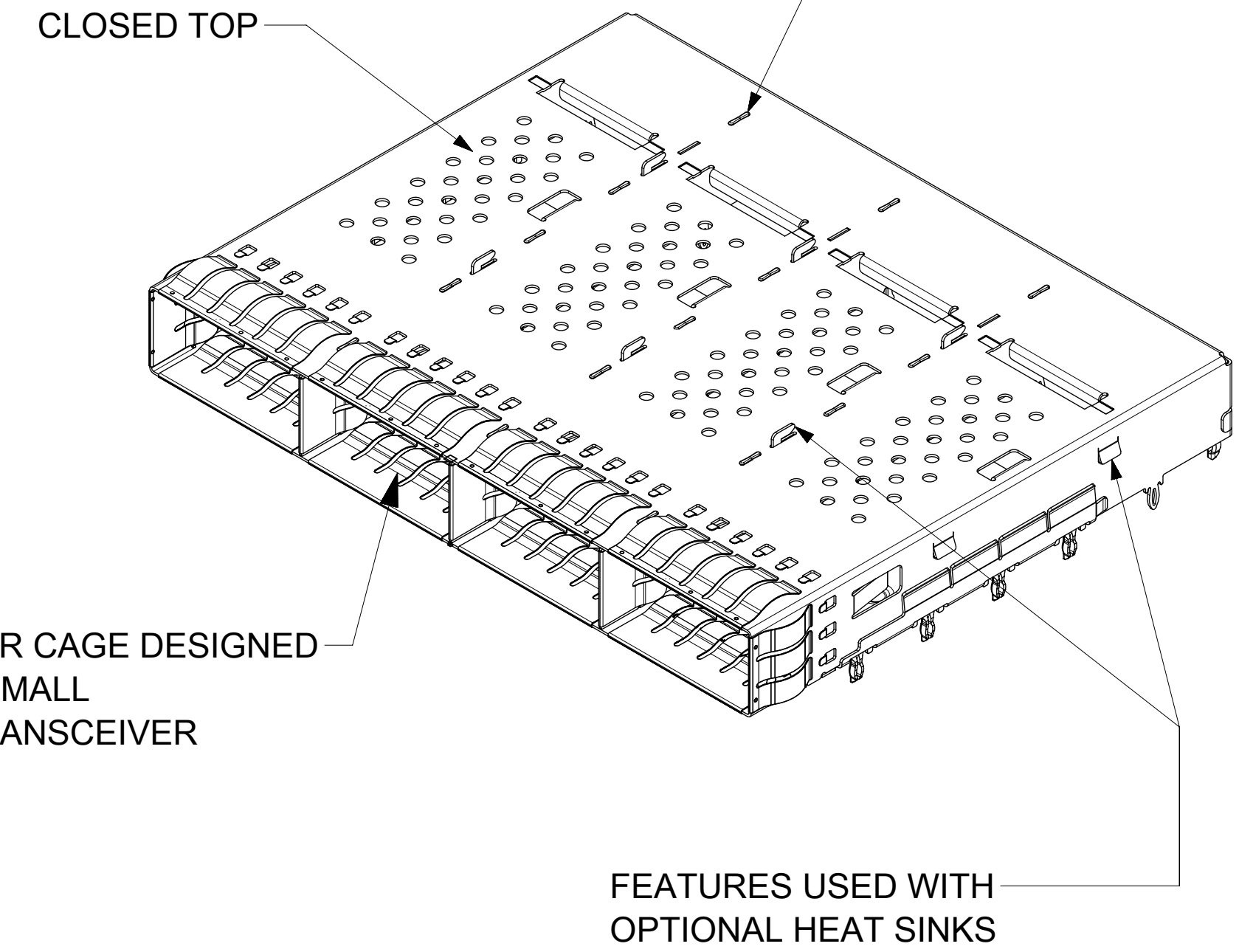
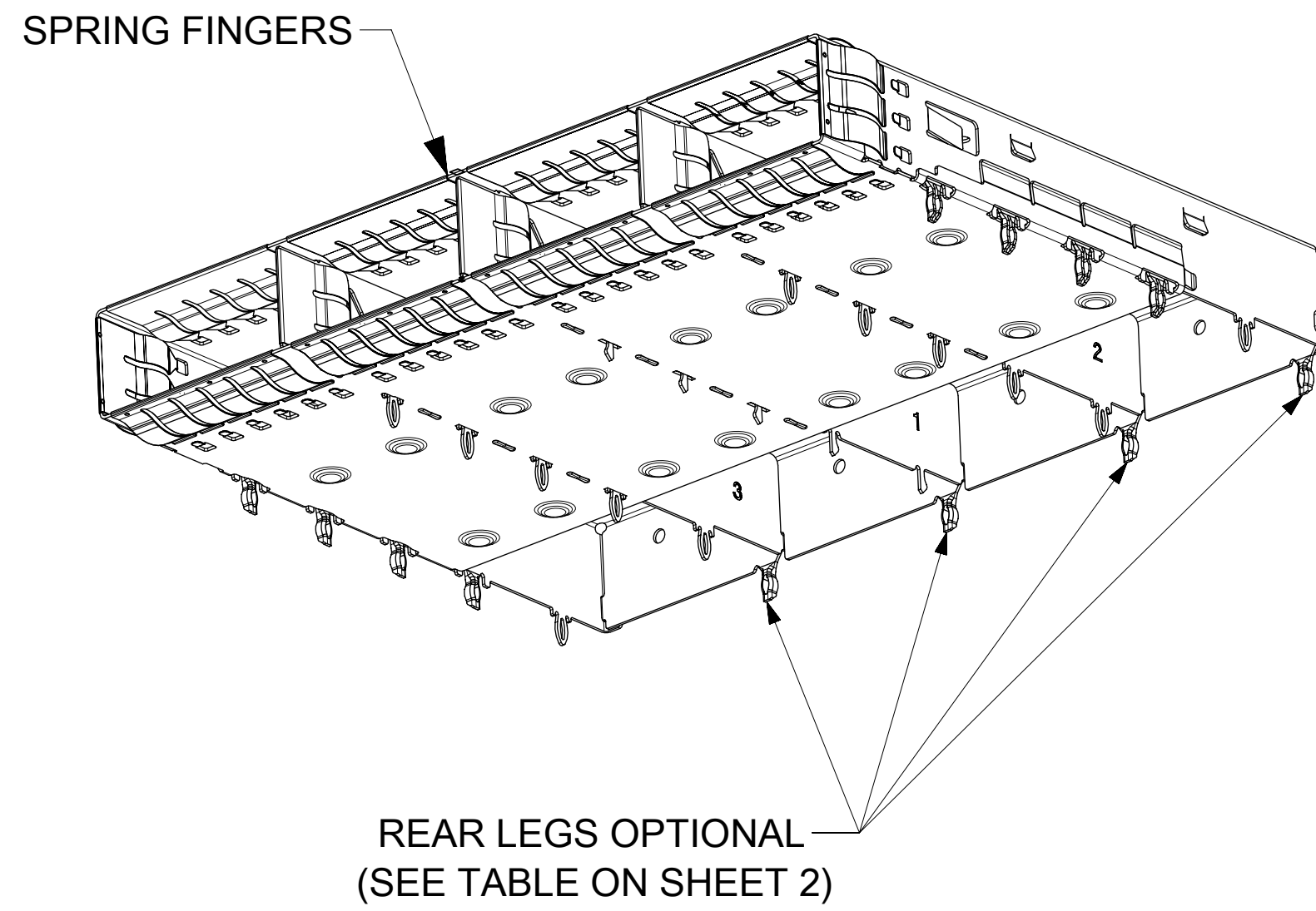
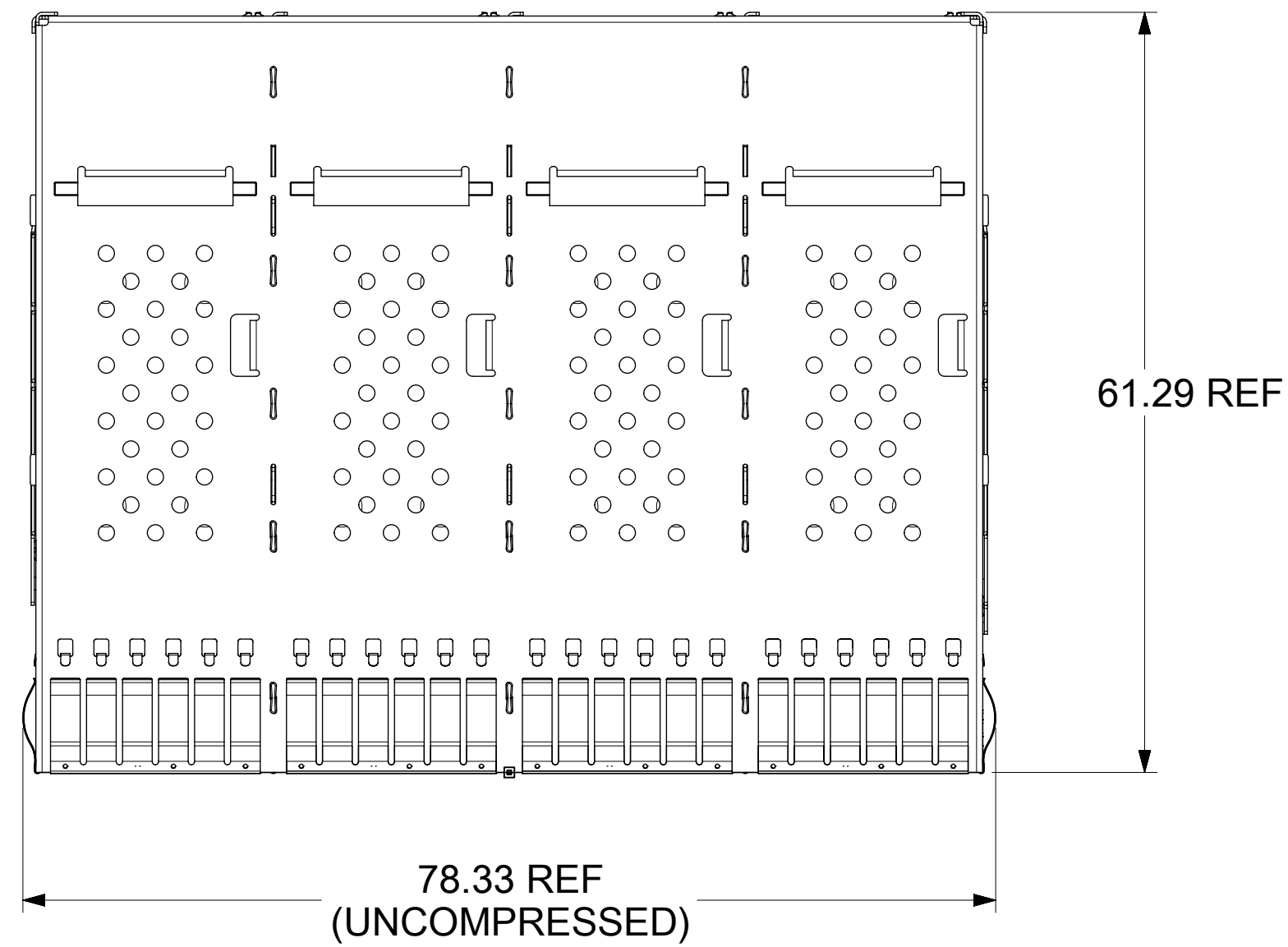


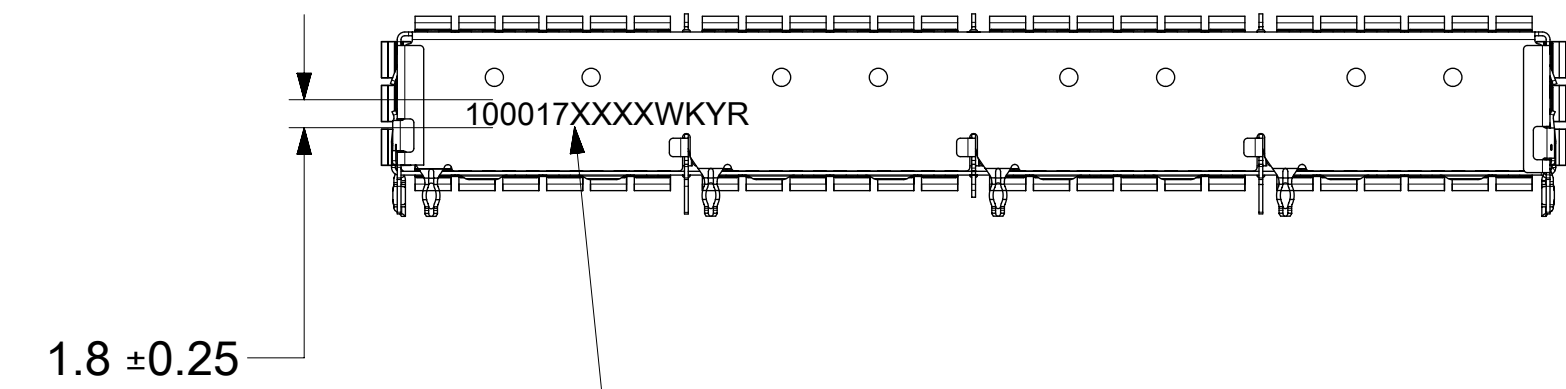
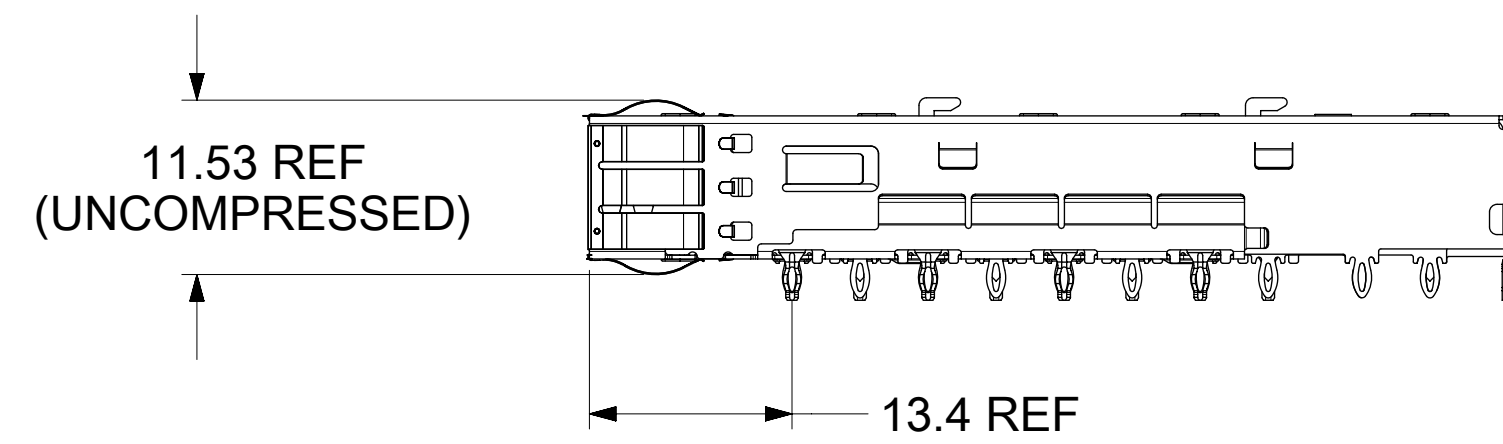
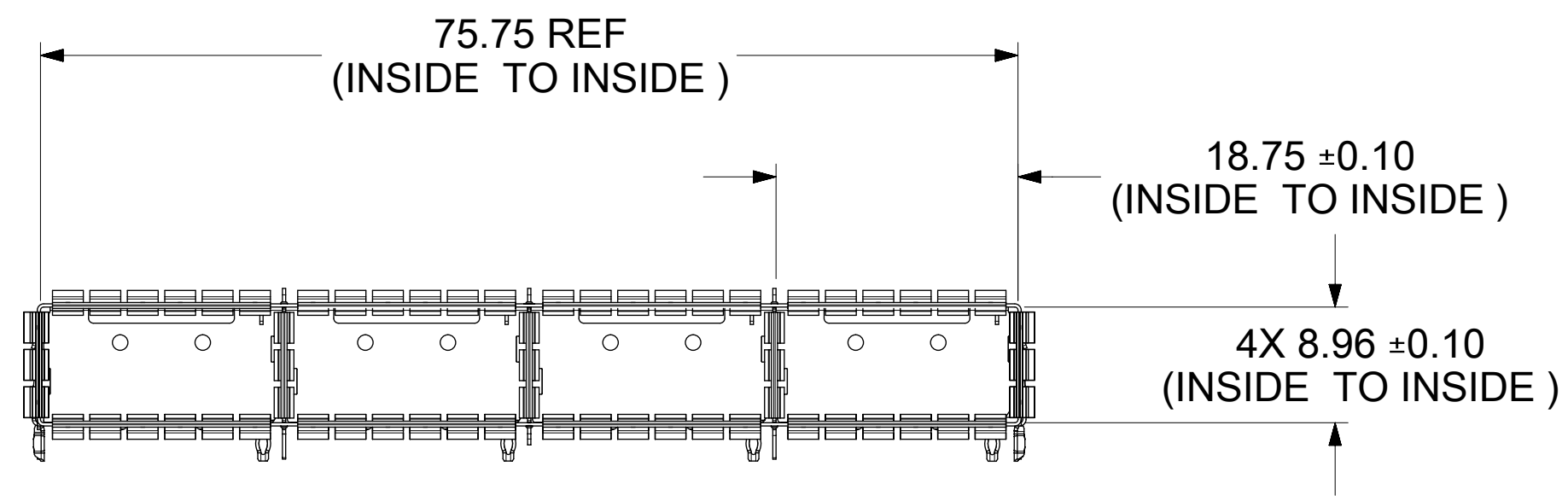
# BASE CAGE DETAILS

1000173242

SHOWN



DIMENSIONS OF EACH INNER CAGE DESIGNED TO FUNCTION WITH QUAD SMALL FORM-FACTOR (zQSFP+) TRANSCEIVER



P/N AND WEEK/YEAR DATE CODE TO BE PRINTED ON BACK OF COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN. SEE TABLE BELOW FOR DATE CODE INFORMATION.

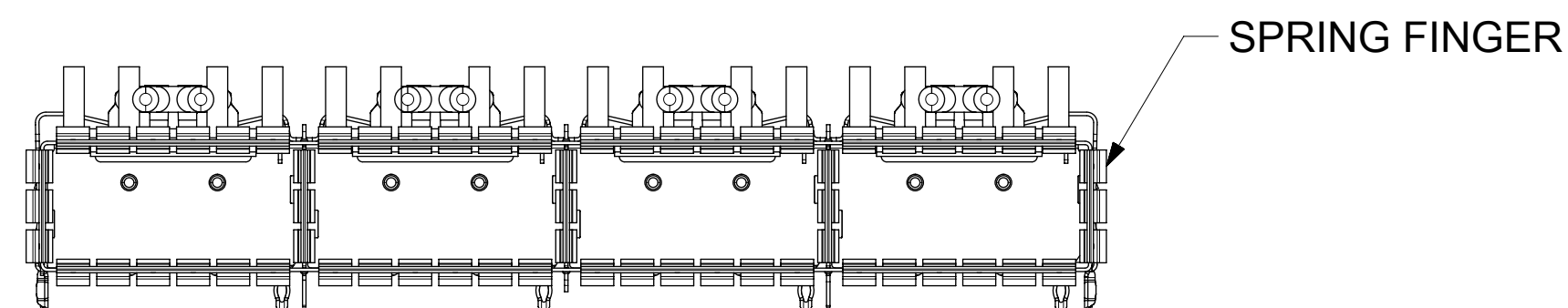
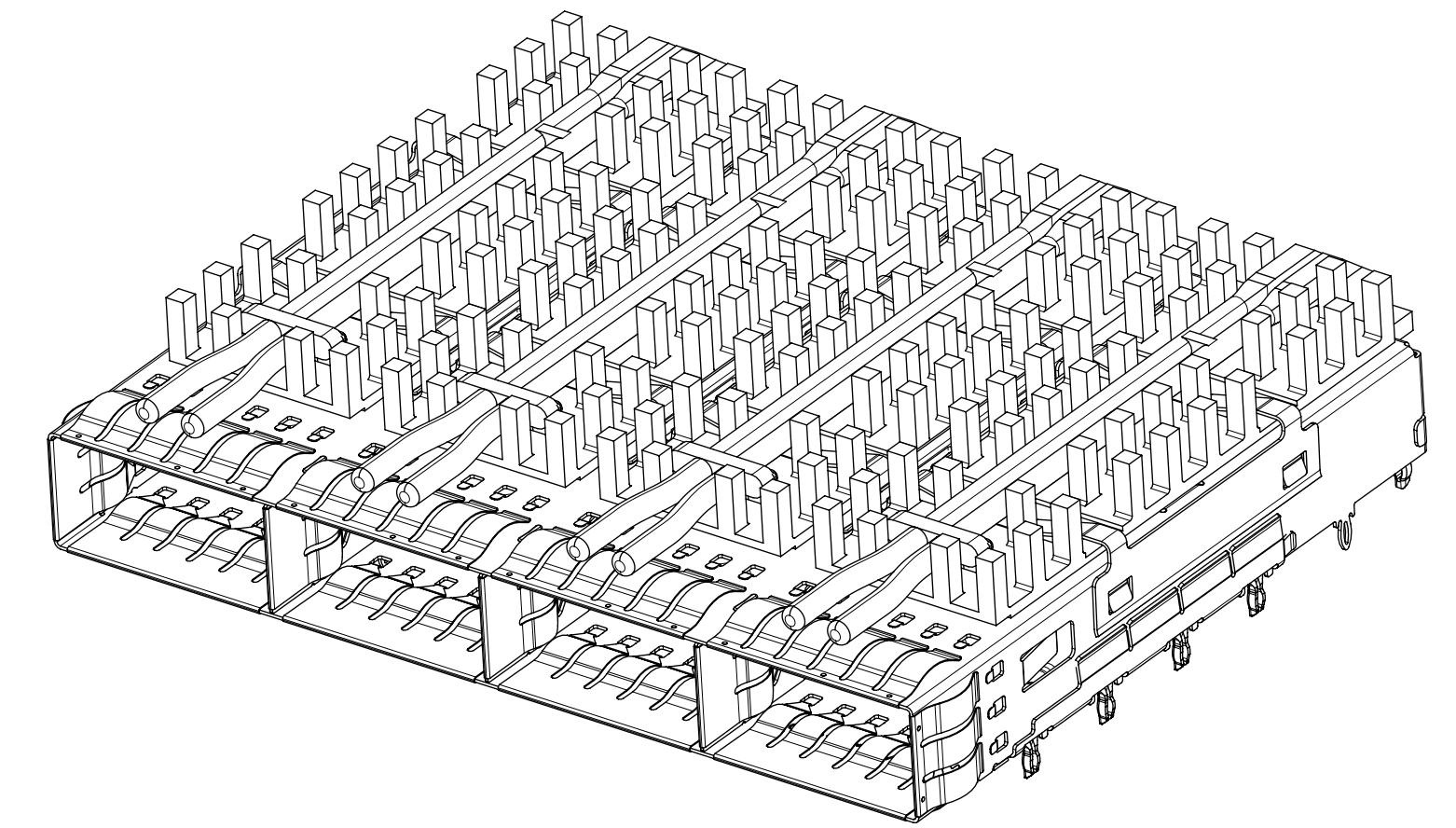
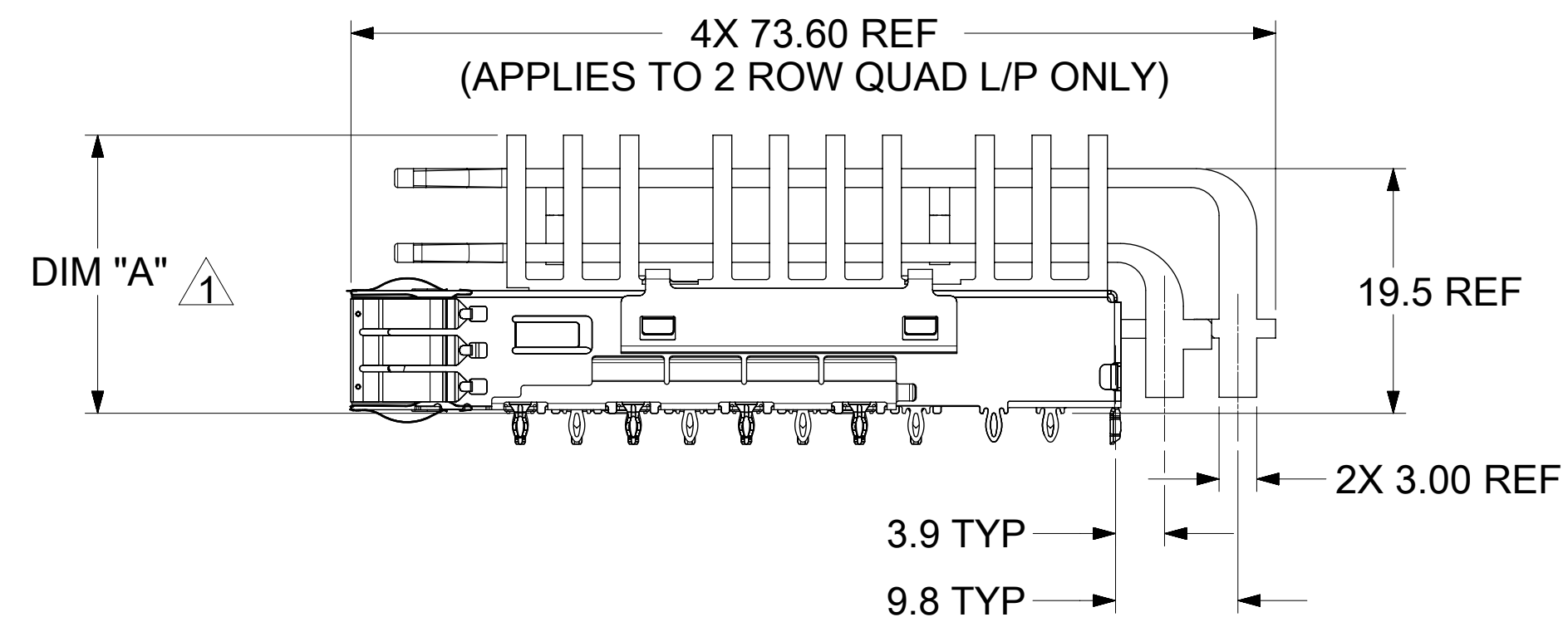
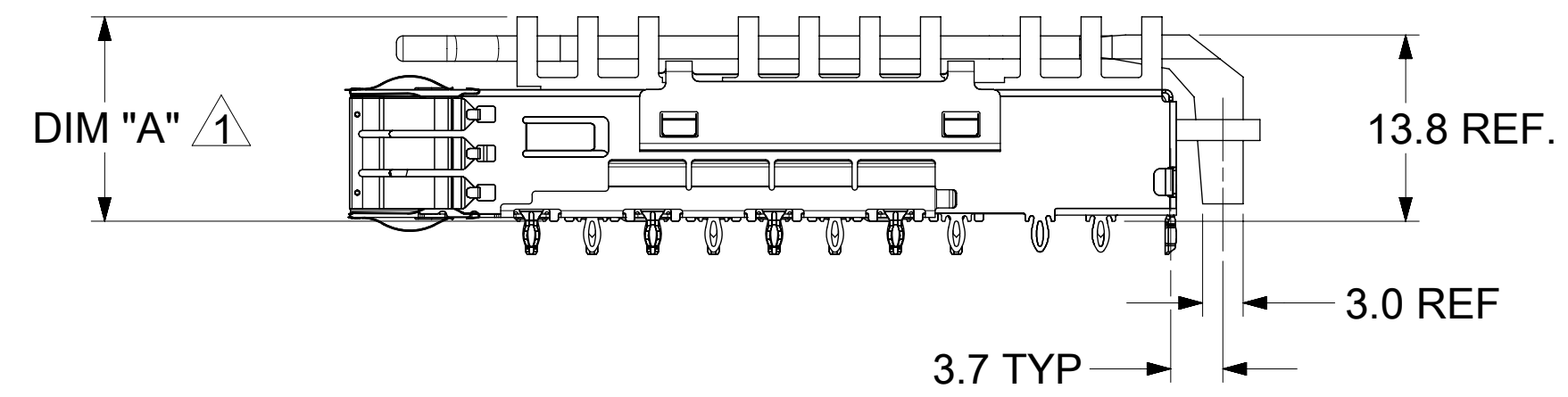
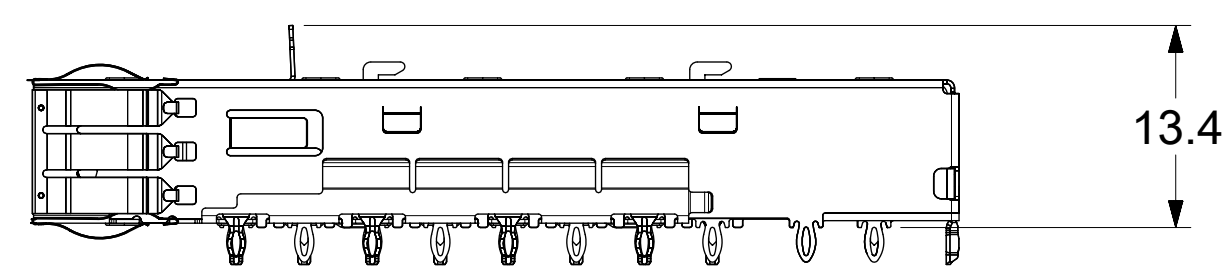
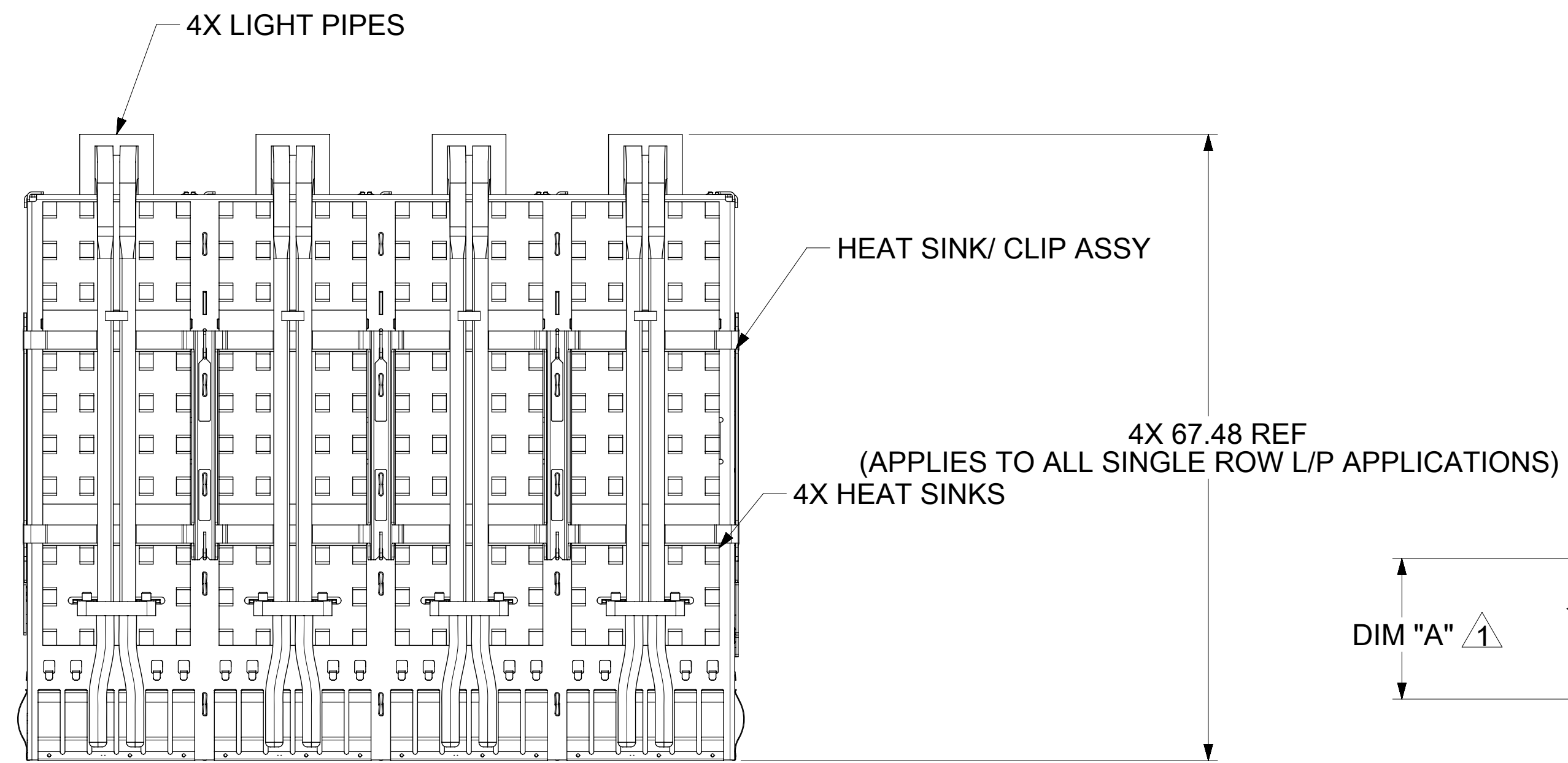
- NOTES:
- MATERIAL: CAGE: STAINLESS STEEL  
CENTER WALLS: STAINLESS STEEL  
SPRING FINGERS: STAINLESS STEEL  
HEAT SINKS: NICKEL PLATED ALUMINUM  
HEAT SINK CLIP: STAINLESS STEEL  
LIGHT PIPES: POLYCARBONATE (UL 94-V-0)
  - DIMENSIONS MARKED  $\nabla$  ARE CRITICAL TO FUNCTION OF THE PART AND MUST BE INSPECTED
  - DRAWING APPLIES TO ALL P/N'S SHOWN ON PAGE 3
  - DURING FINAL INSPECTION, CAGE LEG LOCATIONS AND STRAIGHTNESS MUST BE CHECKED USING APPROPRIATE GO - NO GO GAGE
  - DURING FINAL INSPECTION, CAGE MUST BE INSPECTED TO MAKE SURE LEG CONFIGURATIONS AND PART NUMBERS ARE CORRECT, USE SHEETS 3, 4 AND 5
  - PARTS TO BE INSPECTED PER MOLEX COSMETIC SPEC WI-HP-7-2774 (CLASS B UNLESS OTHERWISE SPECIFIED)
  - PRESS-FIT LEGS 2.44 LONG -  
1.57 MINIMUM PCB THICKNESS FOR SINGLE SIDED USE.  
3.00 MINIMUM PCB THICKNESS FOR BELLY TO BELLY USE.
  - NO RoHS EXEMPTIONS
  - WELD SPOTS MAY SHOW SLIGHT MATERIAL DISCOLORATION.

WEEK/YEAR DATE CODE TABLE													
WK	WEEK OF THE YEAR 01 THRU 52 (EXAMPLE: 01= FIRST WEEK OF YEAR 52= LAST WEEK OF YEAR)												
YR	22, 23, 24 ETC.. (EXAMPLE: YEAR 2022= 22)												
FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
$\nabla_A = 0$	DIMENSION UNITS	SCALE	CURRENT REV DESC: SEE REVISION TABLE							<p>ZQSFP+ 1X4 GANGED CAGE ASSY'S W/ SS TAB TYPE SPRING FINGER H/S &amp; L/P OPTIONS</p> <p>PRODUCT CUSTOMER DRAWING</p>			
$\nabla_C = 0$	mm	2:1	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 698865								
$\nabla_D = 0$	ANGULAR TOL $\pm 1.0^\circ$		4 PLACES $\pm$		DRWN: KRISHH1 2022/02/17								
DIVISIONAL SYMBOLS	3 PLACES $\pm$		2 PLACES $\pm 0.13$		CHK'D: TKUMARKC 2022/03/10								
1 PLACE $\pm 0.25$			0 PLACES $\pm$		APPR: JCHIANG 2022/03/21								
INITIAL REVISION:			DRWN: KRISHH1 2022/02/17		APPR: JCHIANG 2022/03/21					DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
					D-SIZE		100017		SEE P/N TABLE		GENERAL MARKET		1 OF 8

# CAGE ASSEMBLY OPTIONS

1000173544

SHOWN

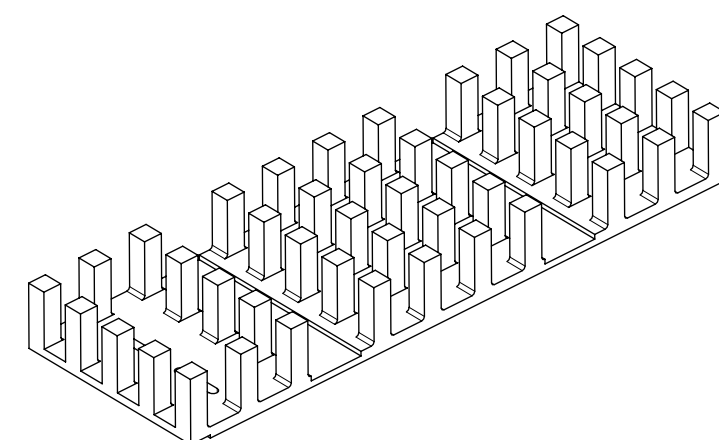


OVERALL HEAT SINK HEIGHT	DIM "A"
PCI	13.7 REF
SAN	16.0 REF
NET	23.0 REF

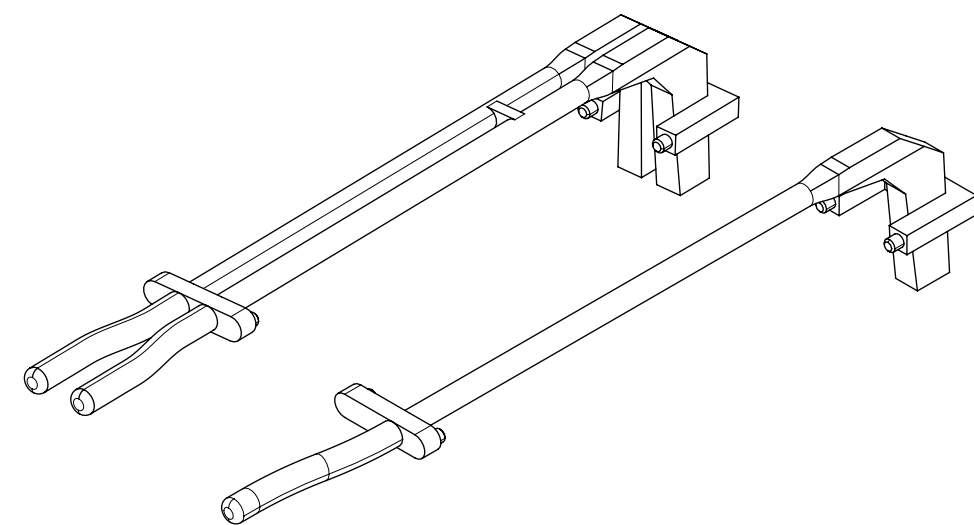
$\triangle$  HEIGHT OF HEAT SINK WITH MODULE INSERTED.  
DIMENSION MAY BE LESS DUE TO MODULE AND HEAT SINK VARIATIONS

## HEATSINK AND LIGHT PIPE COMBINATIONS

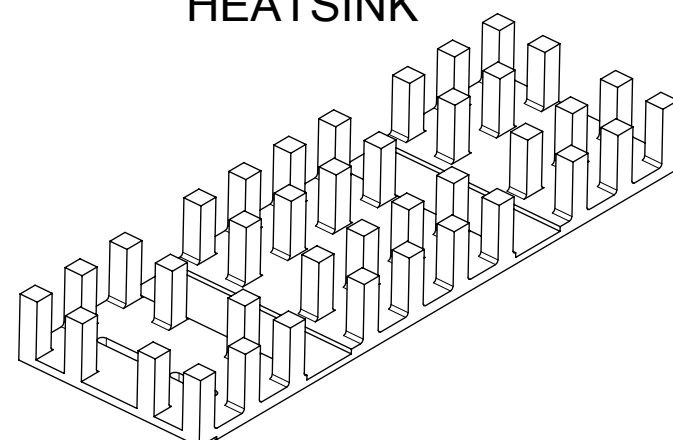
HEATSINK  
USED  
WITHOUT  
LIGHTPIPE



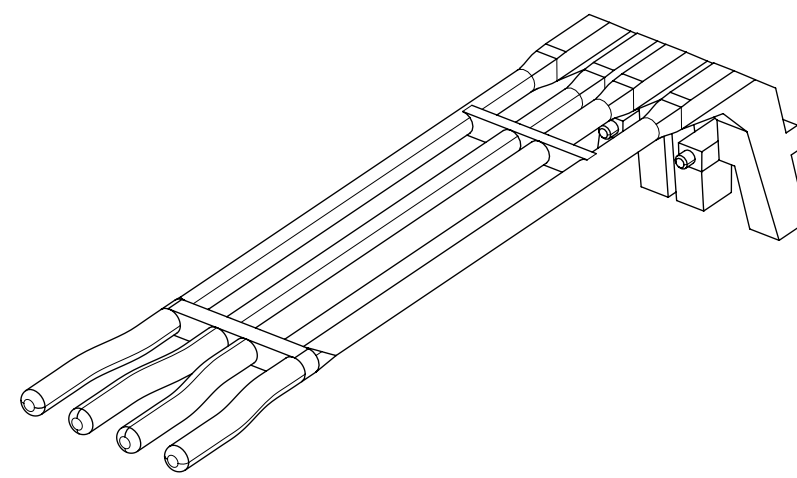
SINGLE / DUAL LIGHT PIPE



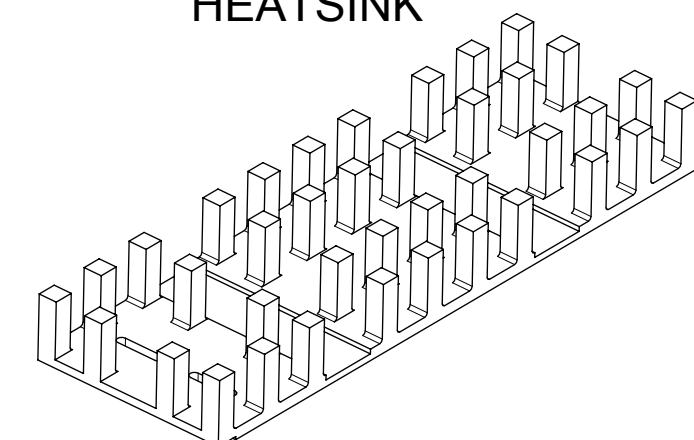
HEATSINK



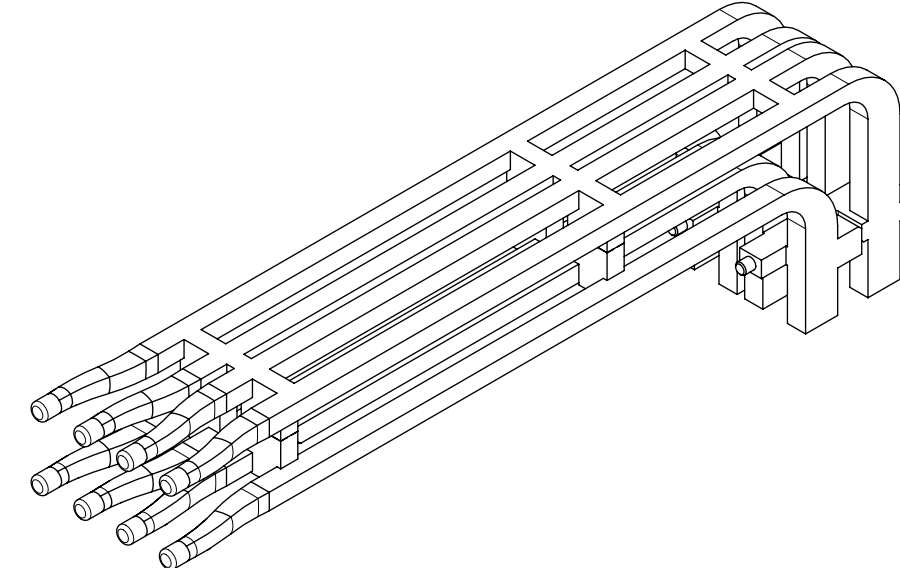
QUAD LIGHT PIPE



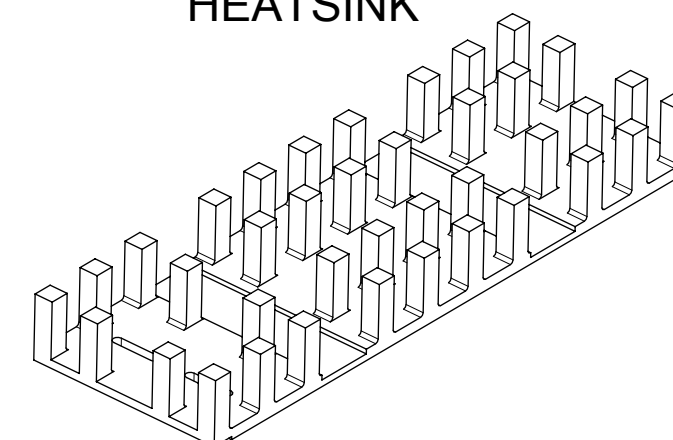
HEATSINK



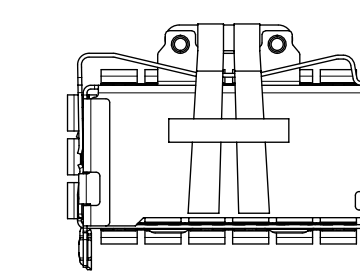
2 ROW QUAD LIGHT PIPE



HEATSINK

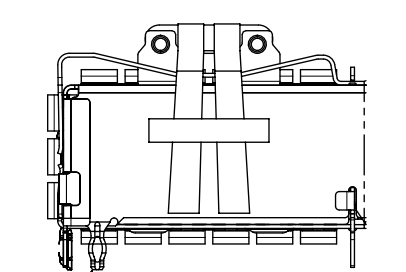


## REAR LEG OPTIONS



0 REAR LEGS

Partial1  
Scale 2.5:1



1 REAR LEGS

Partial2  
Scale 2.5:1

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: SEE REVISION TABLE	
mm	2:1		
GENERAL TOLERANCES (UNLESS SPECIFIED)			
ANGULAR TOL	$\pm 1.0^\circ$		
4 PLACES	$\pm$	EC NO: 698865	
3 PLACES	$\pm$	DRWN: KRISHH1	2022/02/17
2 PLACES	$\pm 0.13$	CHK'D: TKUMARKC	2022/03/10
1 PLACE	$\pm 0.25$	APPR: JCHIANG	2022/03/21
0 PLACES	$\pm$	INITIAL REVISION:	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: KRISHH1	2022/02/17
THIRD ANGLE PROJECTION		APPR: JCHIANG	2022/03/21
DRAWING		SERIES	MATERIAL NUMBER
D-SIZE		100017	SEE P/N TABLE
CUSTOMER		GENERAL MARKET	
SHEET NUMBER		2 OF 8	

**molex**

ZQSFP+ 1X4 GANGED CAGE ASSY'S  
W/ SS TAB TYPE SPRING FINGER H/S & L/P  
OPTIONS

PRODUCT CUSTOMER DRAWING

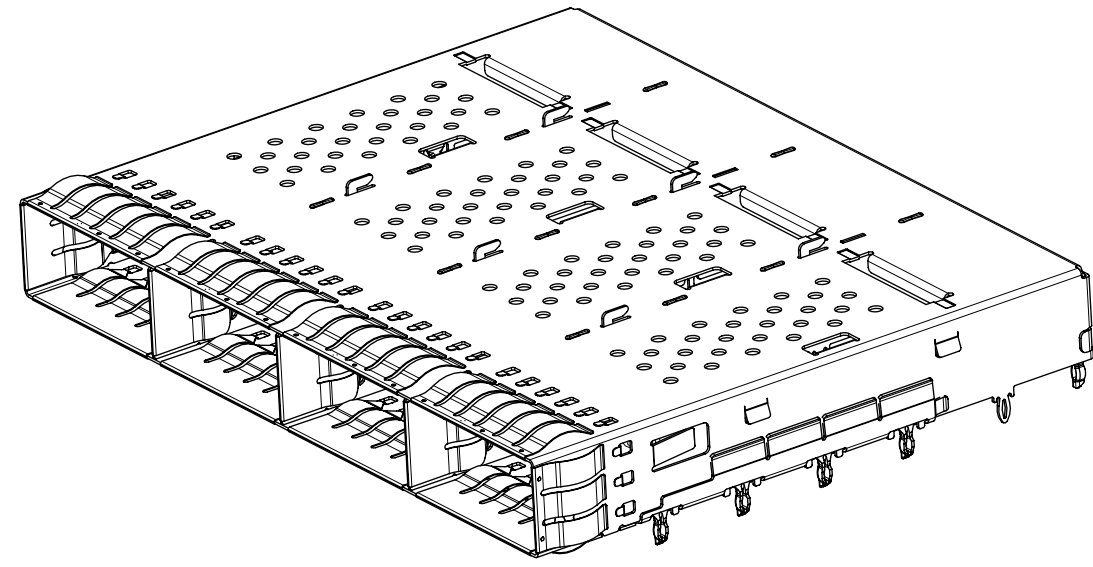
DOCUMENT NUMBER DOC TYPE DOC PART REVISION

1000173200

PSD ASY A

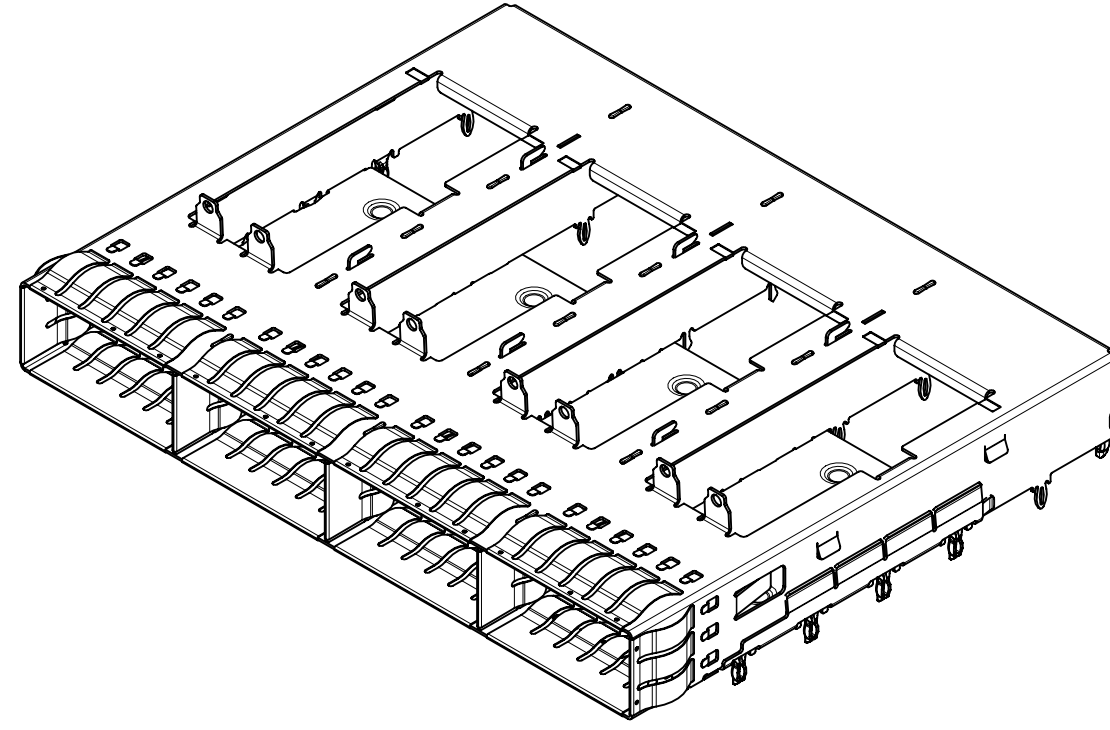
# PART NUMBER SELECTION

NO HEATSINKS  
NO LIGHT PIPES  
CLOSED TOP



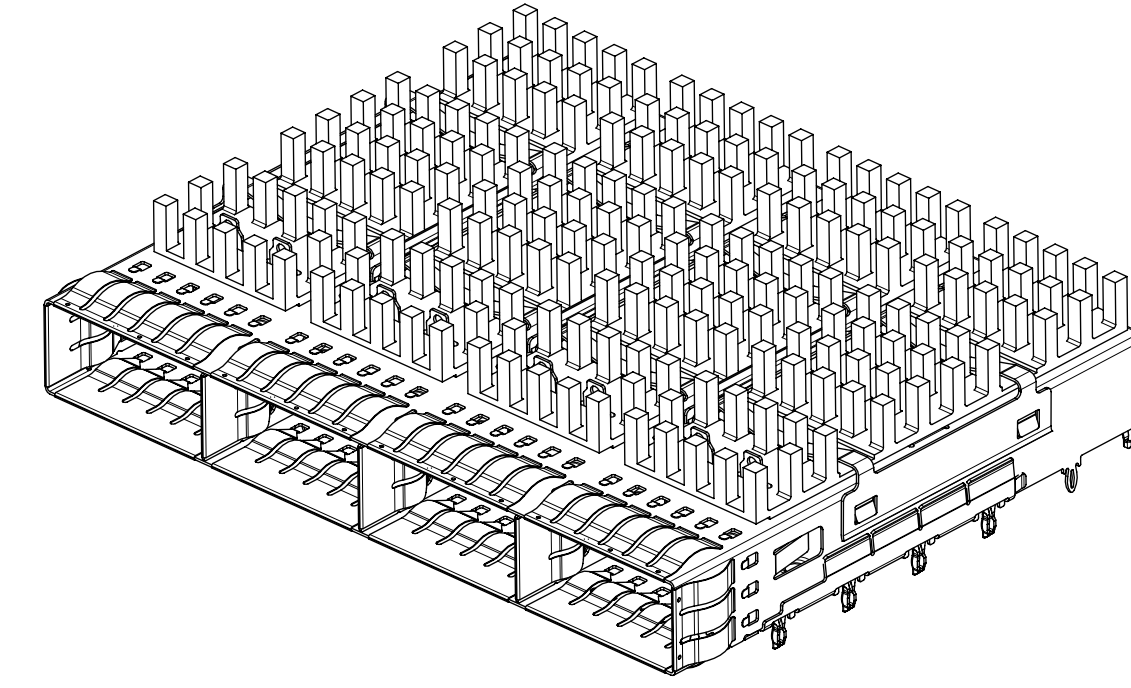
MOLEX P/N W/ SPRING FINGERS	#OF REAR LEGS PER PORT
1000173242	1

NO HEATSINKS  
NO LIGHT PIPES  
OPEN TOP



MOLEX P/N W/ SPRING FINGERS	#OF REAR LEGS PER PORT
1000173252	1

WITH HEATSINKS  
NO LIGHT PIPES

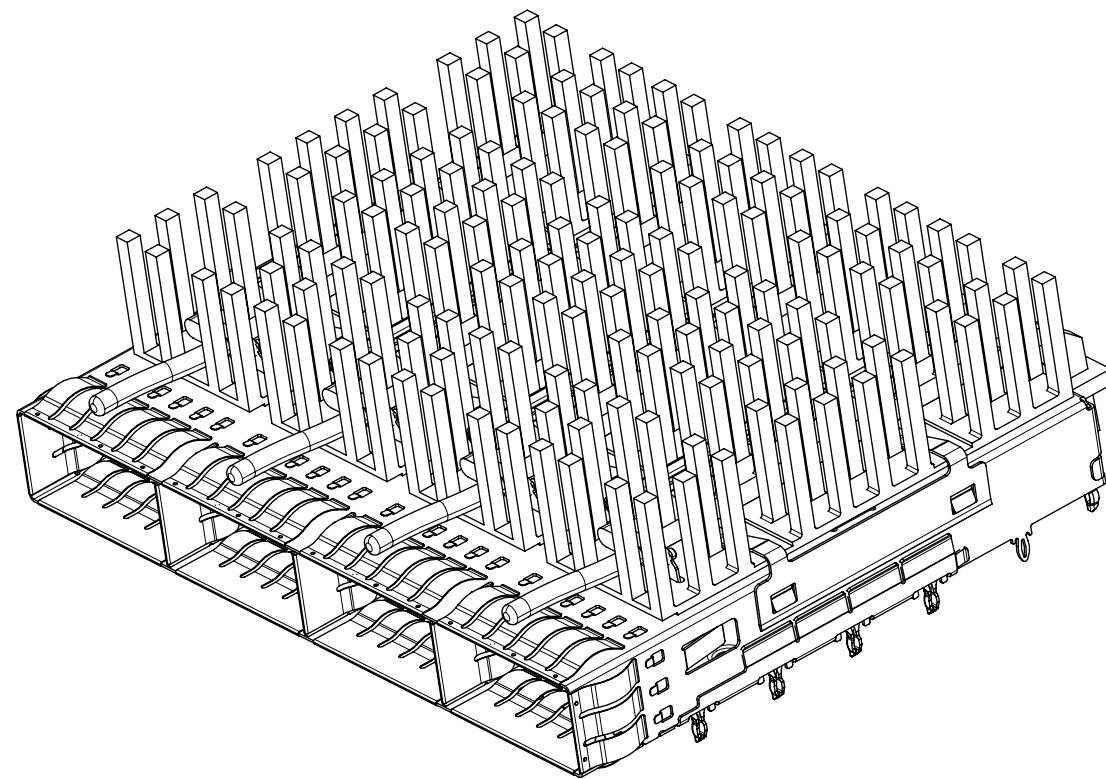


MOLEX P/N	HEATSINKS	#OF REAR LEGS PER PORT
1000173343	PCI	1
1000173344	SAN	1

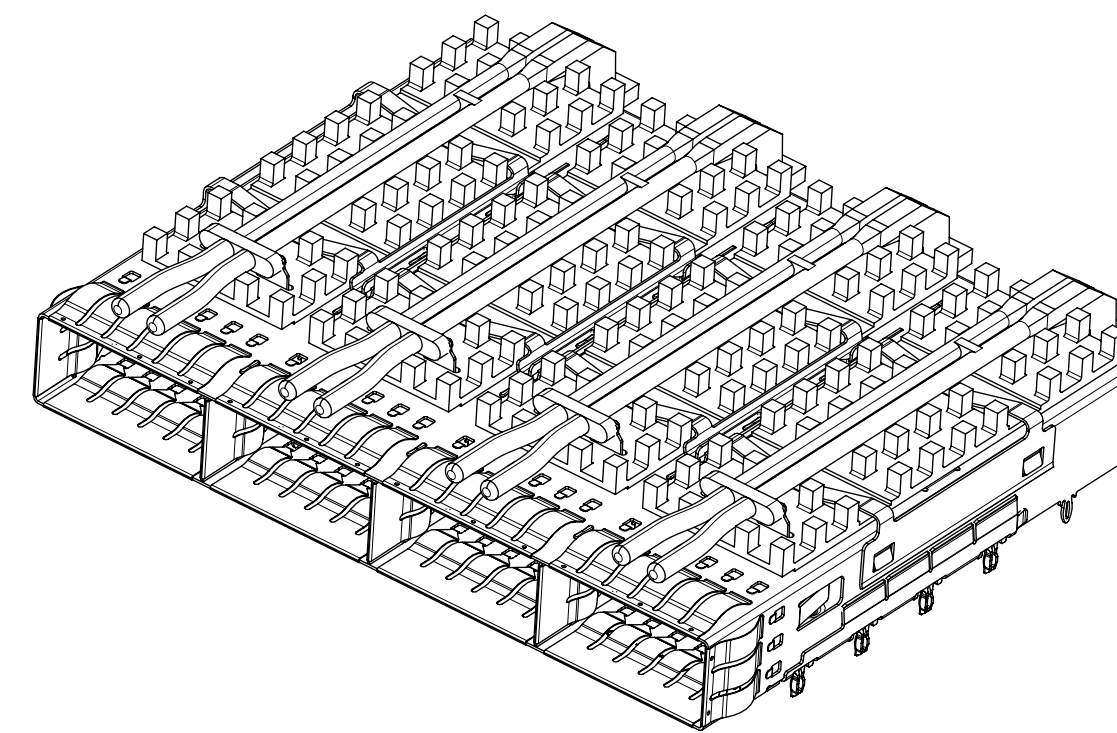
## WITH HEATSINKS AND LIGHT PIPES

MOLEX P/N	LIGHTPIPES	HEATSINKS	#OF REAR LEGS PER PORT
1000173443	DUAL	PCI	0
1000173446	QUAD	PCI	0
1000173542	SINGLE	NET	1
1000173544	DUAL	SAN	1
1000173547	QUAD	SAN	1
1000173548	QUAD	NET	1

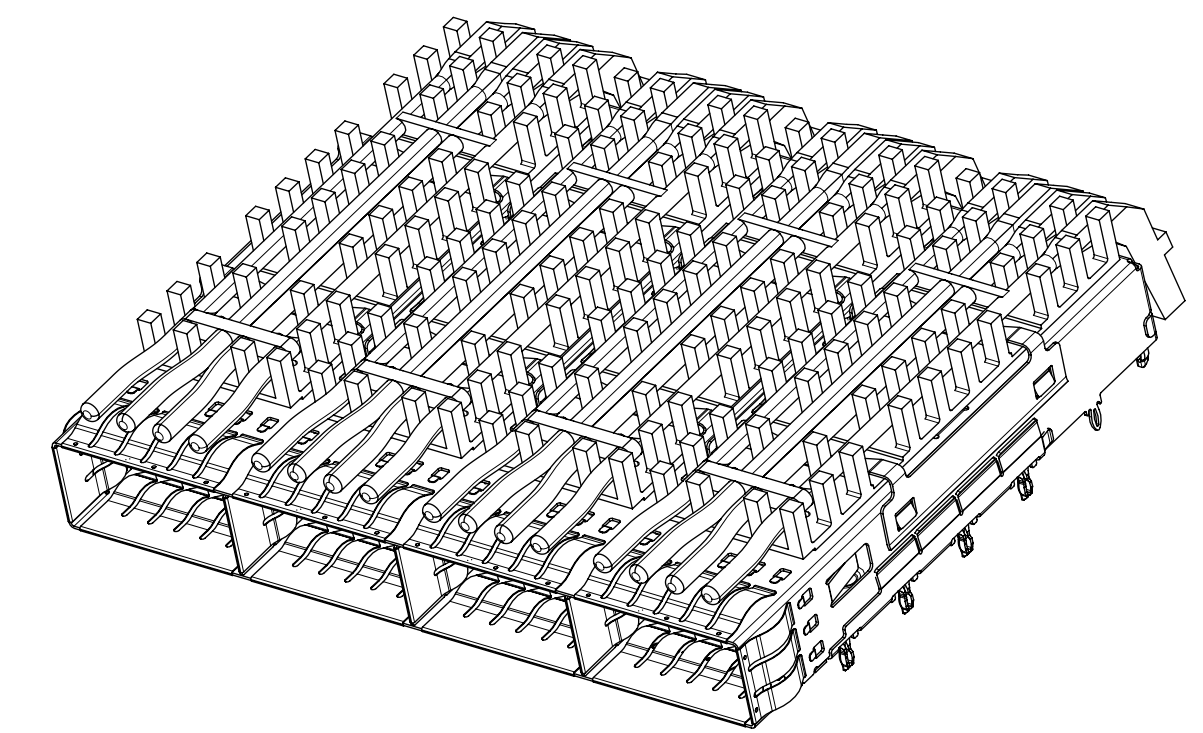
SINGLE LIGHT PIPE



DUAL LIGHT PIPE



QUAD LIGHT PIPE



THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS: mm  
SCALE: 1.5:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 1.0°
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.13
1 PLACE	± 0.25
0 PLACES	±

CURRENT REV DESC: SEE REVISION TABLE

EC NO: 698865  
DRWN: KRISHH1 2022/02/17  
CHK'D: TKUMARKC 2022/03/10  
APPR: JCHIANG 2022/03/21  
INITIAL REVISION:  
DRWN: KRISHH1 2022/02/17  
APPR: JCHIANG 2022/03/21

**molex**

ZQSFP+ 1X4 GANGED CAGE ASSYS  
W/ SS TAB TYPE SPRING FINGER H/S & L/P  
OPTIONS

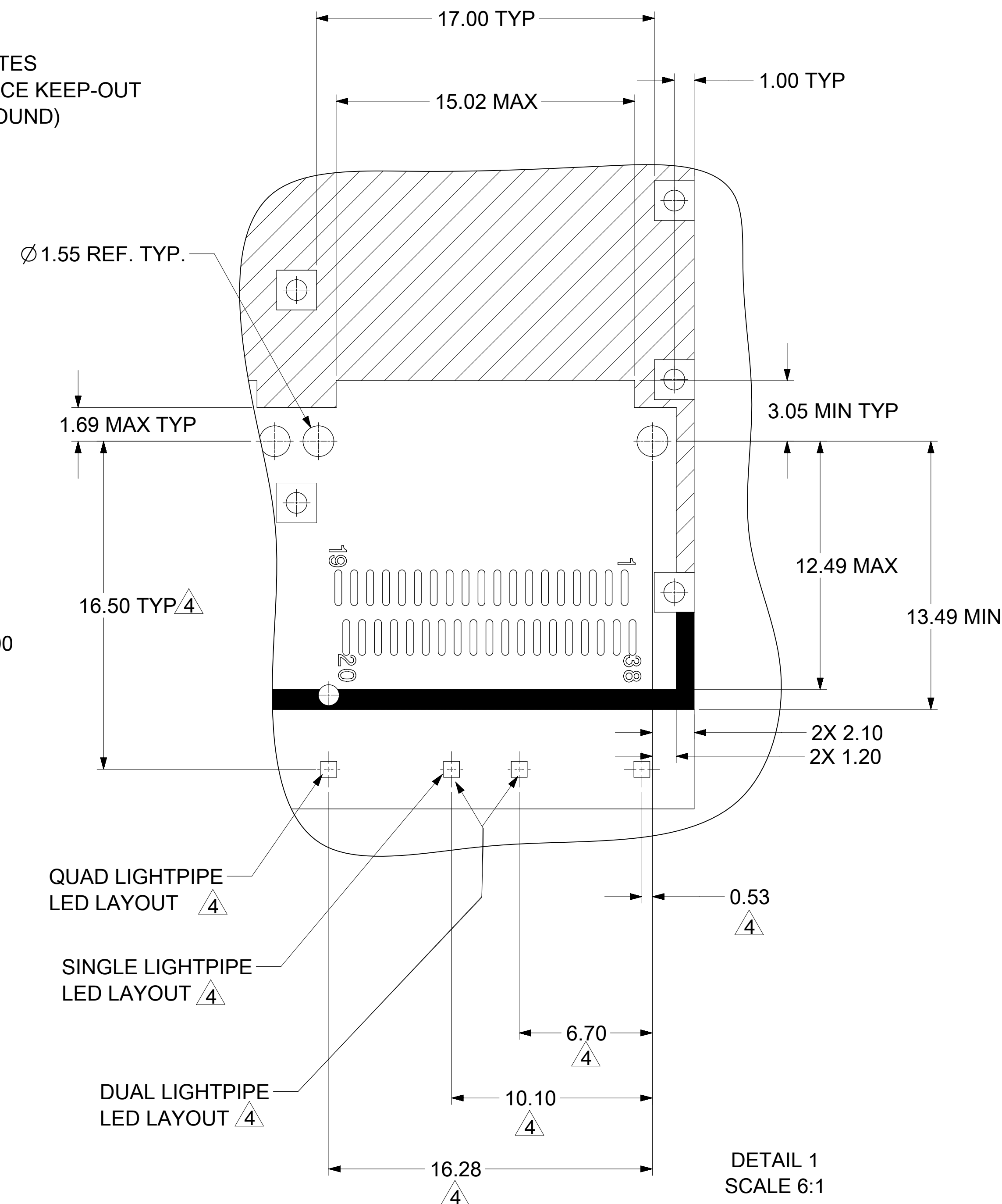
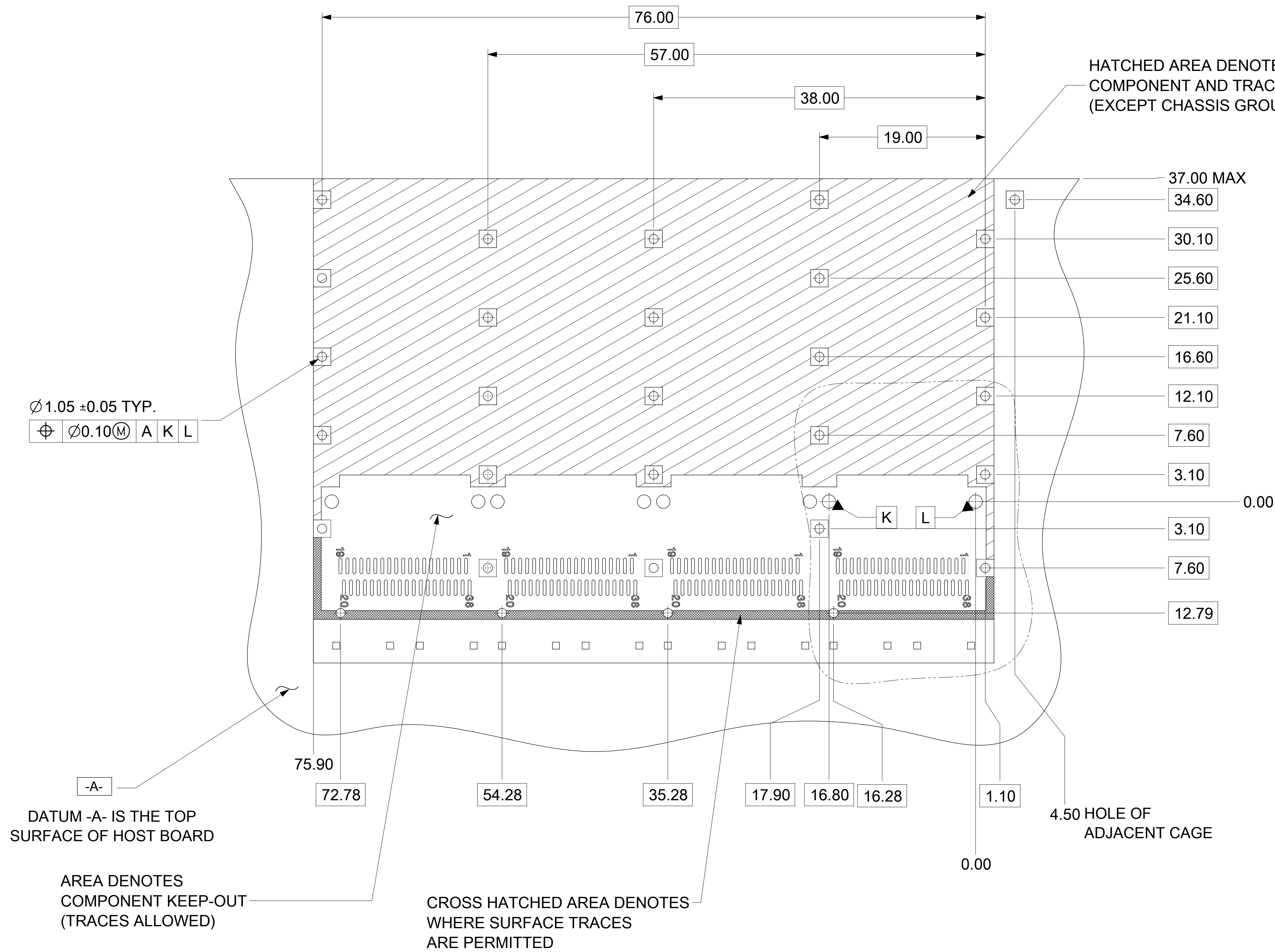
PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1000173200	PSD	ASY	A

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
		D-SIZE	100017	SEE P/N TABLE	GENERAL MARKET	3 OF 8



# PCB LAYOUT FOR SINGLE SIDED MOUNTING



- NOTES:
1. PADS AND VIAS GO TO CHASSIS GROUND. (RECOMMENDED PADS TO BE 2.00mm SQUARE.)
  2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  3. CONNECTOR PAD LAYOUT PER SFF-8663 WILL ACCOMODATE MOLEX CONNECTOR SERIES 170432.
  4. NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLIES WITH LIGHT PIPES.

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: SEE REVISION TABLE					
mm		3.5:1							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL ± 1.0°									
4 PLACES ±		EC NO: 698865		DRWN: KRISHH1		2022/02/17			
3 PLACES ±		CHK'D: TKUMARKC		2022/03/10					
2 PLACES ± 0.13		APPR: JCHIANG		2022/03/21					
1 PLACE ± 0.25		INITIAL REVISION:		DRWN: KRISHH1		2022/02/17			
0 PLACES ±		APPR: JCHIANG		2022/03/21					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES	
				D-SIZE		100017			
				MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
				SEE P/N TABLE		GENERAL MARKET		4 OF 8	

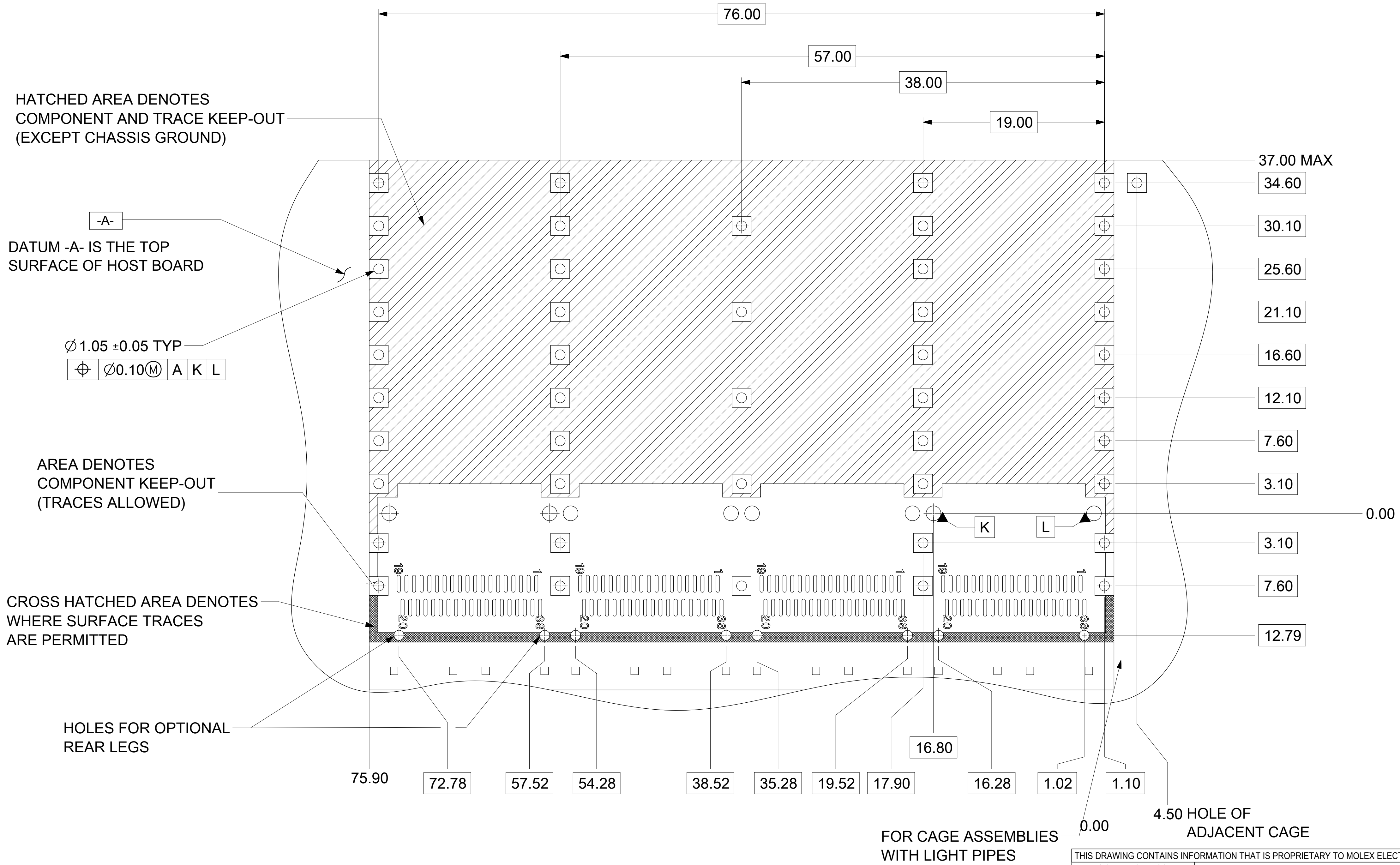
**molex**

ZQSFP+ 1X4 GANGED CAGE ASSY'S  
W/ SS TAB TYPE SPRING FINGER H/S & L/P  
OPTIONS

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1000173200	PSD	ASY	A

# PCB LAYOUT FOR BELLY TO BELLY MOUNTING



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

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

Ø1.05 ±0.05 TYP  
 Ø0.10 (M) A K L

AREA DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)

CROSS HATCHED AREA DENOTES WHERE SURFACE TRACES ARE PERMITTED

HOLES FOR OPTIONAL REAR LEGS

NOTE:  
 SEE SHEET 4 FOR HOST CONNECTOR DETAIL AND SINGLE ROW LED LOCATION DETAIL

SEE SHEET 6 FOR DUAL-QUAD LED LOCATION DETAIL

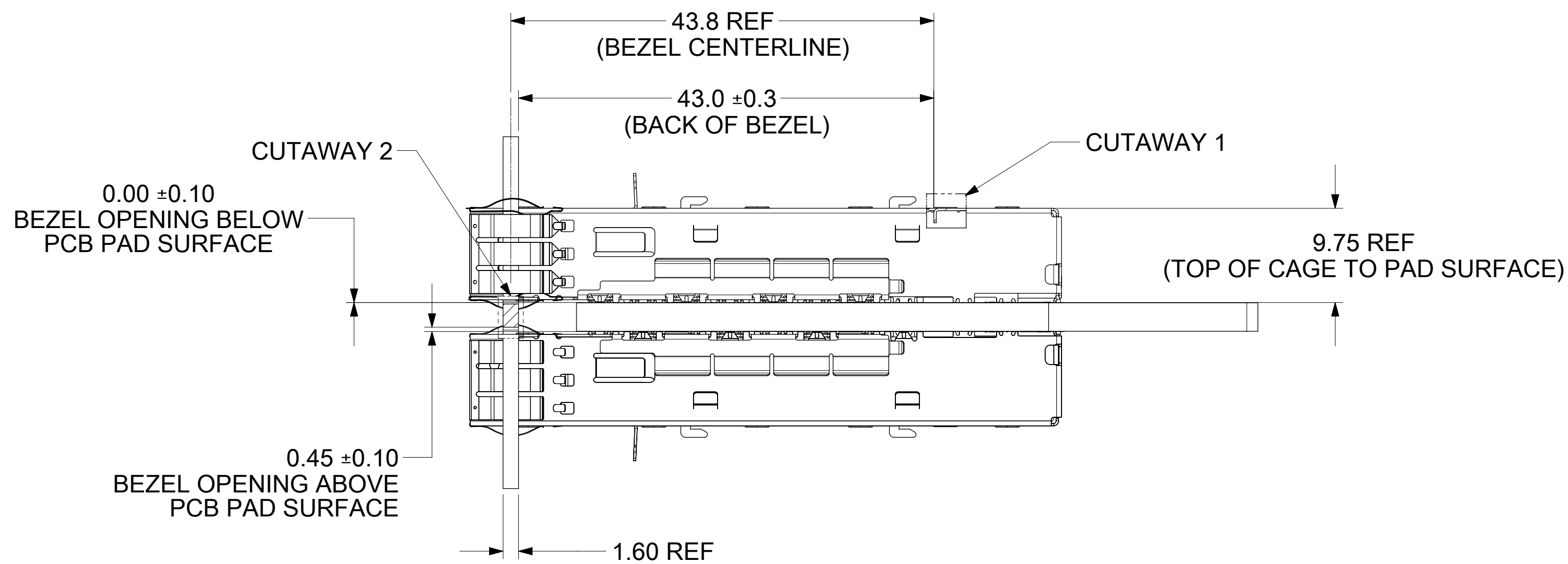
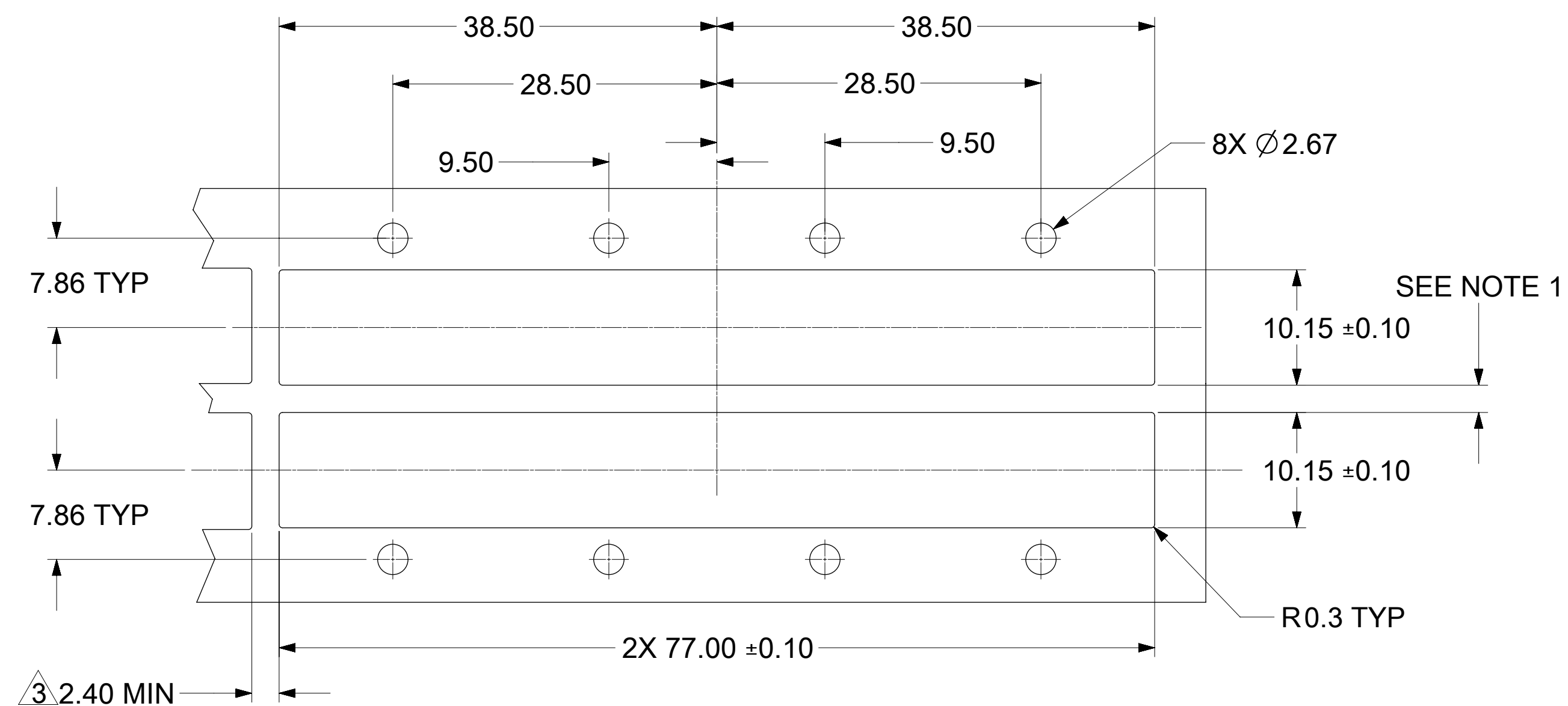
- NOTES:
1. PADS AND VIAS GO TO CHASSIS GROUND. (RECOMMENDED PADS TO BE 2.00mm SQUARE.)
  2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  3. CONNECTOR PAD LAYOUT PER SFF-8663 WILL ACCOMODATE MOLEX CONNECTOR SERRIES 170432.

FOR CAGE ASSEMBLIES WITH LIGHT PIPES  
 4.50 HOLE OF ADJACENT CAGE

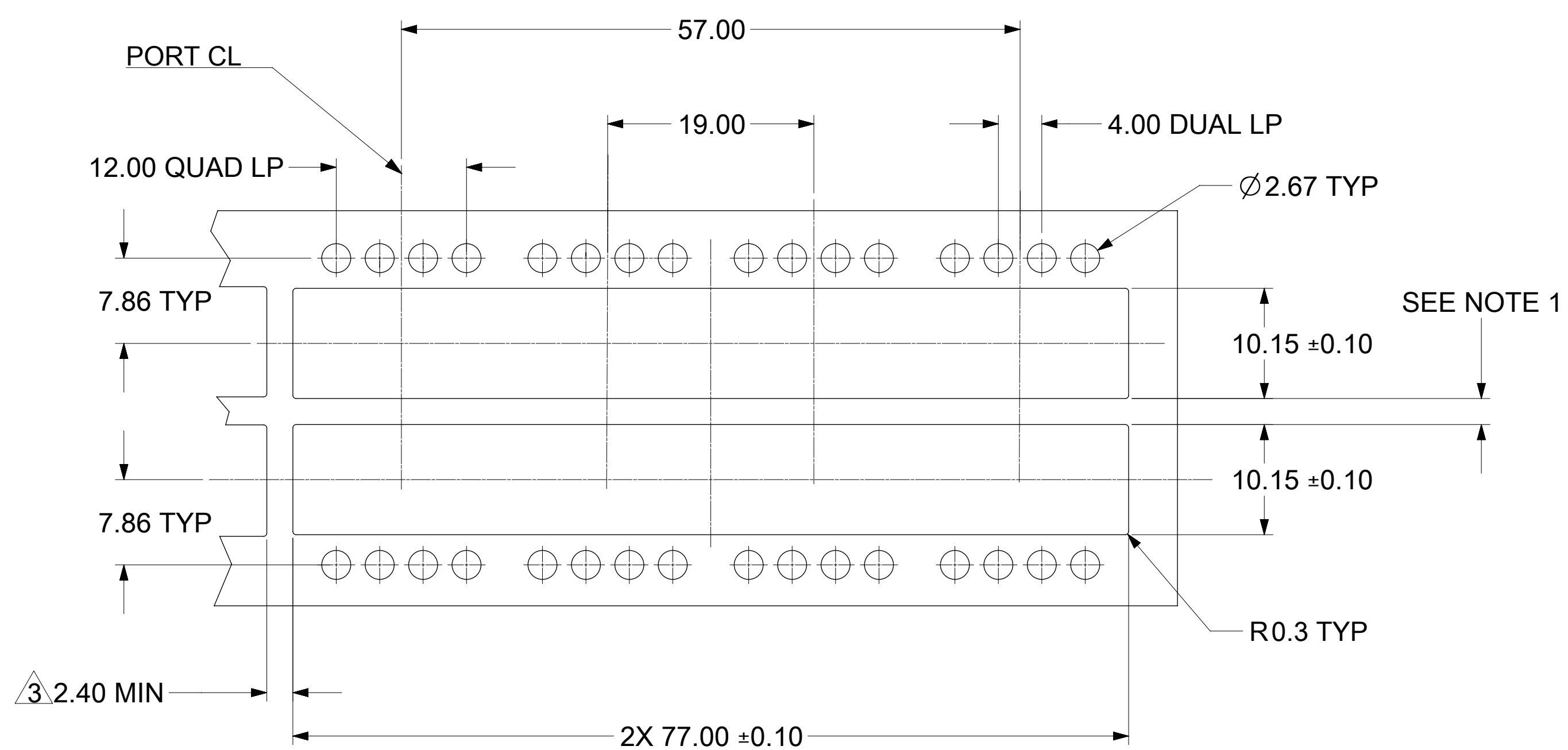
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
DIMENSION UNITS <b>mm</b>	SCALE <b>4:1</b>	CURRENT REV DESC: SEE REVISION TABLE	
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 698865	
ANGULAR TOL	± 1.0°	DRWN: KRISHH1	2022/02/17
4 PLACES	±	CHK'D: TKUMARKC	2022/03/10
3 PLACES	±	APPR: JCHIANG	2022/03/21
2 PLACES	± 0.13	INITIAL REVISION:	
1 PLACE	± 0.25	DRWN: KRISHH1	2022/02/17
0 PLACES	±	APPR: JCHIANG	2022/03/21
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING
			<b>D-SIZE</b>
		SERIES	<b>100017</b>
		MATERIAL NUMBER	SEE P/N TABLE
		CUSTOMER	GENERAL MARKET
		DOCUMENT NUMBER	<b>1000173200</b>
		DOC TYPE	PSD
		DOC PART	ASY
		REVISION	A
		SHEET NUMBER	5 OF 8

BEZEL AND BOARD POSITION DIMENSIONS  
FOR BELLY TO BELLY MOUNTING

SINGLE LIGHT PIPE <sup>2</sup>



DUAL LIGHT PIPE AND QUAD LIGHT PIPE <sup>2</sup>

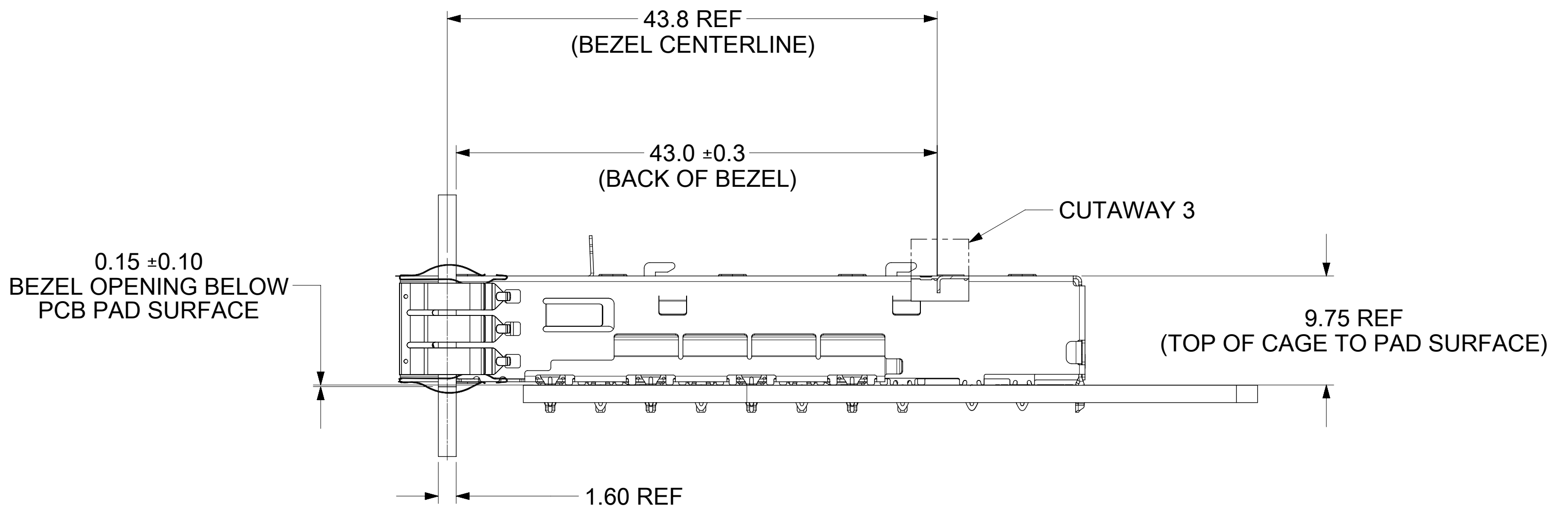
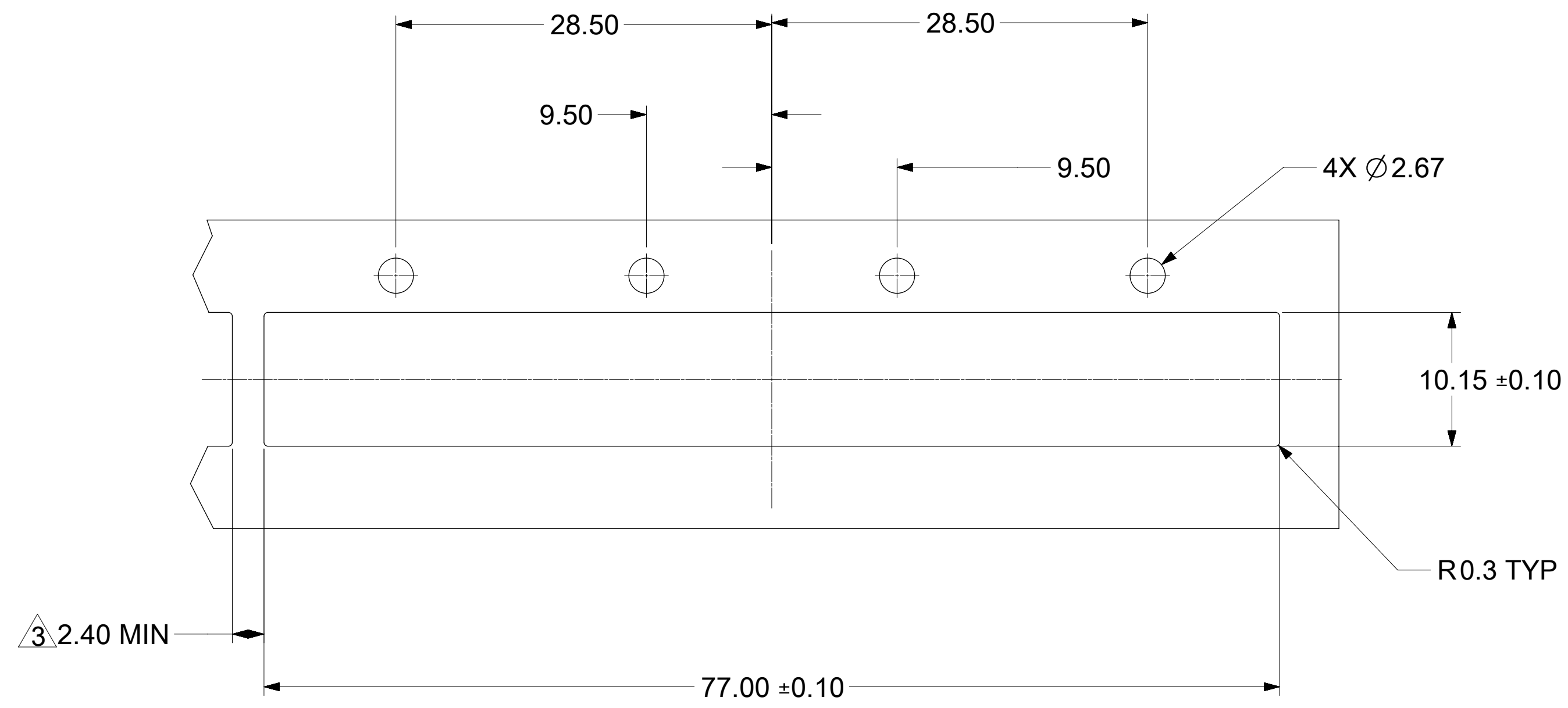


- NOTE:
1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING LOCATION.
  2. NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLIES WITH LIGHT PIPES.
  3. THIS DIMENSION IS FOR REFERENCE ONLY. USER CAN MODIFY IT DEPENDS ON APPLICATION. (THIS DIMENSION VARIES BASED ON DISTANCE OF " HOLE OF ADJACENT CAGE" ON PCB LAYOUT.)

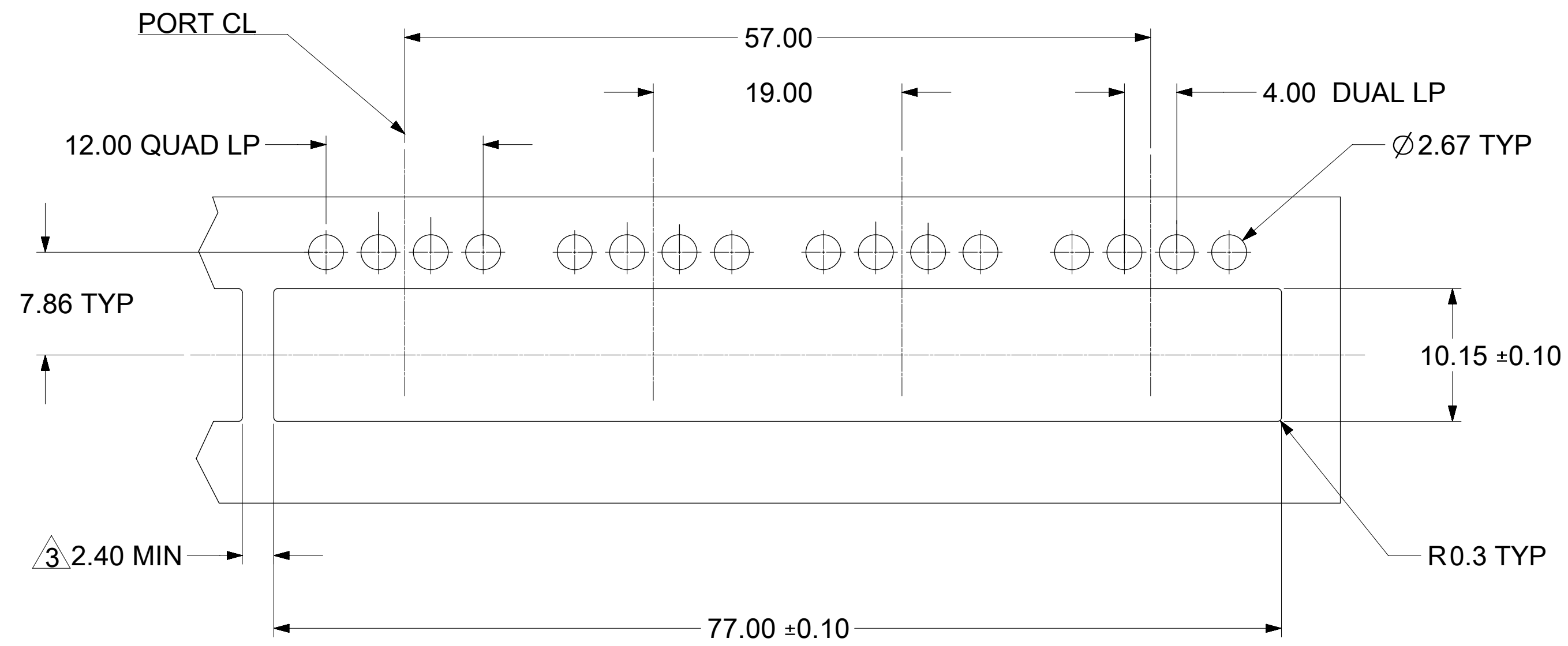
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC: SEE REVISION TABLE							
mm	2.5:1	<p><b>molex</b></p> <p>ZQSFP+ 1X4 GANGED CAGE ASSY'S W/ SS TAB TYPE SPRING FINGER H/S &amp; L/P OPTIONS</p> <p>PRODUCT CUSTOMER DRAWING</p>							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 1.0°								
4 PLACES	±								
3 PLACES	±								
2 PLACES	± 0.13	EC NO: 698865	2022/02/17	DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION		
1 PLACE	± 0.25	DRWN: KRISHH1	2022/03/10	1000173200	PSD	ASY	A		
0 PLACES	±	APPR: JCHIANG	2022/03/21	SEE P/N TABLE	GENERAL MARKET		SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	6 OF 8			
		D-SIZE	100017						

BEZEL AND BOARD POSITION DIMENSIONS  
FOR SINGLE SIDE MOUNTING

SINGLE LIGHT PIPE <sup>2</sup>



DUAL LIGHT PIPE AND QUAD LIGHT PIPE <sup>2</sup>



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: SEE REVISION TABLE							
mm	3:1	<p><b>molex</b></p> <p>ZQSFP+ 1X4 GANGED CAGE ASSY'S W/ SS TAB TYPE SPRING FINGER H/S &amp; L/P OPTIONS</p> <p>PRODUCT CUSTOMER DRAWING</p> <p>DOCUMENT NUMBER: 1000173200    DOC TYPE: PSD    DOC PART: ASY    REVISION: A</p> <p>MATERIAL NUMBER: SEE P/N TABLE    CUSTOMER: GENERAL MARKET    SHEET NUMBER: 7 OF 8</p>							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 1.0°								
4 PLACES	±								
3 PLACES	±								
2 PLACES	± 0.13								
1 PLACE	± 0.25	EC NO: 698865	DRWN: KRISHH1	2022/02/17					
0 PLACES	±	CHK'D: TKUMARKC	2022/03/10						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES					
			D-SIZE	100017					

NOTE:  
1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING LOCATION.  
<sup>2</sup> NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLIES WITH LIGHT PIPES.  
<sup>3</sup> THIS DIMENSION IS FOR REFERENCE ONLY. USER CAN MODIFY IT DEPENDS ON APPLICATION. (THIS DIMENSION VARIES BASED ON DISTANCE OF " HOLE OF ADIACENT CAGE" ON PCB LAYOUT.)

DOCUMENT STATUS	P1	RELEASE DATE	2022/03/21 02:37:39
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