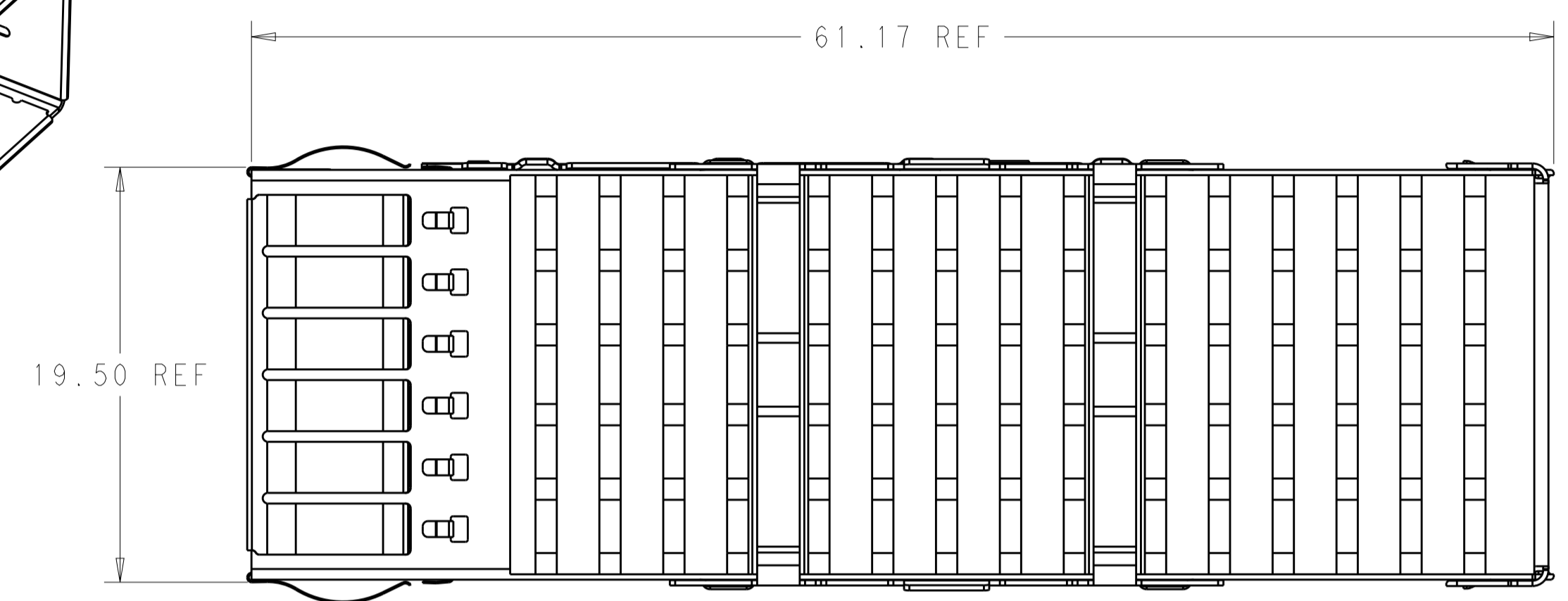
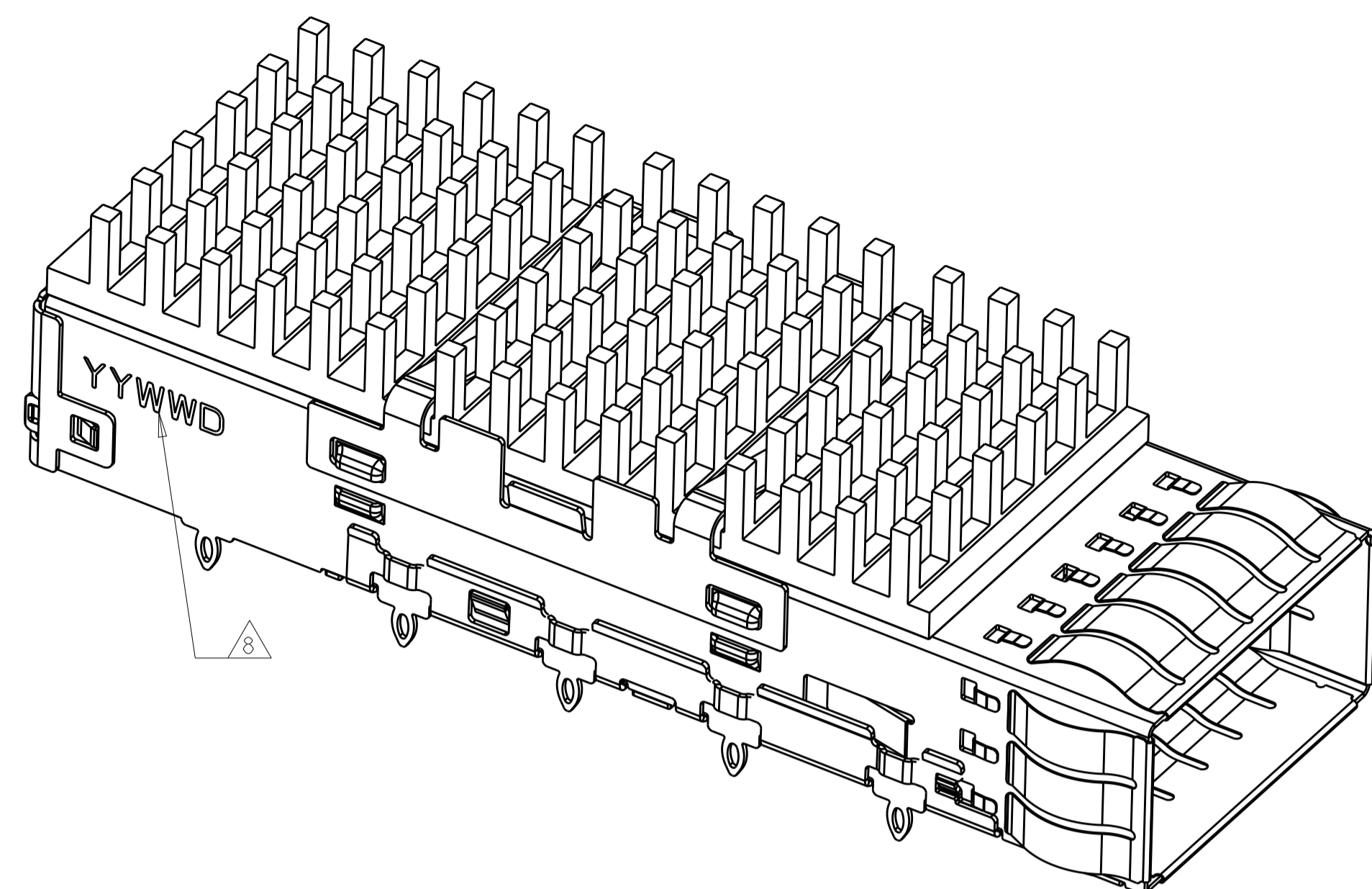
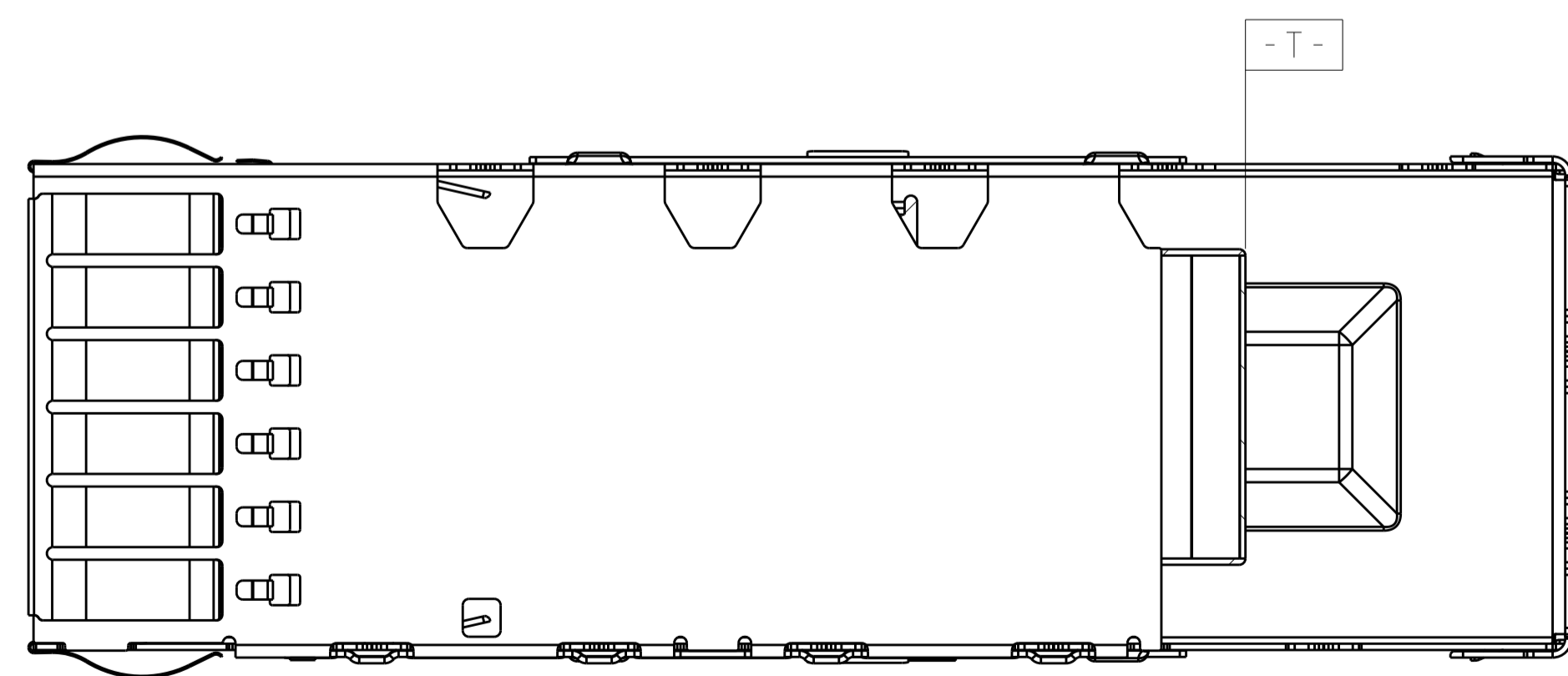
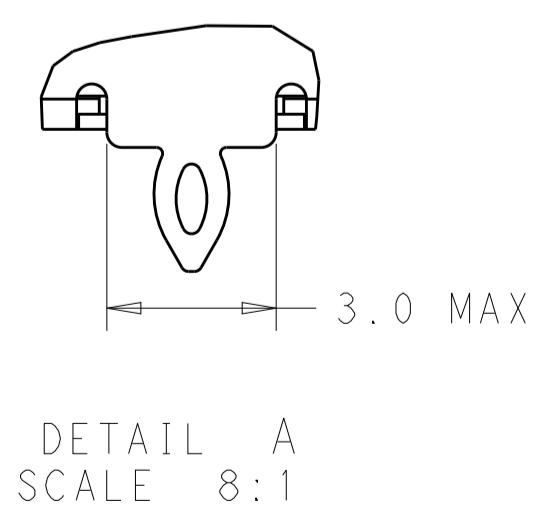
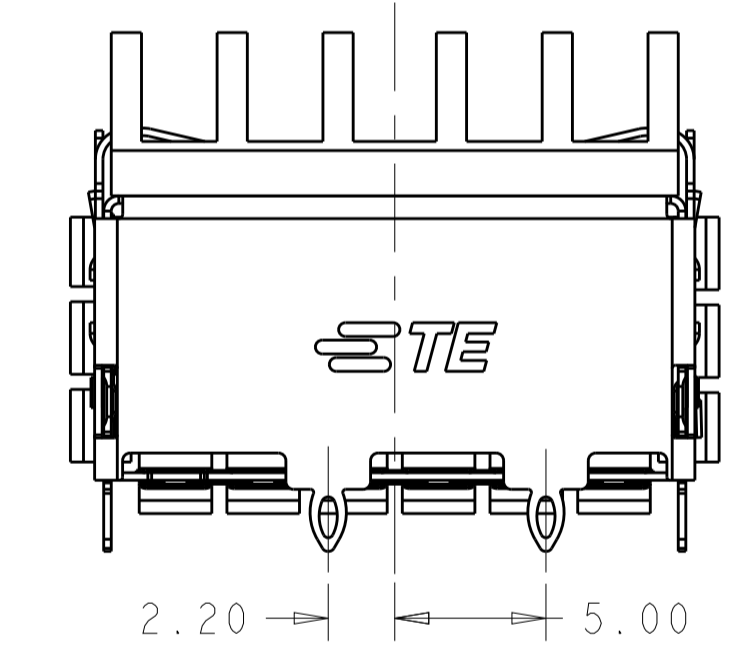
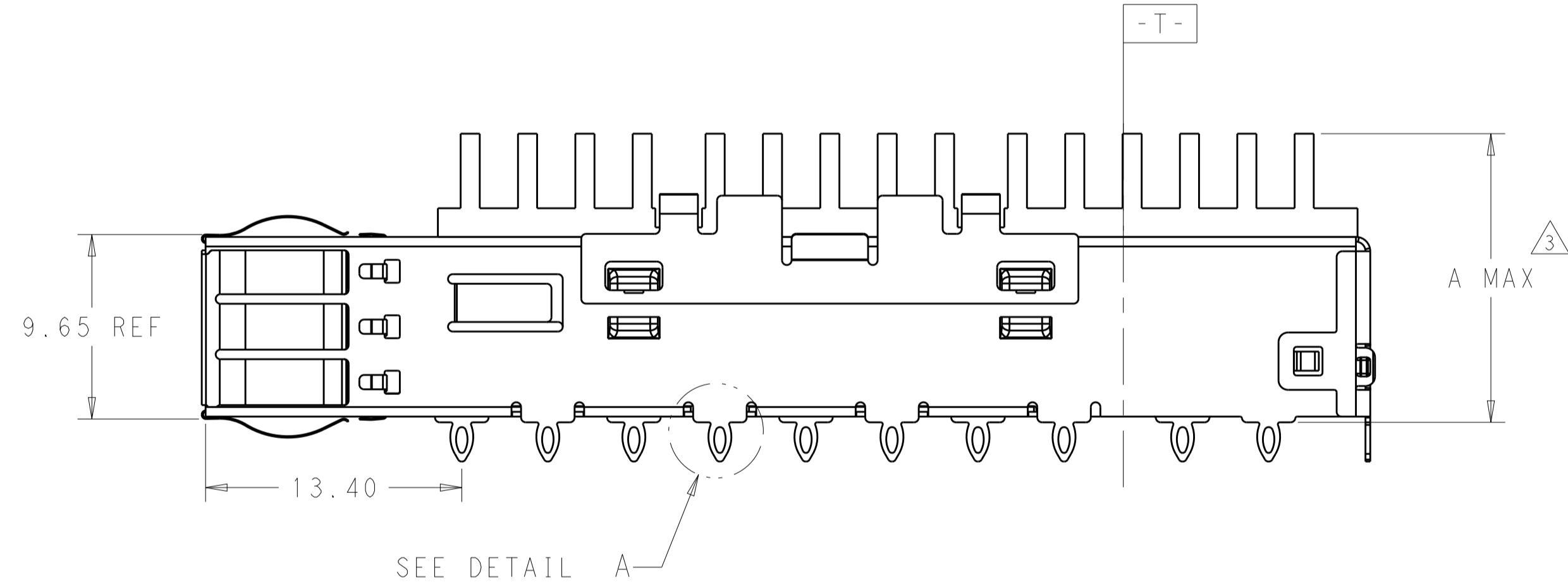
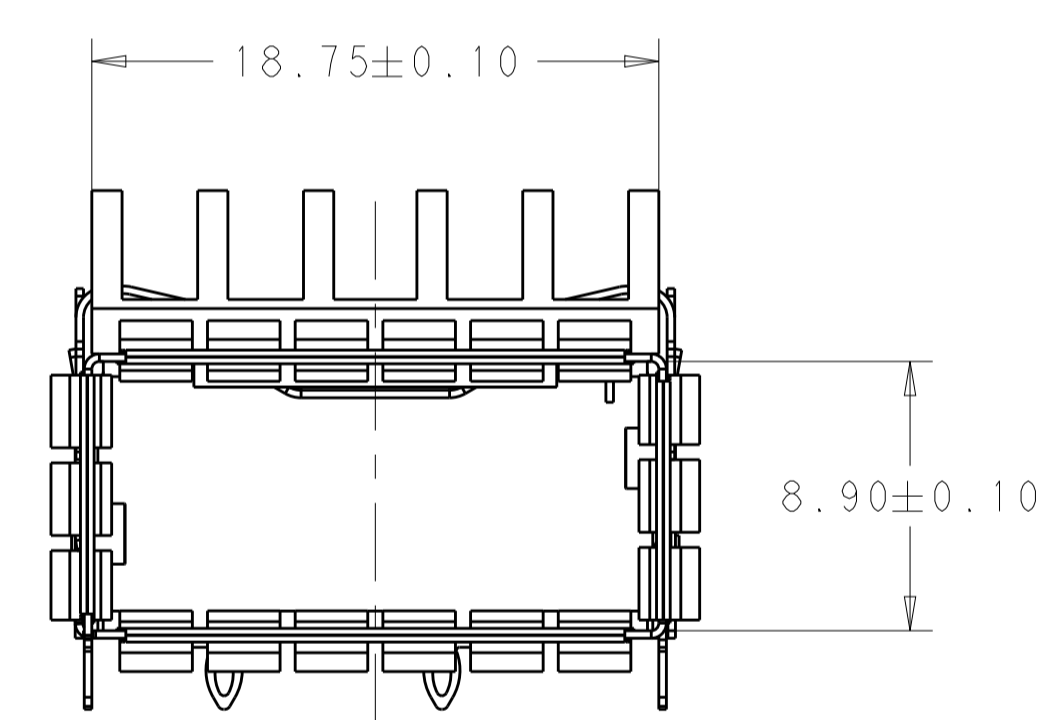


| LOC |     | DIST                      |           | REVISIONS |      |  |  |
|-----|-----|---------------------------|-----------|-----------|------|--|--|
| P   | LTN | DESCRIPTION               | DATE      | OWN       | APVD |  |  |
| A   |     | INITIAL RELEASE           | 06FEB2015 | JY        | MC   |  |  |
| A1  |     | REVISED PER ECO-16-008561 | 07JUN2016 | TX        | SH   |  |  |
| B   |     | REVISED PER ECO-16-010870 | 21JUL2016 | JY        | SH   |  |  |
| B1  |     | REVISED PER ECO-16-014592 | 28SEP2016 | RG        | SH   |  |  |



- MATERIAL:  
 CAGE MATERIAL : 0.25 THICK NICKEL SILVER.  
 SPRING MATERIAL: COPPER ALLOY  
 HEAT SINK MATERIAL: ALUMINUM  
 CLIP MATERIAL: STAINLESS STEEL
- FINISH:  
 SPRING: NICKEL PLATING  
 HEAT SINK: BLACK ANODIZE

- ⚠ DIMENSION APPLIES WITH MODULE INSTALLED IN THE CAGE TO TOP OF HEAT SINK.
- ⚠ REFERENCE APPLICATION SPEC 114-32023 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.
- ⚠ DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMERS.
- 6. MINIMUM PC BOARD THICKNESS : SINGLES SIDED: 1.57 MIN  
 DOUBLE SIDED: 3.00 MIN
- ⚠ DATUM **-A-** IS TOP SURFACE OF THE HOST BOARD.
- ⚠ DATE CODE (YYWWD) MARKED APPROXIMATELY AS SHOWN
- 9. MATES WITH QSFP28 MSA COMPATIBLE TRANSCEIVER.



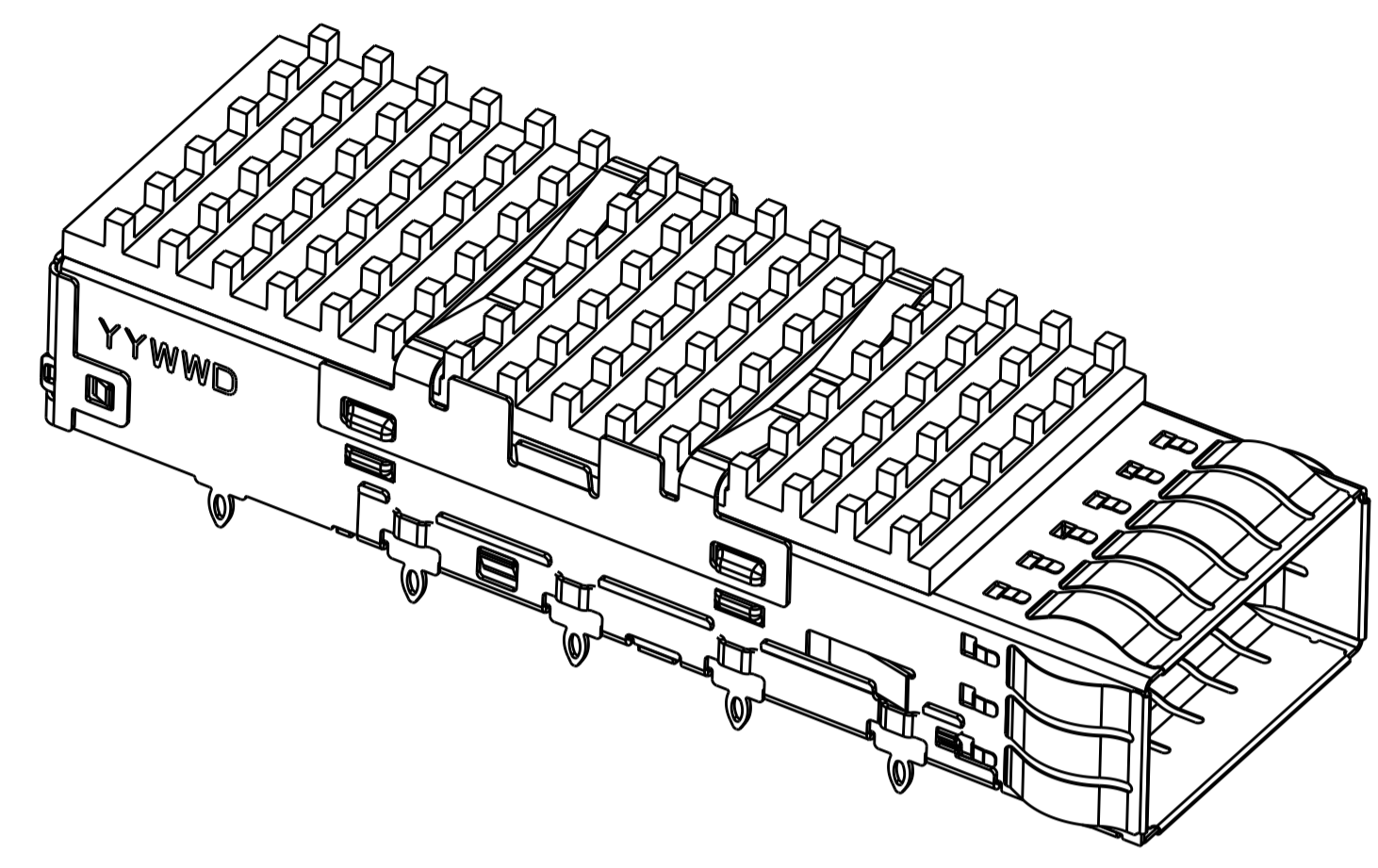
| DIM A | # REAR PINS | APPLICATION | PART NUMBER |
|-------|-------------|-------------|-------------|
| 13.7  | 2           | CUSTOMIZED  | 1-2170704-2 |
| 13.7  | 2           | PCI         | 1-2170704-1 |
| 19.0  | 2           | CUSTOMIZED  | 1-2170704-0 |
| 23.0  | 1           | NETWORKING  | 2170704-9   |
| 16.0  | 1           | SAN         | 2170704-8   |
| 13.7  | 1           | PCI         | 2170704-7   |
| 23.0  | 0           | NETWORKING  | 2170704-6   |
| 16.0  | 0           | SAN         | 2170704-5   |
| 13.7  | 0           | PCI         | 2170704-4   |
| 23.0  | 2           | NETWORKING  | 2170704-3   |
| 16.0  | 2           | SAN         | 2170704-2   |
| 13.7  | 2           | PCI         | 2170704-1   |

2170704-2 AS SHOWN

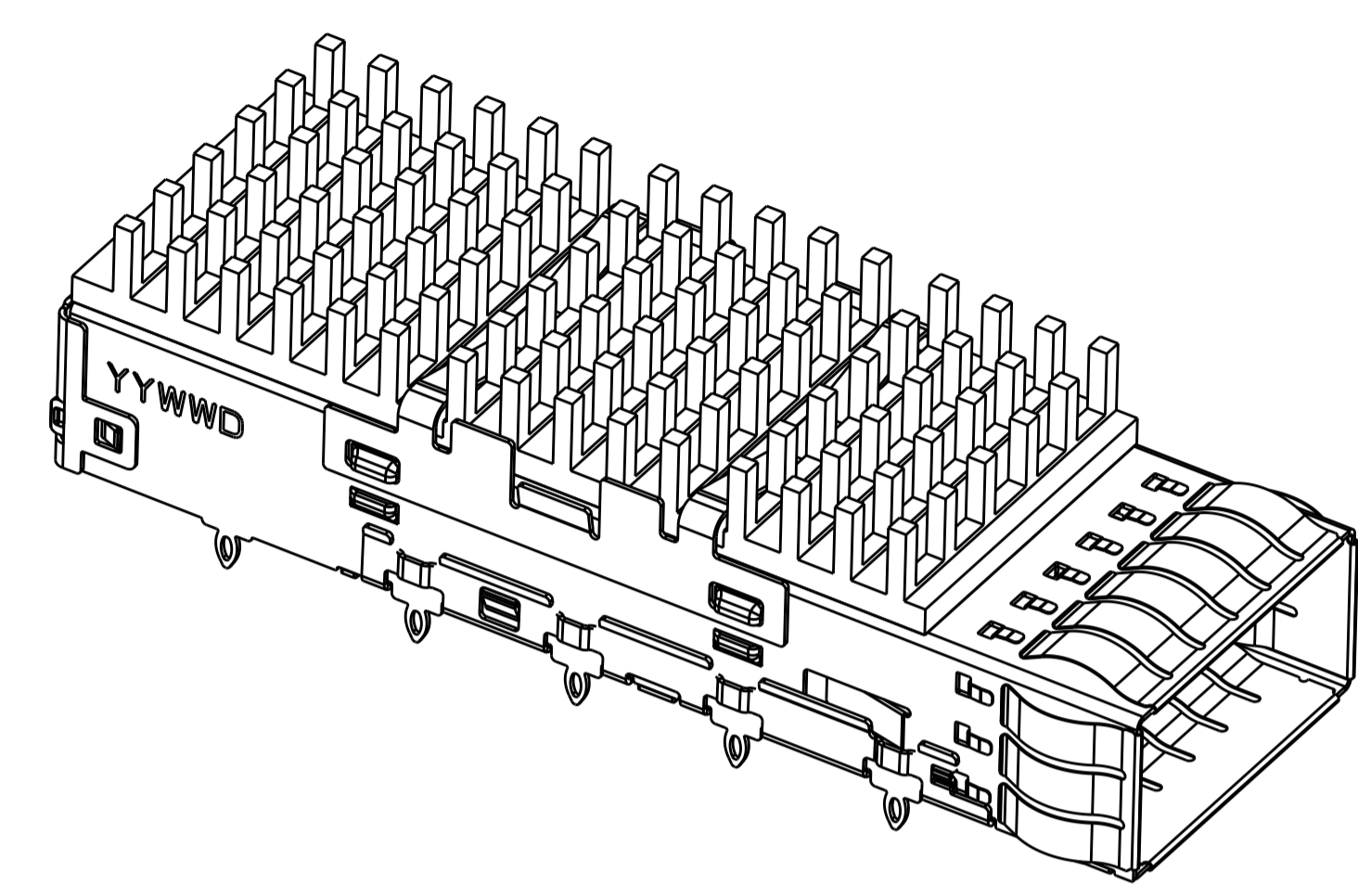
|   |  |  |  |
|---|--|--|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT.  |  | OWN: JASON YANG 23SEP2013                              | TE Connectivity  |
| DIMENSIONS: mm  |  | CHK: JASON YANG 23SEP2013                              |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:  |  | APVD: JASON YANG 23SEP2013                             | NAME: CAGE ASSEMBLY, QSFP28, THRU BEZEL WITH EMI SPRING FINGER HEAT SINK<br>SIZE: CAGE CODE DRAWING NO: 114-32023<br>WEIGHT: -<br>CUSTOMER DRAWING |
| 0 PLC ±0.25<br>1 PLC ±0.25<br>2 PLC ±0.25<br>3 PLC ±0.25<br>4 PLC ±0.100<br>ANGLES ±°<br>FINISH ± |  | PRODUCT SPEC: 108-19428<br>APPLICATION SPEC: 114-32023 |  |
| MATERIAL: -   |  | RESTRICTED TO: A100779C=2170704                        | SCALE: 2:1 SHEET 1 OF 6 REV: B1  |

| LOC |     | DIST        |      | REVISIONS |      |  |  |
|-----|-----|-------------|------|-----------|------|--|--|
| P   | LTN | DESCRIPTION | DATE | DMN       | APVD |  |  |
| -   | -   | SEE SHEET 1 | -    | -         | -    |  |  |
|     |     |             |      |           |      |  |  |

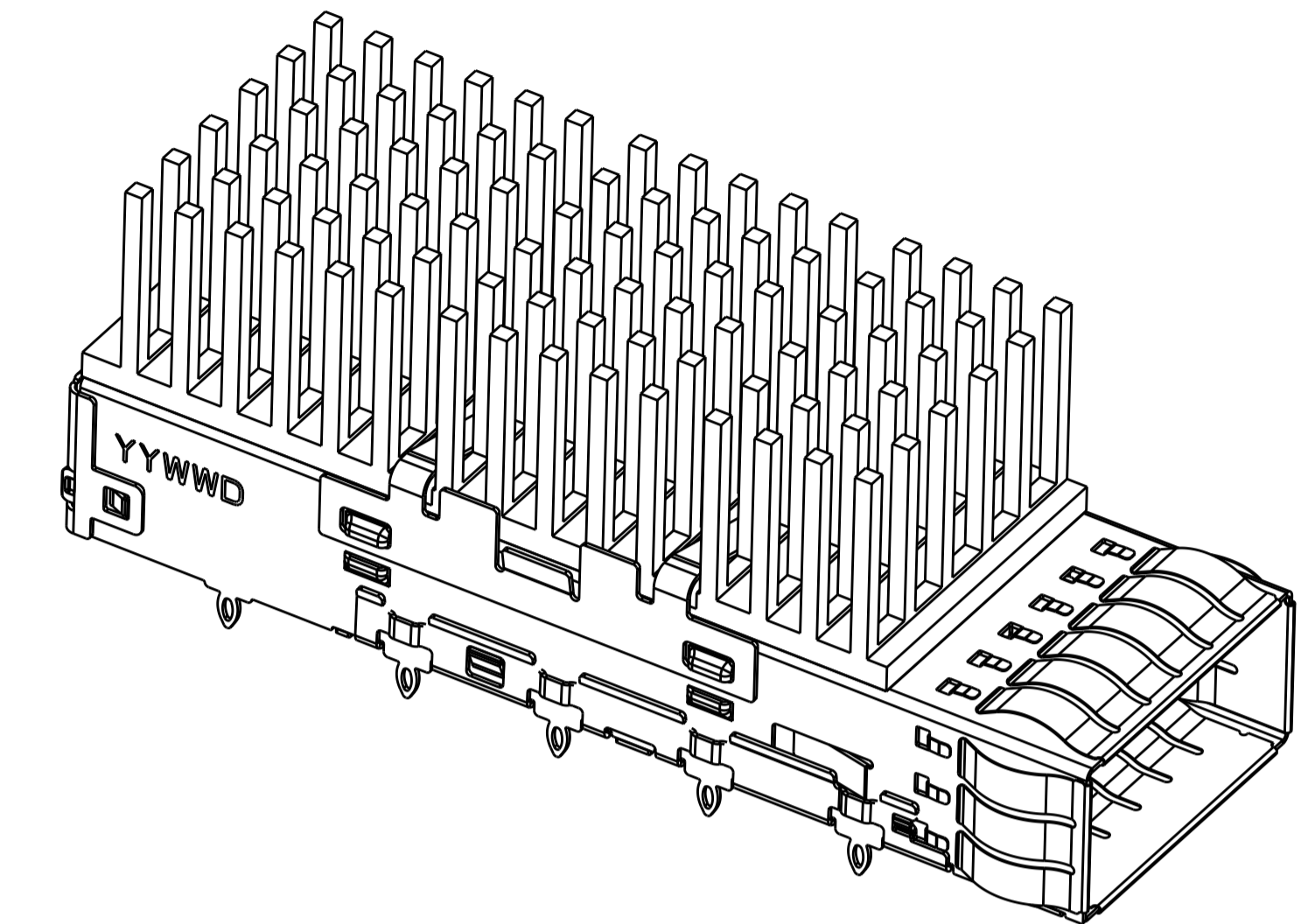
# HEAT SINK OPTIONS



PCI HEAT SINK  
SCALE 3:1

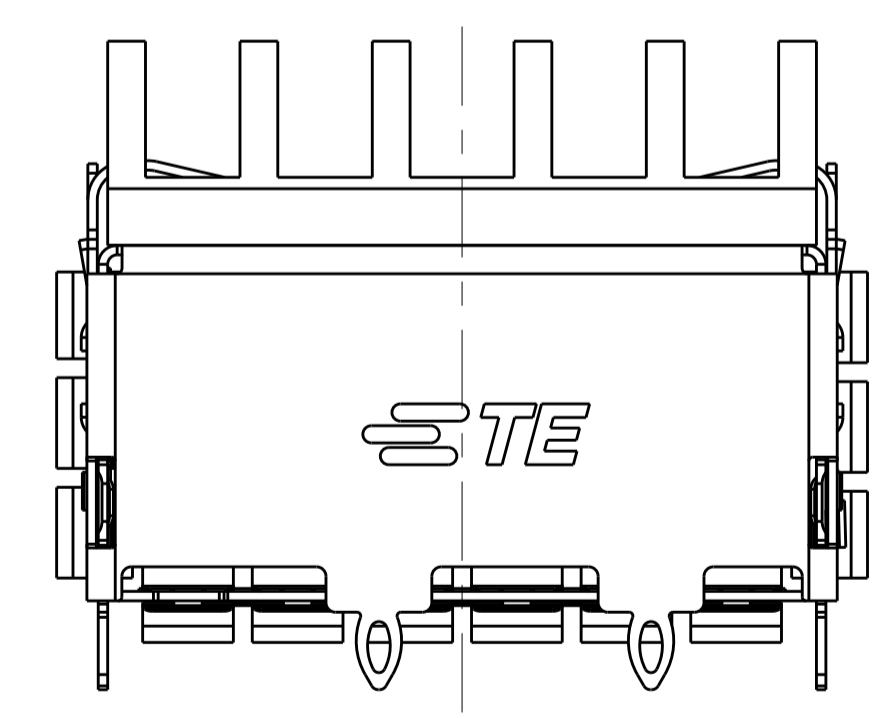


SAN HEAT SINK  
SCALE 3:1

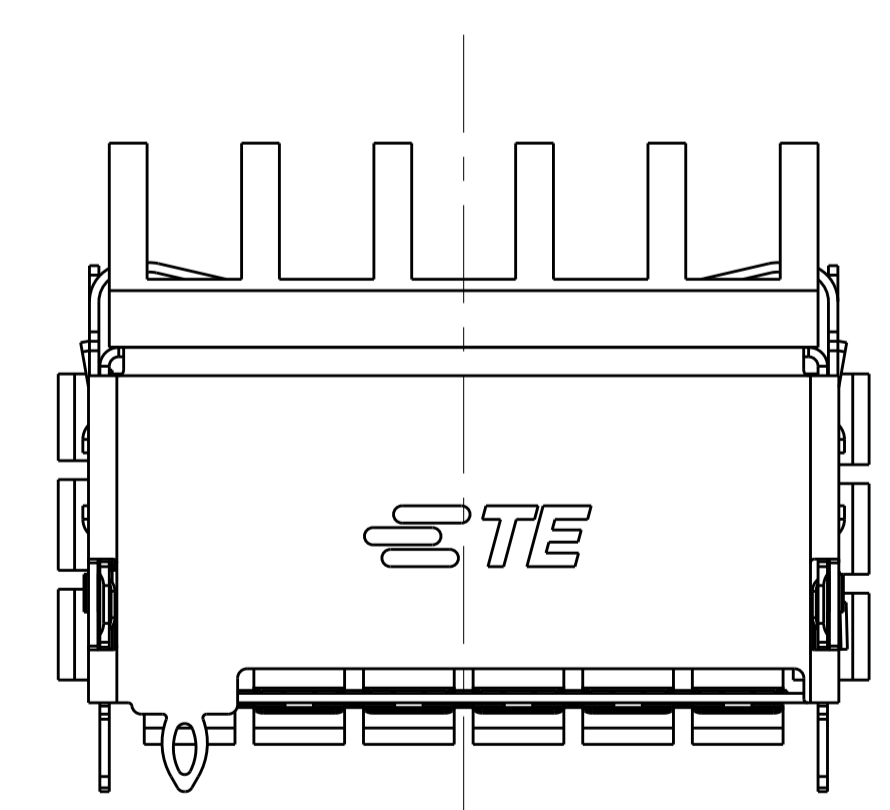


NETWORKING HEAT SINK  
SCALE 3:1

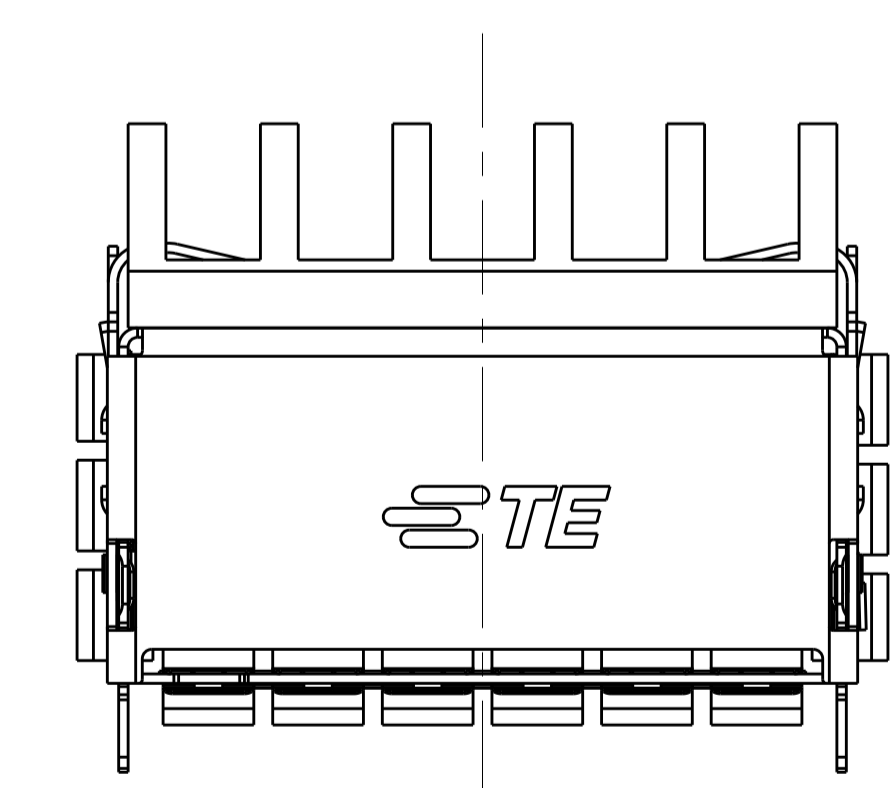
# # OF REAR LEGS OPTIONS



2 REAR LEGS  
SCALE 5:1



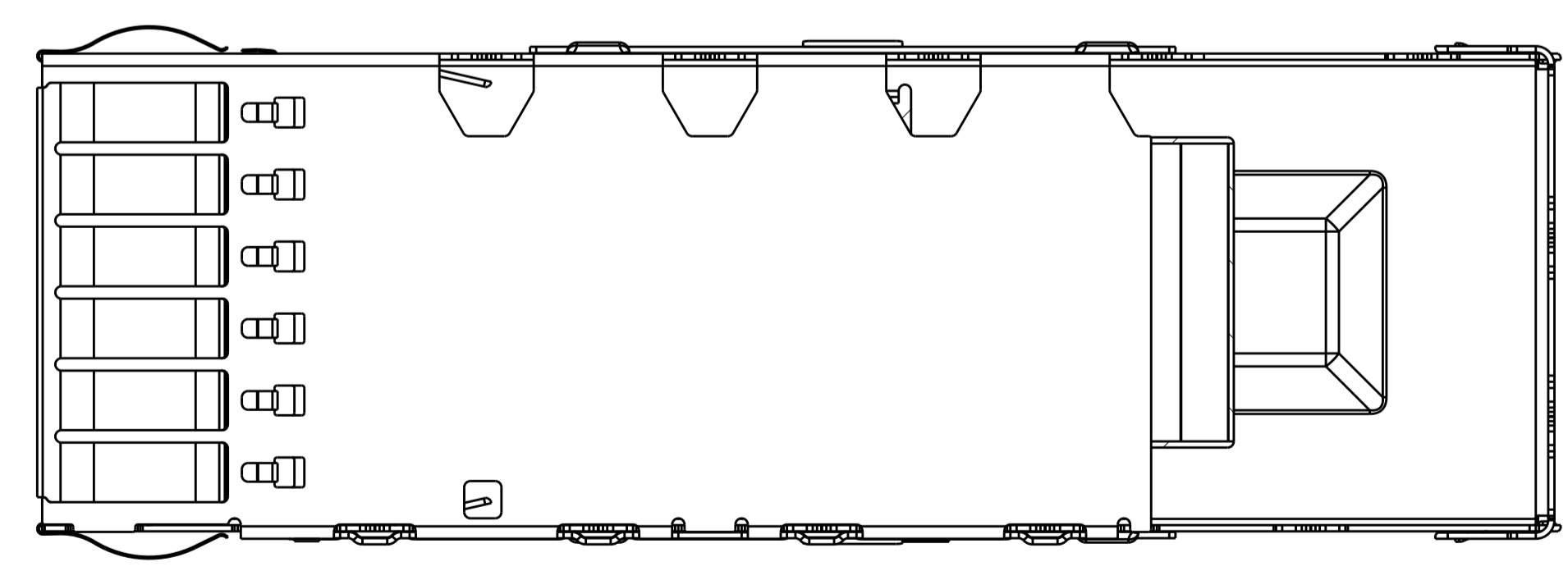
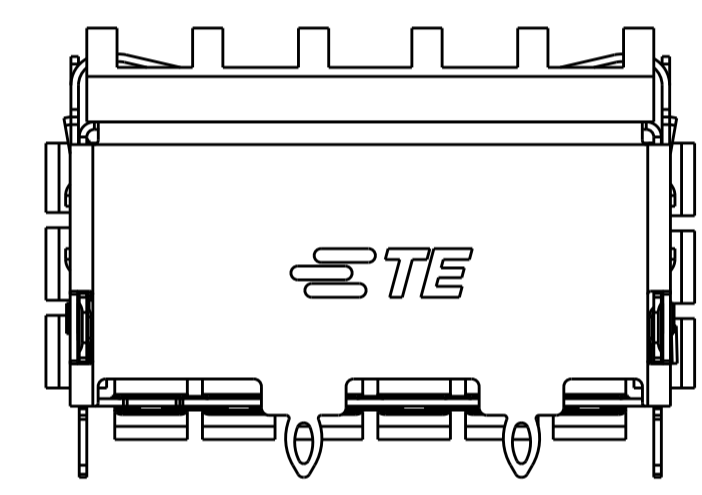
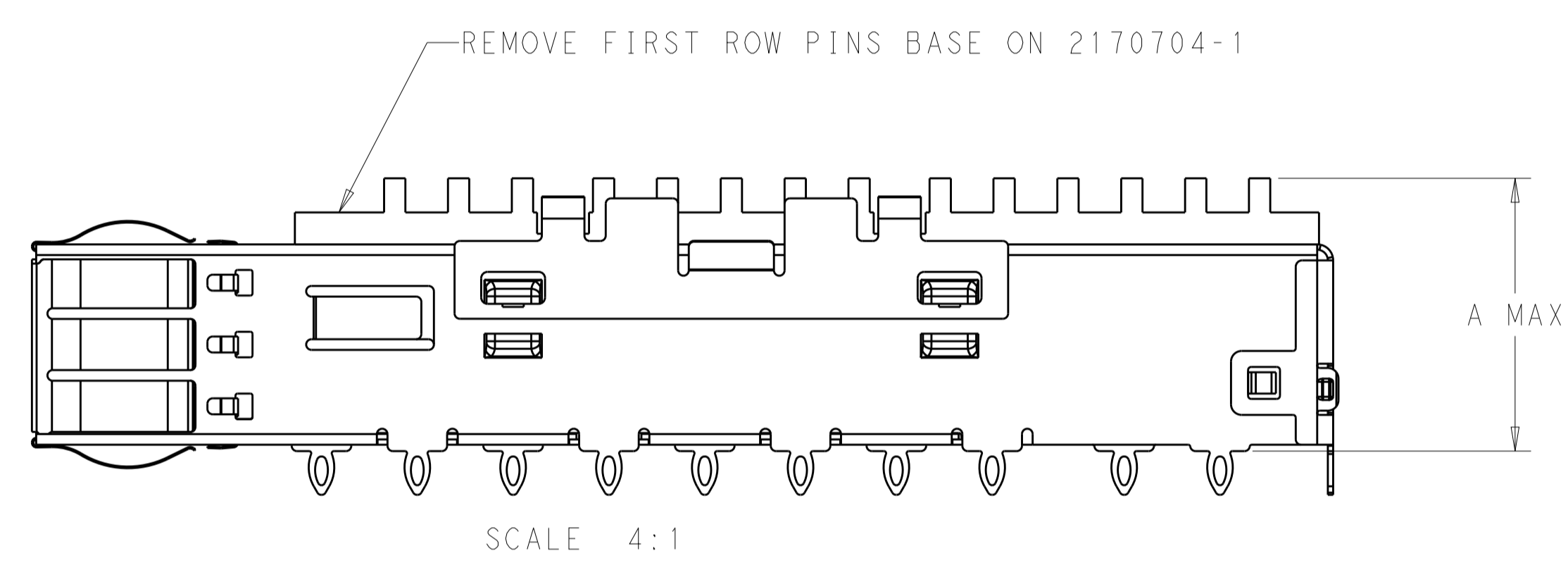
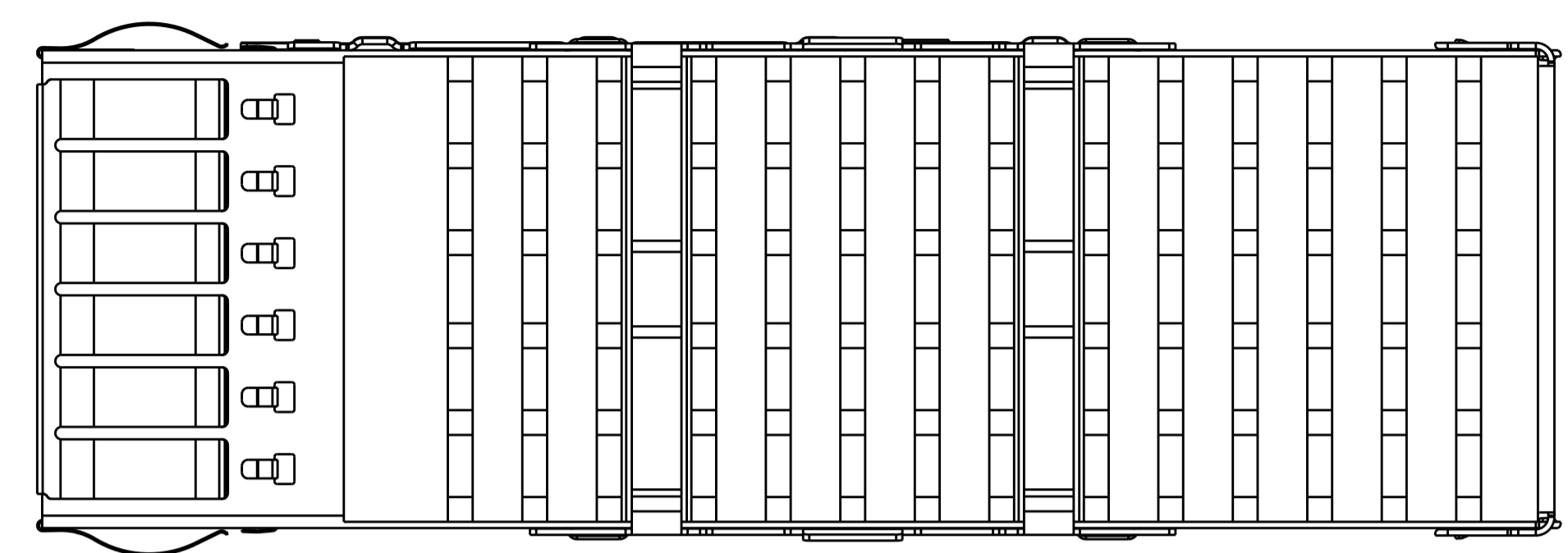
1 REAR LEG  
SCALE 5:1



0 REAR LEG  
SCALE 5:1

|   |  |  |   |
|---|--|--|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT.  |  | DMN: JASON YANG 23SEP2013                              | TE Connectivity   |
|   |  | CHK: 23SEP2013   |   |
| DIMENSIONS:   |  | APVD: 23SEP2013  | NAME: CAGE ASSEMBLY, QSFP28, THRU BEZEL WITH EMI SPRING FINGER HEAT SINK<br>SIZE: CAGE CODE DRAWING NO: 114-32023<br>WEIGHT: A100779C=2170704 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:<br>0 PLC ±0.25<br>1 PLC ±0.25<br>2 PLC ±0.20<br>3 PLC ±0.100<br>4 PLC ±<br>ANGLES ±°<br>FINISH ± |  | PRODUCT SPEC: 108-19428<br>APPLICATION SPEC: 114-32023 |   |
| MATERIAL: -   |  | CUSTOMER DRAWING SCALE: 2:1 SHEET 2 OF 6 REV: B1       |   |

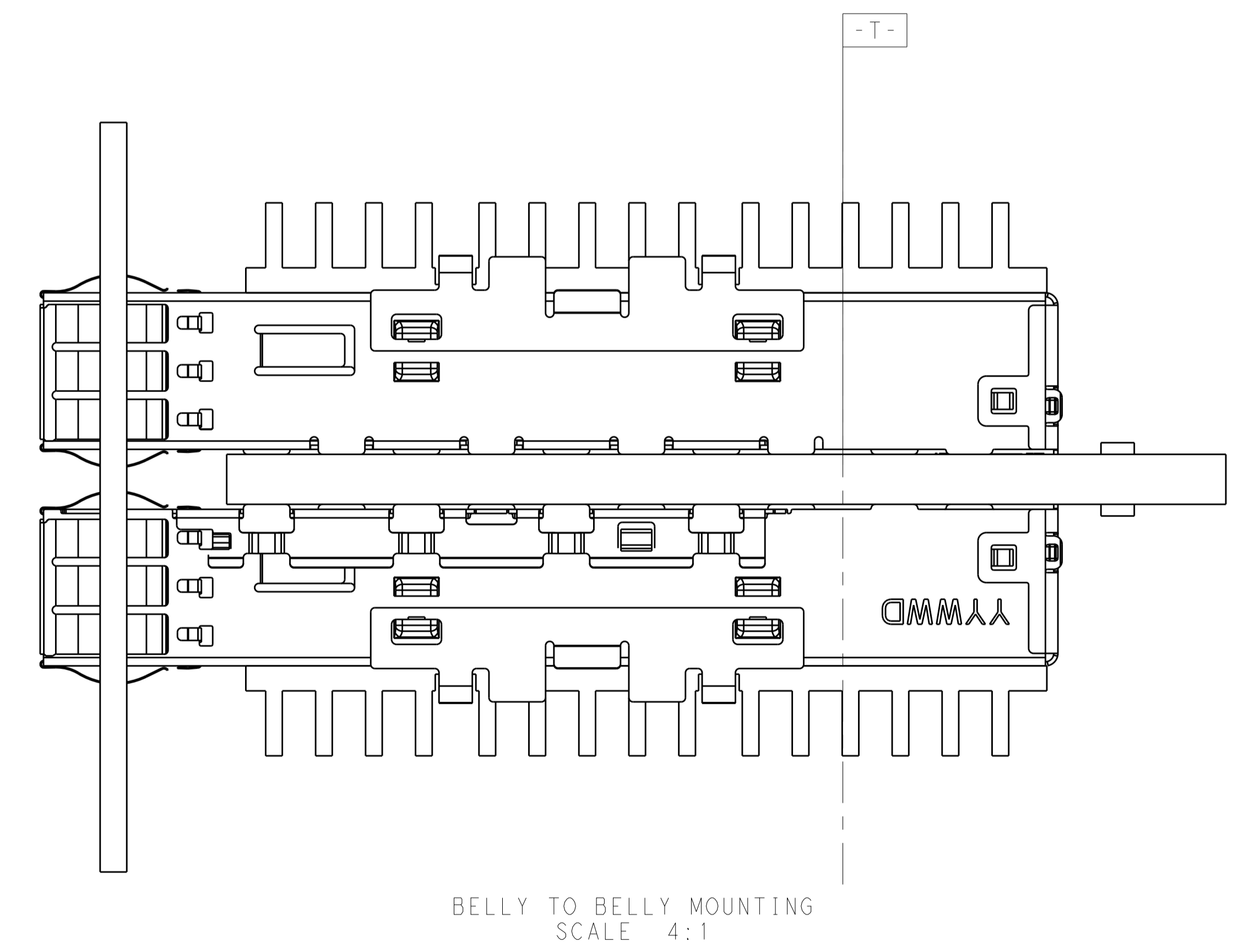
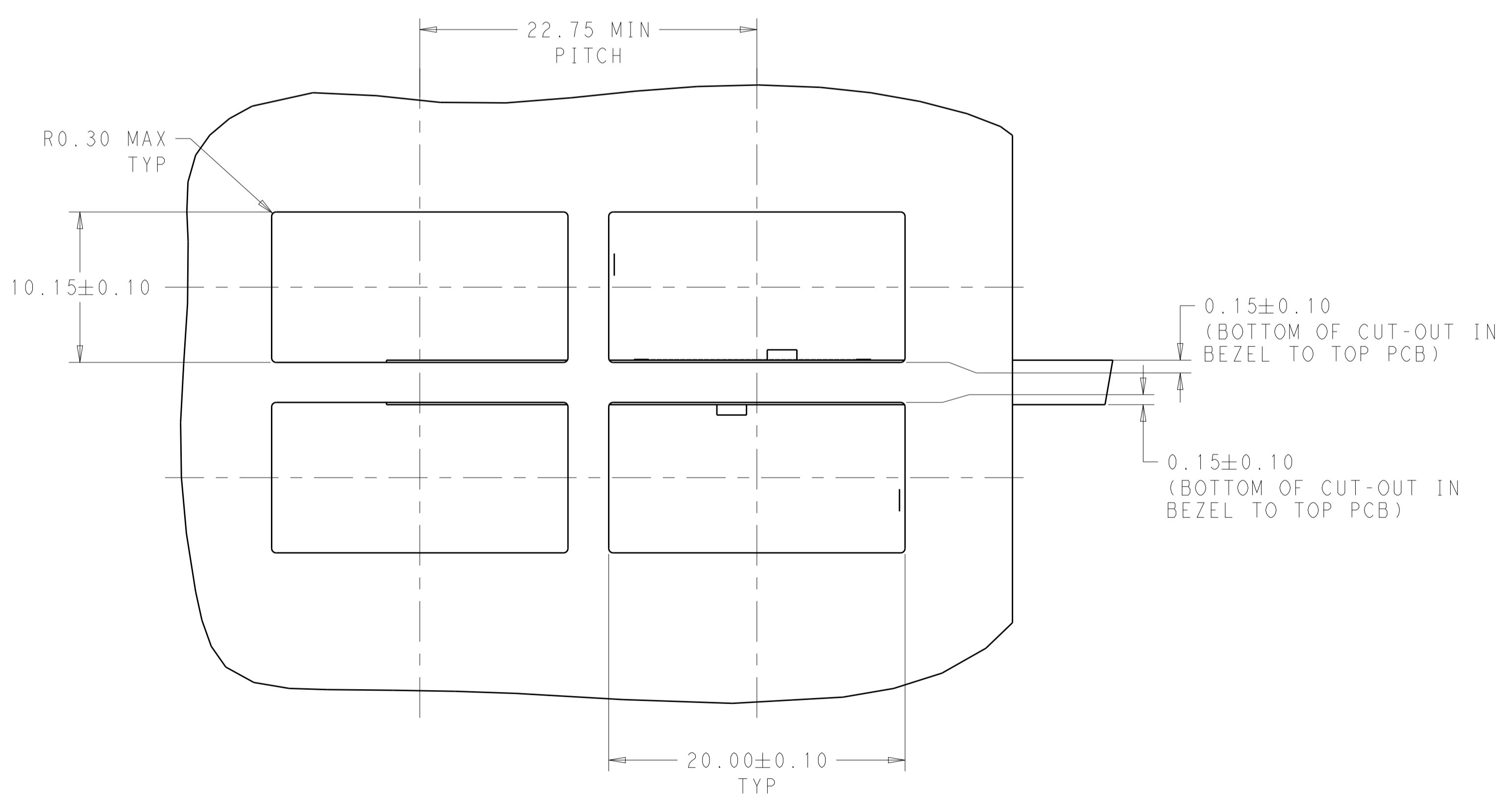
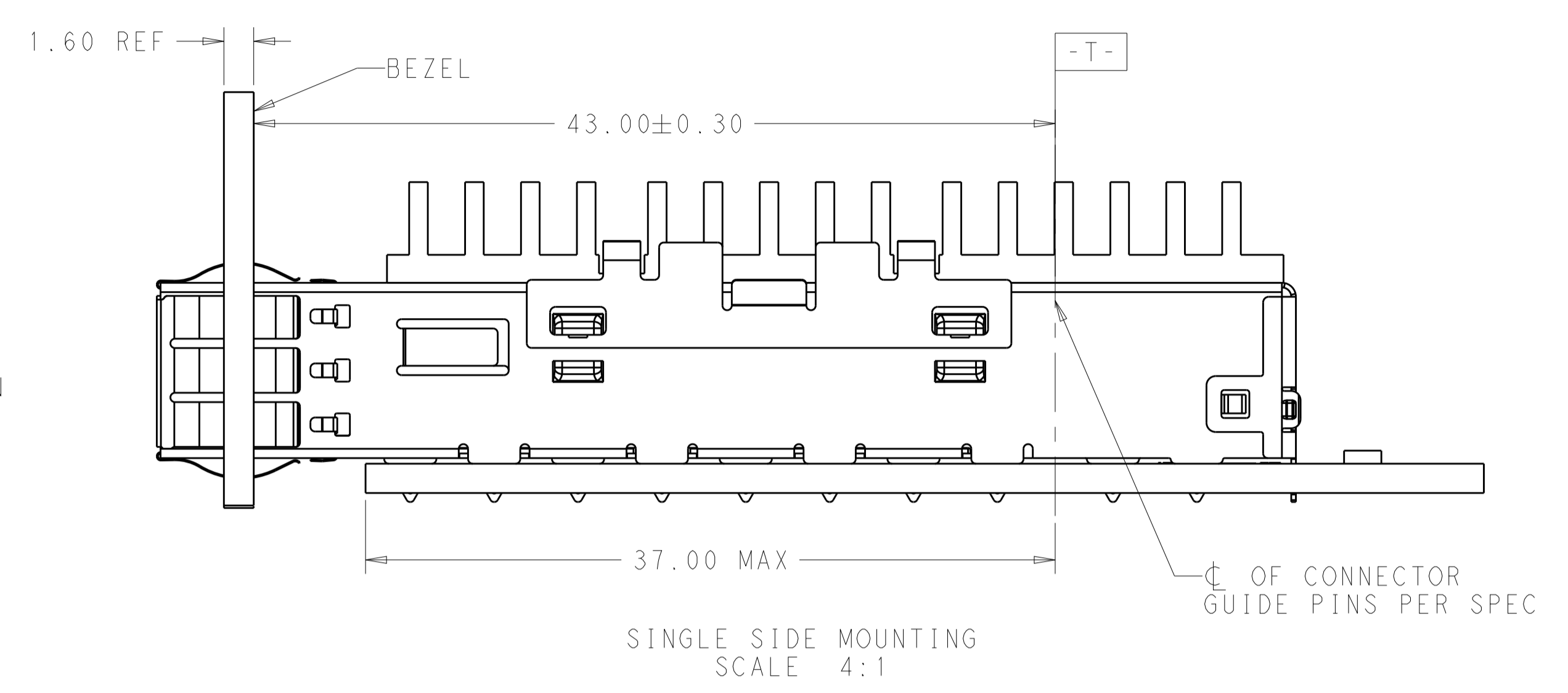
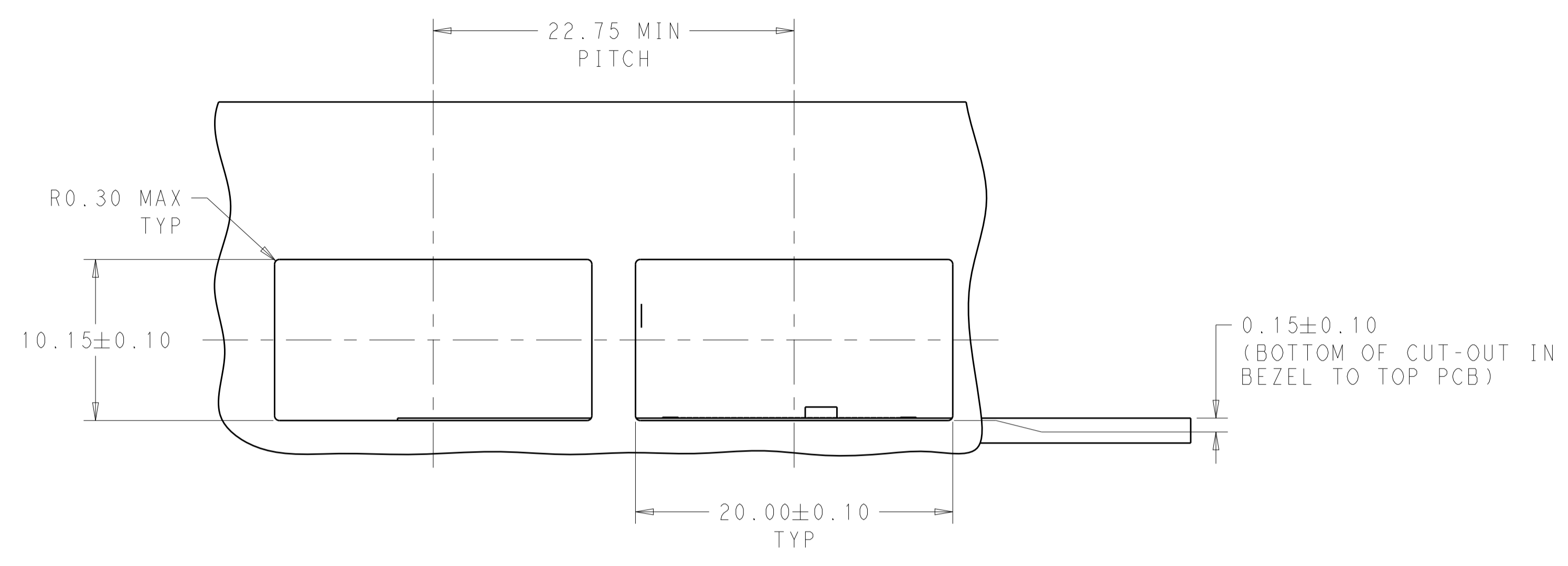
| LOC |     | DIST        |      | REVISIONS |      |  |  |
|-----|-----|-------------|------|-----------|------|--|--|
| P.  | LTN | DESCRIPTION | DATE | DWN       | APVD |  |  |
| -   | -   | SEE SHEET 1 | -    | -         | -    |  |  |
|     |     |             |      |           |      |  |  |
|     |     |             |      |           |      |  |  |



1-2170704-2 ARE AS SHOWN

|   |  |                             |  |
|---|--|-----------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT.  |  | DWN: JASON YANG 23SEP2013   | TE Connectivity  |
|   |  | CHK: 23SEP2013              |  |
| DIMENSIONS:   |  | APVD: 23SEP2013             | NAME: CAGE ASSEMBLY, QSFP28, THRU BEZEL WITH EMI SPRING FINGER HEAT SINK<br>SIZE: A100779<br>CAGE CODE: C=2170704<br>DRAWING NO: 114-32023 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:  |  | PRODUCT SPEC: 108-19428     |  |
| 0 PLC ±0.25<br>1 PLC ±0.25<br>2 PLC ±0.20<br>3 PLC ±0.100<br>4 PLC ±<br>ANGLES ±° |  | APPLICATION SPEC: 114-32023 |  |
| FINISH: -   |  | WEIGHT: -                   |  |
| MATERIAL: -   |  | CUSTOMER DRAWING            | RESTRICTED TO: -   |
| 4805 (3/11)   |  | SCALE: 2:1                  | SHEET 3 OF 6   |
|   |  | REV: B1                     |  |

| LOC |     | DIST        |      | REVISIONS |      |   |   |
|-----|-----|-------------|------|-----------|------|---|---|
| P   | LTN | DESCRIPTION | DATE | DWN       | APVD |   |   |
| -   | -   | SEE SHEET 1 | -    | -         | -    | - | - |
|     |     |             |      |           |      |   |   |
|     |     |             |      |           |      |   |   |

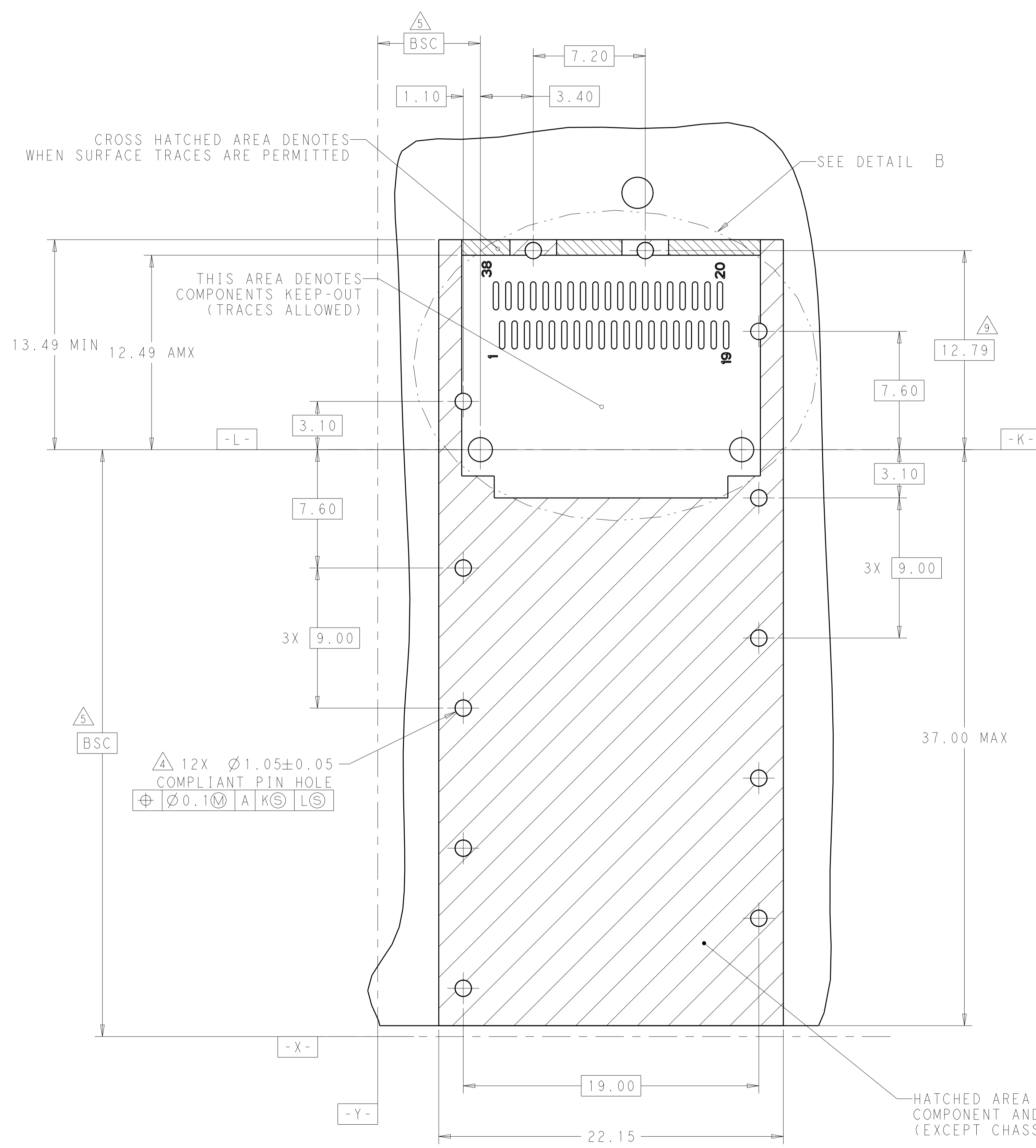


|  |              |                            |  |
|--|--------------|----------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |              | DWN: JASON YANG 23SEP2013  | TE Connectivity  |
| DIMENSIONS: mm                         |              | CHK: 23SEP2013             |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |              | APVD: 23SEP2013            | NAME: CAGE ASSEMBLY, QSFP28, THRU BEZEL WITH EMI SPRING FINGER HEAT SINK |
| 0 PLC ±0.25                            | 1 PLC ±0.25  | PRODUCT SPEC 108-19428     | SIZE: A100779  |
| 2 PLC ±0.20                            | 3 PLC ±0.100 | APPLICATION SPEC 114-32023 | CAGE CODE: C=2170704   |
| 4 PLC ±                                | ANGLES ±     | WEIGHT                     | RESTRICTED TO  |
| MATERIAL                               | FINISH       | CUSTOMER DRAWING           | SCALE: 2:1 SHEET 4 OF 6 REV: B1  |

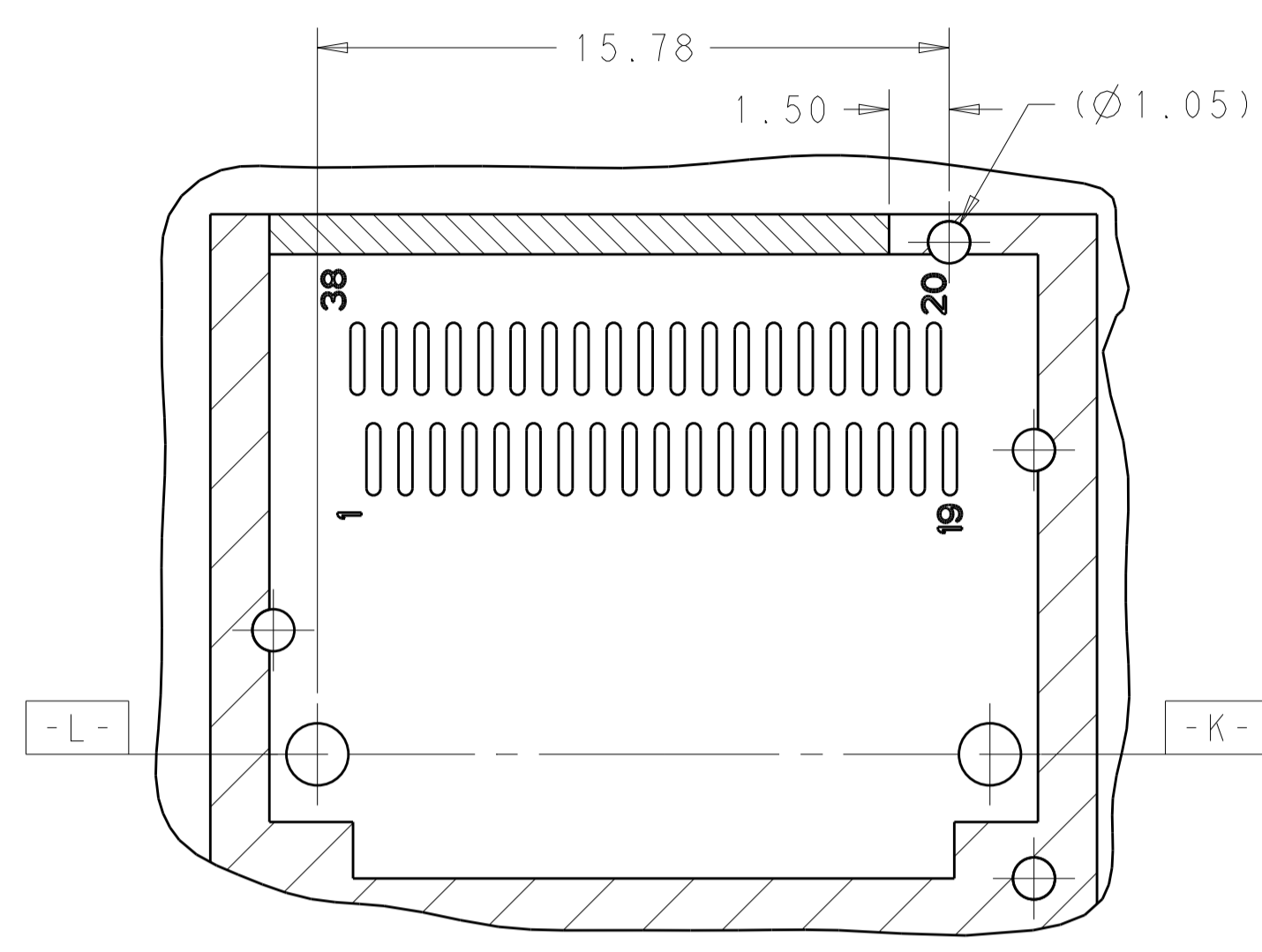
| LOC | DIST | REV | DATE | BY | APPV |
|-----|------|-----|------|----|------|
|     |      | 1   |      |    |      |

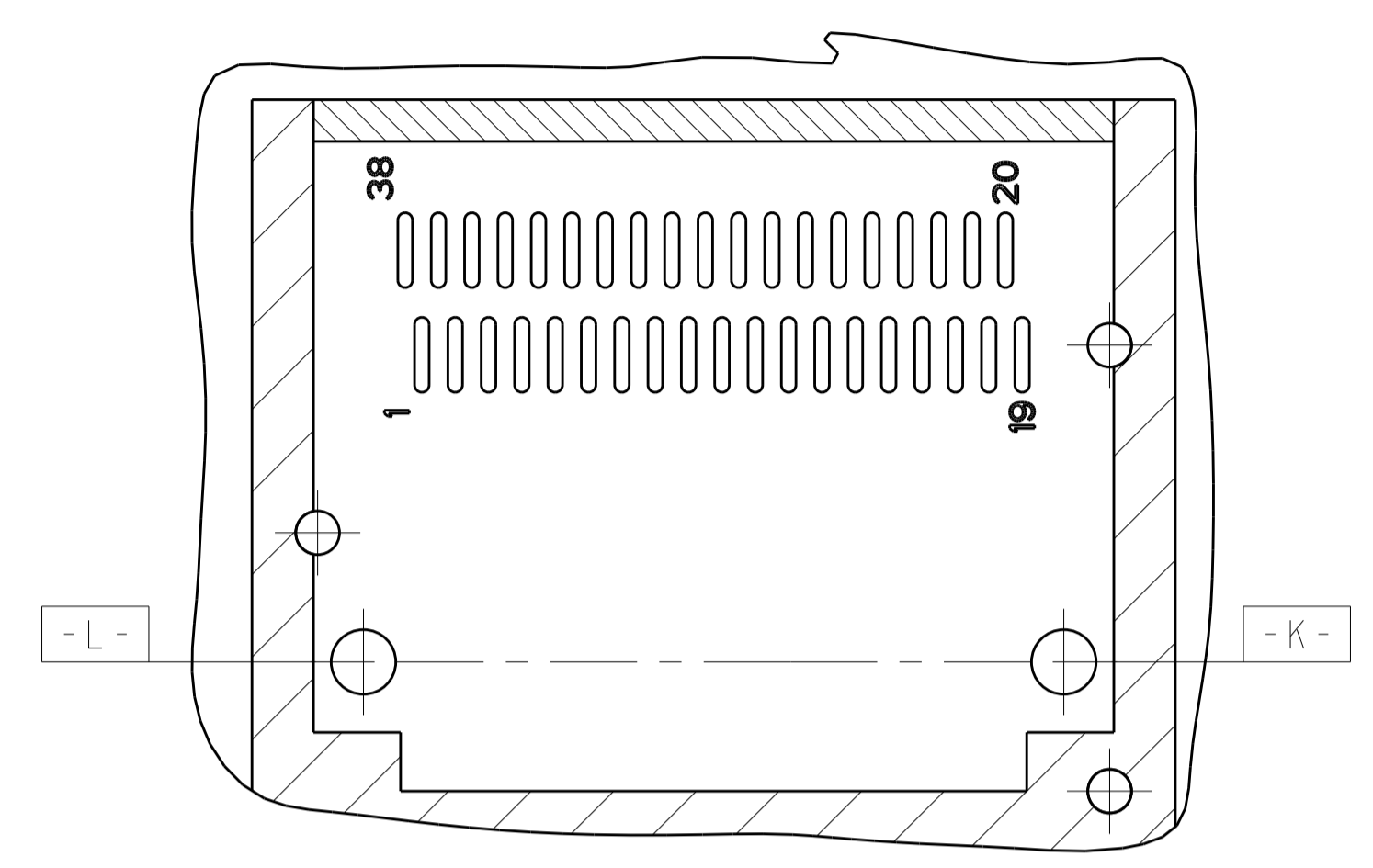
| REV | DESCRIPTION | DATE | BY | APPV |
|-----|-------------|------|----|------|
| 1   | SEE SHEET 1 |      |    |      |



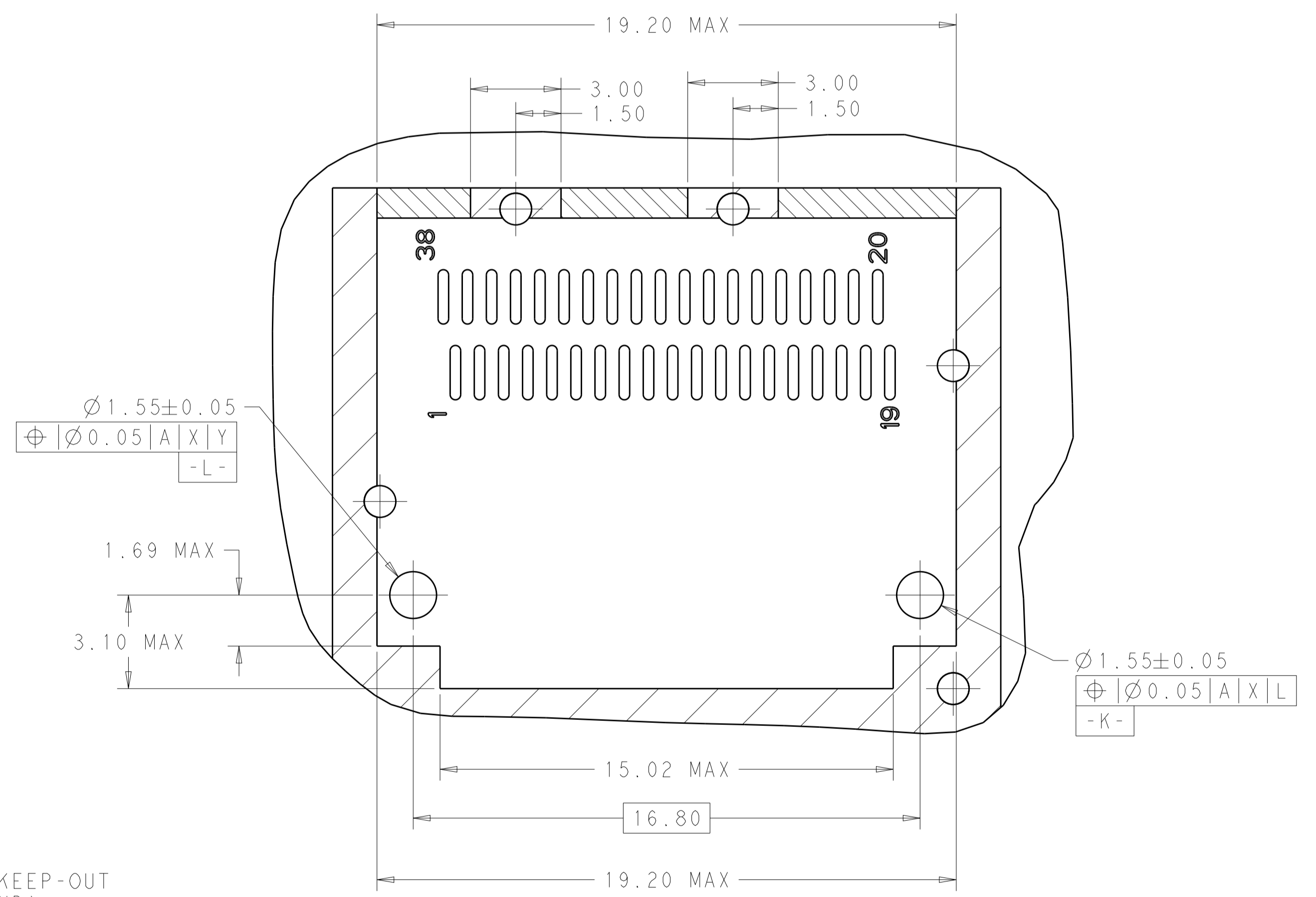
RECOMMENDED PCB LAYOUT  
 SINGLE TYPE OF 2 REAR HOLES OF LEGS  
 PCB TOLERANCE:  $\pm 0.05$   
 SCALE 6:1



RECOMMENDED PCB LAYOUT  
 SINGLE TYPE OF 1 REAR HOLES OF LEGS  
 PCB TOLERANCE:  $\pm 0.05$   
 SCALE 6:1



RECOMMENDED PCB LAYOUT  
 SINGLE TYPE OF 0 REAR HOLES OF LEGS  
 PCB TOLERANCE:  $\pm 0.05$   
 SCALE 6:1

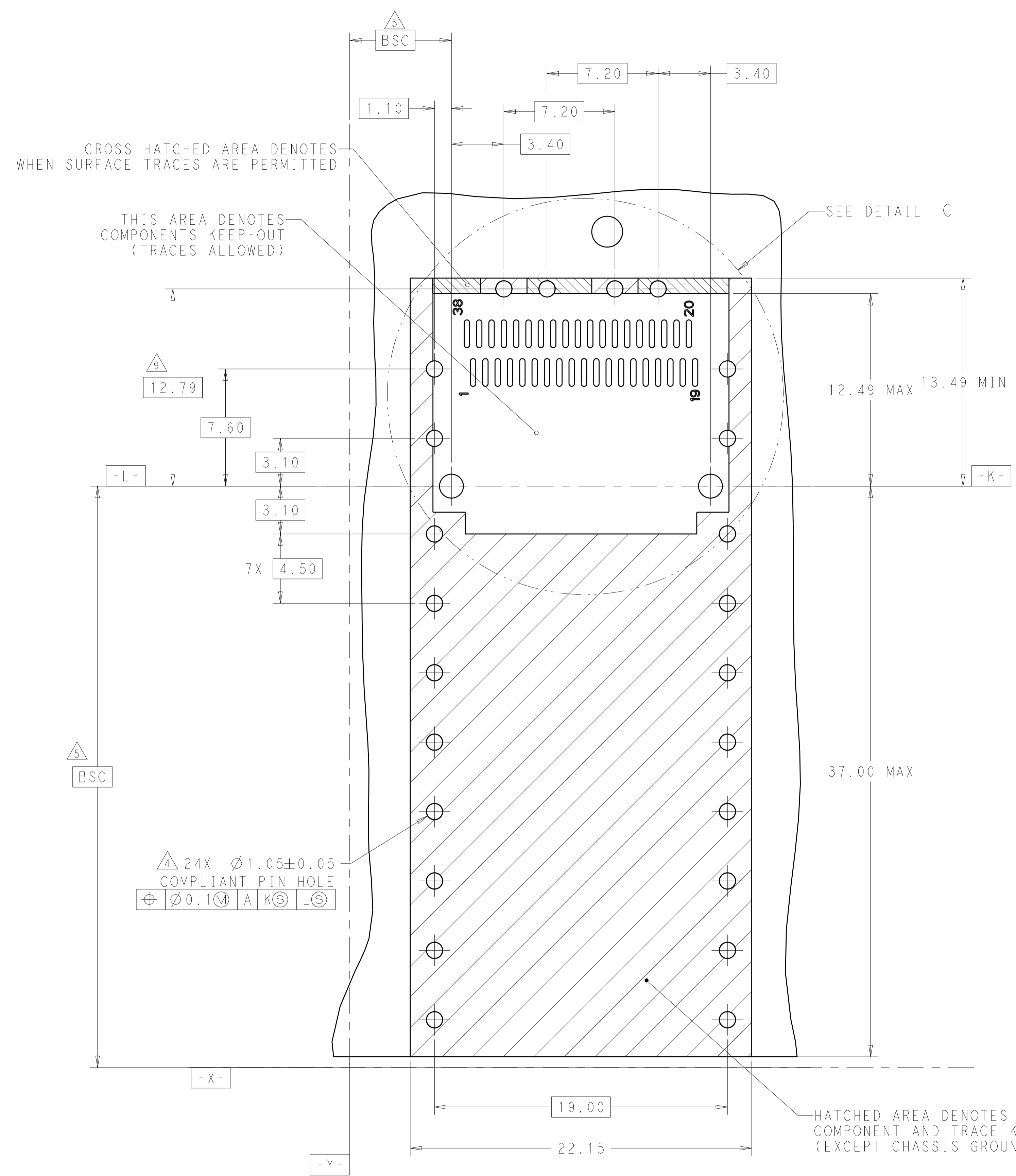


DETAIL B  
 SCALE 8:1

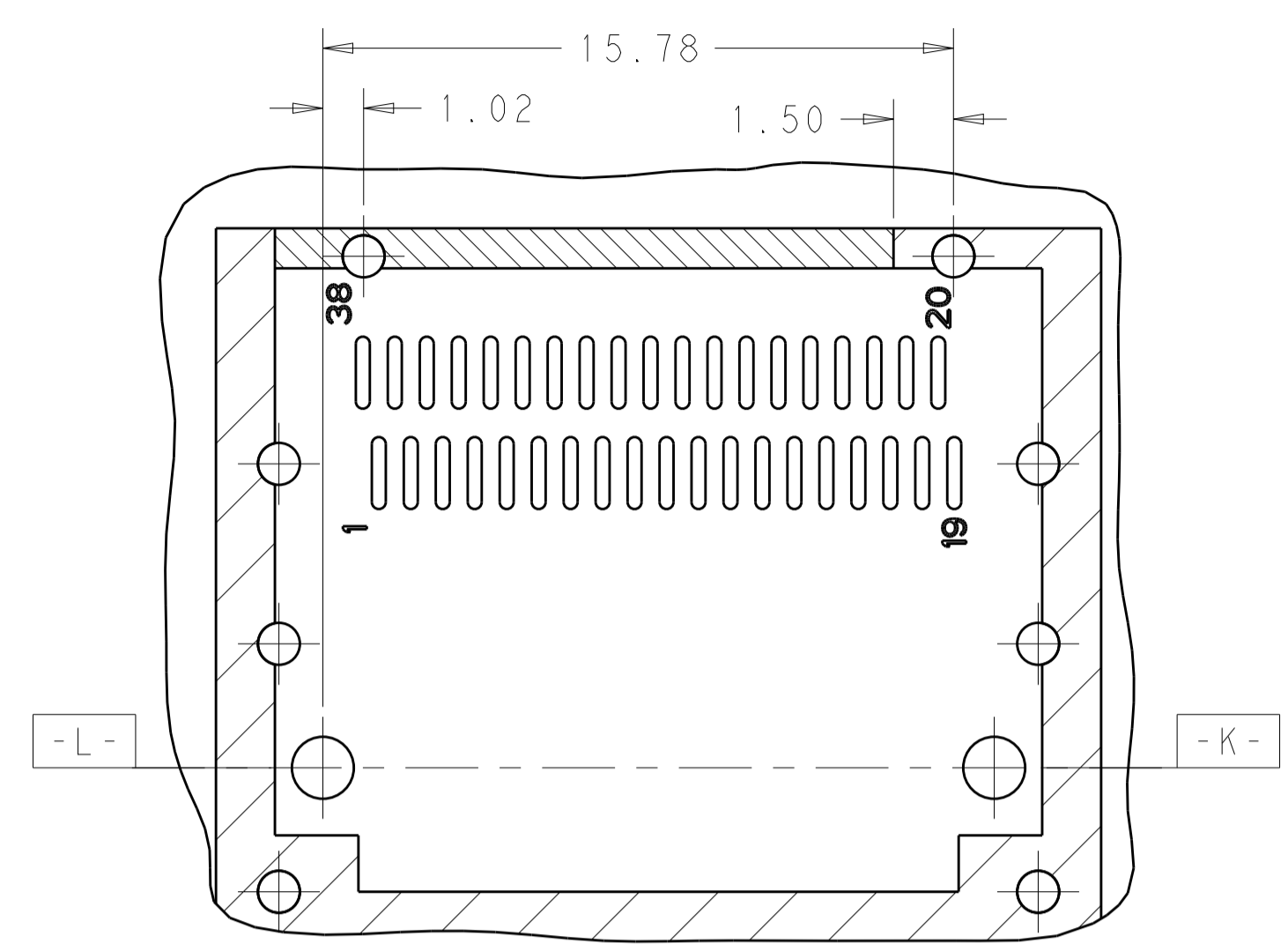
HATCHED AREA DENOTES COMPONENT AND TRACE KEEP-OUT (EXCEPT CHASSIS GROUND)

|  |                   |                            |   |
|--|-------------------|----------------------------|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |                   | OWN JASON YANG 23SEP2013   | TE Connectivity   |
| DIMENSIONS: mm                         |                   | CHK JASON YANG 23SEP2013   |   |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |                   | APVD JASON YANG 23SEP2013  | NAME CAGE ASSEMBLY, QSPF28, THRU BEZEL WITH EMI SPRING FINGER HEAT SINK |
| 0 PLC $\pm 0.25$                       | 1 PLC $\pm 0.25$  | PRODUCT SPEC 108-19428     | SIZE CAGE CODE DRAWING NO. RESTRICTED TO                                |
| 2 PLC $\pm 0.20$                       | 3 PLC $\pm 0.100$ | APPLICATION SPEC 114-32023 | A100779C=2170704  |
| 4 PLC $\pm$                            | ANGLES $\pm$      | WEIGHT                     | SCALE 2:1 SHEET 5 OF 6 REV B1   |
| MATERIAL                               | FINISH            | CUSTOMER DRAWING           |   |

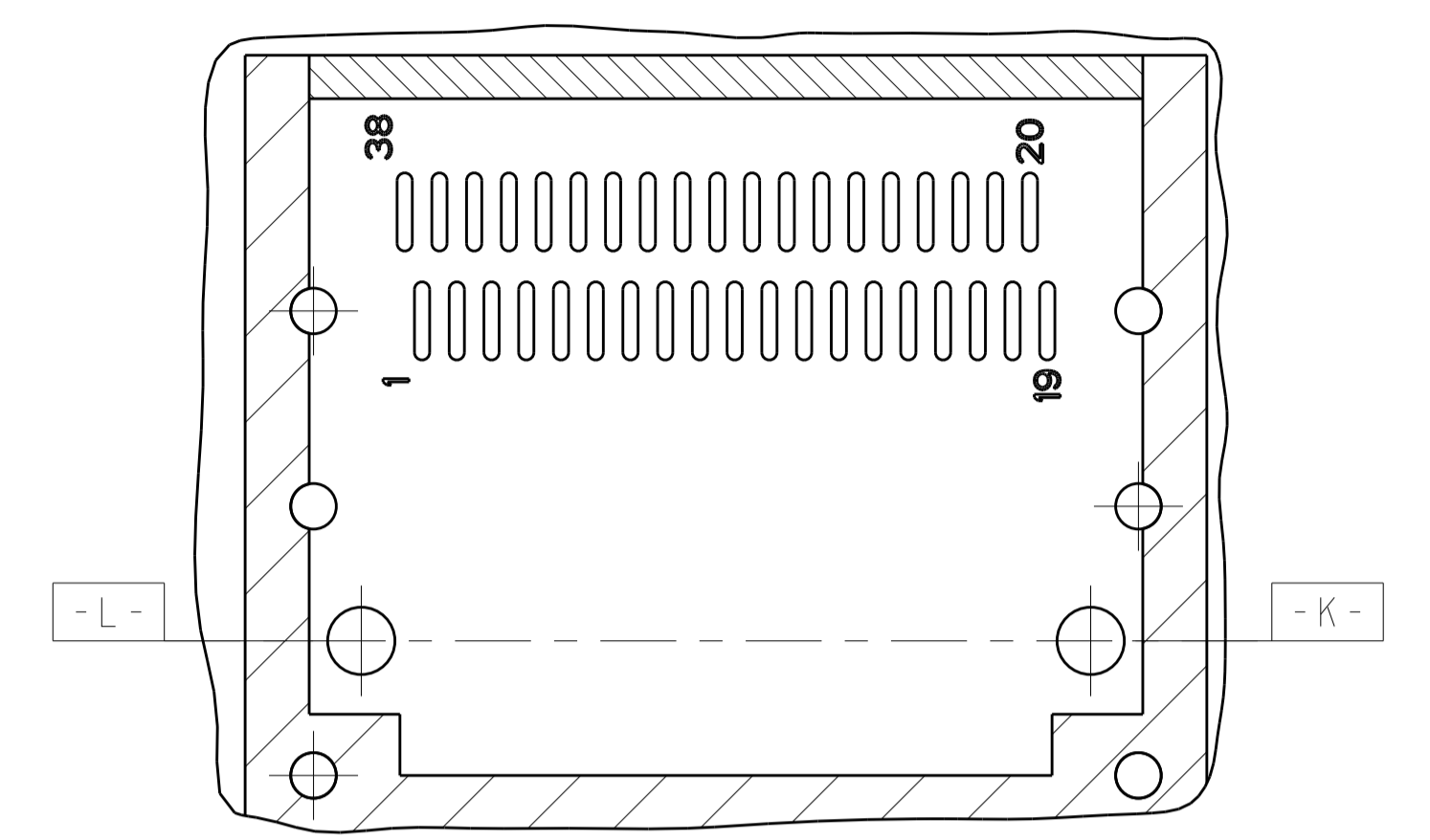
| LOC | DIST | REV | DESCRIPTION | DATE | OWN | APVD |
|-----|------|-----|-------------|------|-----|------|
|     |      |     | SEE SHEET 1 |      |     |      |



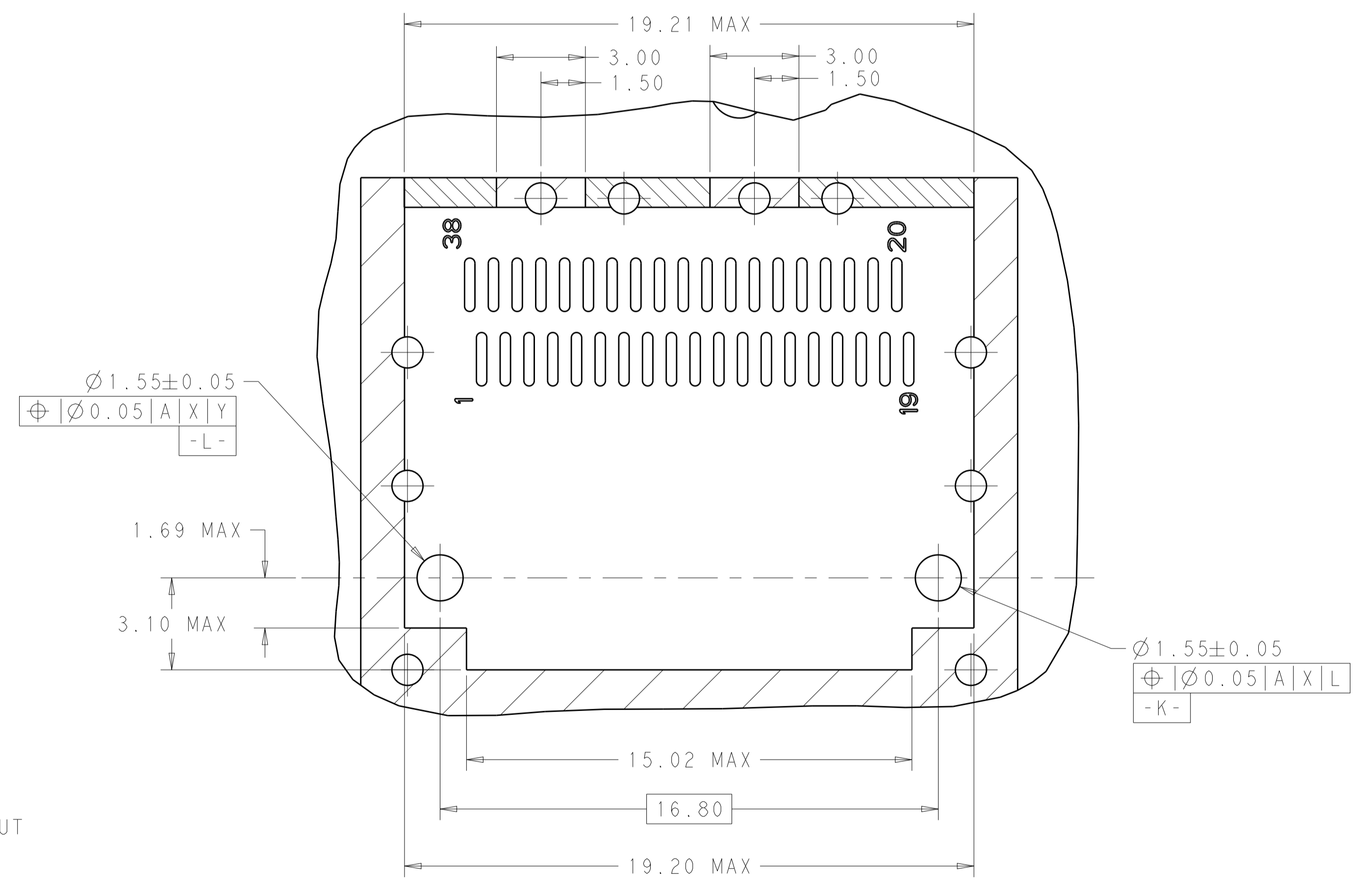
RECOMMENDED PCB LAYOUT  
 BELLY TO BELLY TYPE OF 2 REAR HOLES OF LEGS  
 PCB TOLERANCE:  $\pm 0.05$   
 SCALE 6:1



RECOMMENDED PCB LAYOUT  
 BELLY TO BELLY TYPE OF 1 REAR HOLES OF LEGS  
 PCB TOLERANCE:  $\pm 0.05$   
 SCALE 6:1



RECOMMENDED PCB LAYOUT  
 BELLY TO BELLY TYPE OF 0 REAR HOLES OF LEGS  
 PCB TOLERANCE:  $\pm 0.05$   
 SCALE 6:1



DETAIL C  
 SCALE 8:1

|  |             |                   |                       |  |
|--|-------------|-------------------|-----------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |             | OWN: JASON YANG   | 23SEP2013             | TE Connectivity  |
| DIMENSIONS: mm                         |             | CHK: JASON YANG   | 23SEP2013             |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: |             | APVD: JASON YANG  | 23SEP2013             | NAME: CAGE ASSEMBLY, QSPF28, THRU BEZEL WITH EMI SPRING FINGER HEAT SINK<br>PRODUCT SPEC: 108-19428<br>APPLICATION SPEC: 114-32023 |
| 0 PLC                                  | $\pm 0.25$  | 1 PLC             | $\pm 0.25$            |  |
| 2 PLC                                  | $\pm 0.25$  | 3 PLC             | $\pm 0.25$            |  |
| 4 PLC                                  | $\pm 0.100$ | ANGLES            | $\pm$                 |  |
| MATERIAL:                              |             | FINISH:           |                       | RESTRICTED TO: -   |
| CUSTOMER DRAWING                       |             | WEIGHT:           |                       | SCALE: 2:1   |
| SIZE: A1                               |             | CAGE CODE: 100779 | DRAWING NO: C=2170704 | SHEET 6 OF 6   |
|  |             |                   |                       | REV: B1  |