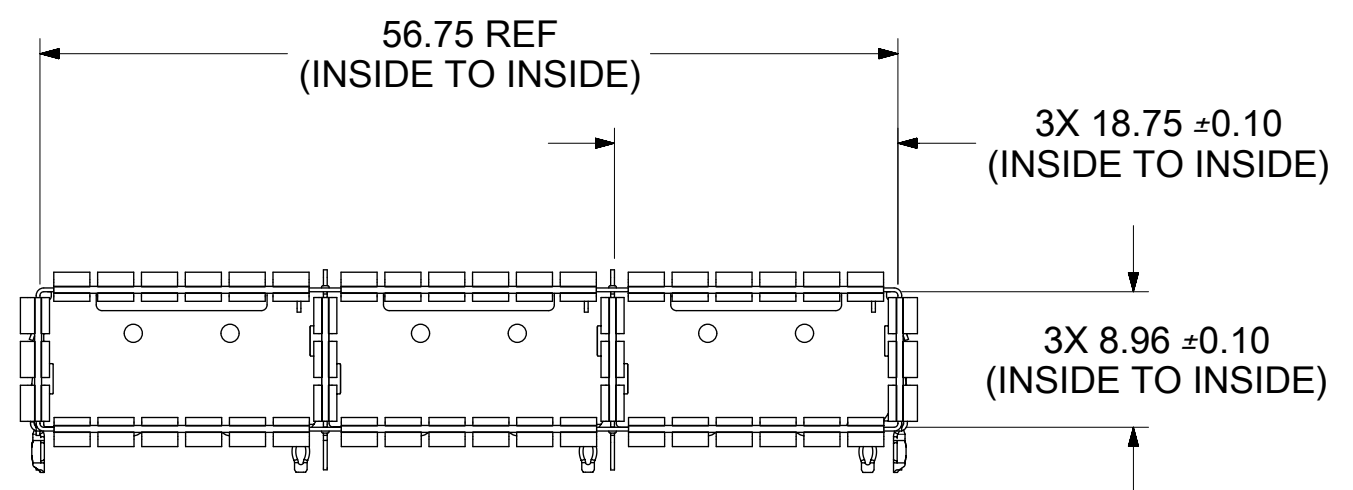
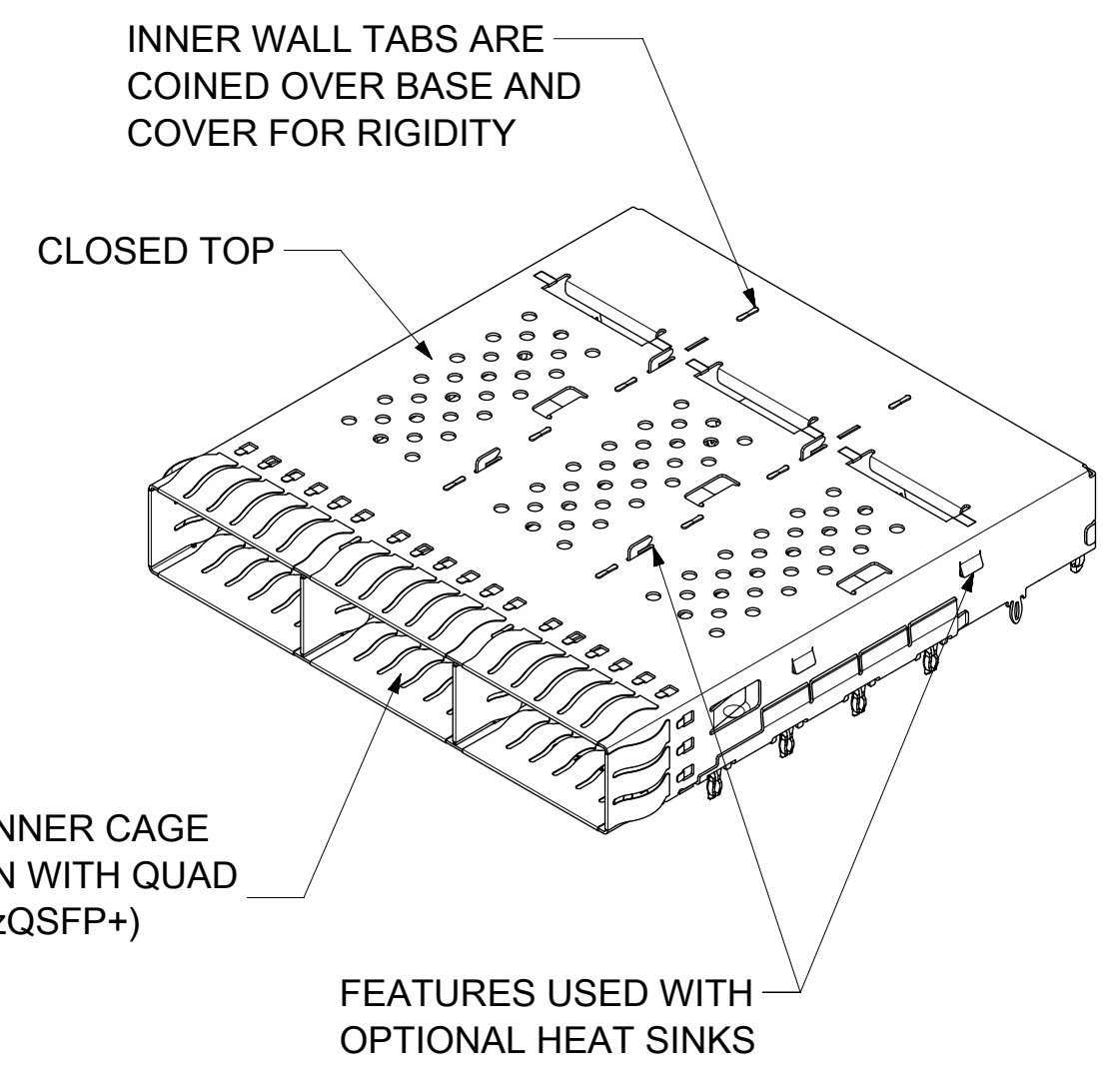
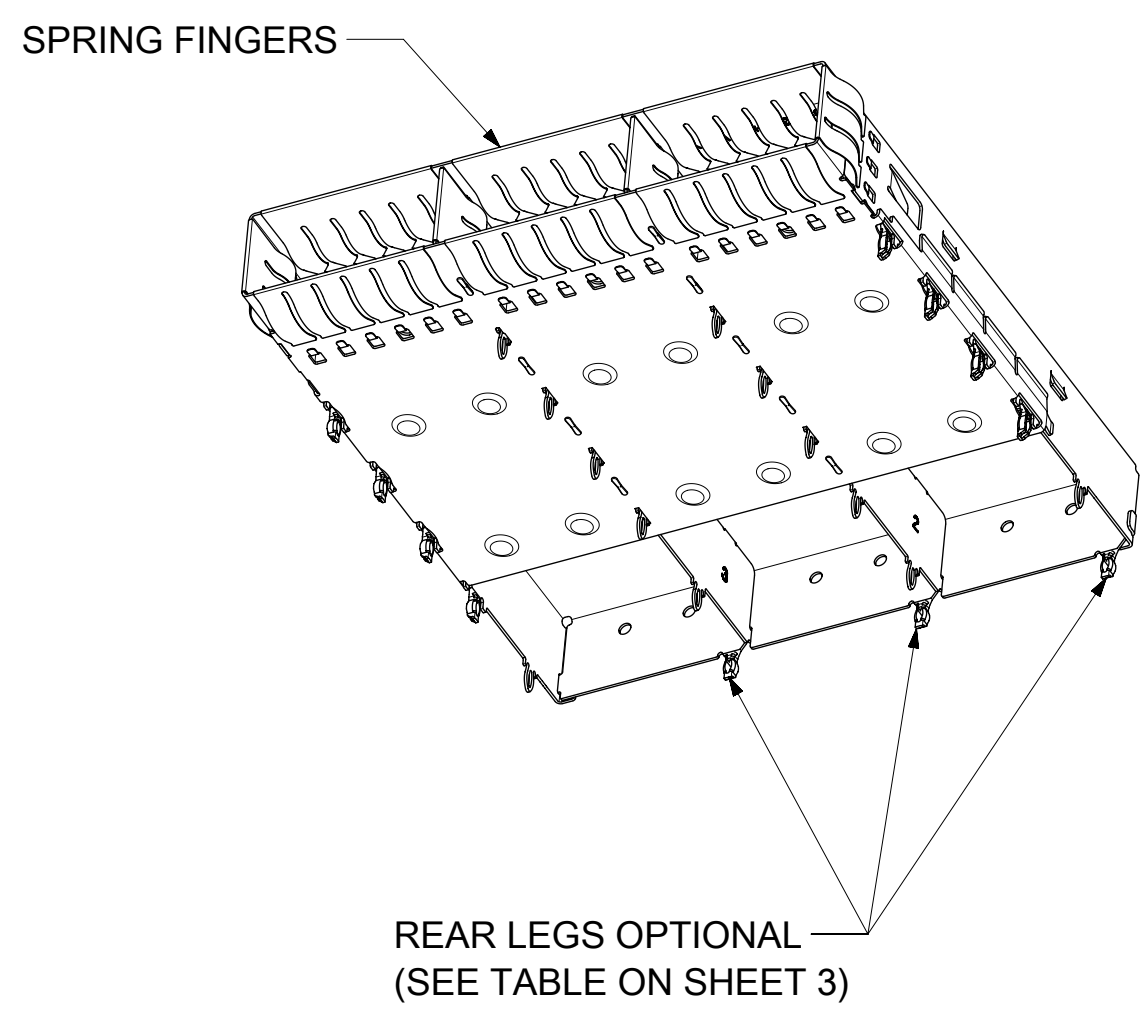
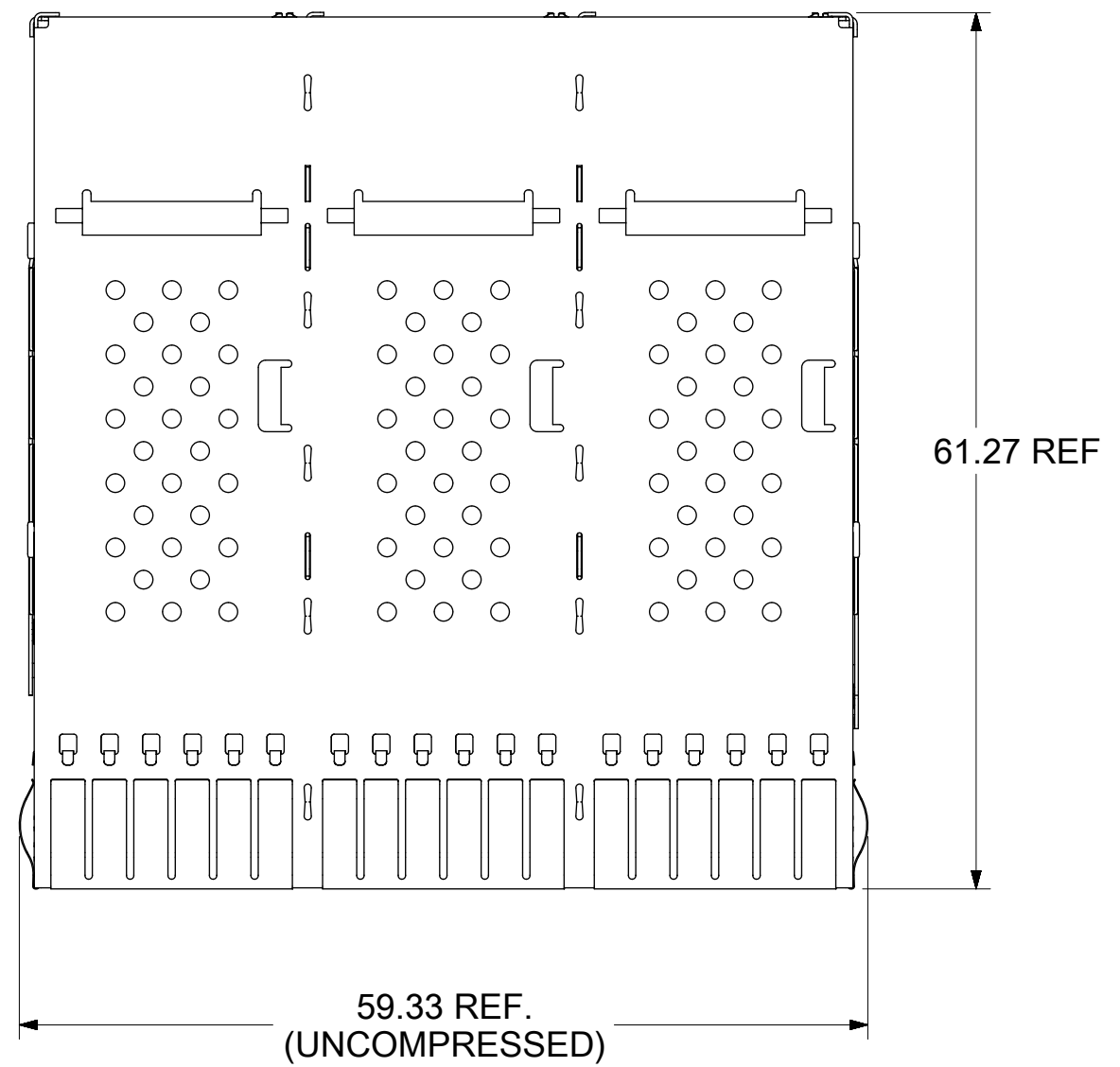
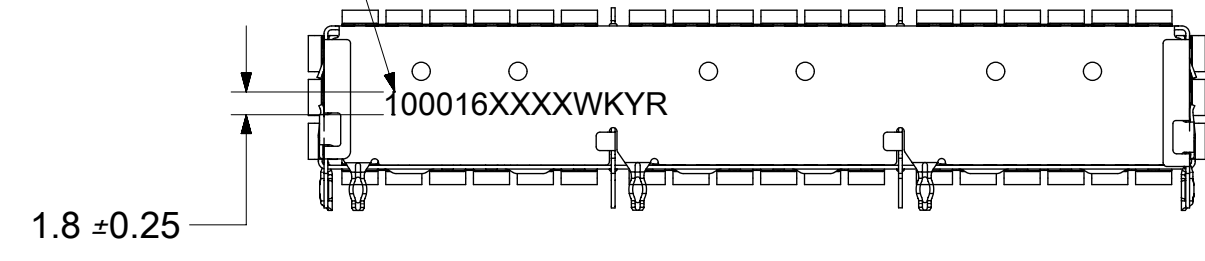
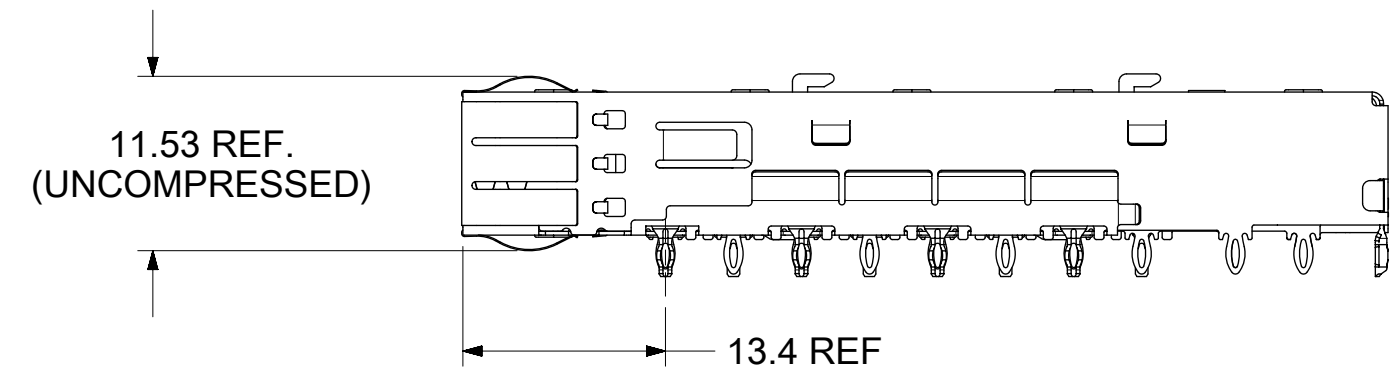


# BASE CAGE DETAILS

1000161242  
SHOWN



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: BERYLLIUM COPPER; NICKEL PLATED  
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.  
2.70 MINIMUM PCB THICKNESS FOR BELLY TO BELLY USE.
  - NO RoHS EXEMPTIONS

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	18, 19, 20 ETC.. (EXAMPLE: YEAR 2018= 18)

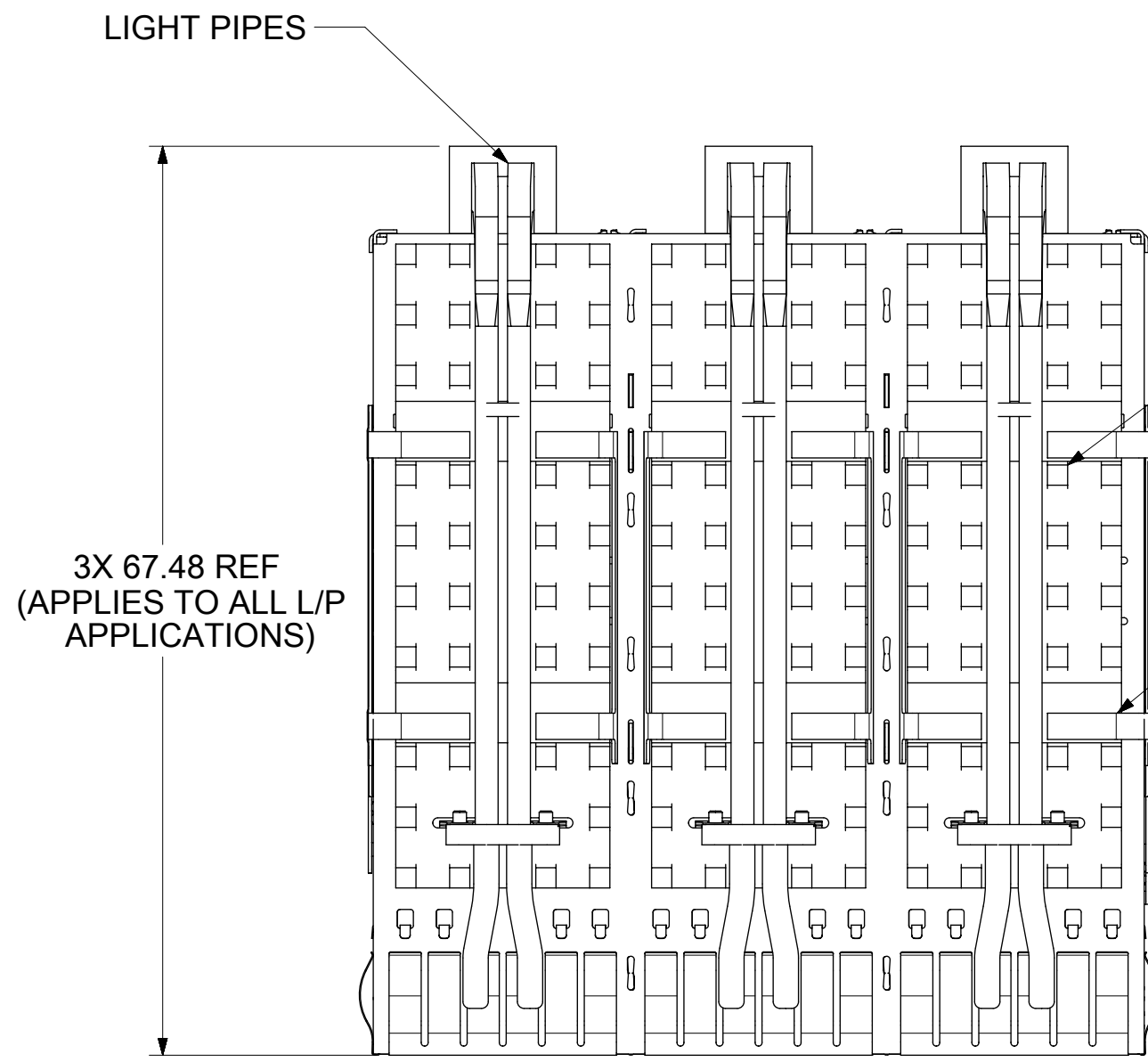
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NO		<b>molex</b>		
mm	2:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 625872		ZQSFP+ 1X3 GANGED CAGE		
ANGULAR TOL	± 2.0°	DRWN: VLOKESHA 2019/08/26		ASSY'S (SPRING FINGER) WITH H/S & L/P OPTIONS		
4 PLACES	±	CHK'D: GB 2019/11/06		PRODUCT CUSTOMER DRAWING		
3 PLACES	±	APPR: GGA 2019/11/12		DOCUMENT NUMBER		
2 PLACES	± 0.13	INITIAL REVISION:		DOC TYPE   DOC PART   REVISION		
1 PLACE	± 0.25	DRWN: TKUMARKC 2015/11/03		1000161200   PSD   ASY   H1		
0 PLACES	±	APPR: RCHEN08 2015/11/11		MATERIAL NUMBER   CUSTOMER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	SEE P/N TABLE	GENERAL MARKET	SHEET NUMBER
		C-SIZE	100016			1 OF 7

# CAGE ASSEMBLY OPTIONS

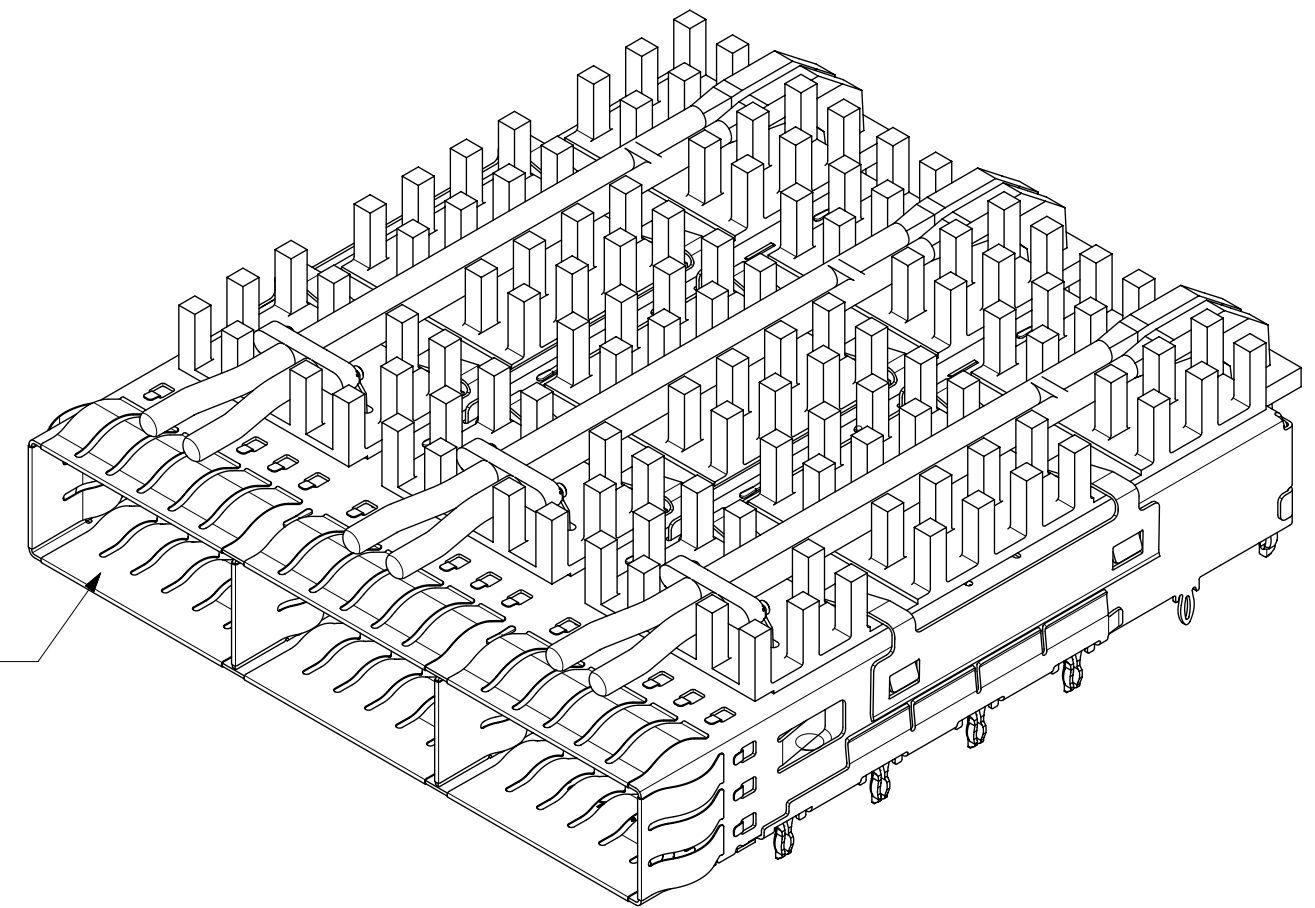
1000161544

SHOWN

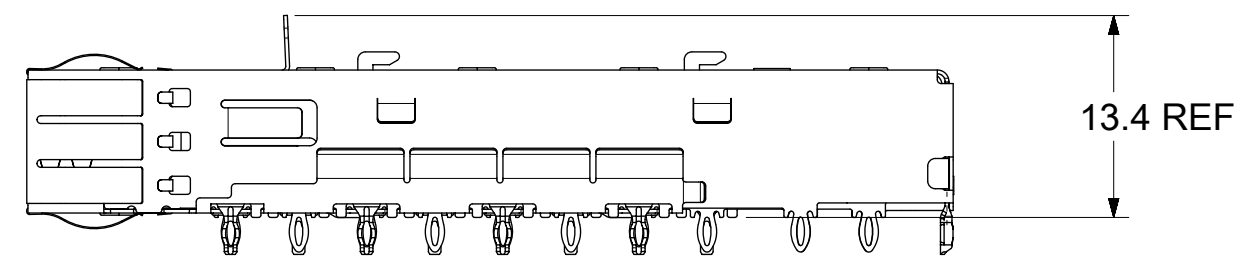


HEAT SINKS

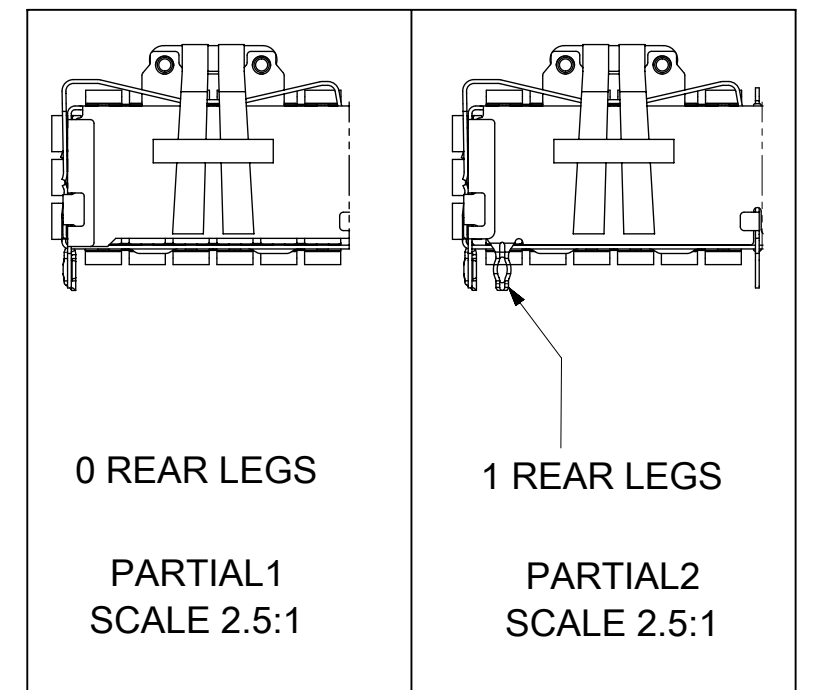
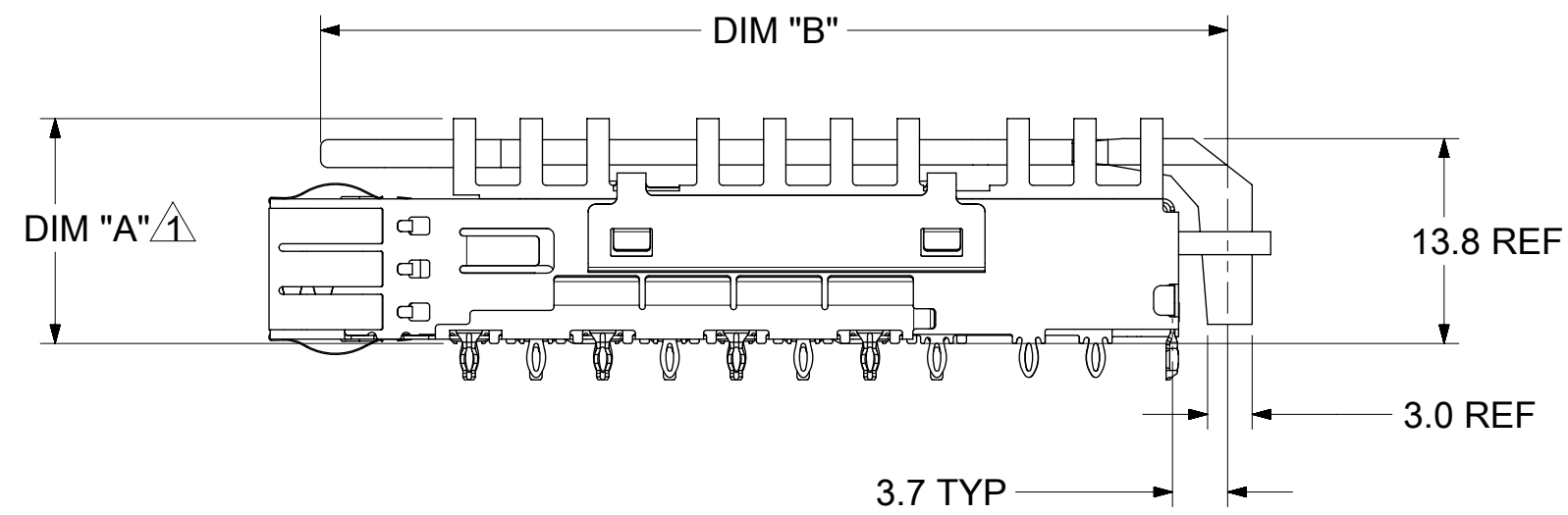
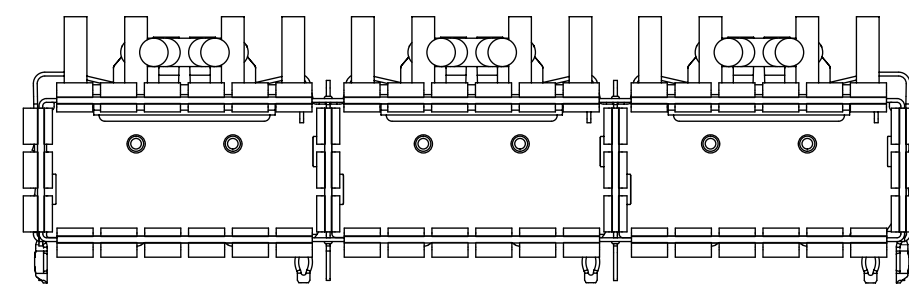
HEAT SINK/CLIP ASSY



SPRING FINGER



## REAR LEG OPTIONS

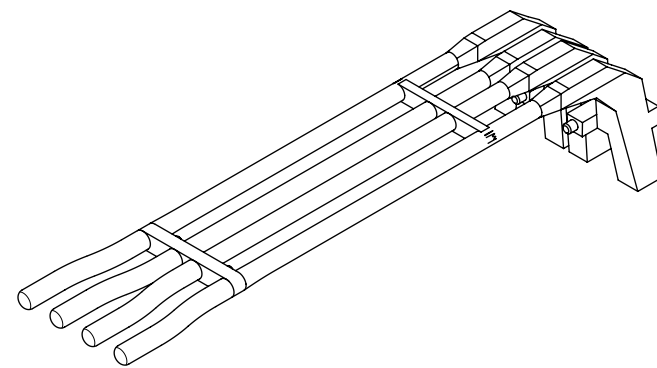
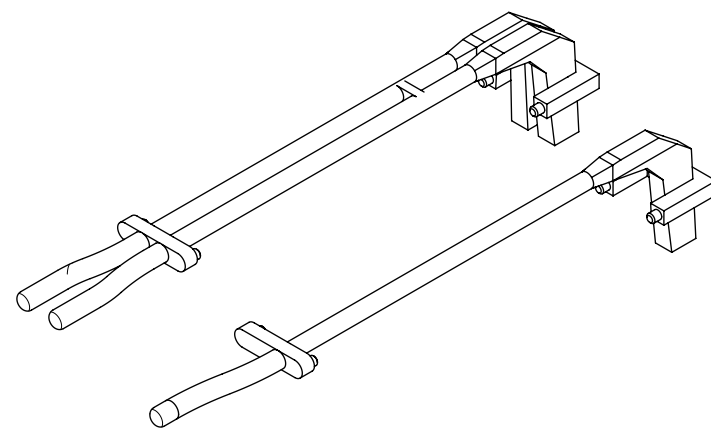


## HEATSINK AND LIGHT PIPE COMBINATIONS

HEATSINK USED WITHOUT LIGHTPIPE

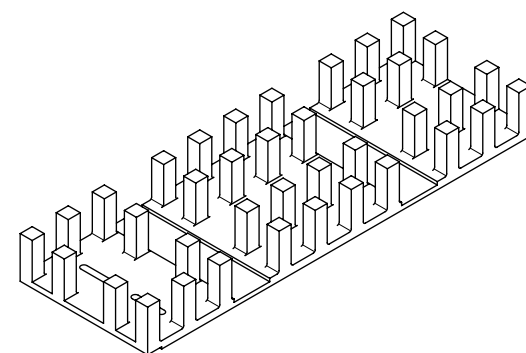
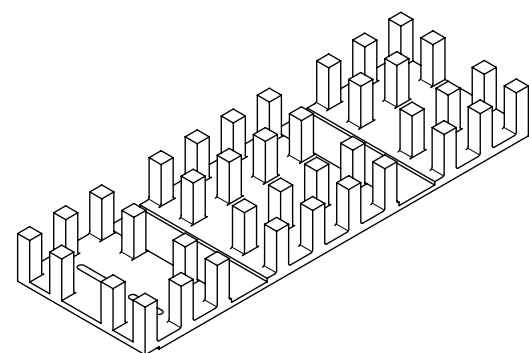
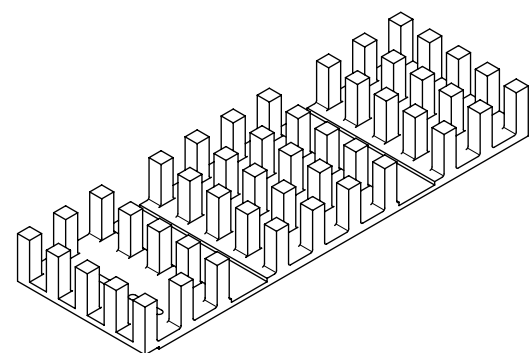
SINGLE / DUAL LIGHT PIPE

QUAD LIGHT PIPE



HEATSINK

HEATSINK



## HEATSINK HEIGHT OPTIONS

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

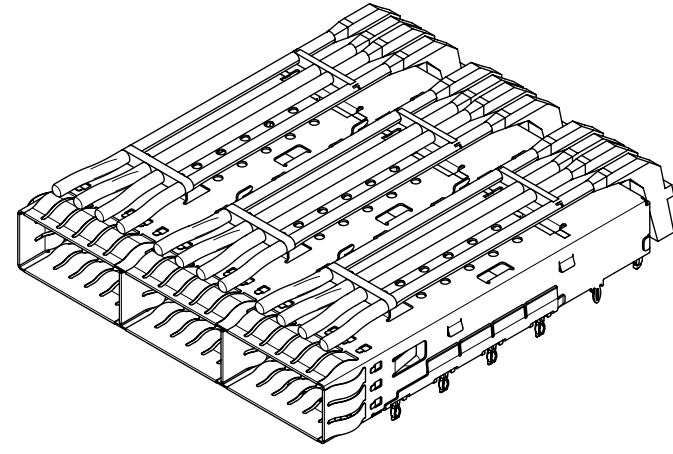
⚠ HEIGHT OF HEAT SINK WITH MODULE INSERTED. DIMENSION MAY BE LESS DUE TO MODULE AND HEAT SINK VARIATIONS

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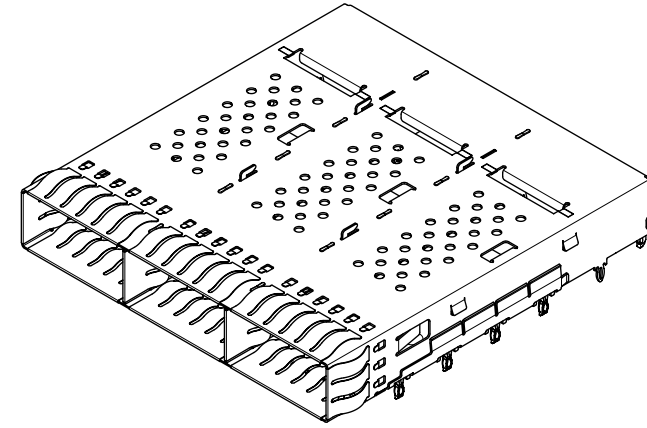
DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NO				
mm	2:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)				ZQSFP+ 1X3 GANGED CAGE ASSY'S (SPRING FINGER) WITH H/S & L/P OPTIONS		
ANGULAR TOL	± 2.0°	EC NO:	625872	PRODUCT CUSTOMER DRAWING		
4 PLACES	±	DRWN:	VLOKESHA	2019/08/26	DOCUMENT NUMBER	
3 PLACES	±	CHK'D:	GB	2019/11/06	DOC TYPE   DOC PART   REVISION	
2 PLACES	± 0.13	APPR:	GGA	2019/11/12	1000161200   PSD   ASY   H1	
1 PLACE	± 0.25	INITIAL REVISION:		MATERIAL NUMBER   CUSTOMER		
0 PLACES	±	DRWN:	TKUMARKC	2015/11/03	SEE P/N TABLE   GENERAL MARKET	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR:	RCHEN08	2015/11/11	SHEET NUMBER	
THIRD ANGLE PROJECTION		DRAWING		SERIES		2 OF 7
C-SIZE		100016				

# PART NUMBER SELECTION

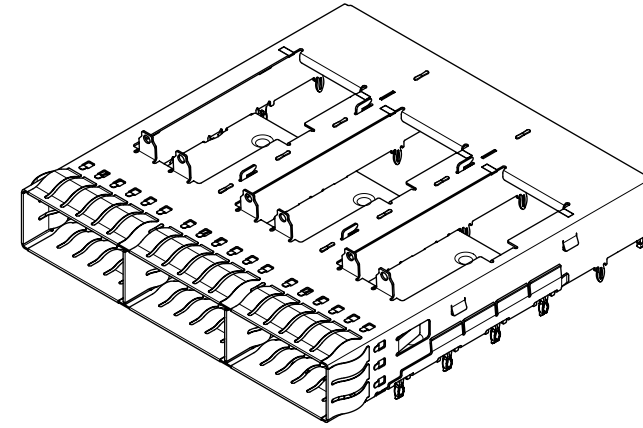
NO HEATSINKS  
WITH LIGHT PIPES  
CLOSED TOP



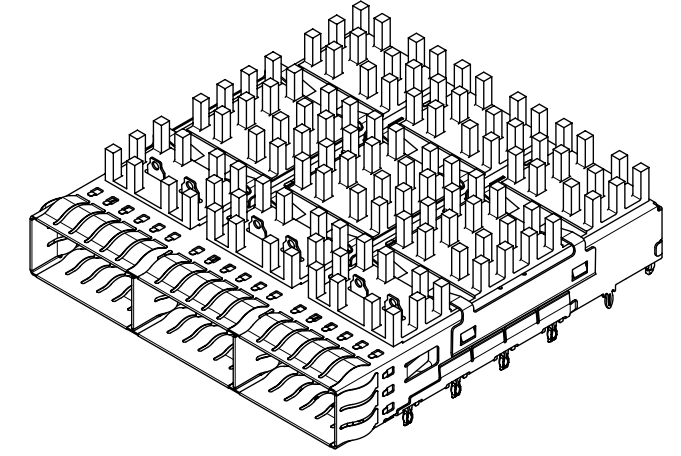
NO HEATSINKS  
NO LIGHT PIPES  
CLOSED TOP



NO HEATSINKS  
NO LIGHT PIPES  
OPEN TOP



WITH HEATSINKS  
NO LIGHT PIPES



MOLEX P/N	LIGHT PIPES	#OF REAR LEGS PER PORT
1000161231	SINGLE	0
1000161232	SINGLE	1
1000161233	DUAL	0
1000161234	DUAL	1
1000161235	QUAD	0
1000161236	QUAD	1

MOLEX P/N W/ SPRING FINGERS	#OF REAR LEGS PER PORT
1000161240	0

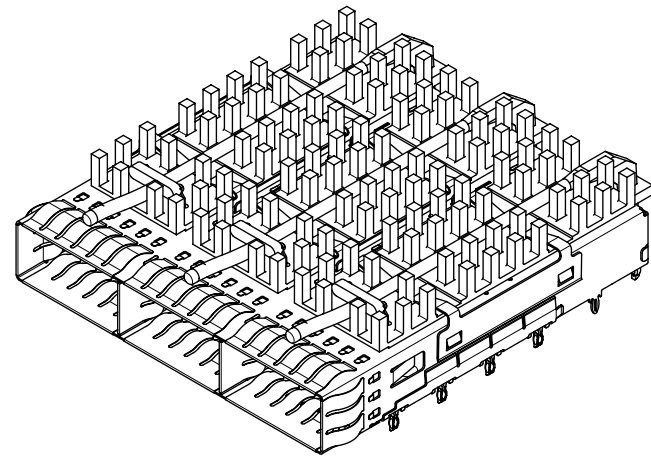
MOLEX P/N W/ SPRING FINGERS	#OF REAR LEGS PER PORT
1000161250	0
1000161252	1

MOLEX P/N	HEATSINKS	#OF REAR LEGS PER PORT
1000161340	PCI	0
1000161341	SAN	0
1000161342	NET	0
1000161343	PCI	1
1000161344	SAN	1
1000161345	NET	1

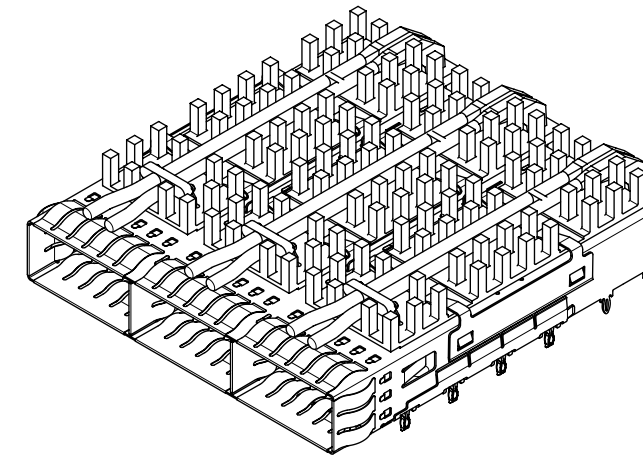
## WITH HEATSINKS AND LIGHT PIPES

MOLEX P/N	LIGHTPIPES	HEATSINKS	#OF REAR LEGS PER PORT	DIM "B"
1000161440	SINGLE	PCI	0	61.07 REF
1000161441	SINGLE	SAN	0	61.07 REF
1000161442	SINGLE	NET	0	61.07 REF
1000161443	DUAL	PCI	0	61.07 REF
1000161444	DUAL	SAN	0	61.07 REF
1000161445	DUAL	NET	0	61.07 REF
1000161446	QUAD	PCI	0	61.07 REF
1000161447	QUAD	SAN	0	61.07 REF
1000161448	QUAD	NET	0	61.07 REF
1000161540	SINGLE	PCI	1	61.07 REF
1000161541	SINGLE	SAN	1	61.07 REF
1000161542	SINGLE	NET	1	61.07 REF
1000161543	DUAL	PCI	1	61.07 REF
1000161544	DUAL	SAN	1	61.07 REF
1000161545	DUAL	NET	1	61.07 REF
1000161547	QUAD	SAN	1	61.07 REF
1000161548	QUAD	NET	1	61.07 REF
1000161901	DUAL	PCI	0	61.57 REF

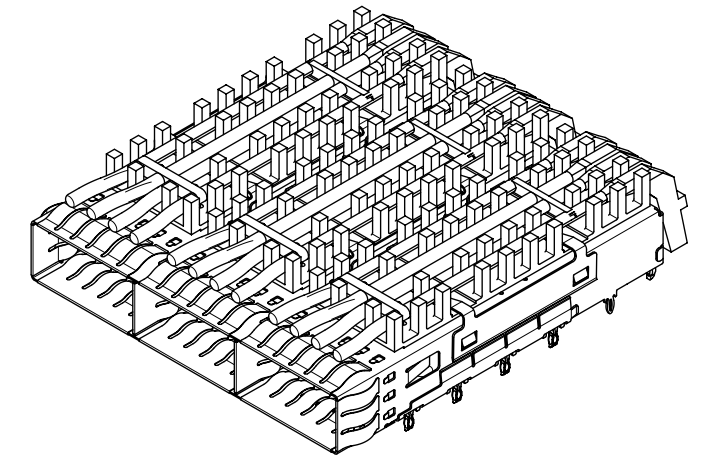
SINGLE LIGHT PIPE



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		SCALE		CURRENT REV DESC: OBSOLETE PART NO					
mm		1:1		<p>ZQSFP+ 1X3 GANGED CAGE ASSY'S (SPRING FINGER) WITH H/S &amp; L/P OPTIONS</p> <p>PRODUCT CUSTOMER DRAWING</p>					
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL		± 2.0°		EC NO: 625872		2019/08/26		DOCUMENT NUMBER	
4 PLACES		±		DRWN: VLOKESHA		2019/11/06		1000161200	
3 PLACES		±		CHK'D: GB		2019/11/12		DOC TYPE DOC PART REVISION	
2 PLACES		± 0.13		APPR: GGA		2019/11/12		PSD ASY H1	
1 PLACE		± 0.25		INITIAL REVISION:		2015/11/03		MATERIAL NUMBER	
0 PLACES		±		DRWN: TKUMARKC		2015/11/11		CUSTOMER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		SHEET NUMBER	
				C-SIZE		100016		SEE P/N TABLE GENERAL MARKET 3 OF 7	

# PCB LAYOUT FOR SINGLE SIDED MOUNTING

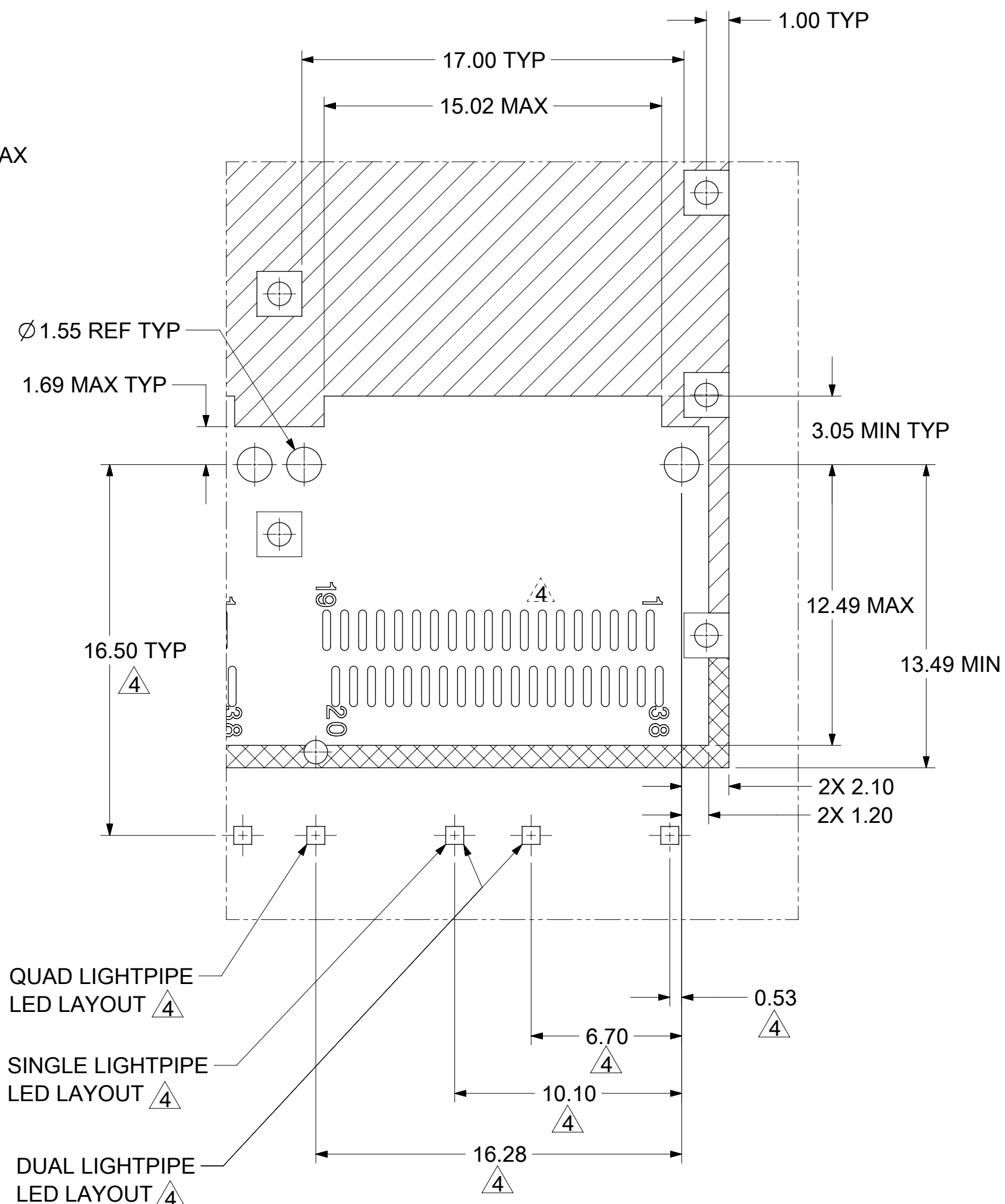
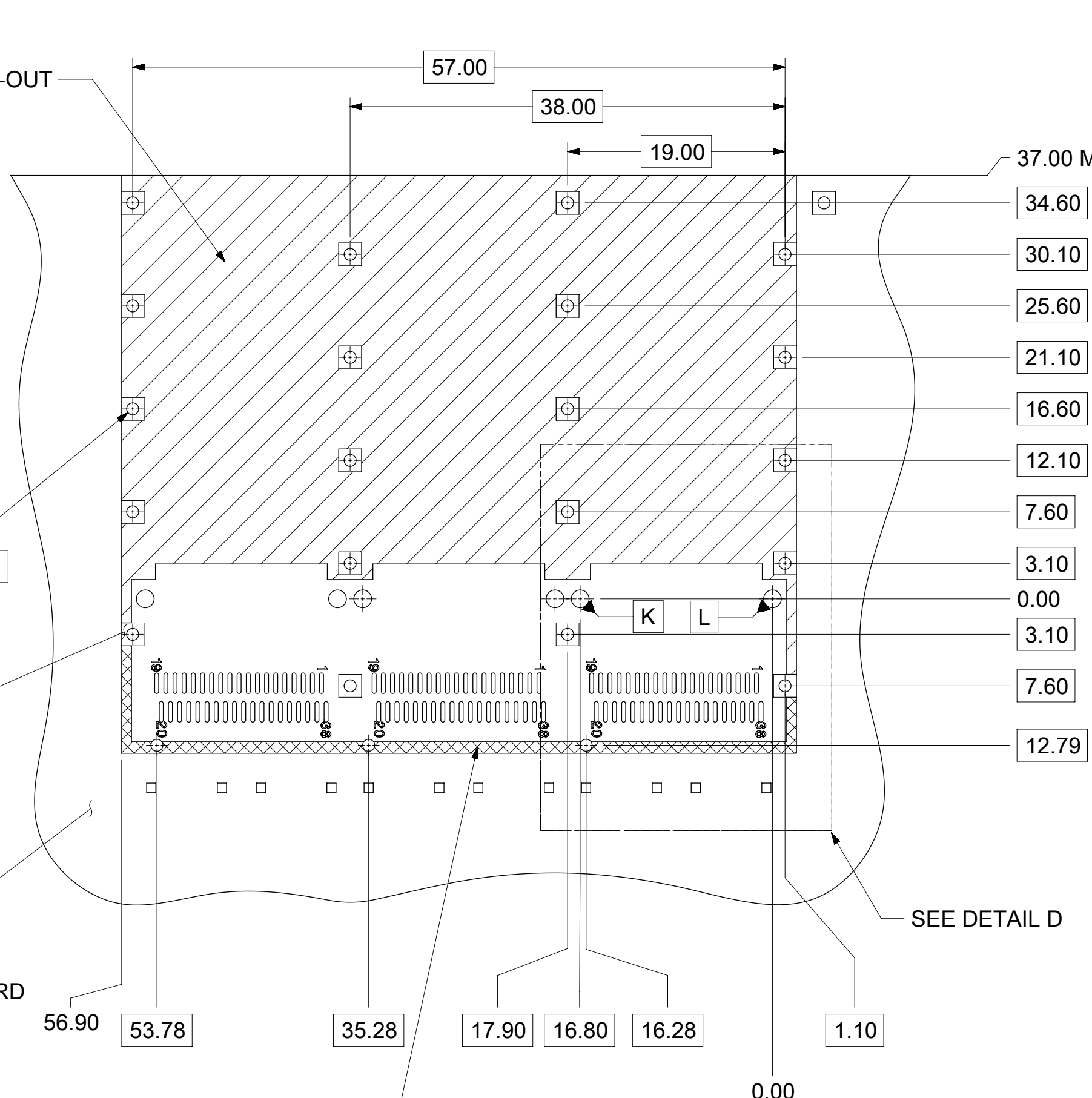
HATCHED AREA DENOTES COMPONENT AND TRACE KEEP-OUT (EXCEPT CHASSIS GROUND)

Ø1.05 ±0.05 TYP  
 ⊕ Ø0.10 (M) A K L

AREA DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)

DATUM -A- IS THE TOP SURFACE OF HOST BOARD

CROSS HATCHED AREA DENOTES WHERE SURFACE TRACES ARE PERMITTED



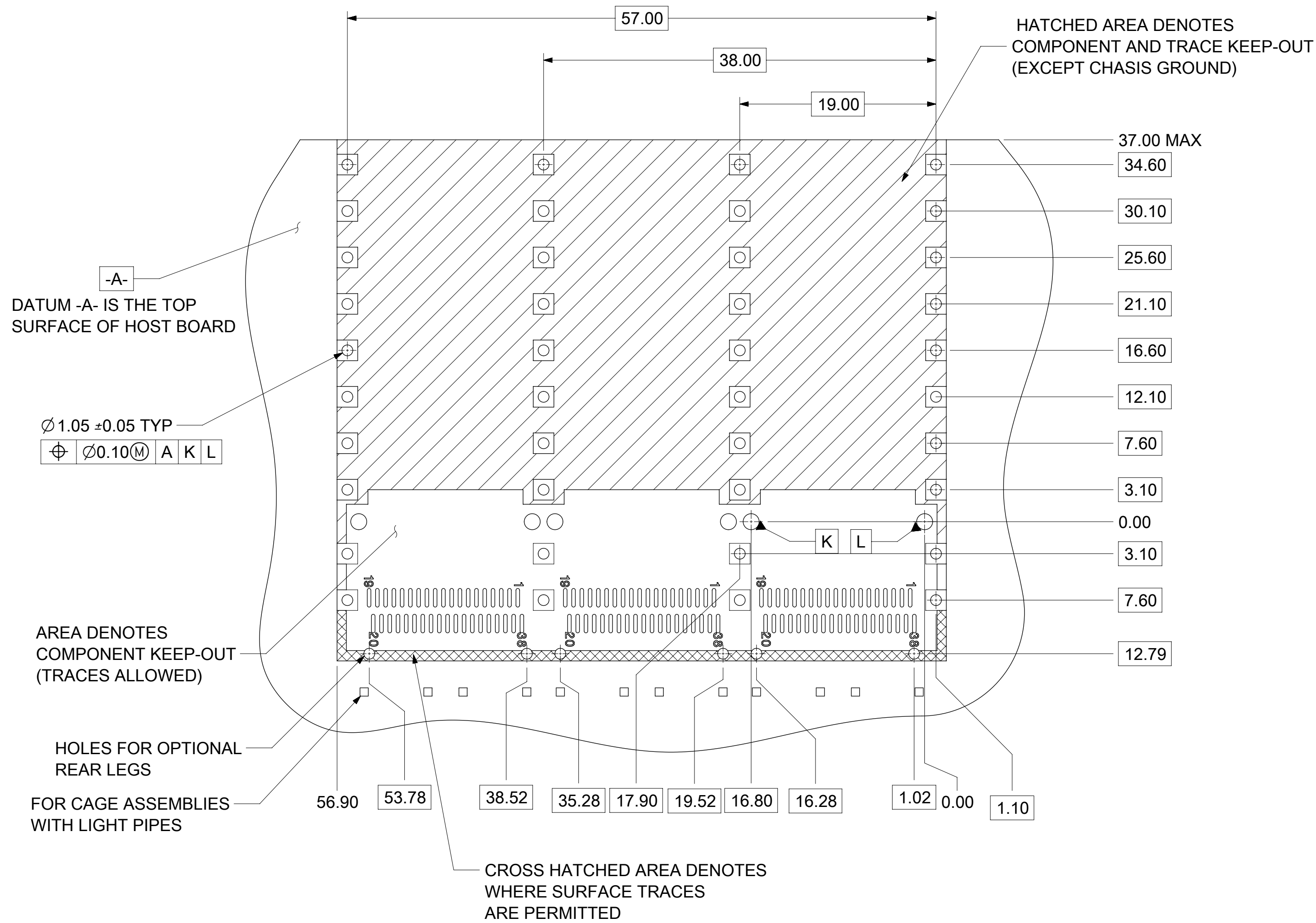
DETAIL D  
SCALE 5:1

- NOTES:
- PADS AND VIAS GO TO CHASSIS GROUND. (RECOMMENDED PADS TO BE 2.00mm SQUARE.)
  - RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN).
  - CONNECTOR PAD LAYOUT PER SFF-8663 WILL ACCOMODATE MOLEX CONNECTOR SERIES 170432.
- ⚠ 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: OBSOLETE PART NO		<b>molex</b>		
mm	3.5:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 625872		ZQSFP+ 1X3 GANGED CAGE		
ANGULAR TOL	± 2.0°	DRWN: VLOKESHA	2019/08/26	ASSY'S (SPRING FINGER) WITH H/S & L/P OPTIONS		
4 PLACES	±	CHK'D: GB	2019/11/06	PRODUCT CUSTOMER DRAWING		
3 PLACES	±	APPR: GGA	2019/11/12	DOCUMENT NUMBER		
2 PLACES	± 0.13	INITIAL REVISION:		1000161200		
1 PLACE	± 0.25	DRWN: TKUMARKC	2015/11/03	DOC TYPE	DOC PART	REVISION
0 PLACES	±	APPR: RCHEN08	2015/11/11	PSD	ASY	H1
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
		C-SIZE	100016	SEE P/N TABLE	GENERAL MARKET	4 OF 7

# PCB LAYOUT FOR BELLY TO BELLY MOUNTING



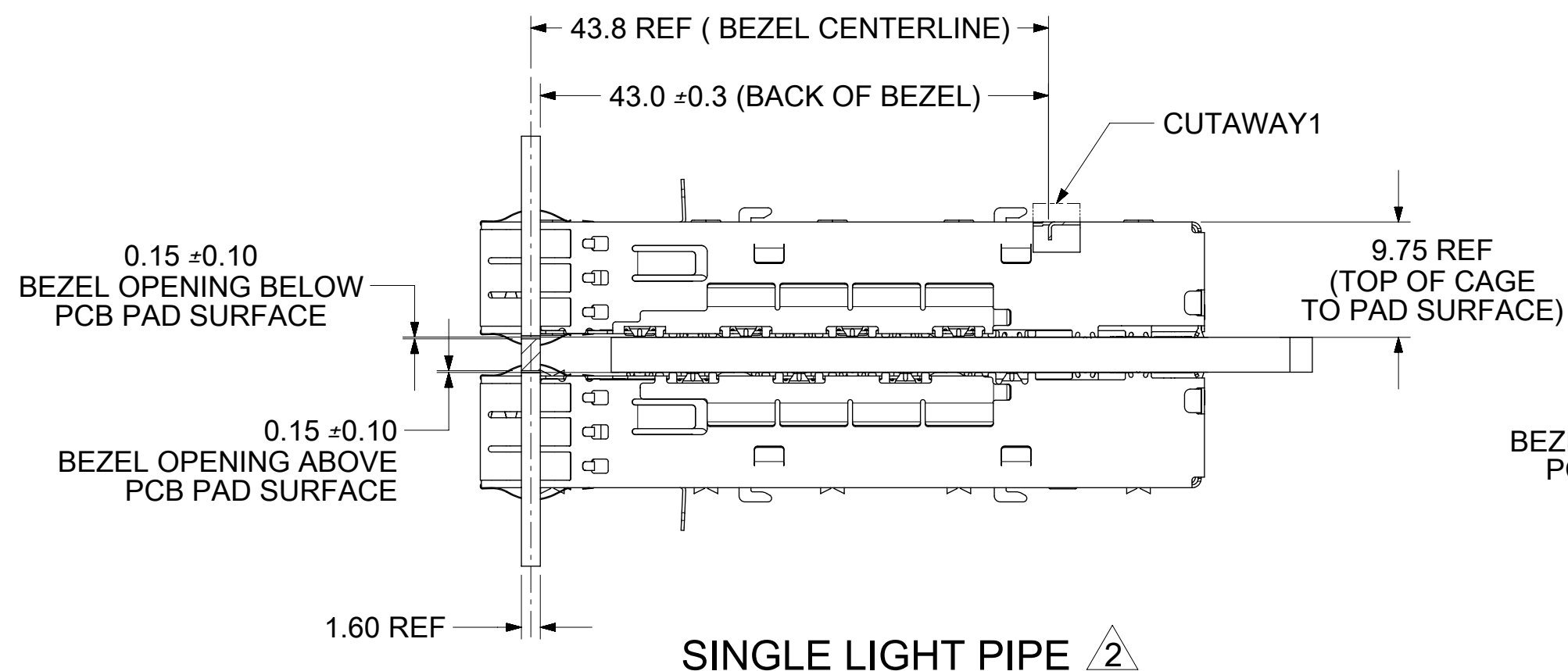
NOTE:  
SEE SHEET 4 FOR  
HOST CONNECTOR DETAIL  
AND LED LOCATION DETAILS

- 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.

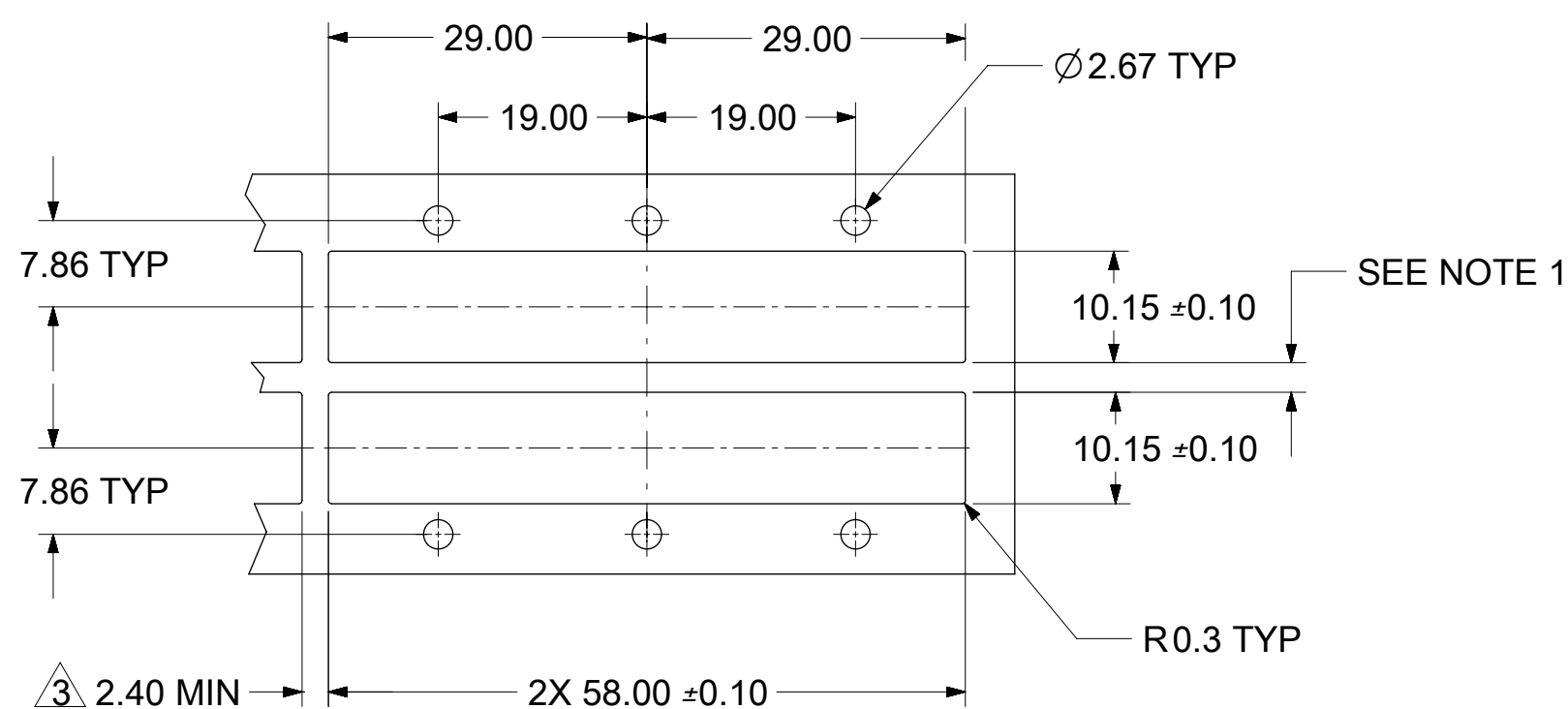
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC: OBSOLETE PART NO					
mm		3:1							
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 625872		2019/08/26		ZQSFP+ 1X3 GANGED CAGE	
ANGULAR TOL ± 2.0°				DRWN: VLOKESHA		2019/11/06		ASSY'S (SPRING FINGER) WITH H/S & L/P OPTIONS	
4 PLACES ±				CHK'D: GB		2019/11/12		PRODUCT CUSTOMER DRAWING	
3 PLACES ±				APPR: GGA				DOCUMENT NUMBER	
2 PLACES ± 0.13				INITIAL REVISION:		2015/11/03		1000161200	
1 PLACE ± 0.25				DRWN: TKUMARKC		2015/11/11		PSD ASY H1	
0 PLACES ±				APPR: RCHEN08				DOC TYPE DOC PART REVISION	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER CUSTOMER SHEET NUMBER	
				C-SIZE		100016		SEE P/N TABLE GENERAL MARKET 5 OF 7	

DOCUMENT STATUS	P1	RELEASE DATE	2019/11/12 07:19:43
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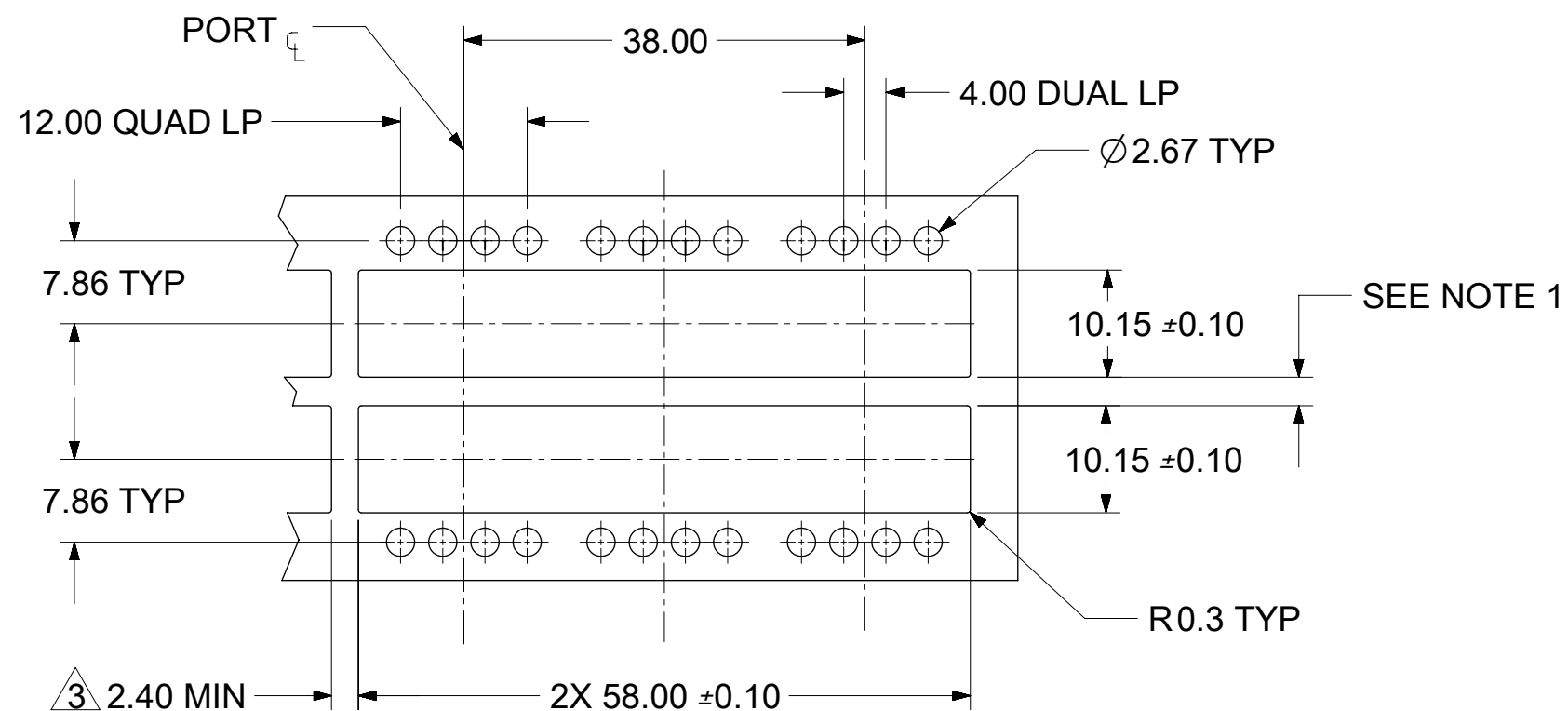
# BEZEL AND BOARD POSITION DIMENSIONS FOR BELLY TO BELLY MOUNTING



SINGLE LIGHT PIPE <sup>2</sup>

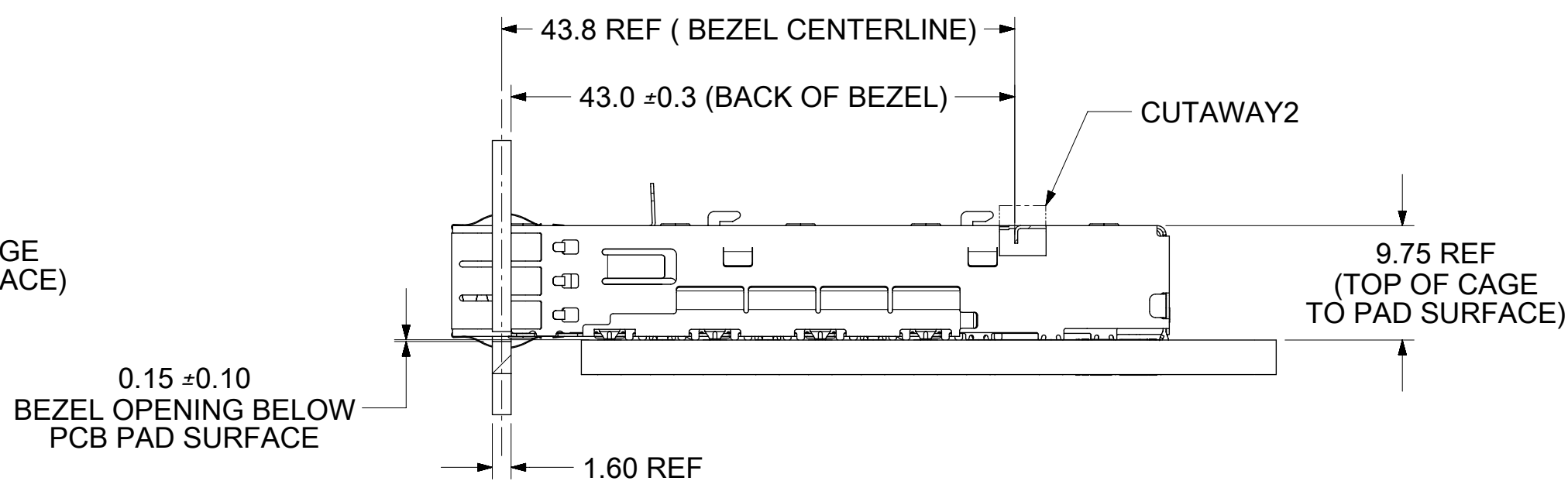


DUAL/QUAD LIGHT PIPE <sup>2</sup>

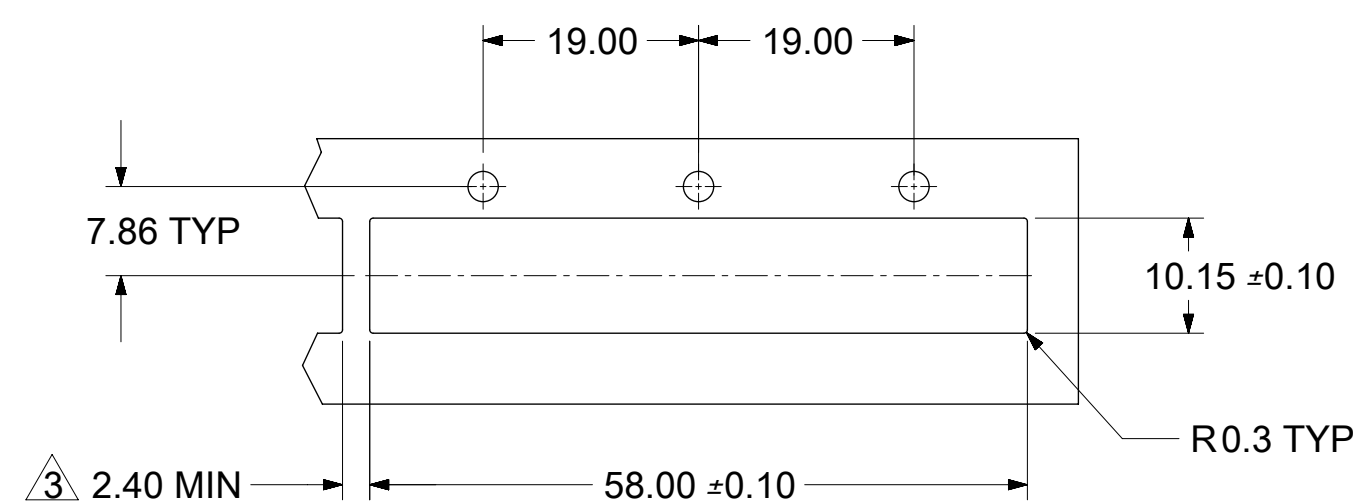


NOTE:  
 1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING LOCATION.  
 2. NOTED DIMENSIONS ONLY APPLY TO CAGE ASSEMBLIES WITH LIGHT PIPES.  
 3. THIS DIMENSION IS FOR REFERENCE ONLY. USER CAN MODIFY IT DEPENDS ON APPLICATION. (THIS DIMENSION VARIES BASED ON DISTANCE OF " HOLE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

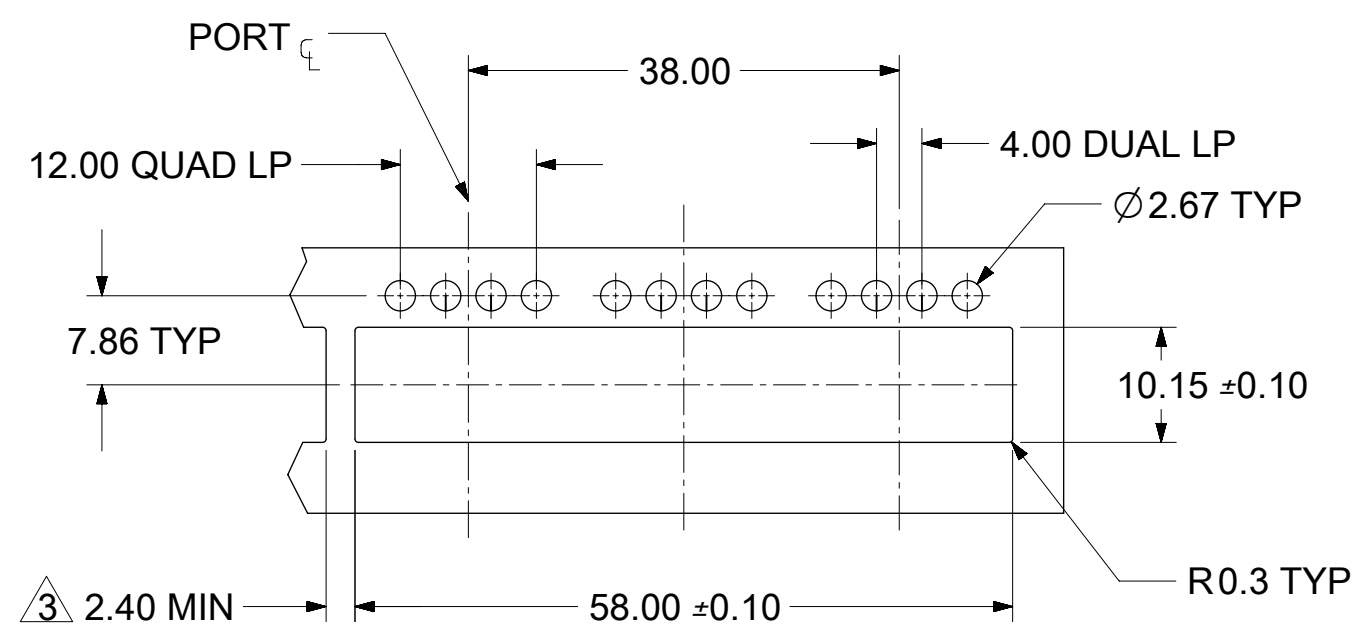
# BEZEL AND BOARD POSITION DIMENSIONS FOR SINGLE SIDE MOUNTING



SINGLE LIGHT PIPE <sup>2</sup>



DUAL 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: OBSOLETE PART NO					
mm		2:1							
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 625872				ZQSFP+ 1X3 GANGED CAGE	
ANGULAR TOL ± 2.0°				DRWN: VLOKESHA 2019/08/26				ASSY'S (SPRING FINGER) WITH H/S & L/P OPTIONS	
4 PLACES ±				CHK'D: GB 2019/11/06				PRODUCT CUSTOMER DRAWING	
3 PLACES ±				APPR: GGA 2019/11/12				DOCUMENT NUMBER	
2 PLACES ± 0.13				INITIAL REVISION:				DOC TYPE   DOC PART   REVISION	
1 PLACE ± 0.25				DRWN: TKUMARKC 2015/11/03				1000161200	
0 PLACES ±				APPR: RCHEN08 2015/11/11				PSD   ASY   H1	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
				C-SIZE		100016		SEE P/N TABLE	
DOCUMENT STATUS		RELEASE DATE		CUSTOMER		SHEET NUMBER			
P1		2019/11/12 07:19:43		GENERAL MARKET		6 OF 7			



REV	DATE	DESCRIPTION
A	2013/03/29	RELEASE
B	2013/03/17	SHEET 2: E-3 CHANGED 2 REAR LEGS TO 1 REAR LEG SHEET 3: ADDED VIEW AND P/N TABLE FOR CLOSED TOP W/ LP. SHEET 4/5: EXPANDED AREA FOR WHERE SURFACE TRACES ARE PERMITTED. REMOVED "HOLE PATTERN REPEATS FOR EACH PORT" FROM NOTE 4
C	2014/06/27	SHEET 1: ADDED MATERIAL INFORMATION TO NOTES. CHANGED REARMOST LEG ON BOTH SIDES OF ALL CAGES FROM 3D PRESSFIT TO EYE-OF-THE-NEEDLE PRESSFIT LEG.
D	2014/10/06	SHEET 2: CHANGED HEATSINK HEIGHT DIMENSIONS TO REF J13: DIM 67.48 CHANGED TO REF SHEET 4: MOVED DATUMS "K" AND "L" TO CONNECTOR HOLES REMOVED BASIC FROM "0.00" POSITIONS SHEET 5: MOVED DATUMS "K" AND "L" TO CONNECTOR HOLES REMOVED BASIC FROM "0.00" POSITIONS SHEET 6: EDIT NOTE 1, REMOVED "SIZE" REMOVED NOTE 1 FROM ALL "10.15" DIMENSIONS
E	2015/04/14	SHEET4: REVISED DIM "WAS" 12.77 'NOW' 12.79 @ G9 REVISED FRAMED TEXT NUMBER 4 TRAIANGLES TO FRAMED TEXT NUMBER 5 @D4, @E4, @E6, @E5, @E6, AND @H4 SHEET5: REVISED DIM "WAS" 12.77 'NOW' 12.79 @ F7 REMOVED NOTE 4 AND REVISED NOTE 5 TO NOTE 4 REMOVED NOTE 4 @A20 SHEET6: REVISED PORT CL "WAS" (4) "NOW" PORT CL @E7 AND @ E16
F	2015/04/09	REMASTERED FROM SD-100016-1200_REV 'E' TO 1000161200 PSD REV_F SHEET 2: AT E6: ADDED DIM "B" TO THE VIEW SHEET 3: AT A11: ADDED P/N 1000161901 TO WITH HEAT SINK AND LIGHT PIPES TABLE
F1	2016/03/16	CHANGED THE DOCUMENT TYPE FROM RSD TO SD.
G	2018/03/02	SHEET 1: C06: ADDED DIM 13.4 REF SHEET 3: C12: CORRECTED TYOP P/N FROM 1000151447 TO 1000161447 SHEET 4: D08: ADDED BASIC DIM 17.90 SHEET 5: C08: ADDED BASIC DIM 19.52 & 35.28 C09: ADDED BASIC DIM 38.52 & 53.78 SHEET 6: G11: ADDED DIM 0.15±0.10 (BEZEL OPENING ABOVE PCB PAD SURFACE) G07: CORRECTED TYPO DIM FROM 9.78 REF TO 9.75 REF G02: CORRECTED TYPO DIM FROM 9.78 REF TO 9.75 REF F11: CORRECTED TYPO DIM FROM 2.10 REF TO 1.60 REF F05: CORRECTED TYPO DIM FROM 2.10 REF TO 1.60 REF D11 & D05: CORRECTED TYPO DIM FROM 2.75 MIN TO 2.40 REF A11: CORRECTED TYPO DIM FROM 2.75 MIN TO 2.40 REF B05: CORRECTED TYPO DIM FROM 2.75 MIN TO 2.40 REF A12: 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.)
H	2018/05/25	SHEET 4 : ADDED PAD TO HOLES & UPDATED VIEWS TO AVOID CONFUSION. SHEET 5 : ADDED PAD TO HOLES & UPDATED VIEWS TO AVOID CONFUSION.
H1	2019/08/26	OBSOLETED P/N 1000161242,1000161546

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: OBSOLETED PART NO					
mm		1:1		<b>molex</b> ZQSFP+ 1X3 GANGED CAGE ASSY'S (SPRING FINGER) WITH H/S & L/P OPTIONS  PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 1000161200   DOC TYPE: PSD   DOC PART: ASY   REVISION: H1 MATERIAL NUMBER: SEE P/N TABLE   CUSTOMER: GENERAL MARKET   SHEET NUMBER: 7 OF 7					
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL		± 2.0°							
4 PLACES		±							
3 PLACES		±							
2 PLACES		± 0.13		EC NO: 625872		2019/08/26		DRWN: VLOKESHA	
1 PLACE		± 0.25		APPR: GGA		2019/11/06		CHK'D: GB	
0 PLACES		±		INITIAL REVISION:		2019/11/12		APPR: RCHEN08	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		2015/11/03	
				C-SIZE		100016		2015/11/11	

DOCUMENT STATUS	P1	RELEASE DATE	2019/11/12 07:19:43
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