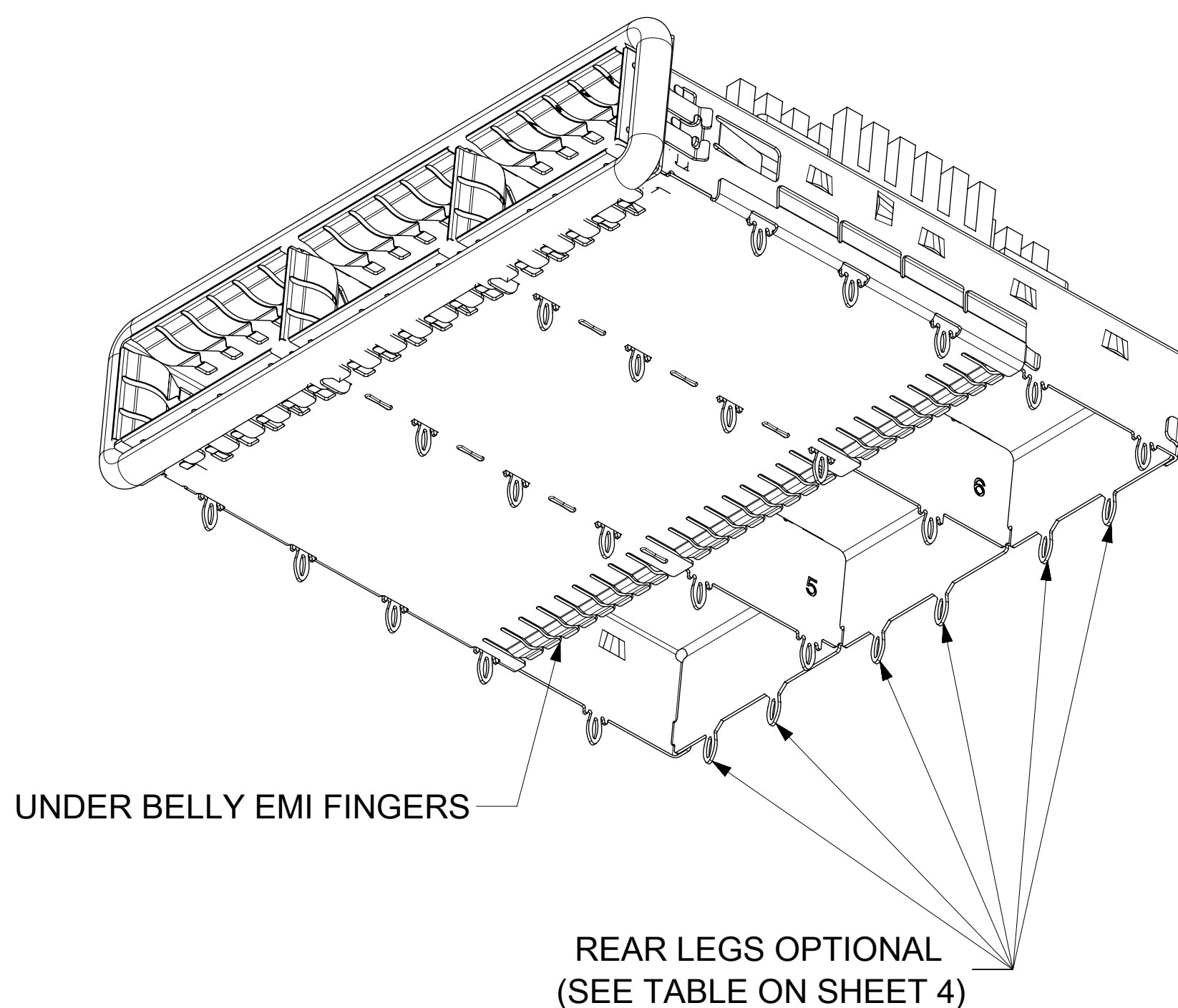
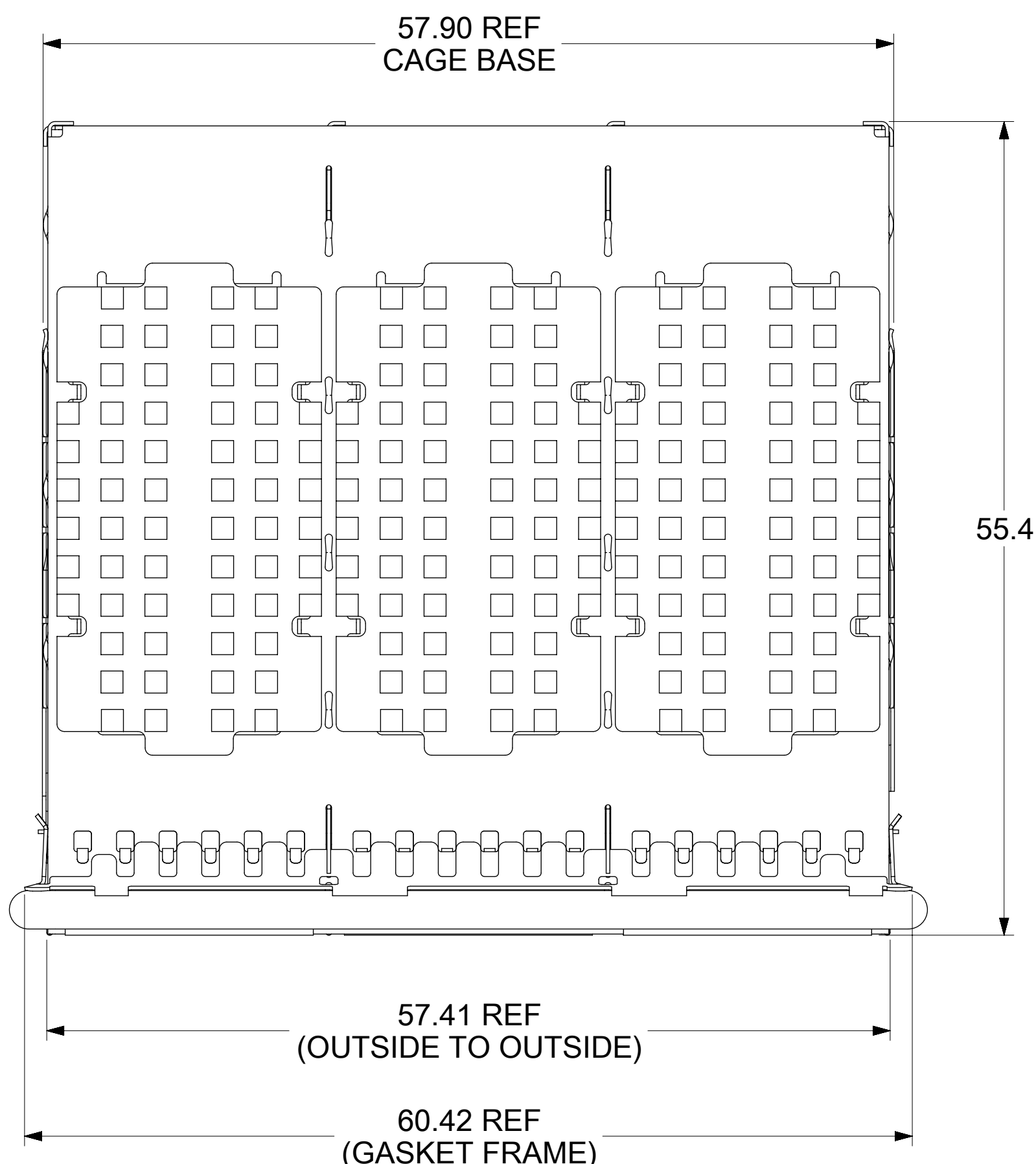


# BASE CAGE DETAILS

(APPLIES TO ALL CAGES IN THIS DRAWING)

747683212 SHOWN



LASER WELDING POINTS (SEE NOTE 5)

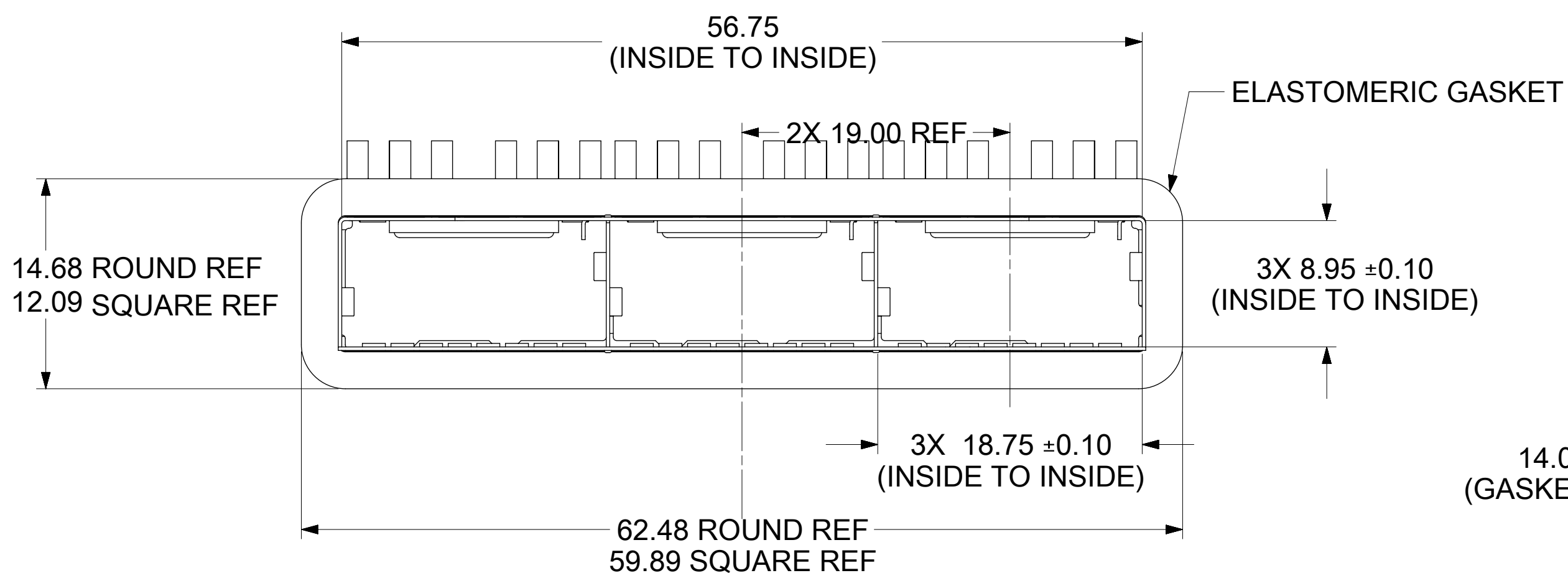
OPEN TOP

INNER WALL TABS ARE COINED OVER BASED AND COVER FOR RIGITY

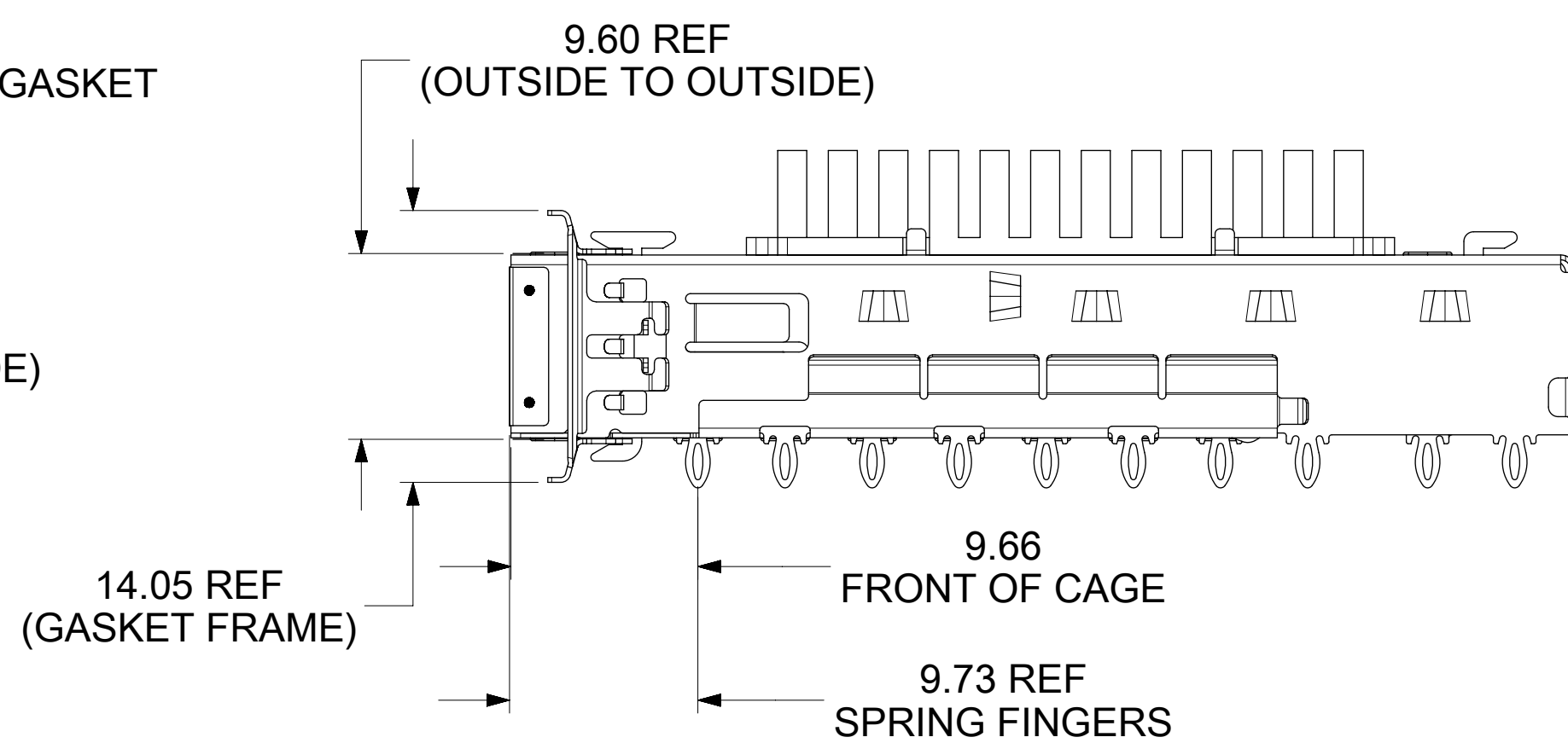
GASKET NOT SHOWN FOR CLARITY

DIMENSION OF EACH INNER CAGE DESIGNED TO FUNCTION WITH QUAD SMALL FORM-FACTOR (QSFP) TRANSCEIVER

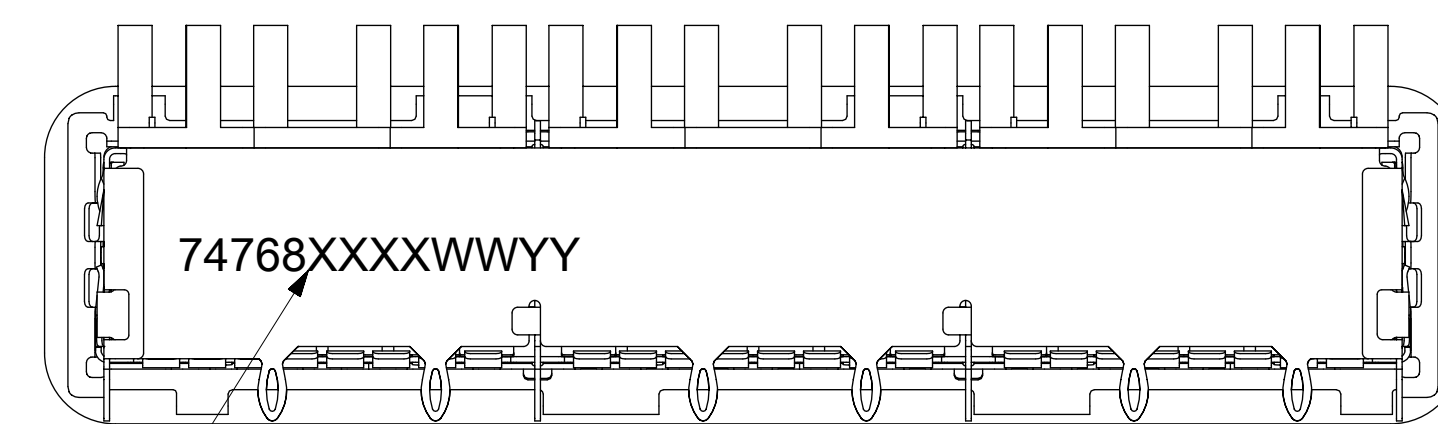
FEATURES USED WITH OPTIONAL LIGHT PIPE AND HEAT SINKS



NOTE: INNER SPRING FINGERS HAVE BEEN REMOVED FOR CLARITY



NOTE: ELASTOMER GASKET REMOVED FOR CLARITY



PART NO. AND WEEK/YEAR DATE CODE TO BE PRINTED ON BACK OF COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN. SEE TABLE BELOW FOR DATE CODE INFORMATION.

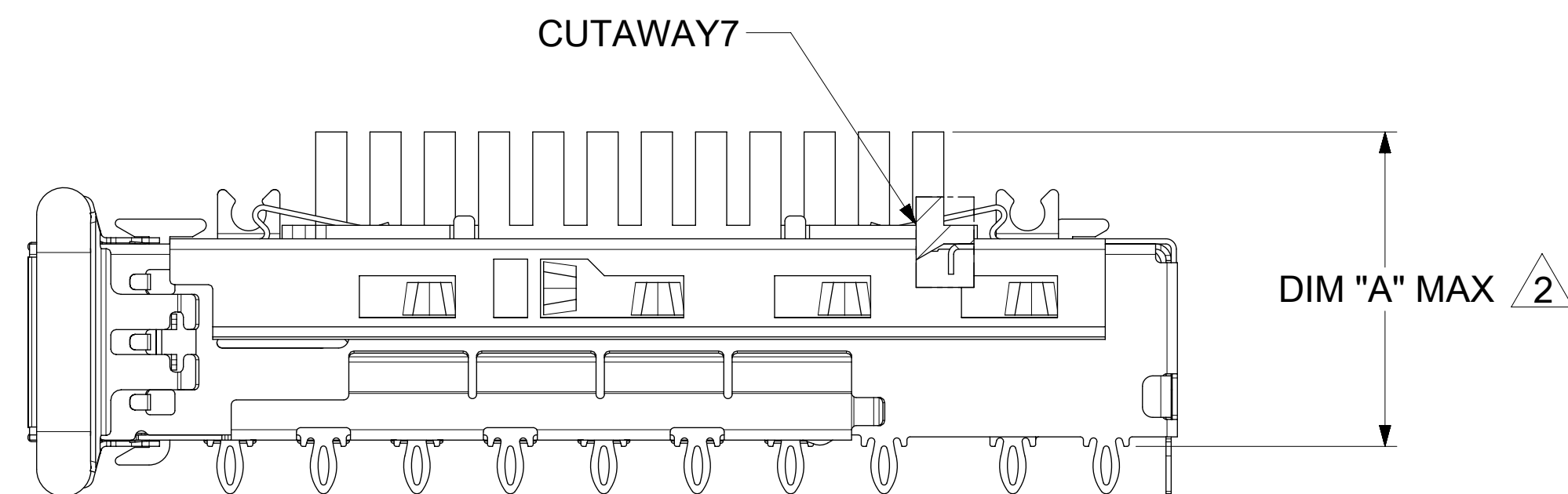
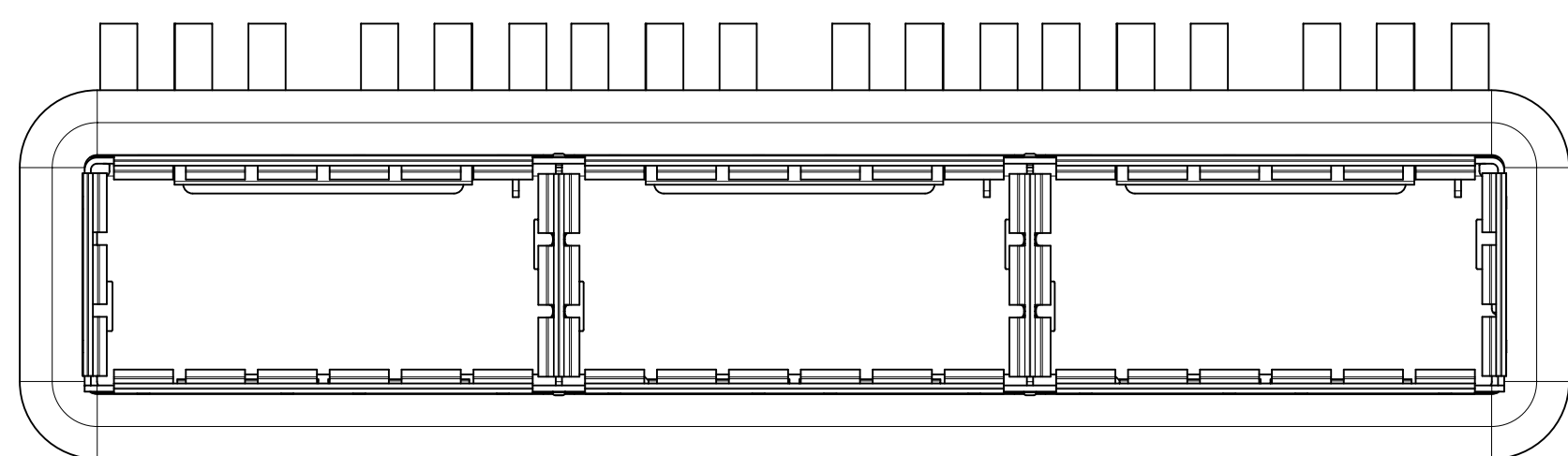
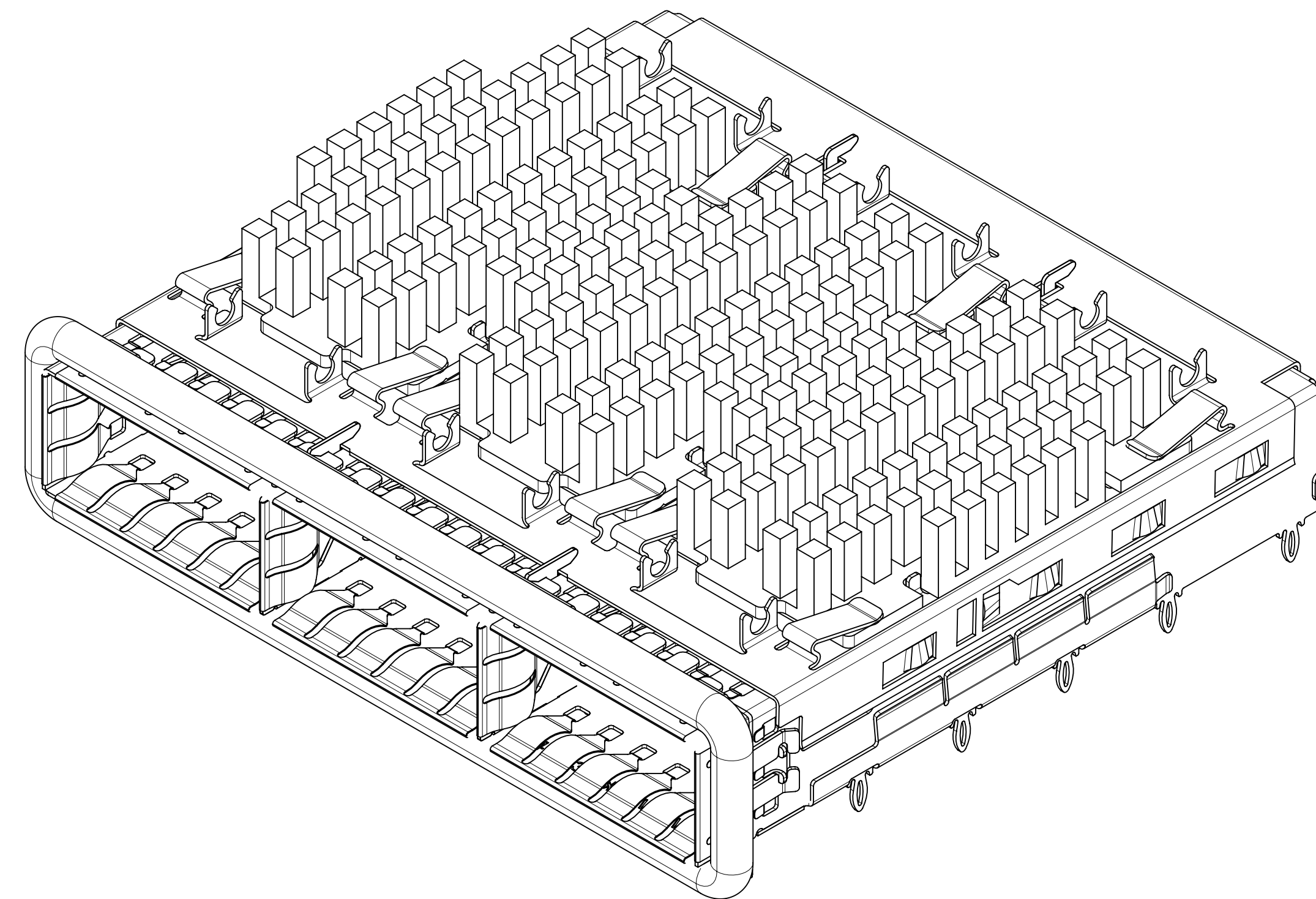
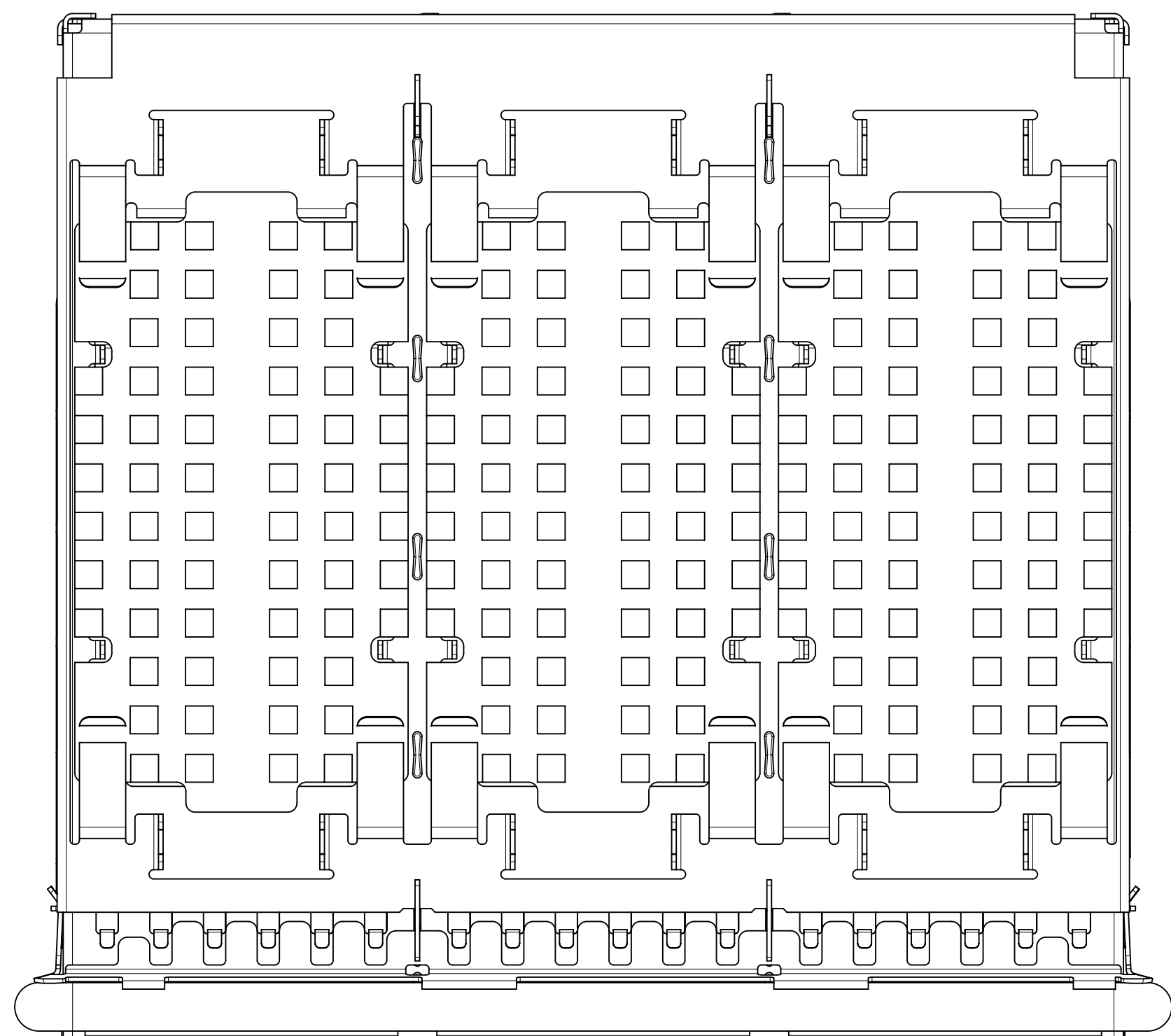
WEEK/YEAR DATE CODE TABLE	
WW	01 THRU 52 EXAMPLE: 01 = FIRST WEEK OF YEAR 52 = LAST WEEK OF YEAR
YY	23, 24, 25 ETC. EXAMPLE: YEAR 2023 =23

- NOTES:
1. QSFP+ ASSEMBLES ALSO AVAILABLE AND 1X1 74750 SERIES, 1X2 (74767 SERIES), 1X4 (74769 SERIES) AND 1X6 (74771 SERIES) CONFIGURATIONS.
  2. MATERIAL:  
COVER: STAINLESS STEEL  
LIGHT PIPES: POLYCARBONATE (94-V0 RATED)  
SPRING FINGER : STAINLESS STEEL  
CLIP: STAINLESS STEEL  
HEAT SINKS: ALUMINUM  
CAGE: COPPER ALLOY  
GASKET MATERIAL : ELASTOMER GASKET SILICONE, COLOUR BLACK
  3. NO RoHS EXEMPTIONS
  4. CUSTOM HEATSINKS AVAILABLE UPON REQUEST.
  5. WELD SPOTS MAY SHOW SLIGHT MATERIAL DISCOLORATION.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																																																			
DIMENSION UNITS	SCALE	CURRENT REV DESC:																																																																	
mm	3:1																																																																		
GENERAL TOLERANCES (UNLESS SPECIFIED)																																																																			
ANGULAR TOL	± 1.0°																																																																		
4 PLACES	±	EC NO: 744377																																																																	
3 PLACES	±	DRWN: DKUMARG		2023/03/29																																																															
2 PLACES	± 0.15	CHK'D: AMRUTH		2023/03/30																																																															
1 PLACE	± 0.25	APPR: TKUMARKC		2023/03/31																																																															
0 PLACES	±	INITIAL REVISION:																																																																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: CHETHH2		2022/05/25																																																															
		APPR: SCHIEN		2022/07/07																																																															
THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER																																																											
D-SIZE		74768		SEE P/N TABLE																																																															
<table border="0" style="width:100%; text-align: right;"> <tr> <td colspan="8"><b>molex</b></td> <td colspan="2">QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER</td> </tr> <tr> <td colspan="10">PRODUCT CUSTOMER DRAWING</td> </tr> <tr> <td colspan="8">DOCUMENT NUMBER</td> <td colspan="2">DOC TYPE</td> <td colspan="2">DOC PART</td> <td colspan="2">REVISION</td> </tr> <tr> <td colspan="8">747683506</td> <td colspan="2">PSD</td> <td colspan="2">ASY</td> <td colspan="2">A1</td> </tr> <tr> <td colspan="4">SHEET NUMBER</td> <td colspan="6">1 OF 7</td> </tr> </table>										<b>molex</b>								QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER		PRODUCT CUSTOMER DRAWING										DOCUMENT NUMBER								DOC TYPE		DOC PART		REVISION		747683506								PSD		ASY		A1		SHEET NUMBER				1 OF 7					
<b>molex</b>								QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER																																																											
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747683506								PSD		ASY		A1																																																							
SHEET NUMBER				1 OF 7																																																															

# CAGE ASSEMBLY OPTIONS

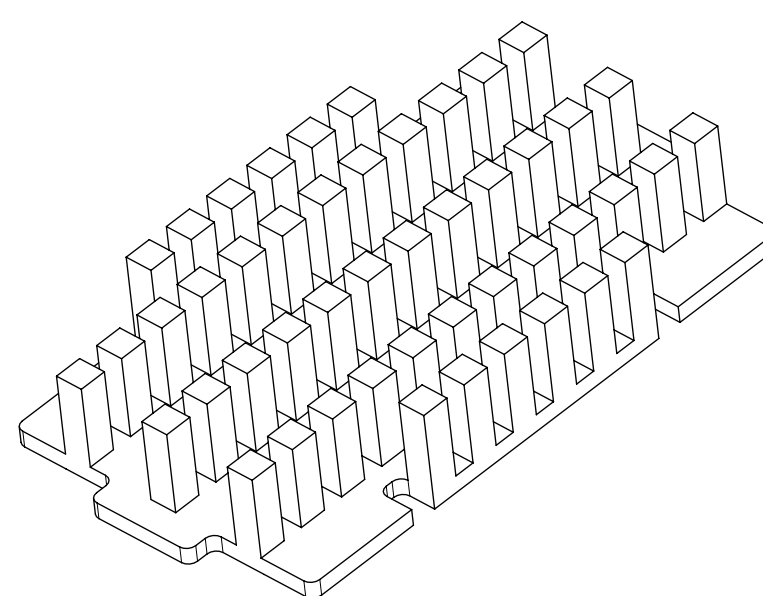
747683506 SHOWN



## HEATSINK HEIGHT OPTIONS

OVERALL HEATSINK HEIGHT	DIM "A"
SAN	16.0

SAN HEAT SINK  
(PIN STYLE)



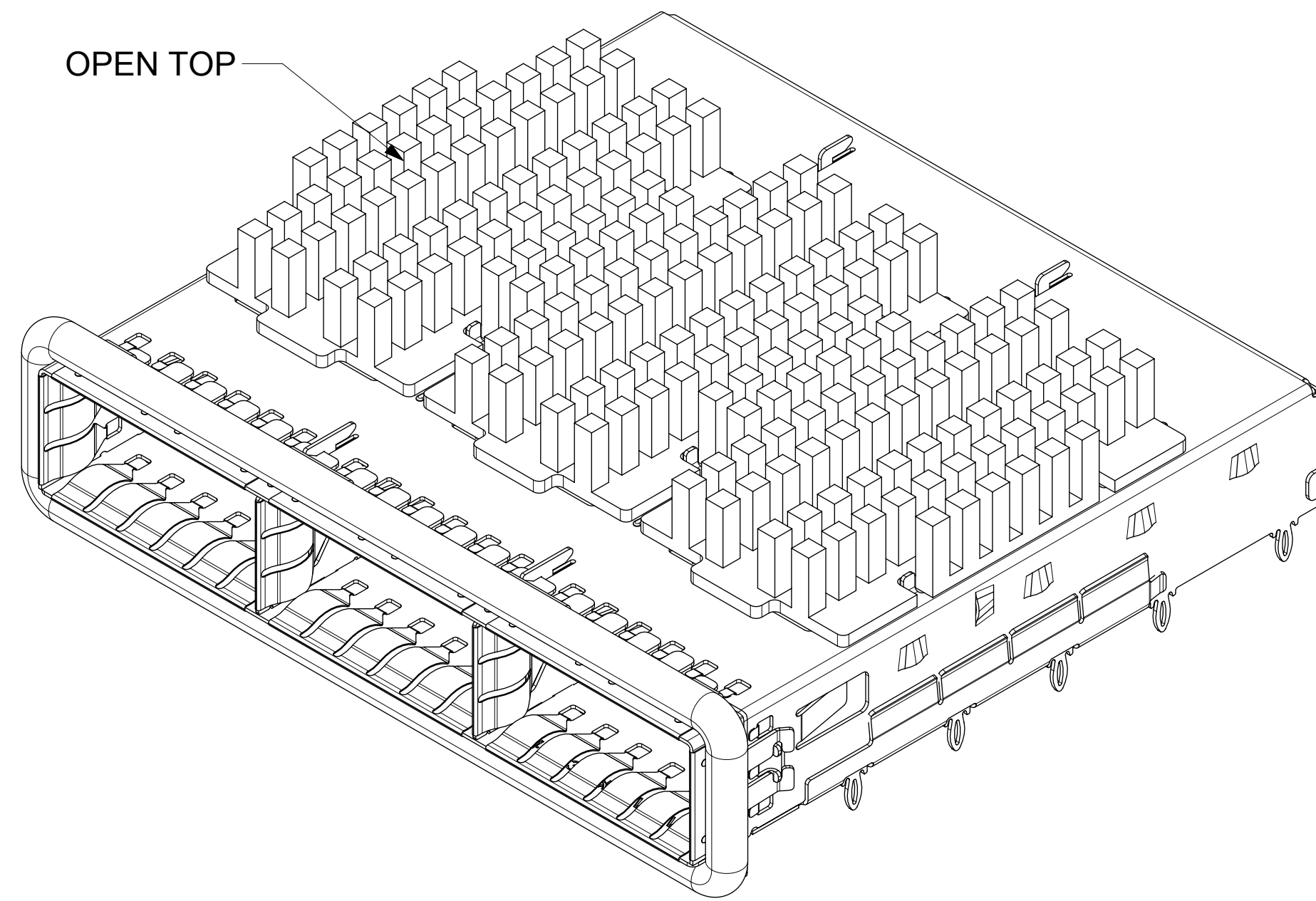
HEIGHT OF HEATSINK WITH MODULE INSERTED.  
DIMENSION MAY BE LESS DUE TO MODULE AND HEATSINK VARIATIONS.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS <b>mm</b>		SCALE <b>3.5:1</b>		CURRENT REV DESC:						<b>molex</b>	
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 744377							
ANGULAR TOL ± 1.0°				DRWN: DKUMARG 2023/03/29						QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER	
4 PLACES ±				CHK'D: AMRUTH 2023/03/30							
3 PLACES ±				APPR: TKUMARKC 2023/03/31						PRODUCT CUSTOMER DRAWING	
2 PLACES ± 0.15				INITIAL REVISION:						DOCUMENT NUMBER	
1 PLACE ± 0.25				DRWN: CHETHH2 2022/05/25						747683506	
0 PLACES ±				APPR: SCHIEN 2022/07/07						PSD ASY A1	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING <b>D-SIZE</b>		SERIES <b>74768</b>		MATERIAL NUMBER SEE P/N TABLE	
								CUSTOMER		SHEET NUMBER 2 OF 7	

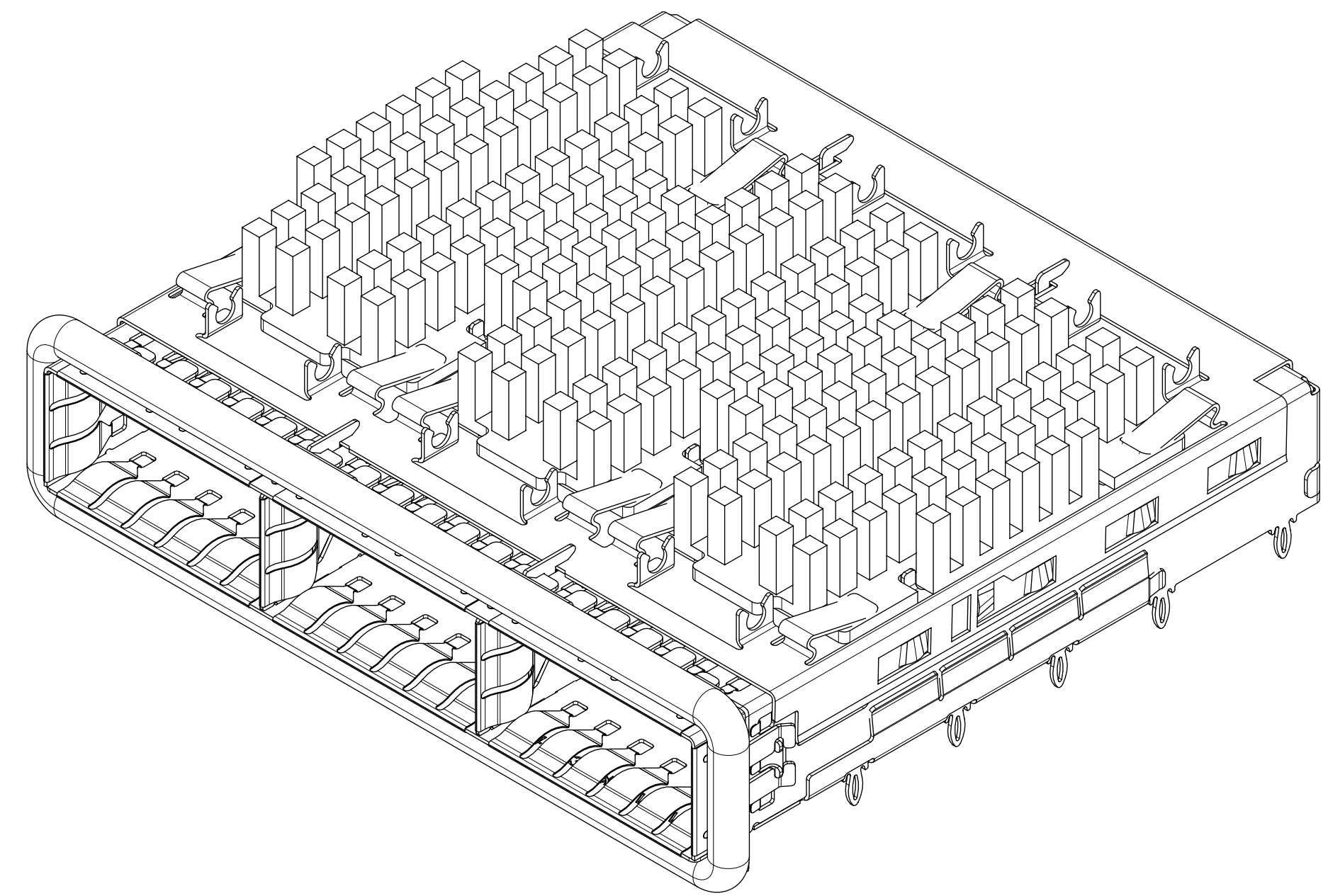
NOTE:  
1. FOR LIGHT PIPE OPTIONS SEE SHEET 3.  
2. HEIGHT OF HEATSINK WITH MODULE INSERTED.  
DIMENSION MAY BE LESS DUE TO MODULE AND HEATSINK VARIATIONS.

# PART NUMBER SELECTION

NO HEAT SINKS  
NO LIGHT PIPES



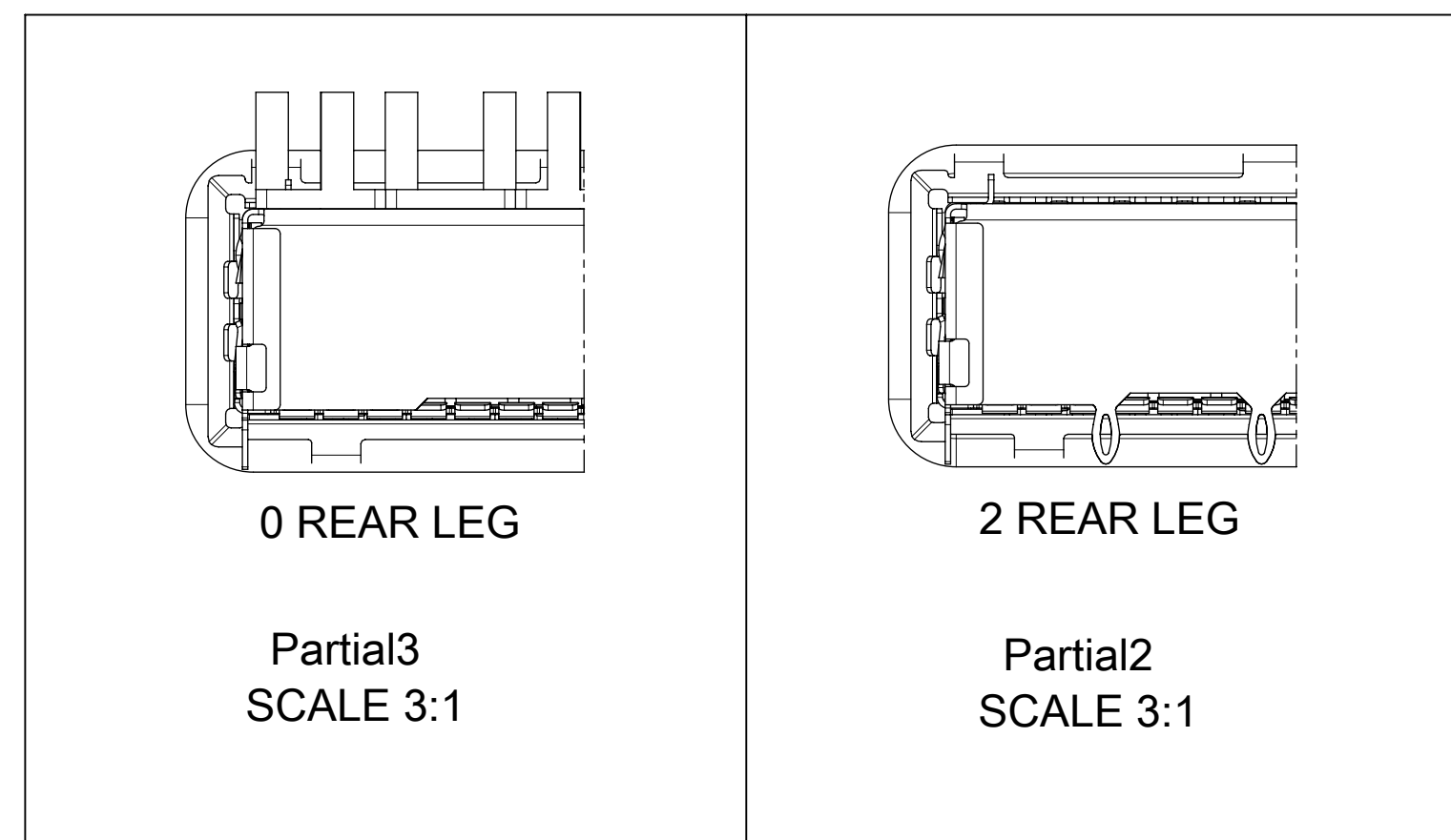
WITH HEAT SINKS  
NO LIGHT PIPES



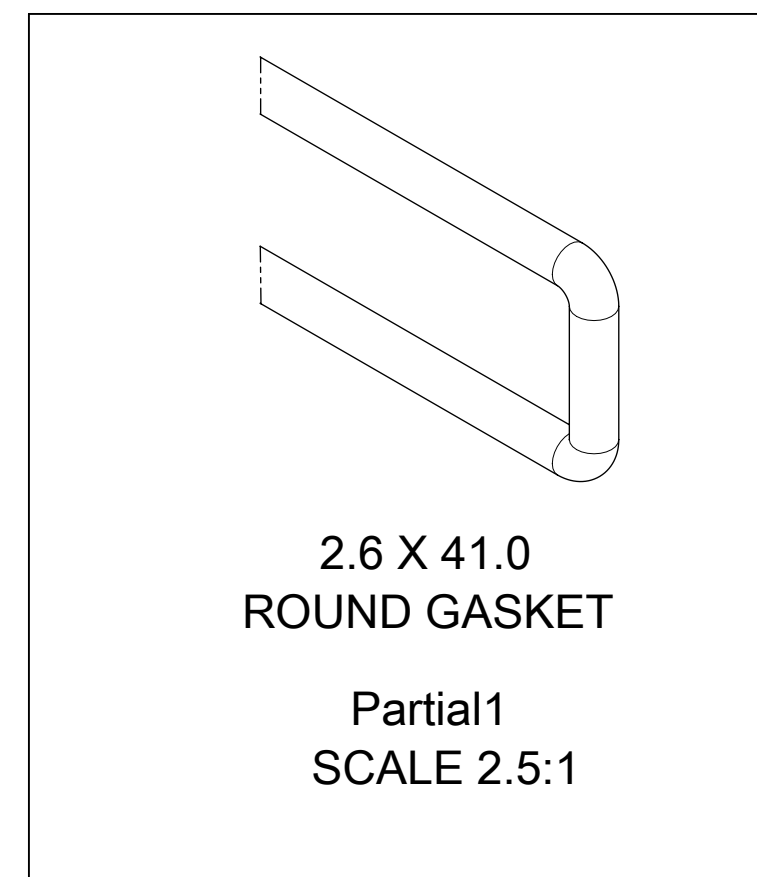
MOLEX P/N	GASKET STYLE	# OF REAR LEGS PER PORT
747683210	ROUND	0
747683212	ROUND	2

MOLEX P/N	GASKET STYLE	HS	# OF REAR LEGS PER PORT
747683506	ROUND	SAN	2

## REAR LEG OPTIONS

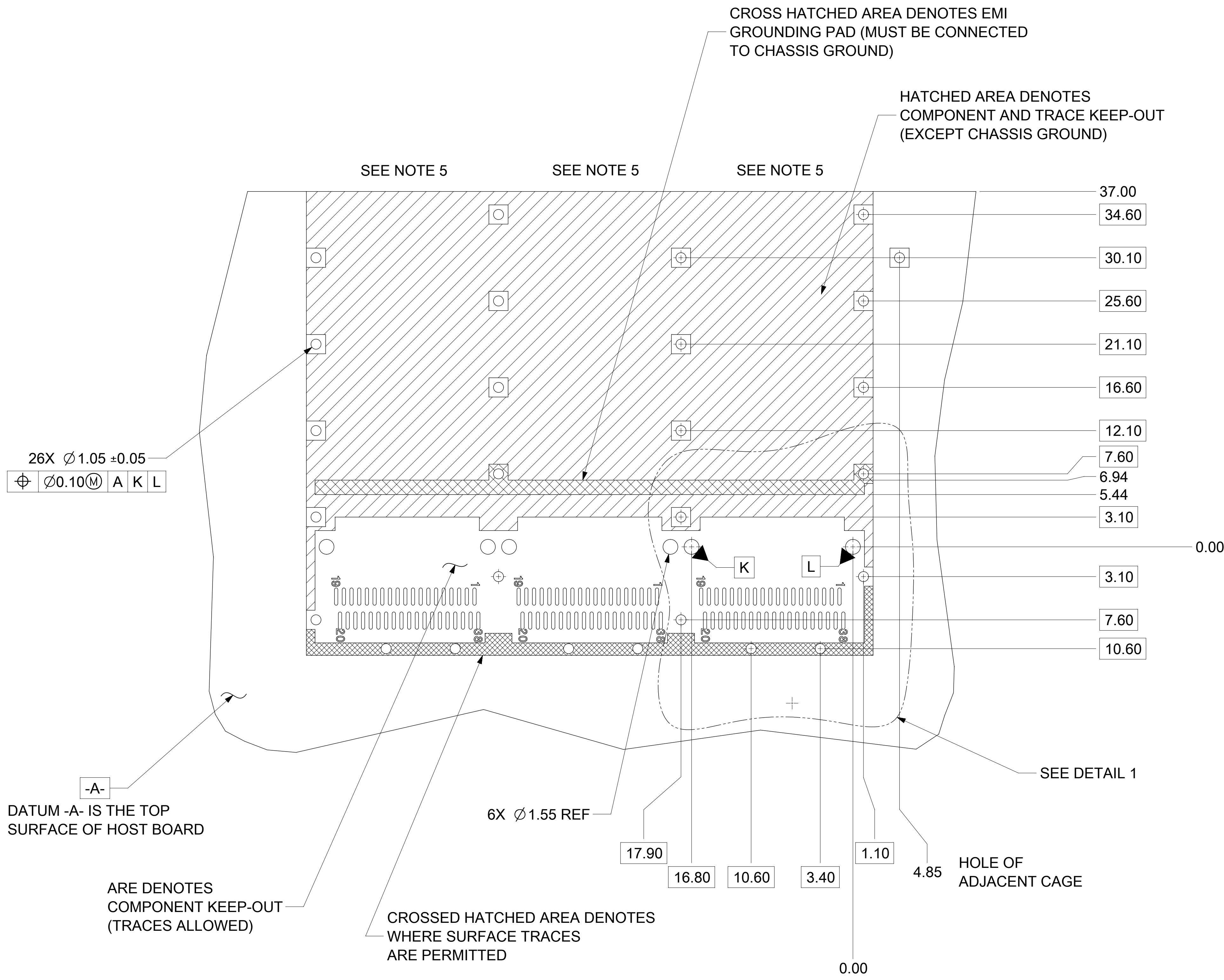


## ELASTOMERIC GASKET OPTIONS

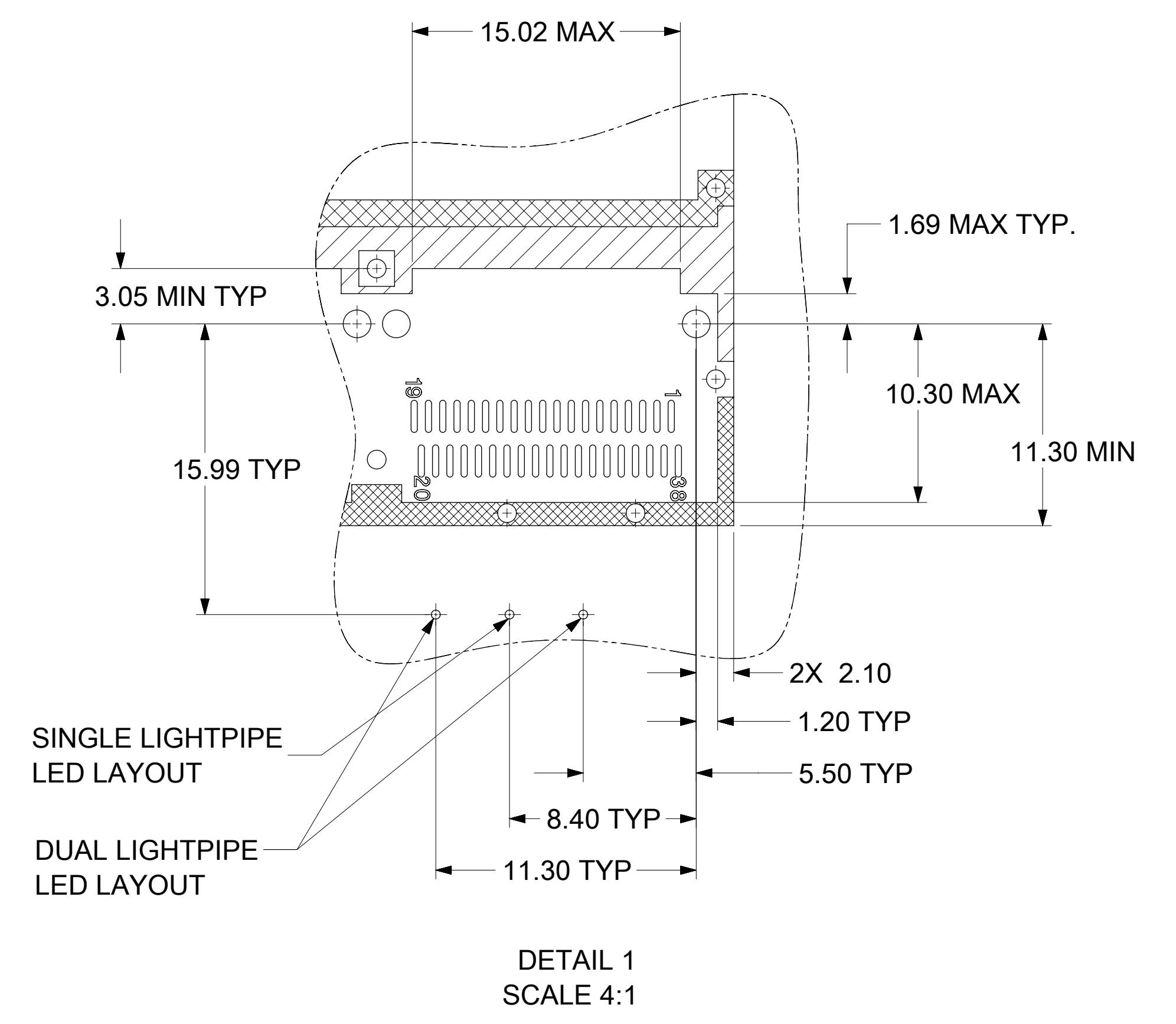


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DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	3:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 744377			QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER PRODUCT CUSTOMER DRAWING				
ANGULAR TOL	± 1.0°	DRWN: DKUMARG 2023/03/29							
4 PLACES	±	CHK'D: AMRUTH 2023/03/30			DOCUMENT NUMBER: <b>747683506</b> DOC TYPE: PSD    DOC PART: ASY    REVISION: A1				
3 PLACES	±	APPR: TKUMARKC 2023/03/31							
2 PLACES	± 0.15	INITIAL REVISION:			MATERIAL NUMBER: SEE P/N TABLE    CUSTOMER:				
1 PLACE	± 0.25	DRWN: CHETHH2 2022/05/25							
0 PLACES	±	APPR: SCHIEN 2022/07/07			SHEET NUMBER: 3 OF 7				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES					
			D-SIZE	74768					

# PCB LAYOUT FOR SINGLE SIDED MOUNTING



## HOST CONNECTOR DETAIL



- NOTES:
- PADS AND VIAS CONNECT TO CHASSIS GROUND (RECOMMEND PADS TO BE 2.00mm SQUARE)
  - RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  - CONNECTOR PAD LAYOUT PER QSFP MSA WILL ACCOMODATE MOLEX CONNECTOR 75586-0010 OR 75586-0011.
  - SINGLE SIDE BOARD THICKNESS:  
NONIMAL: 1.60  
MINIMUM: 1.44
  - SPACING BETWEEN PORTS IS 19.00
  - LED SHOULD BE PLACED RELATIVE TO THE QSFP CONNECTOR POST HOLES

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DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	4:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 1.0°								
4 PLACES	±	EC NO: 744377							
3 PLACES	±	DRWN: DKUMARG		2023/03/29					
2 PLACES	± 0.15	CHK'D: AMRUTH		2023/03/30					
1 PLACE	± 0.25	APPR: TKUMARKC		2023/03/31					
0 PLACES	±	INITIAL REVISION:							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: CHETHH2		2022/05/25					
		APPR: SCHIEN		2022/07/07					
THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER	
D-SIZE		74768		SEE P/N TABLE					

**molex**

QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 747683506  
DOC TYPE: PSD  
DOC PART: ASY  
REVISION: A1

SHEET NUMBER: 4 OF 7

DOCUMENT STATUS	P1	RELEASE DATE	2023/03/31	10:58:52
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# PCB LAYOUT FOR BELLY TO BELLY MOUNTING

CROSS HATCHED AREA DENOTES EMI GROUNDING PAD (MUST BE CONNECTED TO CHASSIS GROUND)

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

SEE NOTE 5

SEE NOTE 5

SEE NOTE 5

37.0 MAX.

34.60

30.10

25.60

21.10

16.60

12.10

7.60

6.94

5.44

3.10

0.00

3.10

7.60

10.60

NOTE:  
SEE PREVIOUS SHEET 4 FOR  
HOST CONNECTOR AND  
LED LOCATION DETAILS

52X  $\varnothing 1.05 \pm 0.05$   
 $\varnothing 0.10$  M A K L

-A-  
DATUM -A- IS THE TOP SURFACE OF HOST BOARD

ARE DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)

CROSSED HATCHED AREA DENOTES WHERE SURFACE TRACES ARE PERMITTED

6X  $\varnothing 1.55$  REF.

HOLE OF ADJACENT CAGE

17.90

16.80

13.40

10.60

6.20


3.40

1.10

4.85

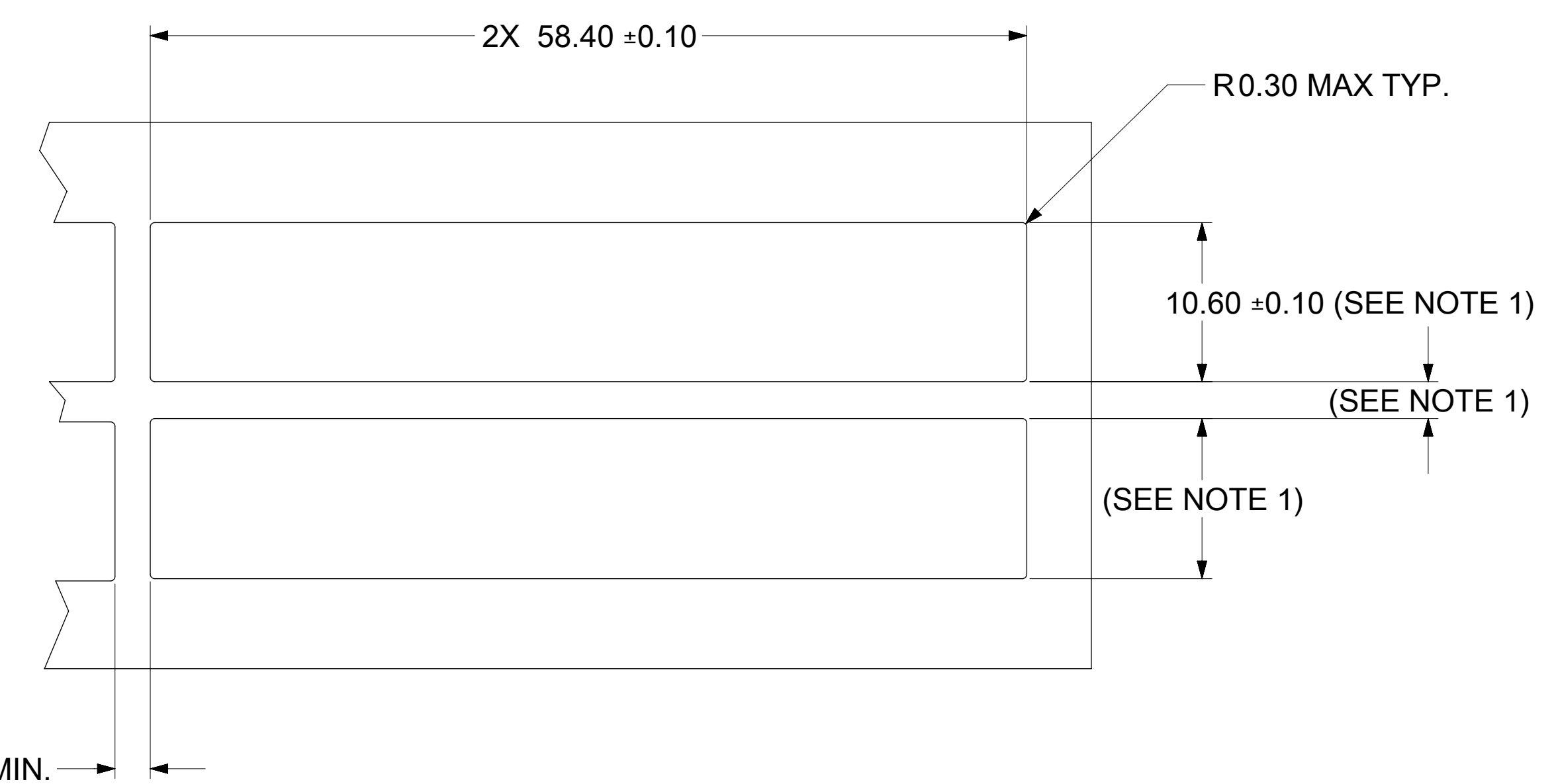
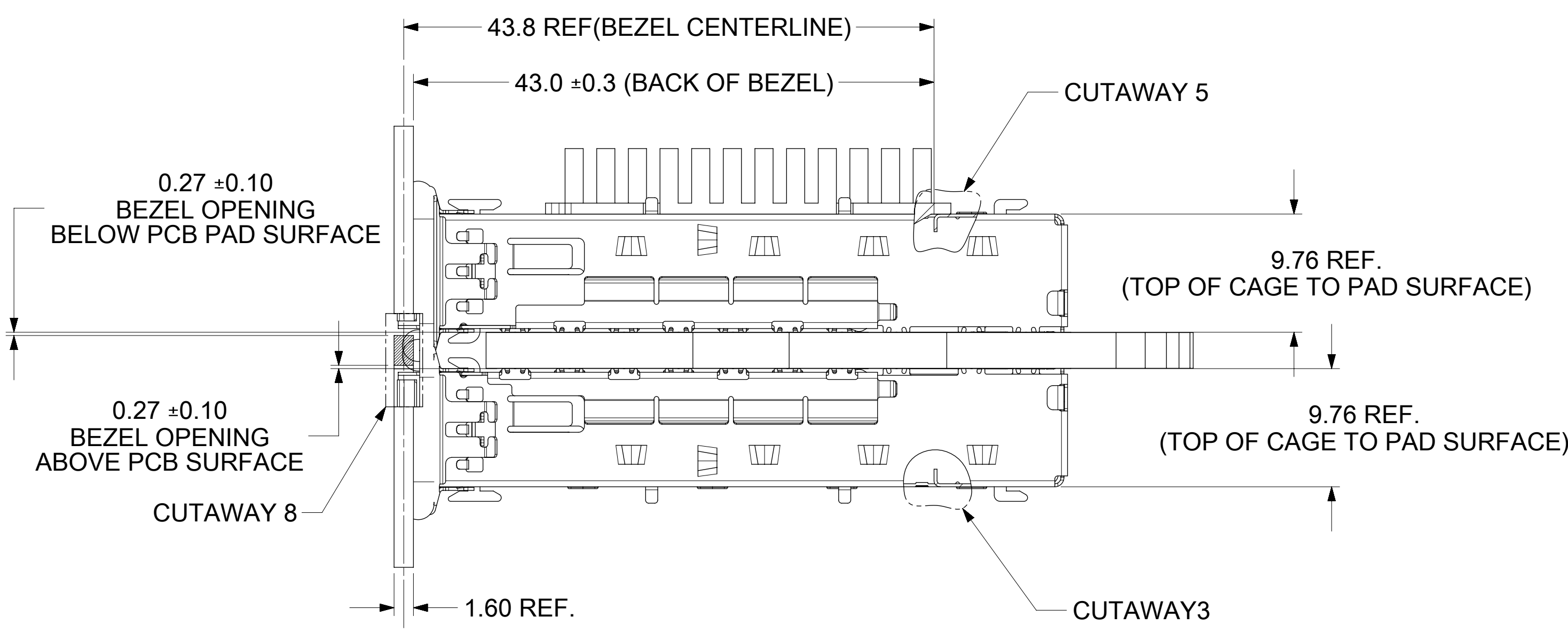
0.00

- NOTES:
- PADS AND VIAS CONNECT TO CHASSIS GROUND (RECOMMEND PADS TO BE 2.00mm SQUARE)
  - RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  - CONNECTOR PAD LAYOUT PER QSFP MSA WILL ACCOMODATE MOLEX CONNECTOR 75586-0010 OR 75586-0011.
  - BELLY TO BELLY BOARD THICKNESS:  
NONIMAL: 2.90  
MINIMUM: 2.48
  - SPACING BETWEEN PORTS IS 19.00

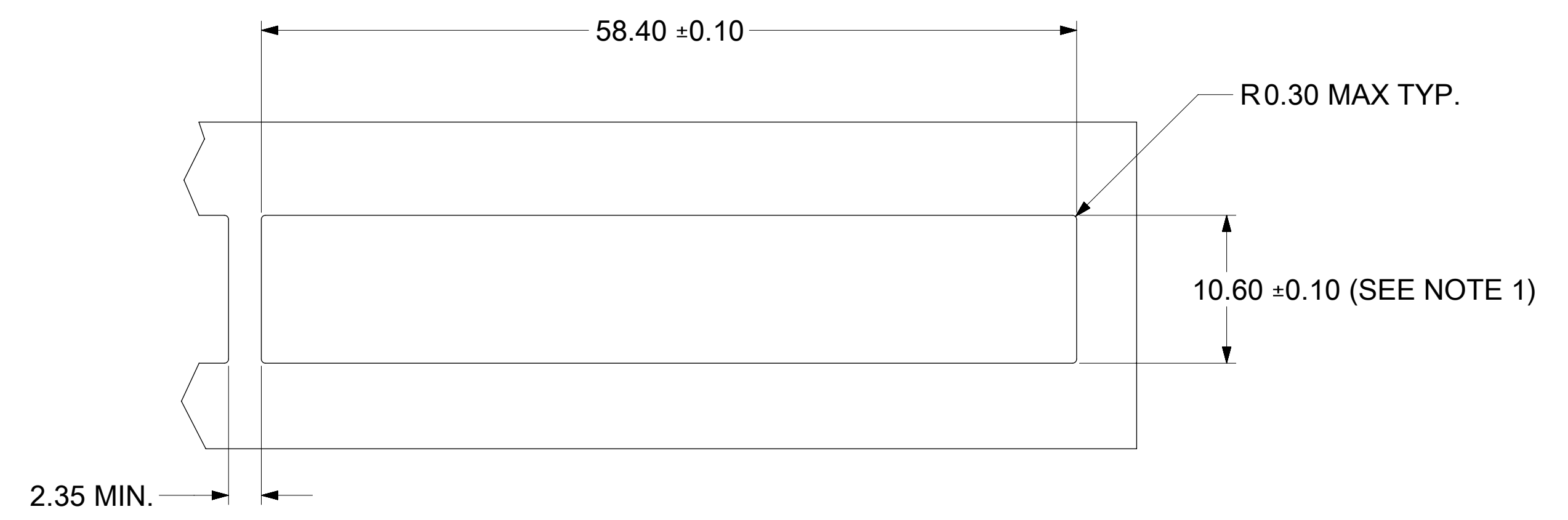
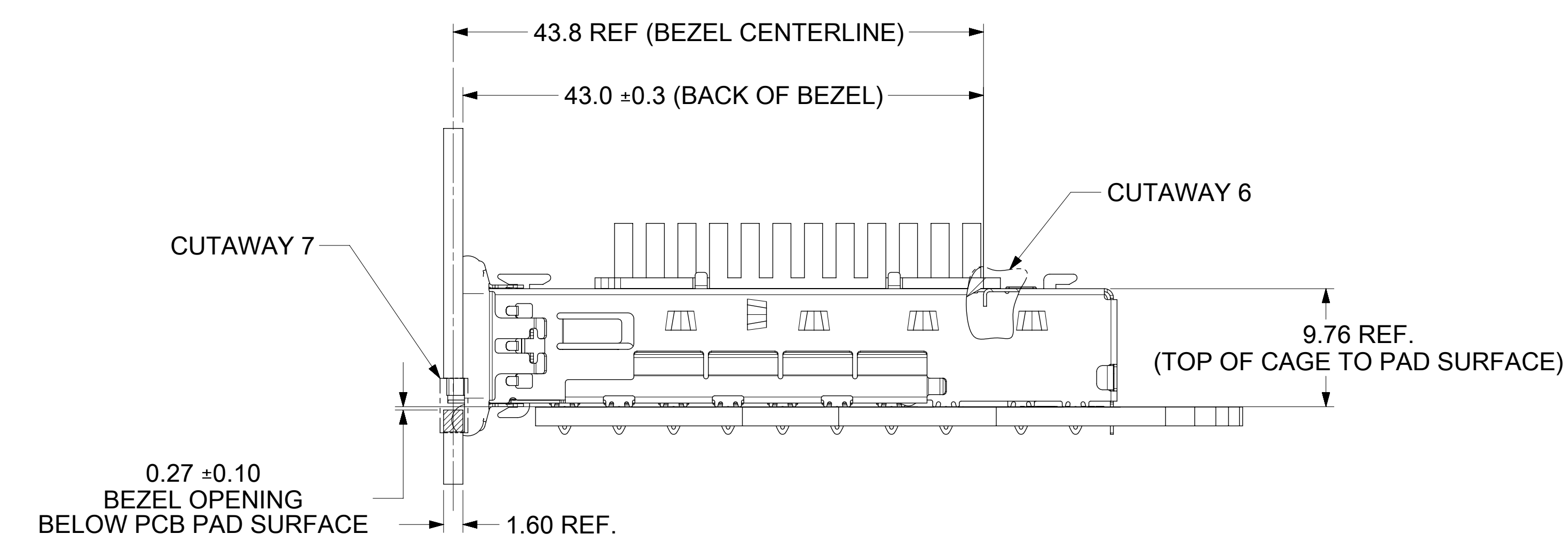
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	4:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 744377			QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER				
ANGULAR TOL $\pm 1.0^\circ$		DRWN: DKUMARG 2023/03/29							
4 PLACES	$\pm$	CHK'D: AMRUTH 2023/03/30			PRODUCT CUSTOMER DRAWING				
3 PLACES	$\pm$	APPR: TKUMARKC 2023/03/31							
2 PLACES	$\pm 0.15$	INITIAL REVISION:			DOCUMENT NUMBER: 747683506 DOC TYPE: PSD DOC PART: ASY REVISION: A1				
1 PLACE	$\pm 0.25$	DRWN: CHETHH2 2022/05/25							
0 PLACES	$\pm$	APPR: SCHIEN 2022/07/07			MATERIAL NUMBER: 74768 CUSTOMER: SEE P/N TABLE SHEET NUMBER: 5 OF 7				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION							

DOCUMENT STATUS	P1	RELEASE DATE	2023/03/31	10:58:52
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# BOARD AND BEZEL POSITION DIMENSIONS FOR BELLY TO BELLY MOUNTING



# BOARD AND BEZEL POSITION DIMENSIONS FOR SINGLE SIDE MOUNTING



NOTES:  
 1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING, SIZE AND LOCATION.

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DIMENSION UNITS		SCALE		CURRENT REV DESC:				<b>molex</b>	
mm		3:1							
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 744377				QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER	
ANGULAR TOL ± 1.0°				DRWN: DKUMARG 2023/03/29				PRODUCT CUSTOMER DRAWING	
4 PLACES ±				CHK'D: AMRUTH 2023/03/30				DOCUMENT NUMBER	
3 PLACES ±				APPR: TKUMARKC 2023/03/31				747683506	
2 PLACES ± 0.15				INITIAL REVISION:				DOC TYPE	
1 PLACE ± 0.25				DRWN: CHETHH2 2022/05/25				PSD	
0 PLACES ±				APPR: SCHIEN 2022/07/07				AS Y	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		REVISION	
				D-SIZE		SERIES		SHEET NUMBER	
				74768		MATERIAL NUMBER		CUSTOMER	
				SEE P/N TABLE		CUSTOMER		6 OF 7	

DOCUMENT STATUS	P1	RELEASE DATE	2023/03/31	10:58:52
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REV	DATE	DESCRIPTION
A	2022/06/25	INITIAL RELEASE
A1	2023/03/29	UPDATED ALL THE VIEWS

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DIMENSION UNITS	SCALE	CURRENT REV DESC:				<b>molex</b>			
mm	1:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)						QSFP+ 1X3 GANGED CAGE, GASKET TYPE W/ SUS INNER SPRING FINGER			
ANGULAR TOL	± 1.0°					PRODUCT CUSTOMER DRAWING			
4 PLACES	±	EC NO: 744377							
3 PLACES	±	DRWN: DKUMARG 2023/03/29							
2 PLACES	± 0.15	CHK'D: AMRUTH 2023/03/30							
1 PLACE	± 0.25	APPR: TKUMARKC 2023/03/31							
0 PLACES	±	INITIAL REVISION:				DOCUMENT NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER	
				D-SIZE	74768	747683506	PSD	ASY	A1
						SEE P/N TABLE		7 OF 7	

DOCUMENT STATUS	P1	RELEASE DATE	2023/03/31	10:58:52
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