

4

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2

1

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| LOC | DIST | REVISIONS | | | | | |
|-----|------|-----------|-----|---------------------------|-----------|-----|------|
| GP | 00 | P | LTR | DESCRIPTION | DATE | DWN | APVD |
| | | A | | RELEASE | 02NOV2016 | JY | SH |
| | | B | | REVISED PER ECO-20-012918 | 1AUG2020 | JW | SH |

HEAT SINK CLIP
 HEAT SINK
 LIGHT PIPE
 1X6 CAGE ASSEMBLY

- COMPONENTS
 CAGE ASSEMBLY: NICKEL-SILVER ALLOY
 HEAT SINK: ALUMINUM/BLACK ANODIZE
 HEAT SINK CLIP: STAINLESS STEEL
 EMI SPRING: COPPER ALLOY/NICKEL PLATE
 LIGHT PIPE: CLEAR POLYCARBONATE WITH UL 94 V-0
 ORGANIZER: POLYESTER WITH UL 94 V-0
- REFERENCE APPLICATION SPECIFICATION 114-32023 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS
- DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER
- DIMENSION APPLIES WITH MODULE INSERTED IN CAGE
- HEAT SINKS, HEAT SINK CLIPS AND LIGHT PIPES ARE SHIPPED ASSEMBLED ON CAGE
- MINIMUM PC BOARD THICKNESS: SINGLE SIDED: 1.57 MIN
 DOUBLE SIDED: 2.20 MIN
- DATUM **-A-** IS TOP SURFACE OF THE HOST BOARD.
- THESE HOLES ARE OPTIONAL WHEN THE REAR PINS ARE REMOVED.
- MATES WITH QSFP28 MSA COMPATIBLE TRANSCEIVER.
- DATE CODE (YYWWD) MARKED APPROXIMATELY AS SHOWN.

114.50 REF
 6X 18.75±0.10
 6X 8.90±0.10
 7.88
 5X 19.00
 4X 19.00
 18.50
 REAR PINS OPTIONAL
 SCALE 2:1

67.75 REF
 -T-
 9.65 REF
 SEE DETAIL C
 48.00
 16.50
 2.05 TYP
 OF GUIDE POST
 A MAX

3.0 MAX

DETAIL C
 SCALE 6:1

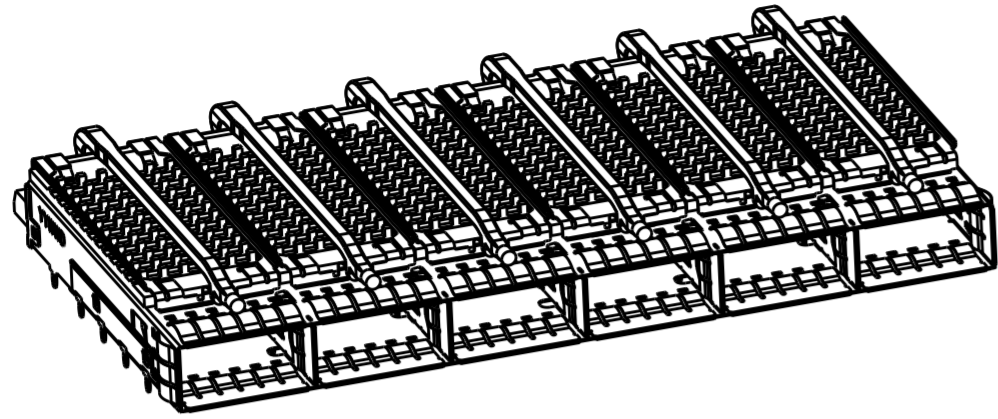
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| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DWN 24OCT2013 JASON YANG | STE TE Connectivity | |
| | | CHK 02NOV2016 SEAN HAN | | |
| DIMENSIONS: | TOLERANCES UNLESS OTHERWISE SPECIFIED: | APVD - | NAME | |
| mm | 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ± | PRODUCT SPEC 108-19428 | CAGE ASSEMBLY, 1X6, QSFP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING | |
| MATERIAL | SEE NOTES | APPLICATION SPEC 114-32023 | SIZE | CAGE CODE |
| SEE NOTES | SEE NOTES | WEIGHT - | A200779 | DRAWING NO C-2170708 |
| | | CUSTOMER DRAWING | SCALE 1:1 | SHEET 1 OF 9 |
| | | | | REV B |

1471-9 (3/11)

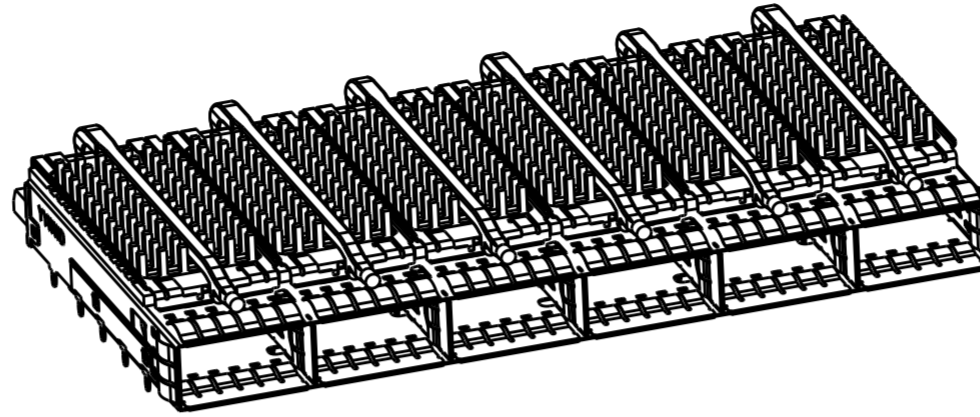
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| - | | SEE SHEET 1 | | - | - | - | |
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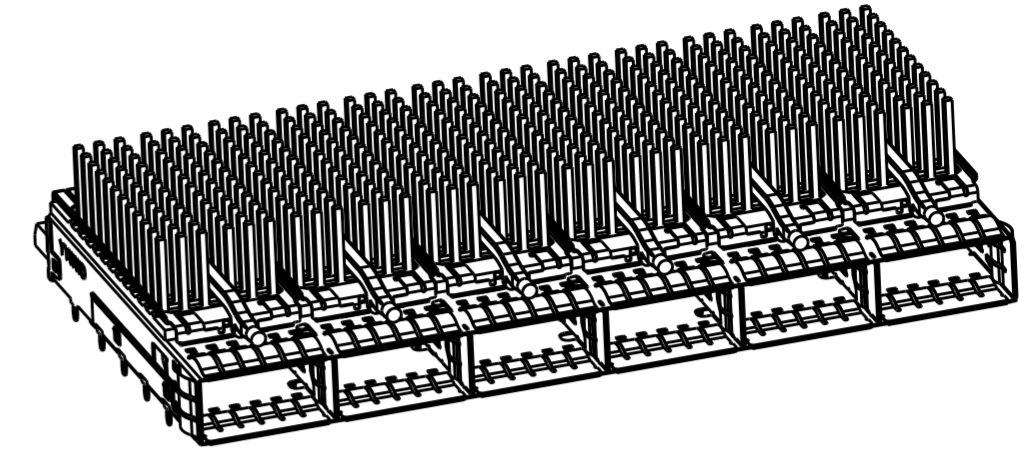
HEAT SINK OPTION



PCI HEAT SINK
SCALE 1:1

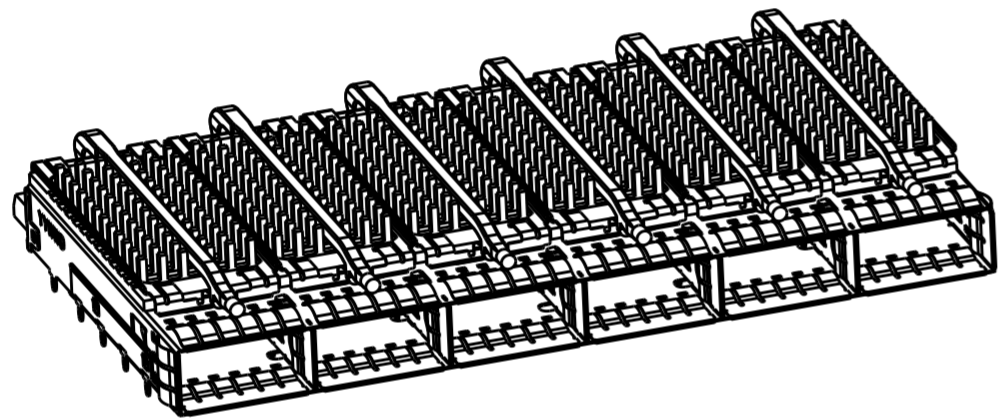


SAN HEAT SINK
SCALE 1:1

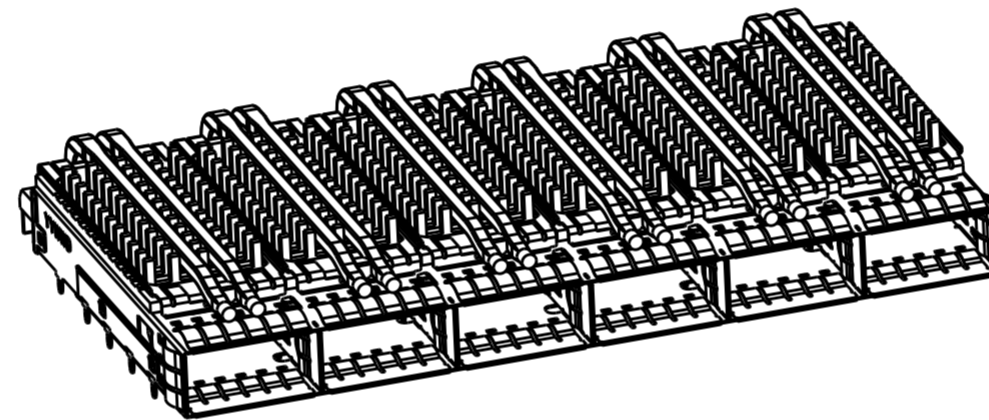


NETWORKING
SCALE 1:1

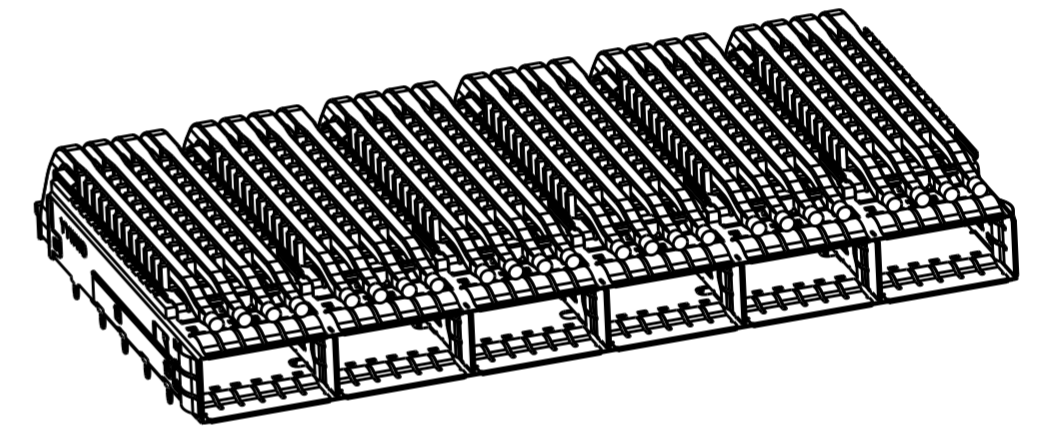
LIGHT PIPE OPTION



SINGLE LIGHT PIPE
SCALE 1:1

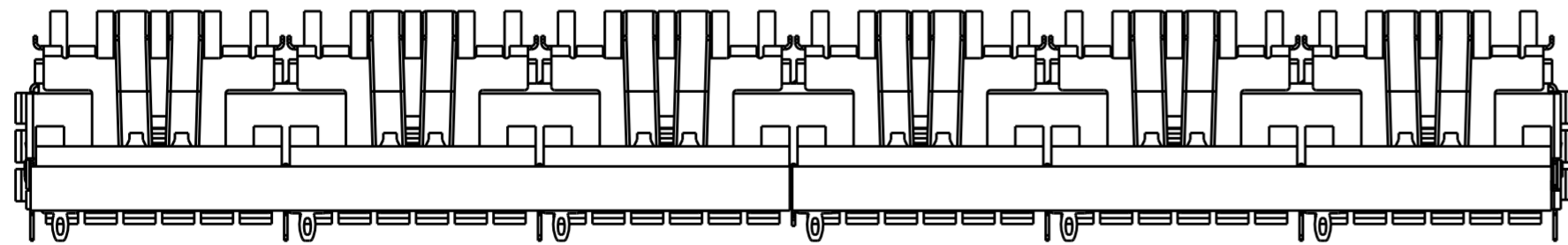


DUAL LIGHT PIPE
SCALE 1:1

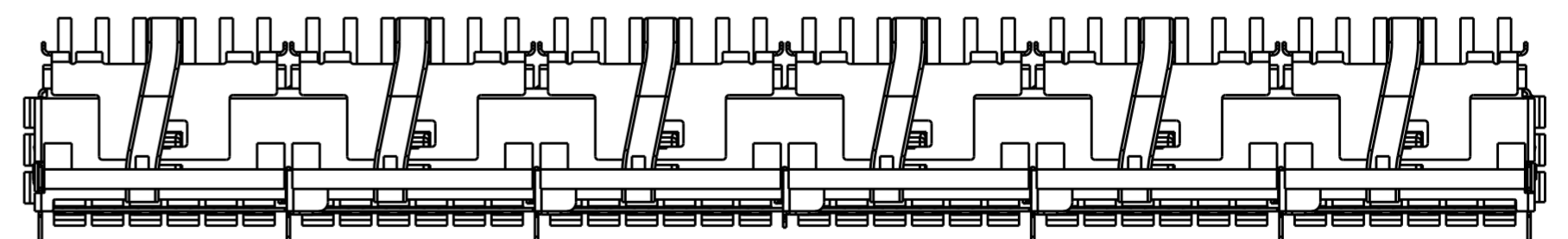


QUAD LIGHT PIPE
SCALE 1:1


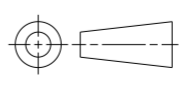
OF REAR LEGS OPTIONS



1 REAR LEGS
SCALE 2:1



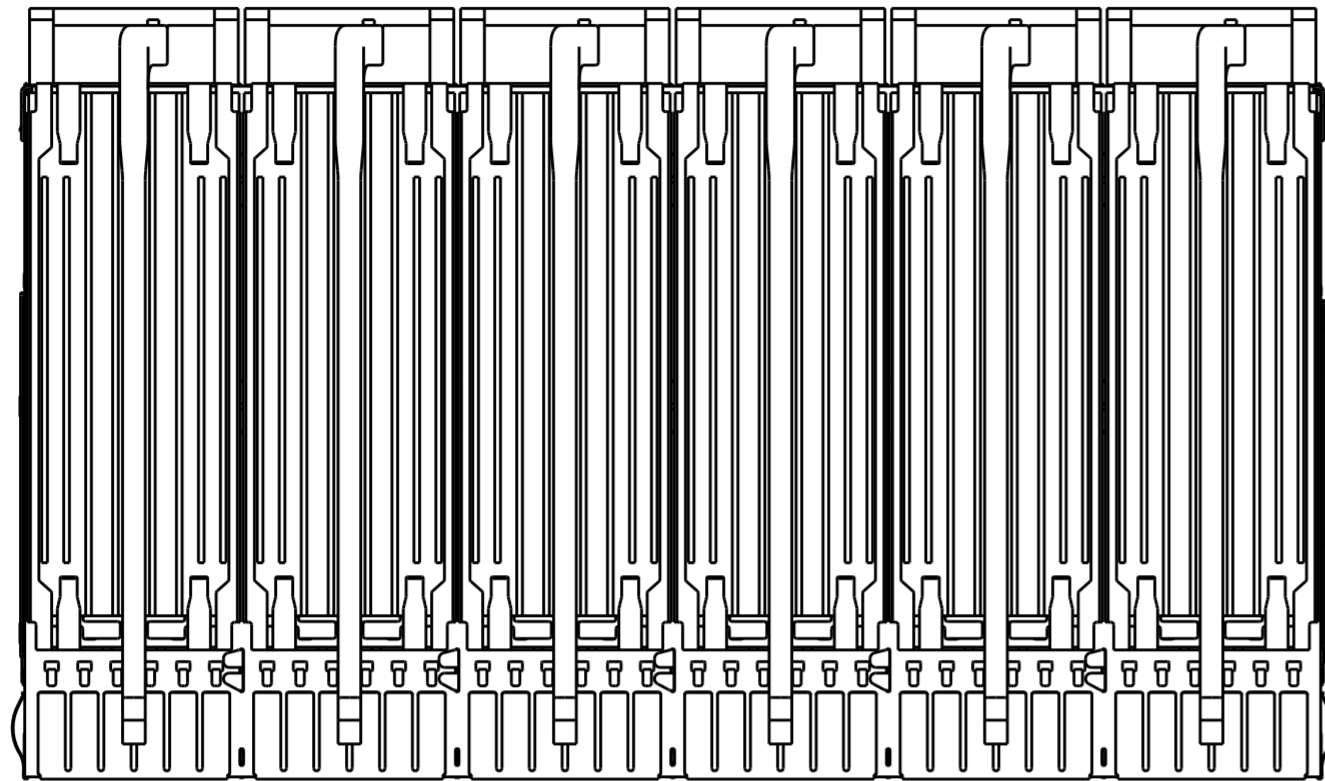
0 REAR LEGS
SCALE 2:1

| | | | | |
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| | | CHK SEAN HAN 02NOV2016 | | |
| DIMENSIONS: mm | | TOLERANCES UNLESS OTHERWISE SPECIFIED: | | NAME CAGE ASSEMBLY, 1X6, QSFP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING |
|  | | 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH ± | | PRODUCT SPEC 108-19428 APPLICATION SPEC 114-32023 |
| MATERIAL SEE NOTES material_2 | | FINISH SEE NOTES finish_spec_2 | | SIZE A200779 CAGE CODE C-2170708 DRAWING NO RESTRICTED TO |
| | | CUSTOMER DRAWING | | SCALE 3:1 SHEET 2 OF 9 REV B |

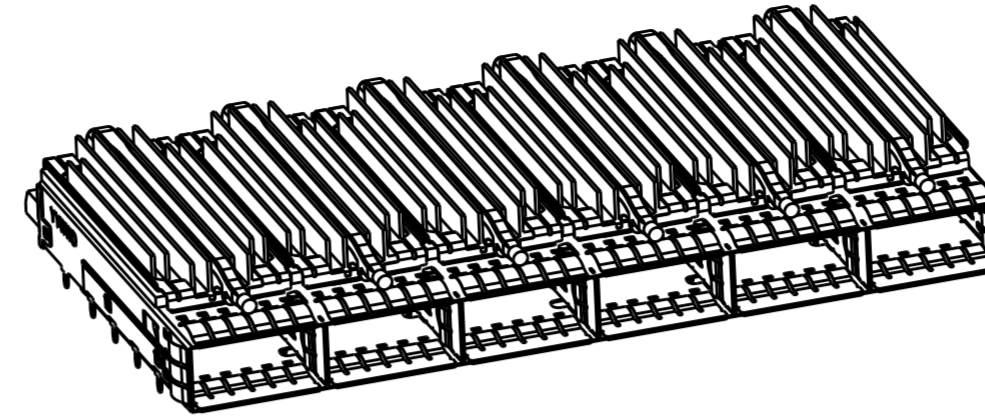
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| P | LTR | DESCRIPTION | DATE | DWN | APVD |
| - | - | SEE SHEET 1 | - | - | - |
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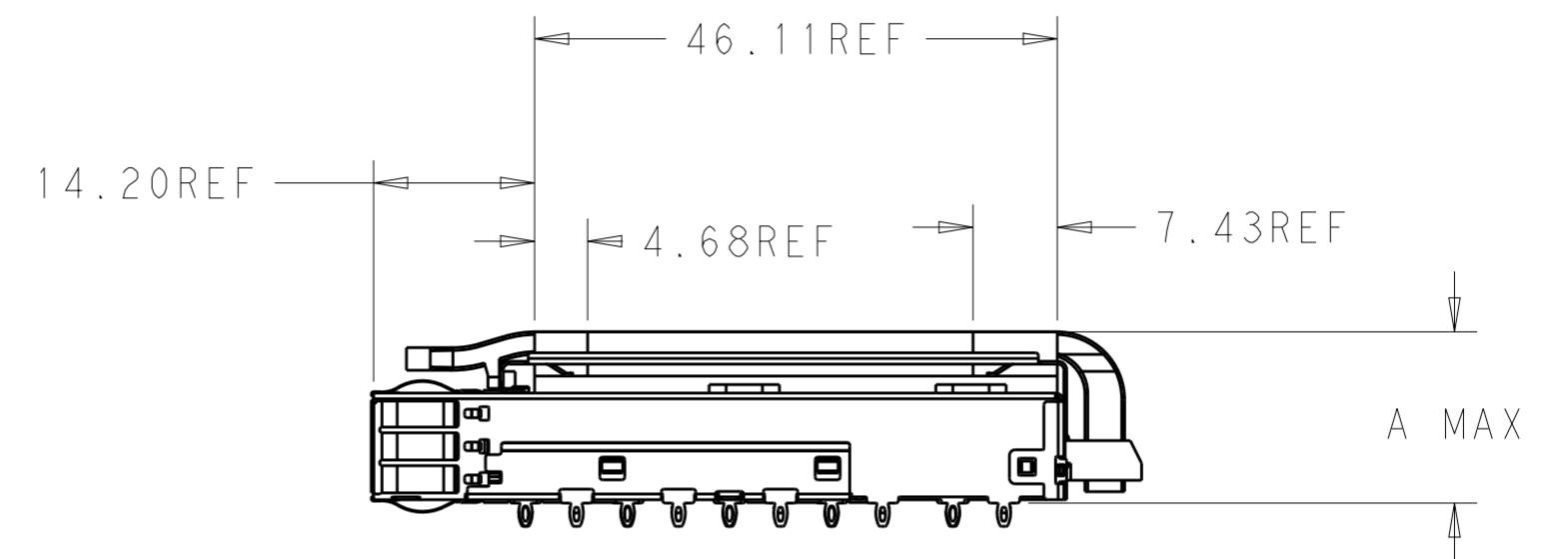
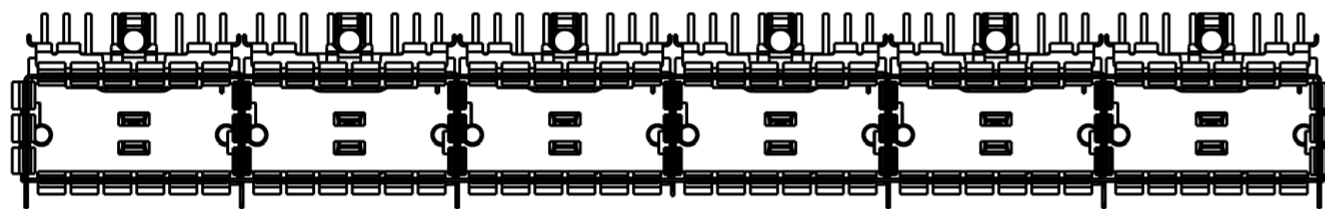
5-2170708-5 UNMARKED DIMENSIONS SAME AS 2170708-1




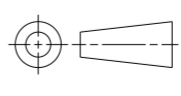
SCALE 3:2



5-2170708-5
SCALE 1:1

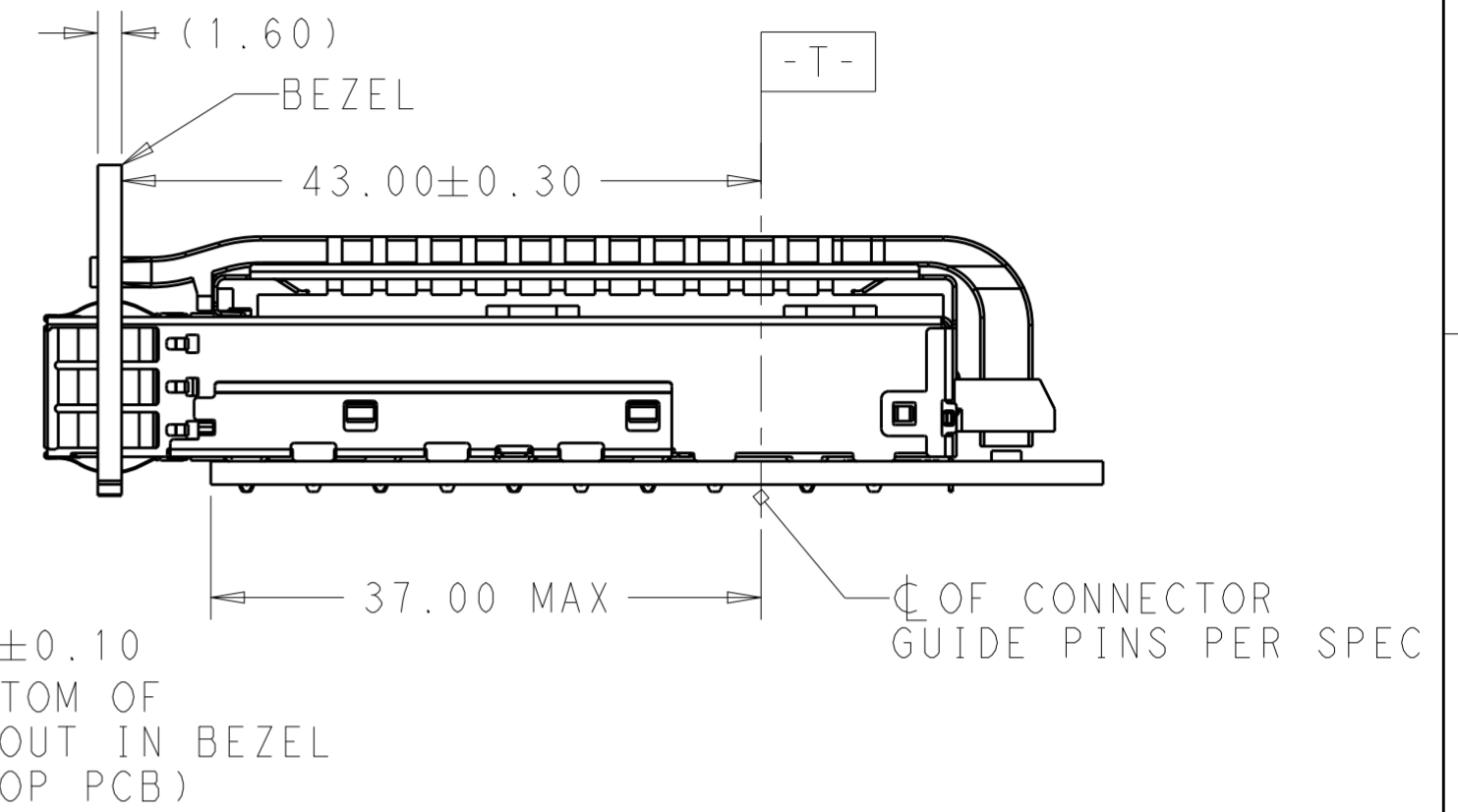
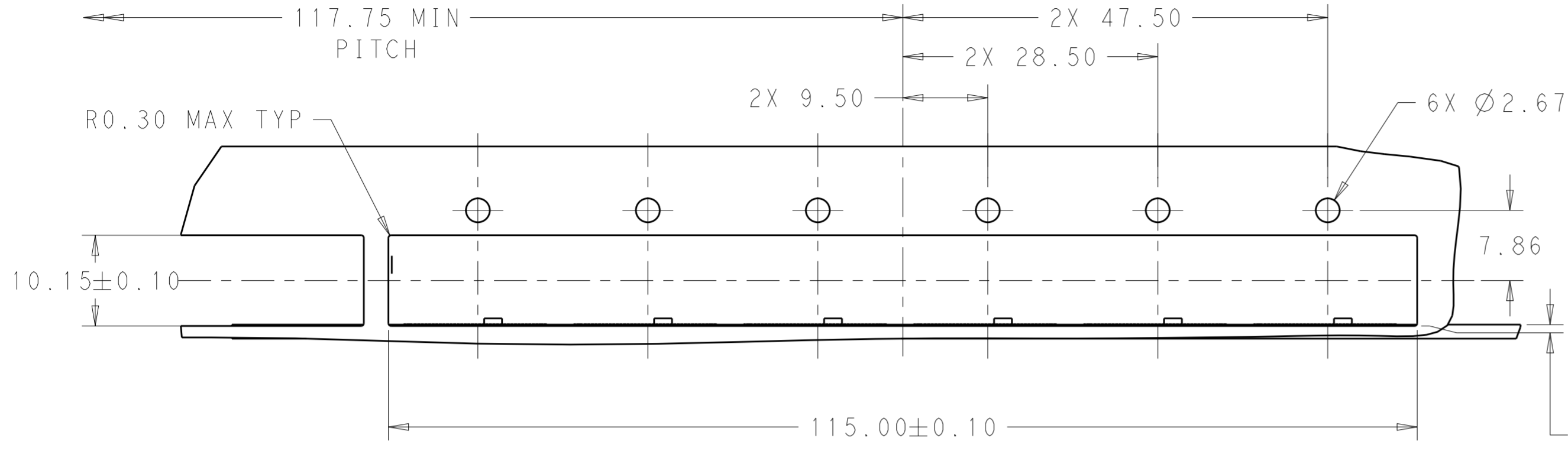


| | | | | |
|---------------|-------|-------------------|-------------------|-------------|
| 0 | 16 | FIN TYPE , SAN | SINGLE | 5-2170708-5 |
| 1 | 14.9 | CUSTOMER SPECIFIC | QUAD | 4-2170708-7 |
| 0 | 23.0 | NETWORKING | QUAD | 4-2170708-6 |
| 0 | 16.0 | SAN | QUAD | 4-2170708-5 |
| 0 | 13.7 | PCI | QUAD | 4-2170708-4 |
| 1 | 23.0 | NETWORKING | QUAD | 4-2170708-3 |
| 1 | 16.0 | SAN | QUAD | 4-2170708-2 |
| 1 | 13.7 | PCI | QUAD | 4-2170708-1 |
| 0 | 16.5 | CUSTOMIZED | DUAL | 2-2170708-7 |
| 0 | 23.0 | NETWORKING | DUAL | 2-2170708-6 |
| 0 | 16.0 | SAN | DUAL | 2-2170708-5 |
| 0 | 13.7 | PCI | DUAL | 2-2170708-4 |
| 1 | 23.0 | NETWORKING | DUAL | 2-2170708-3 |
| 1 | 16.0 | SAN | DUAL | 2-2170708-2 |
| 1 | 13.7 | PCI | DUAL | 2-2170708-1 |
| 1 | 14.9 | CUSTOMER SPECIFIC | SINGLE | 1-2170708-1 |
| 0 | 23.0 | NETWORKING | SINGLE | 2170708-6 |
| 0 | 16.0 | SAN | SINGLE | 2170708-5 |
| 0 | 13.7 | PCI | SINGLE | 2170708-4 |
| 1 | 23.0 | NETWORKING | SINGLE | 2170708-3 |
| 1 | 16.0 | SAN | SINGLE | 2170708-2 |
| 1 | 13.7 | PCI | SINGLE | 2170708-1 |
| # OF REAR PIN | DIM A | APPLICATION | LIGHT PIPE OPTION | PART NUMBER |

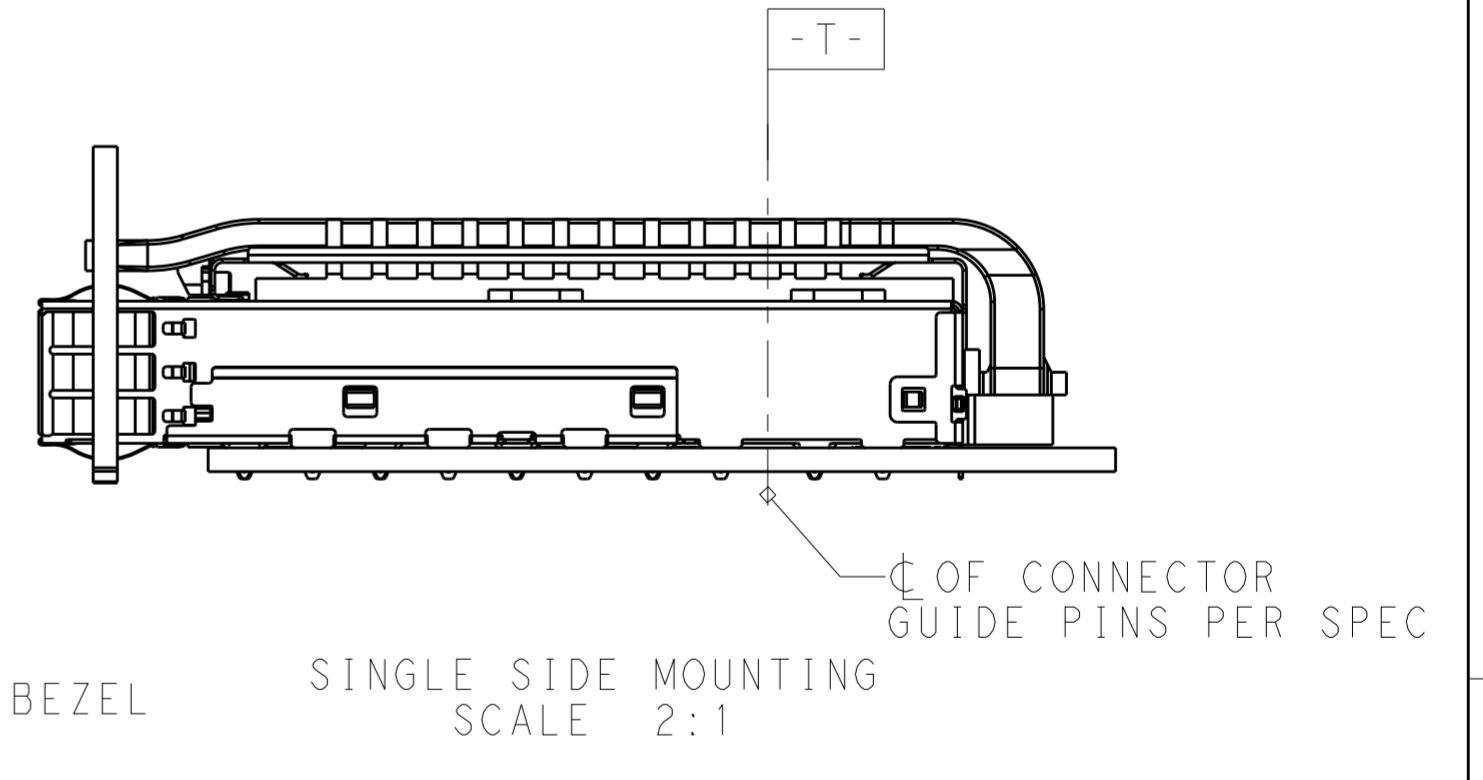
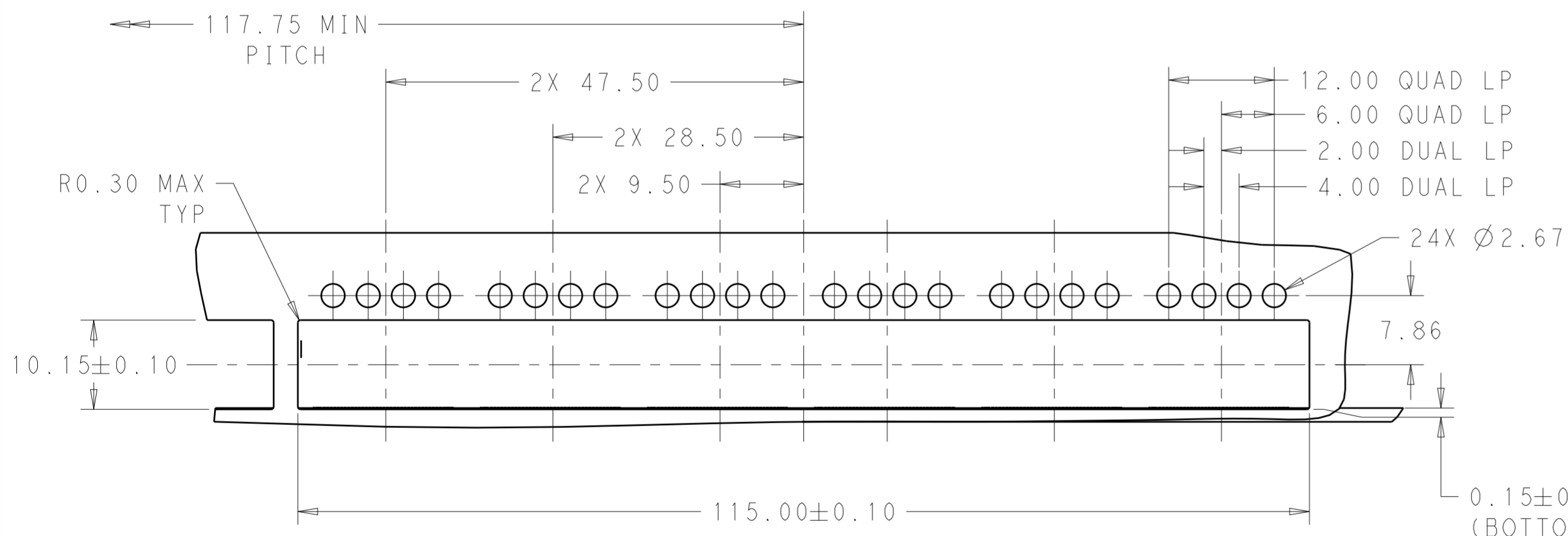
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| | | CHK 02NOV2016 SEAN HAN | |
| DIMENSIONS: mm | TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± | APVD - | NAME CAGE ASSEMBLY, 1X6, QSFP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING |
|  | | PRODUCT SPEC 108-19428 | SIZE A200779 |
| MATERIAL SEE NOTES material_2 | FINISH SEE NOTES finish_spec_2 | APPLICATION SPEC 114-32023 | DRAWING NO C-2170708 |
| | | WEIGHT - | RESTRICTED TO - |
| | | CUSTOMER DRAWING | SCALE 3:1 SHEET 3 OF 9 REV B |

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| P | LTR | DESCRIPTION | DATE | DWN | APVD | | |
| - | - | SEE SHEET 1 | - | - | - | | |



SINGLE SIDE MOUNTING
SCALE 2:1

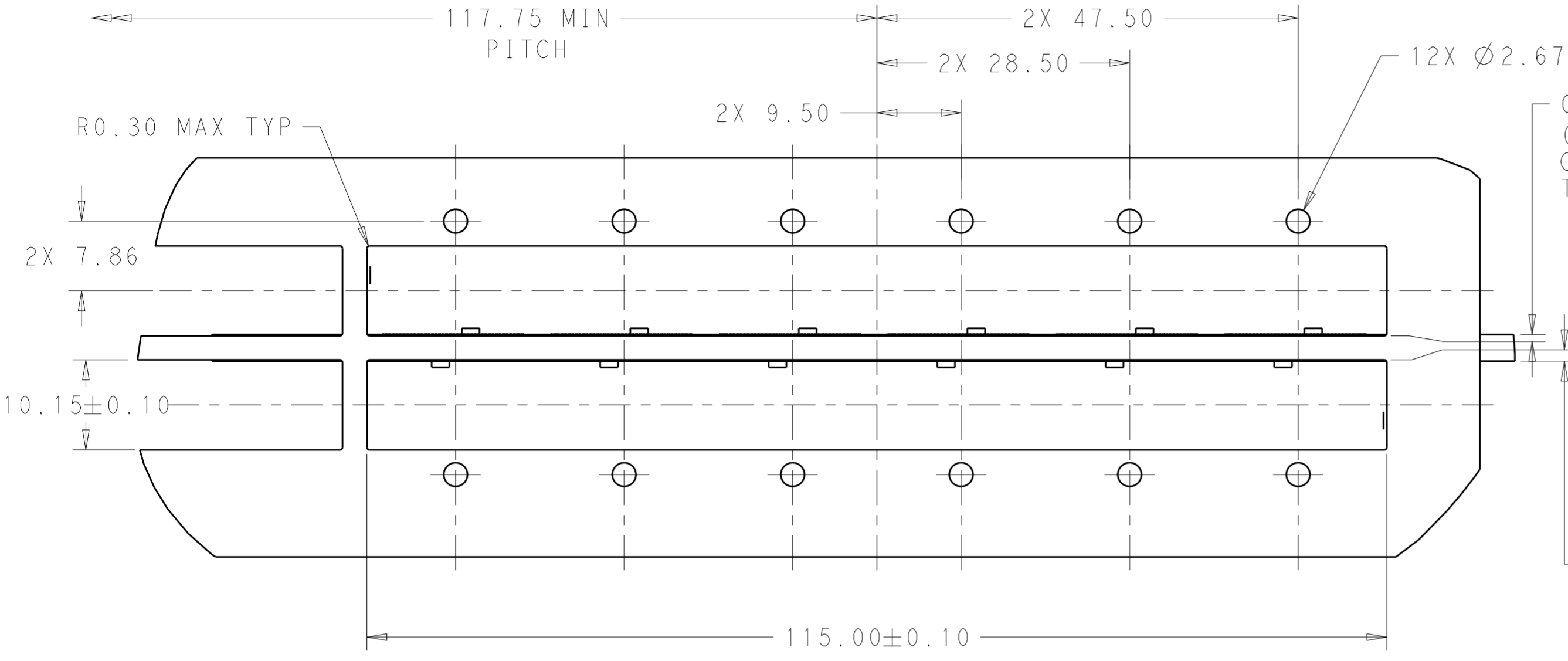


SINGLE SIDE MOUNTING
SCALE 2:1

| | | | | |
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| mm | 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± ANGLES ± FINISH | PRODUCT SPEC | CAGE ASSEMBLY, 1X6, QSFP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING | |
| MATERIAL | SEE NOTES | APPLICATION SPEC | SIZE | CAGE CODE |
| material_2 | finish_spec_2 | 114-32023 | A200779 | C-2170708 |
| | | WEIGHT | DRAWING NO | RESTRICTED TO |
| | | CUSTOMER DRAWING | SCALE 3:1 | SHEET 4 OF 9 REV B |

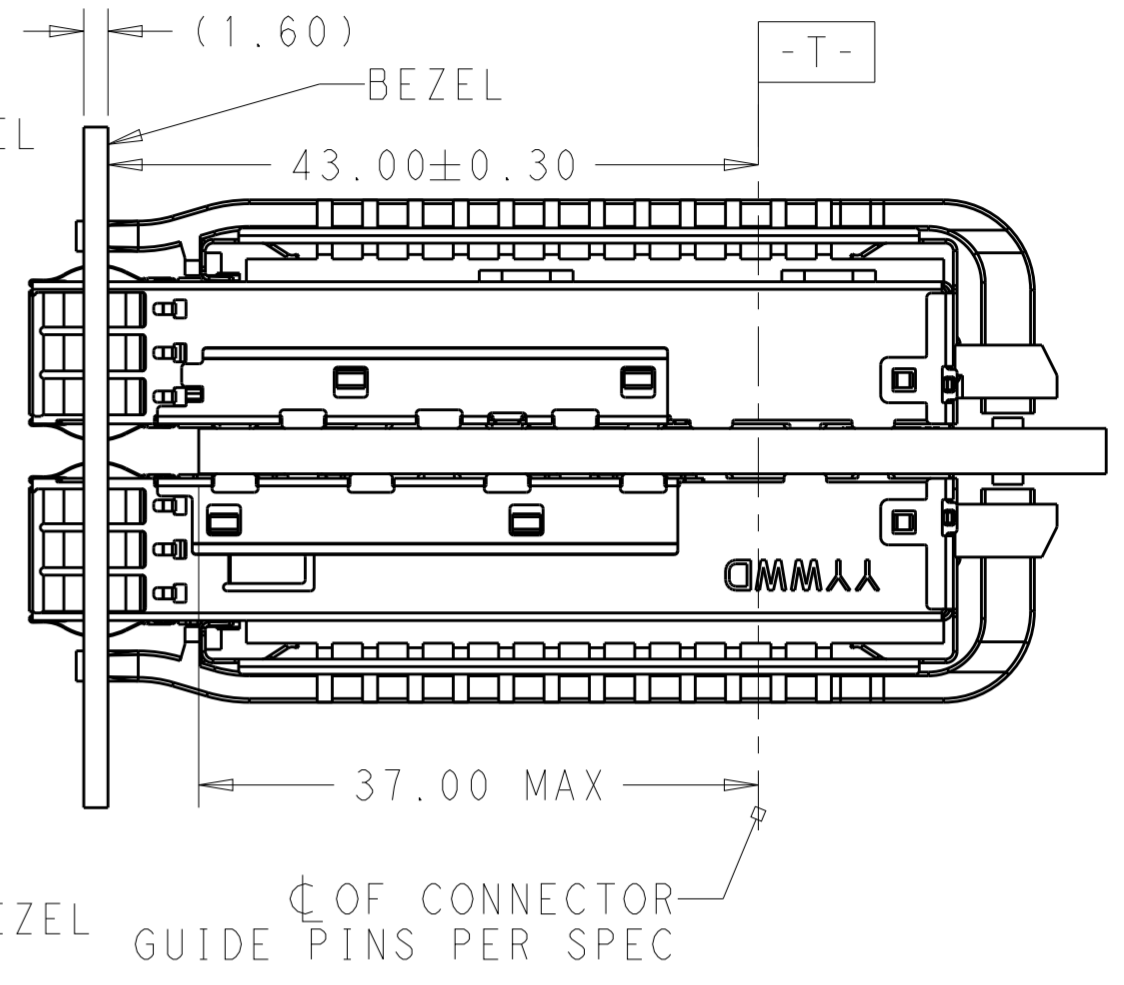
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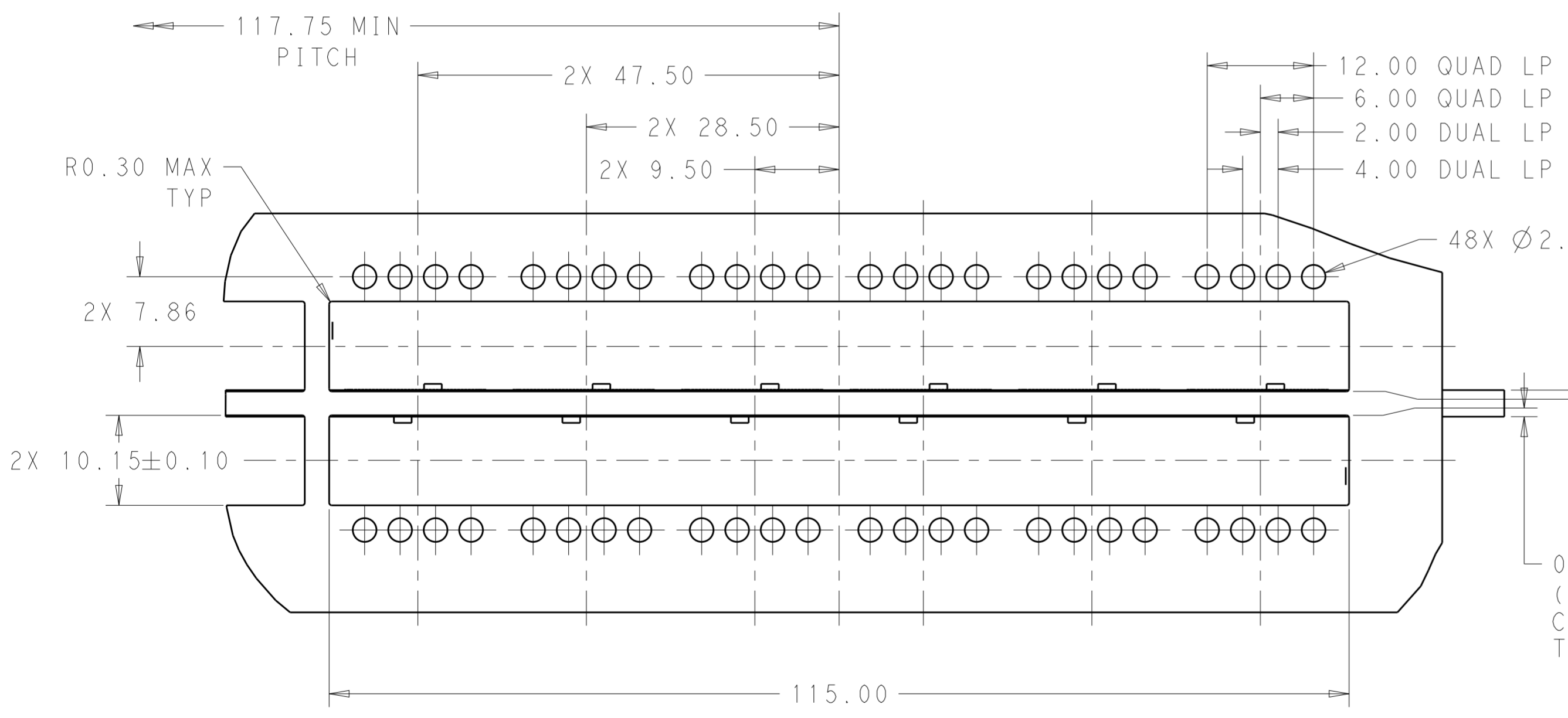


0.15±0.10
(BOTTOM OF CUT-OUT IN BEZEL TO TOP PCB)

0.15±0.10
(BOTTOM OF CUT-OUT IN BEZEL TO TOP PCB)

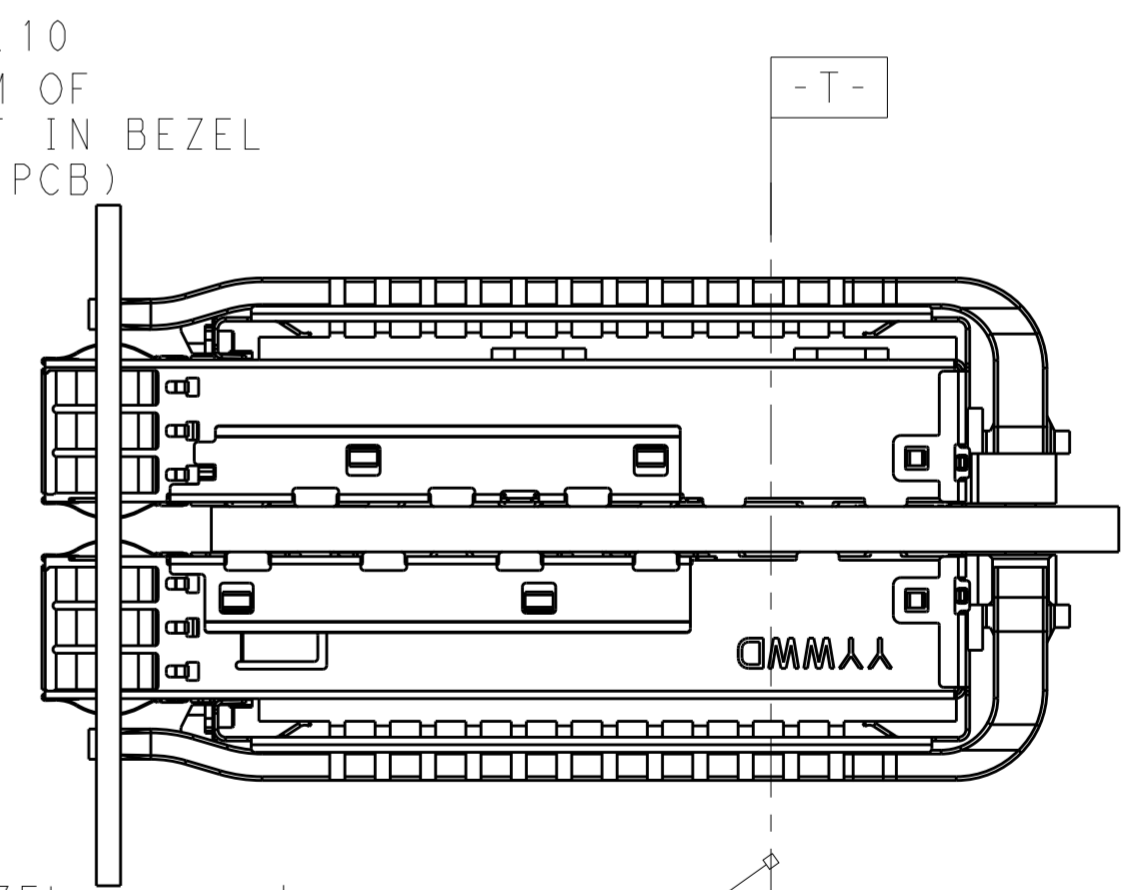


BELLY TO BELLY MOUNTING SCALE 2:1



0.15±0.10
(BOTTOM OF CUT-OUT IN BEZEL TO TOP PCB)

0.15±0.10
(BOTTOM OF CUT-OUT IN BEZEL TO TOP PCB)

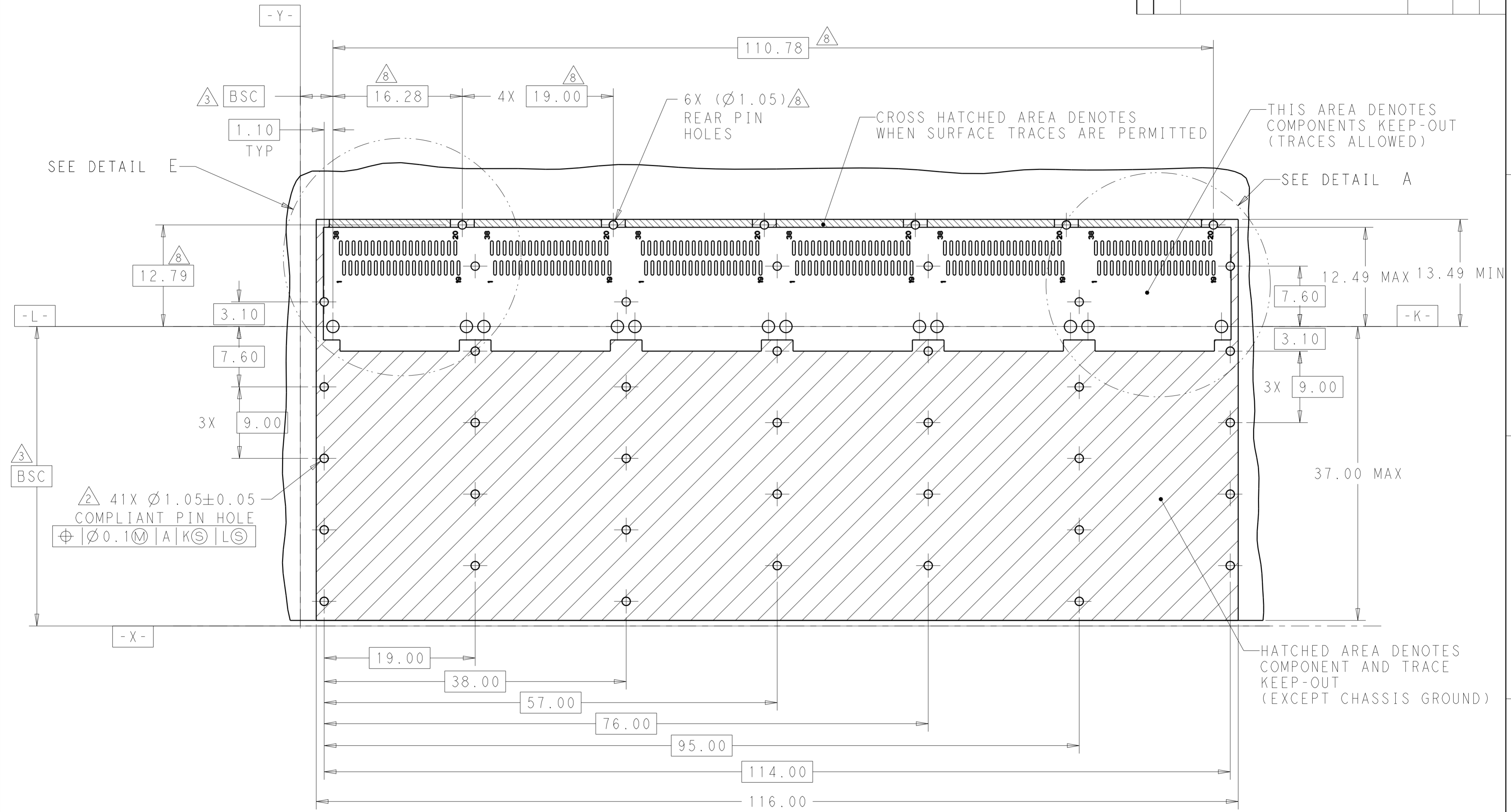


BELLY TO BELLY MOUNTING SCALE 2:1

| | | | | |
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| DIMENSIONS: | TOLERANCES UNLESS OTHERWISE SPECIFIED: | APVD - | NAME CAGE ASSEMBLY, 1X6, QSFP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING | |
| mm | 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± | PRODUCT SPEC 108-19428 | SIZE A200779 | DRAWING NO C-2170708 |
| MATERIAL SEE NOTES material_2 | FINISH SEE NOTES finish_spec_2 | APPLICATION SPEC 114-32023 | RESTRICTED TO | |
| | | WEIGHT - | SCALE 3:1 | SHEET 5 OF 9 |
| | | CUSTOMER DRAWING | REV B | |

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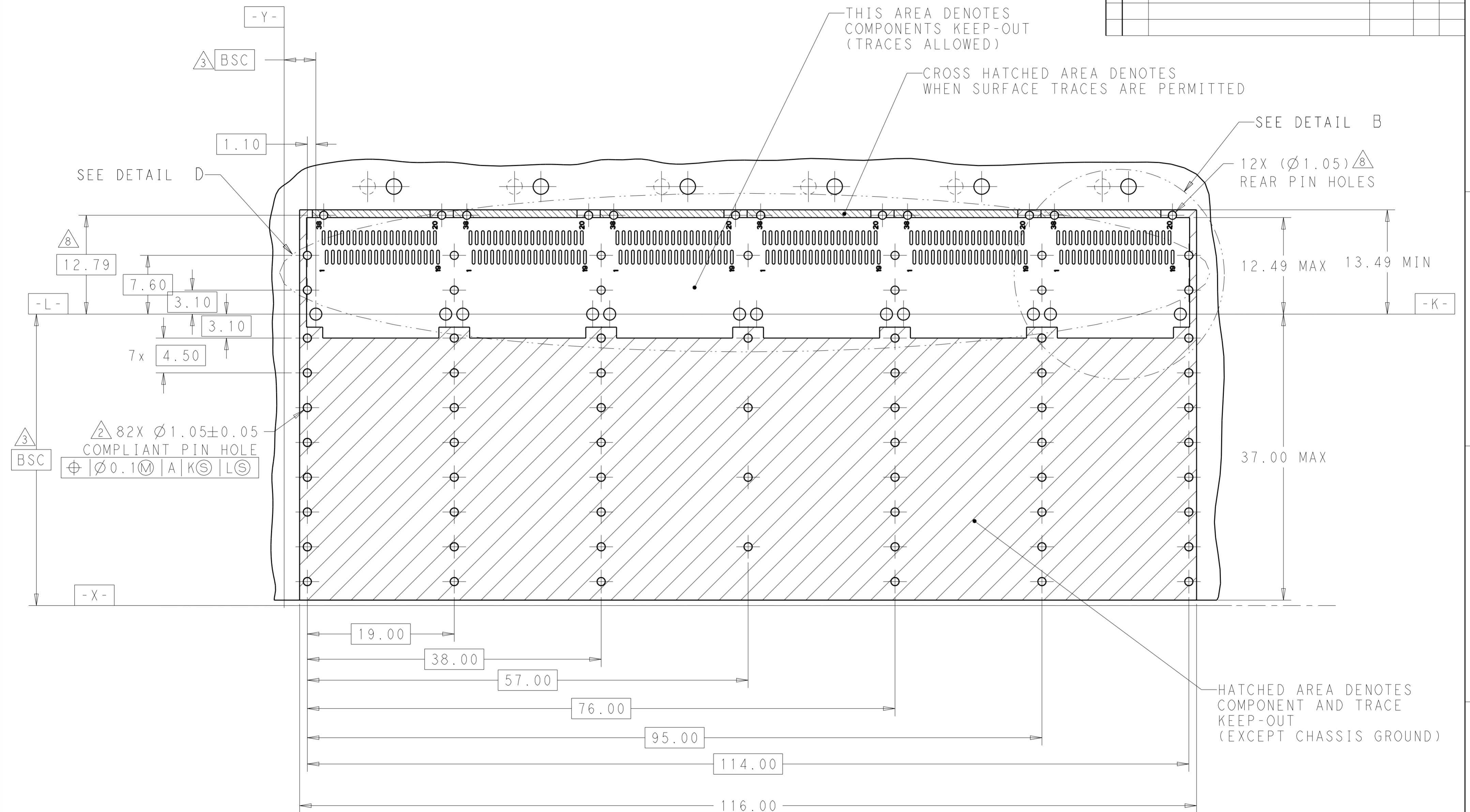


RECOMMENDED PCB LAYOUT
 SINGLE TYPE
 PCB TOLERANCE: ±0.05
 SCALE 3:1

| | | | | |
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| | | CHK: 02NOV2016 SEAN HAN | | |
| DIMENSIONS: mm | | APVD: - | NAME: CAGE ASSEMBLY, 1X6, QSFP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | PRODUCT SPEC: 108-19428 | SIZE: A2 | |
| 0 PLC ± | | APPLICATION SPEC: 114-32023 | CAGE CODE: 00779 | DRAWING NO: C-2170708 |
| 1 PLC ±0.25 | | WEIGHT: - | RESTRICTED TO: - | |
| 2 PLC ±0.2 | | SCALE: 3:1 SHEET 6 OF 9 REV B | | |
| 3 PLC ± | | CUSTOMER DRAWING | | |
| 4 PLC ± | | | | |
| ANGLES ± | | | | |
| FINISH SEE NOTES | | | | |
| MATERIAL: material_2 | | | | |
| finish_spec_2 | | | | |

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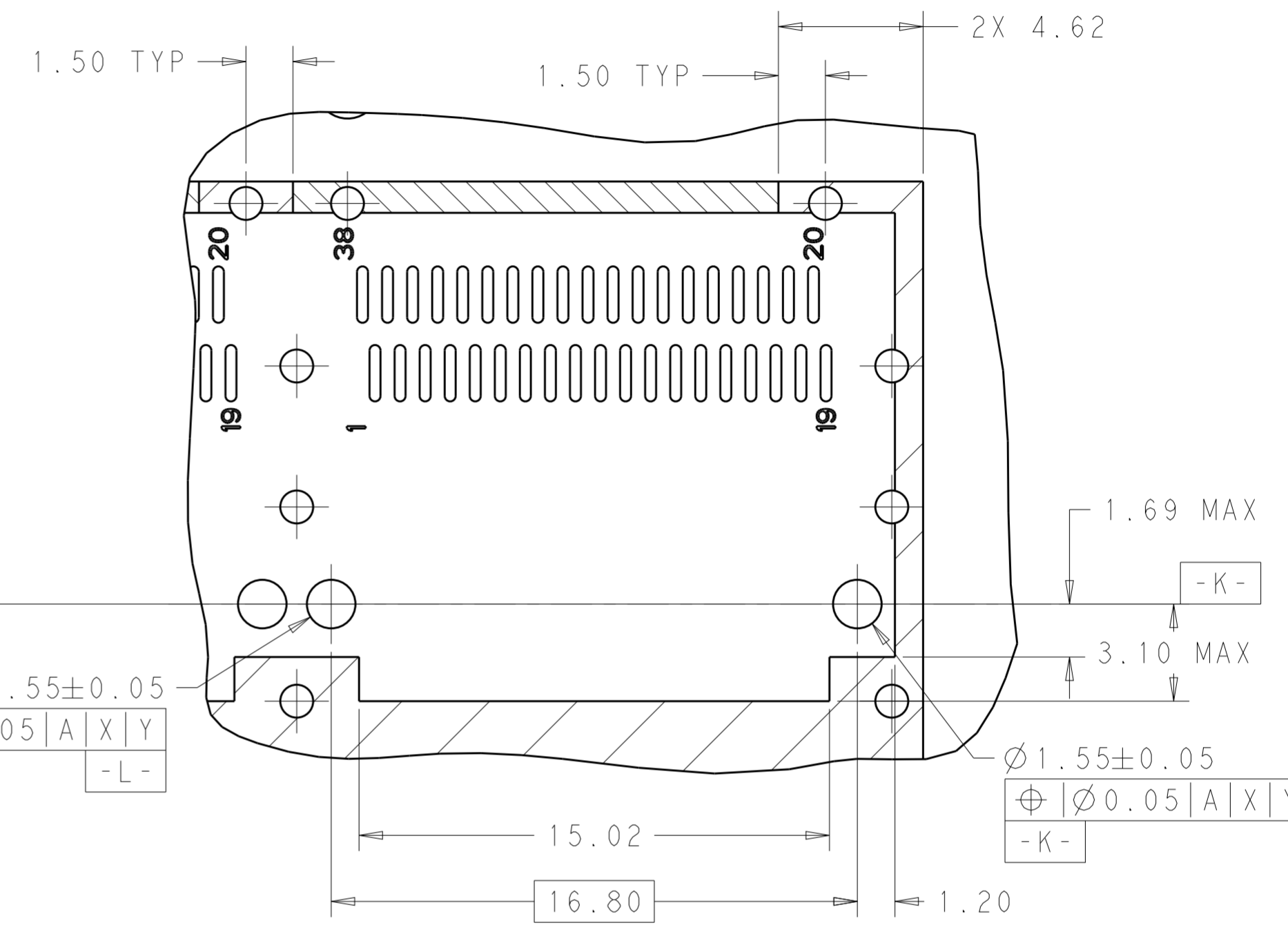


RECOMMENDED PCB LAYOUT
 BELLY TO BELLY TYPE
 PCB TOLERANCE: ±0.05
 SCALE 3:1

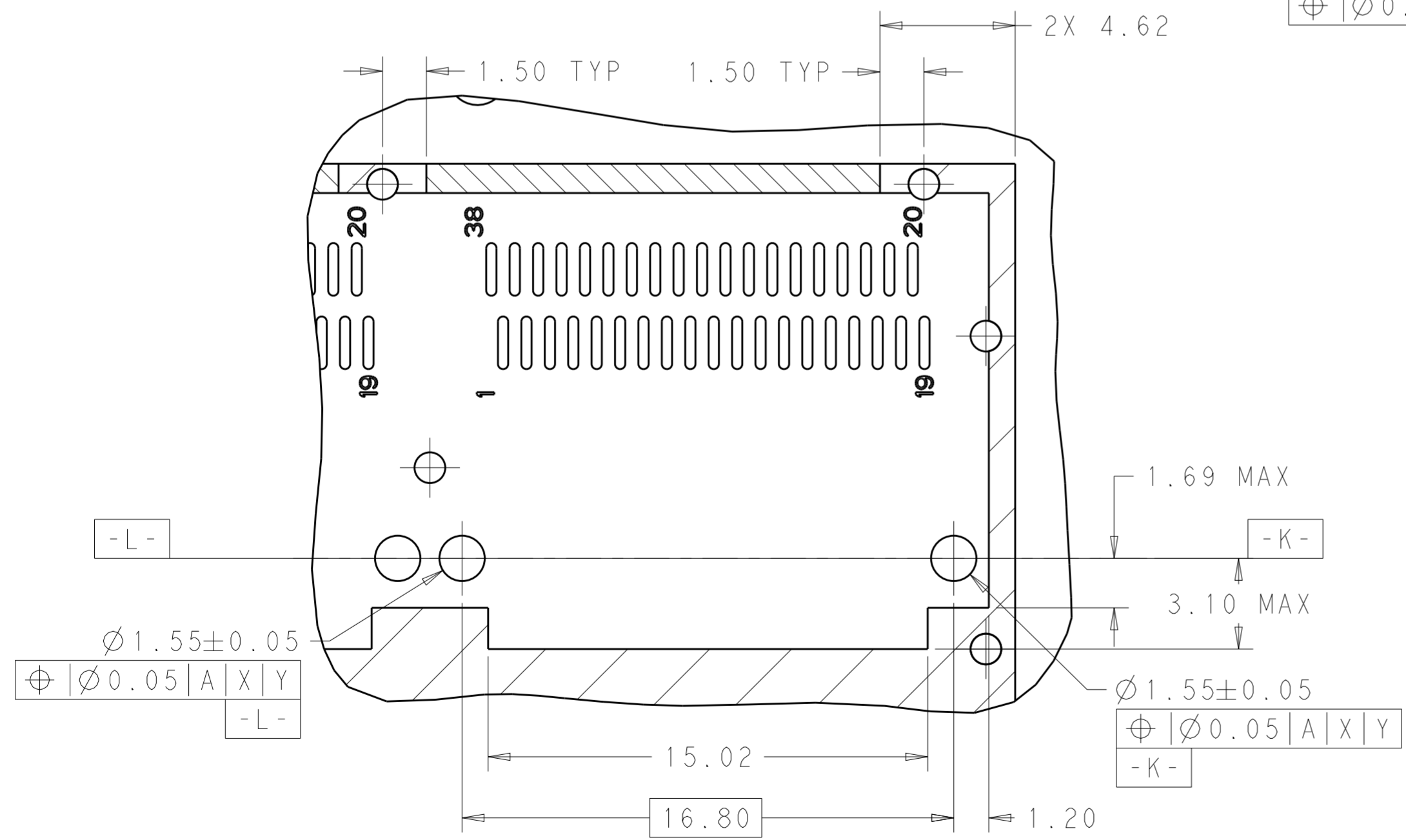
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| | | CHK 02NOV2016 SEAN HAN | | |
| DIMENSIONS: mm | | APVD - | | NAME |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | PRODUCT SPEC | | CAGE ASSEMBLY, 1X6, QSP28 WITH HEAT SINKS AND LIGHT PIPES, THRU BEZEL, EMI SPRING |
| 0 PLC ± | | 108-19428 | | SIZE |
| 1 PLC ±0.25 | | APPLICATION SPEC | | A200779 |
| 2 PLC ±0.2 | | 114-32023 | | DRAWING NO |
| 3 PLC ± | | WEIGHT - | | C-2170708 |
| 4 PLC ± | | CUSTOMER DRAWING | | RESTRICTED TO |
| ANGLES ± | | SCALE 3:1 | | SHEET 7 OF 9 |
| FINISH | | REV B | | |
| MATERIAL SEE NOTES material_2 | | SEE NOTES finish_spec_2 | | |

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| P | LTR | DESCRIPTION | DATE | DWN | APVD |
| - | - | SEE SHEET 1 | - | - | - |
| | | | | | |
| | | | | | |



DETAIL B
SCALE 6:1



DETAIL A
SCALE 6:1

| | | | | |
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| mm | 0 PLC ± 1 PLC ±0.25 2 PLC ±0.2 3 PLC ± 4 PLC ± | PRODUCT SPEC | 108-19428 | |
| | ANGLES ± | APPLICATION SPEC | 114-32023 | |
| MATERIAL | FINISH | WEIGHT | SIZE | CAGE CODE |
| SEE NOTES material_2 | SEE NOTES finish_spec_2 | CUSTOMER DRAWING | A200779 | C-2170708 |
| | | | DRAWING NO | RESTRICTED TO |
| | | | SCALE 3:1 | SHEET 8 OF 9 |
| | | | REV B | |