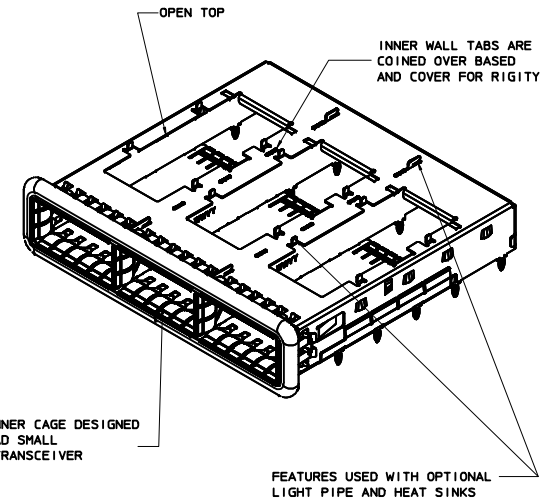
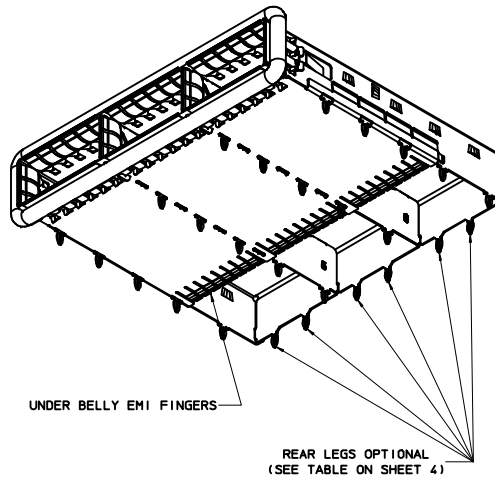
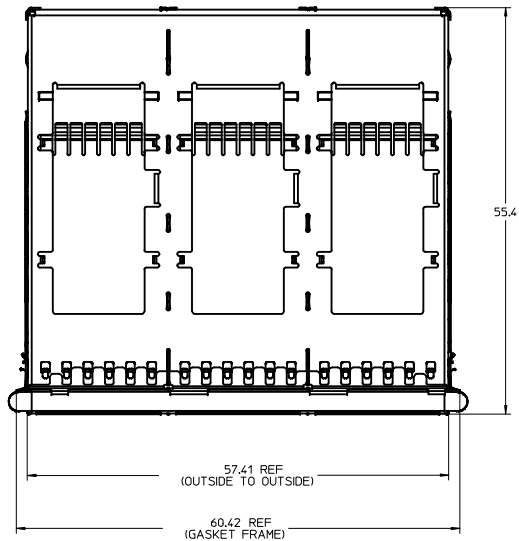


# BASE CAGE DETAILS

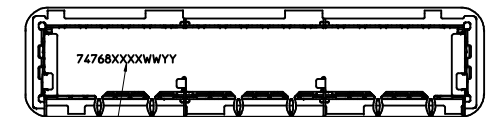
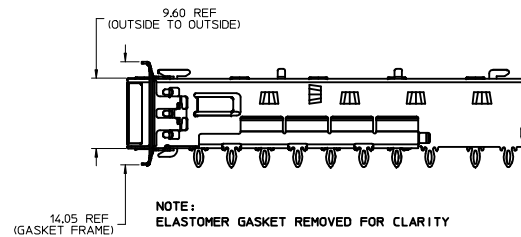
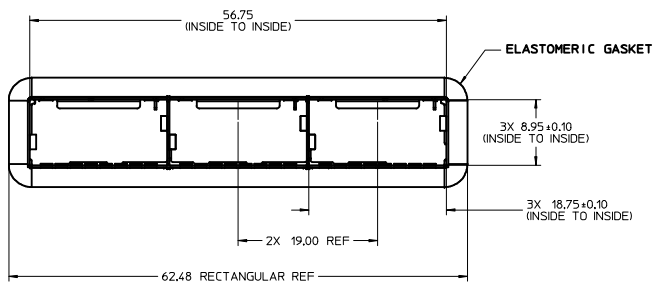
(APPLIES TO ALL CAGES IN THIS DRAWING)

747680212

SHOWN



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



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	12, 13, 14 ETC. EXAMPLE: YEAR 2014 = 14	

INNER SPRING FINGERS HAVE BEEN REMOVED FOR CLARITY

## NOTES:

1. QSFP+ ASSEMBLES ALSO AVAILABLE AND 1X1 74750 SERIES, 1X2 (74767 SERIES), 1X4 (74769 SERIES) AND 1X6 (74771 SERIES) CONFIGURATIONS.
2. MATERIAL:  
COVER/CLIP: STAINLESS STEEL  
LIGHT PIPES: POLYCARBONATE (94-V0 RATED)  
HEAT SINKS: ALUMINUM  
CAGE: COPPER ALLOY
3. NO RoHS EXEMPTIONS
4. CUSTOM HEATSINKS AVAILABLE UPON REQUEST

SEE REV HISTORY		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
REV	DESCRIPTION	SYMBOL	VALUE	mm	INCH	MM ONLY	DATE	2:1		METRIC			
1	DRWN:JERWIN 2013/12/08	▽=0	4 PLACES ±---	±---	±---	JERWIN	2011/05/11						
2	CHKD:GABRIELLA 2013/12/03	▽=0	3 PLACES ±---	±---	±---	CHIRSCHY	2011/05/11						
3	APPR:KLLOYD 2014/02/03	▽=0	2 PLACES ±0.15	±---	±---								
			1 PLACE ±0.25	±---	±---								
			0 PLACE ±---	±---	±---								
				ANGULAR ± 1 °		MATERIAL NO.		DOCUMENT NO.					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 4		SD-74768-0501					
						SIZE D							

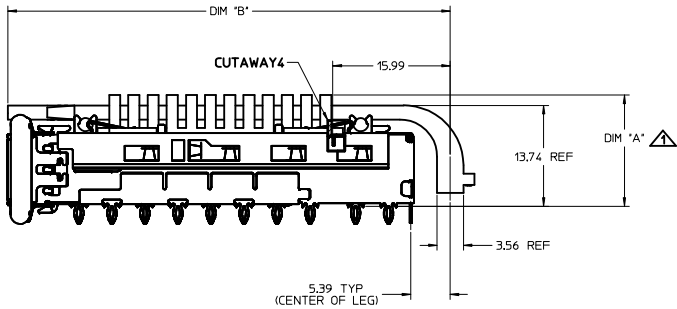
QSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED

**molex**

SHEET NO. 1 OF 9

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

# CAGE ASSEMBLY OPTIONS

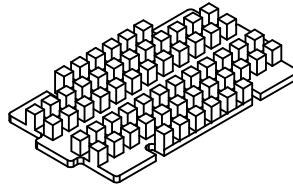


## HEATSINK HEIGHT OPTIONS

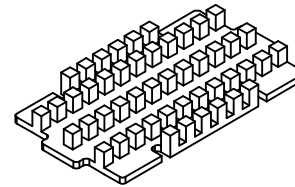
OVERALL HEATSINK HEIGHT	DIM 'A'	TOL
PCI	13.7	+0.25
SAN	16.0	-0.73
NET	23.0	

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

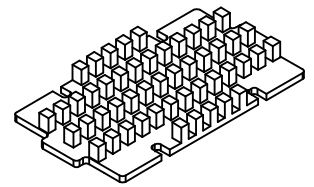
PCI HEAT SINK  
(PIN STYLE)



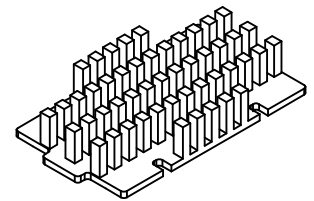
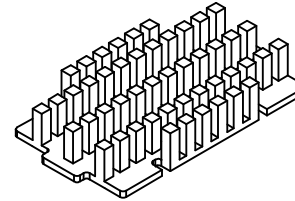
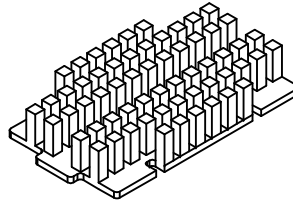
DUAL LIGHT PIPE



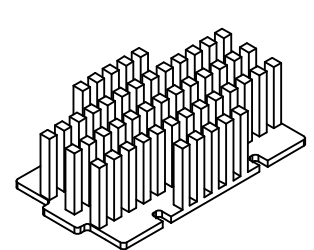
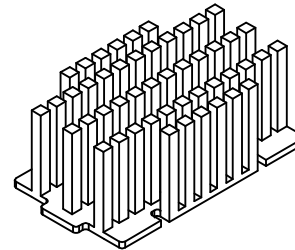
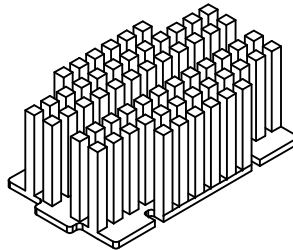
QUAD LIGHT PIPE



SAN HEAT SINK  
(PIN STYLE)



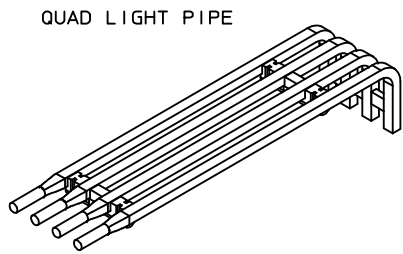
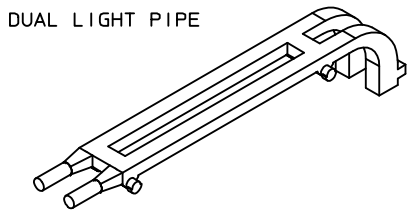
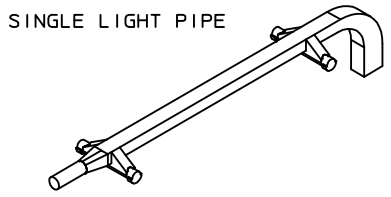
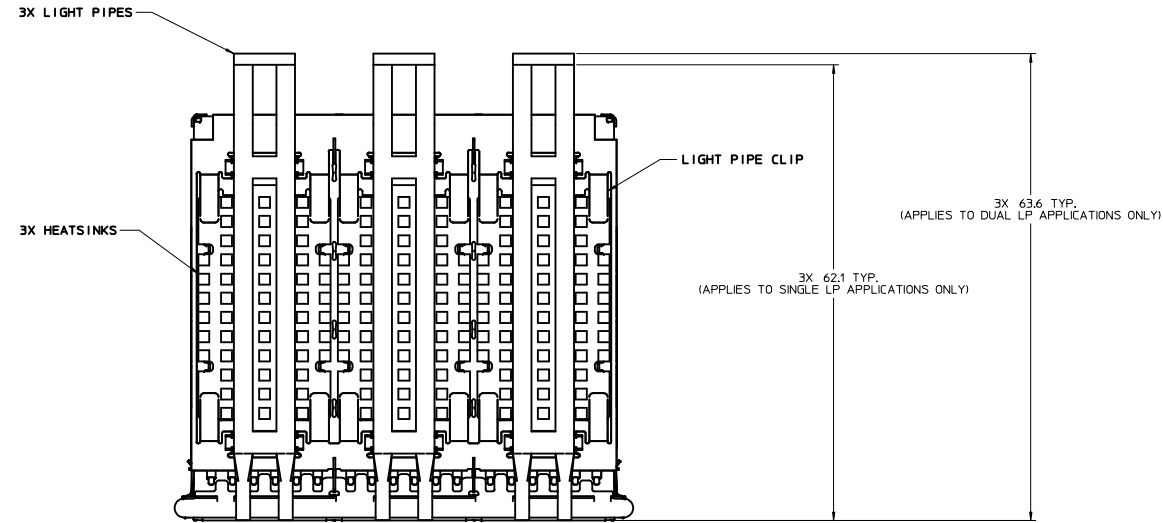
NET HEAT SINK  
(PIN STYLE)



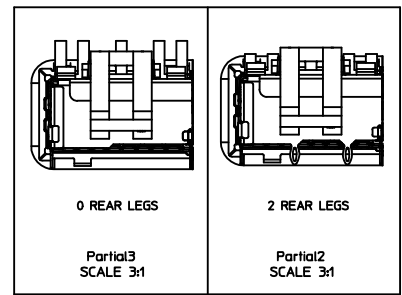
NOTE:  
1) FOR LIGHT PIPE OPTIONS SEE SHEET 3.

<b>SEE REV HISTORY</b> EC NO: CPG2014-2192 DRAWN: JERWIN 2013/12/08 CHKD: GABRIELLA 2013/12/08 APPR: K LLOYD 2014/02/08 REV DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.15 ± --- 1 PLACE ± 0.25 ± --- 0 PLACE ± --- ± --- ANGULAR ± 1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE <b>MM ONLY</b> DRAWN BY DATE JERWIN 2011/05/11 CHECKED BY DATE CHIRSCHY 2011/05/11 APPROVED BY DATE	SCALE <b>3.5:1</b> DESIGN UNITS <b>METRIC</b> THIRD ANGLE PROJECTION	TITLE <b>QSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED</b>	MATERIAL NO. <b>SEE SHEET 4</b>	DOCUMENT NO. <b>SD-74768-0501</b>	SHEET NO. <b>2 OF 9</b>

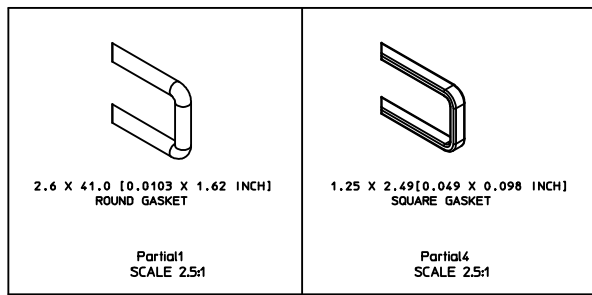
CAGE ASSEMBLY OPTIONS (CONT.)




REAR LEG OPTIONS



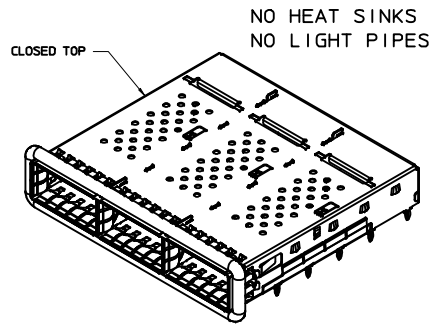
ELASTOMERIC GASKET OPTIONS



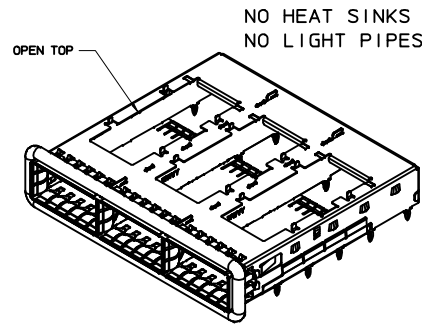
NOTE:  
FOR HEATSINK OPTIONS SEE SHEET 2.

SEE REV HISTORY EC NO: CPG2014-2132 DRAWN BY: JERWIN 2013/12/08 CHKD BY: GARDIELLA 2013/12/08 APPR: K LLOYD 2014/02/03  G	REV	DESCRIPTION	QUALITY SYMBOLS  ▽=0  ▽=0  ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 3:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	
					mm	INCH	DRAWN BY: JERWIN		DATE: 2011/05/11	TITLE: OSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED		
				4 PLACES	± ---	± ---	CHECKED BY: CHIRSCHY		DATE: 2011/05/11	molex		
				3 PLACES	± ---	± ---	APPROVED BY:		DATE:			
				2 PLACES	± 0.15	± ---						
				1 PLACE	± 0.25	± ---						
				0 PLACE	± ---	± ---						
				ANGULAR ± 1 °			MATERIAL NO.		DOCUMENT NO.			SHEET NO.
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHEET 4		SD-74768-0501			3 OF 9
							SIZE D		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

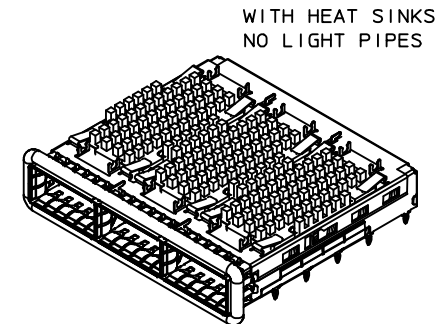
# PART NUMBER SELECTION



MOLEX P/N	# OF REAR LEGS PER PORT
747680223	2
747680226	2

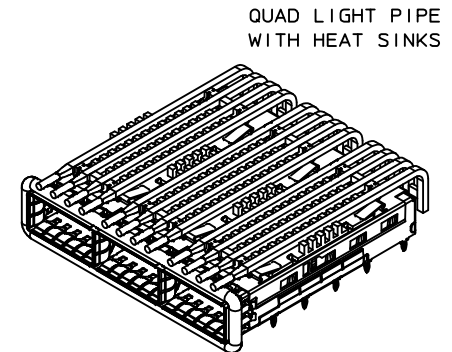
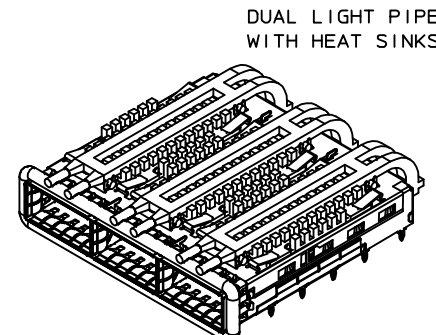
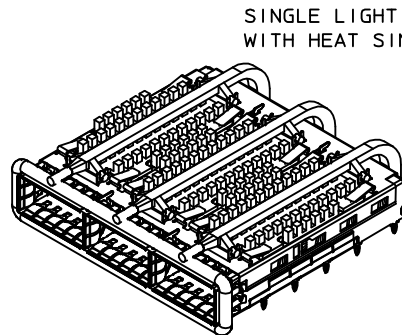


MOLEX P/N	# OF REAR LEGS PER PORT
747680210	0
747680212	2
747680217	2




MOLEX P/N	HS	# OF REAR LEGS PER PORT
747680505	PCI	0
747680506	SAN	2
747680507	NET	2
747680508*	PCI	2
747680509*	NET	2
747680514	PCI	2
747680516**	PCI	2
747680605	PCI	0
747680606	SAN	0
747680607	NET	0

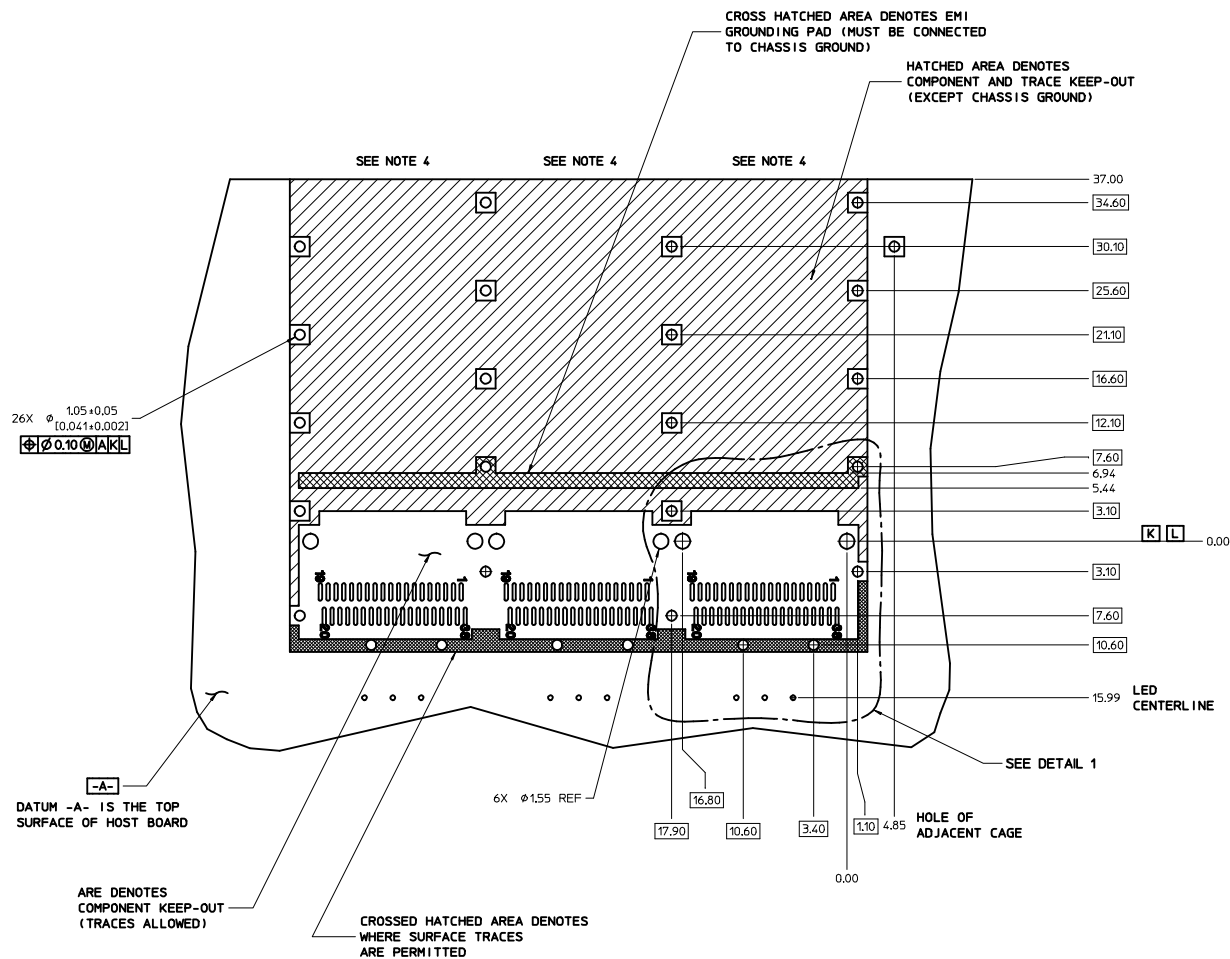
\* EMI GASKET SEAM PLACED ON LEFT SIDE VIEWING INTO PORT  
\*\* USES LOW PROFILE RECTANGULAR GASKET



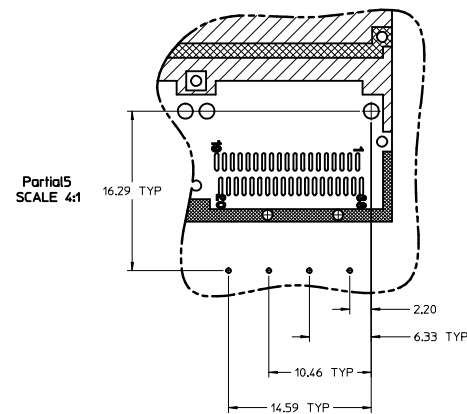
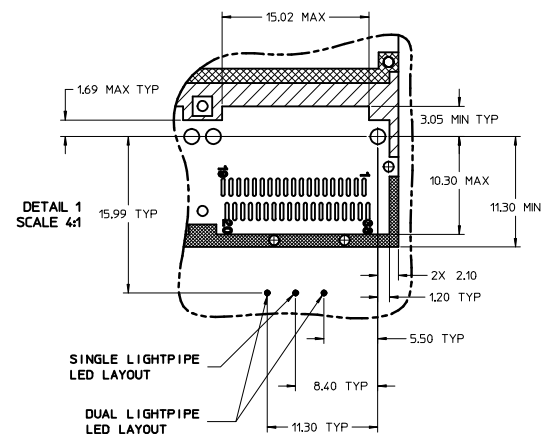
MOLEX P/N	LP	HS	# OF REAR LEGS PER PORT	DIM "B"
747680501	SINGLE	SAN	2	60.25
747680502	SINGLE	NET	2	
747680503	DUAL	SAN	2	
747680504	DUAL	NET	2	
747680511	DUAL	PCI	2	58.63
747680515	DUAL	SAN	2	
747680517	QUAD	PCI	2	
747680518	QUAD	SAN	2	
747680519	QUAD	NET	2	60.54
747680520	QUAD	PCI	0	
747680521	QUAD	SAN	0	
747680522	QUAD	NET	0	
747680601	SINGLE	SAN	0	60.25
747680602	SINGLE	NET	0	
747680603	DUAL	SAN	0	
747680604	DUAL	NET	0	

SEE REV HISTORY IEC NO: CPG2014-2132 DRAWN: JERWIN 2013/12/08 CHECKED: CHYXOGBARELLA 2013/12/08 APPROVED: KLOVD 2014/02/08	QUALITY SYMBOLS  ▽=0  ▽=0  ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)  mmINCH 4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.15 ± 1 PLACE ± 0.25 ± 0 PLACE ± ±	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	TITLE OSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED				
									DRAWN BY JERWIN	DATE 2011/05/11		
											CHECKED BY CHIRSCHY	DATE 2011/05/11
									APPROVED BY	DATE		
											ANGULAR ± 1 °	MATERIAL NO. SEE SHEET 4
									DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
									SIZE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

# PCB LAYOUT FOR SINGLE SIDED MOUNTING




## HOST CONNECTOR DETAIL

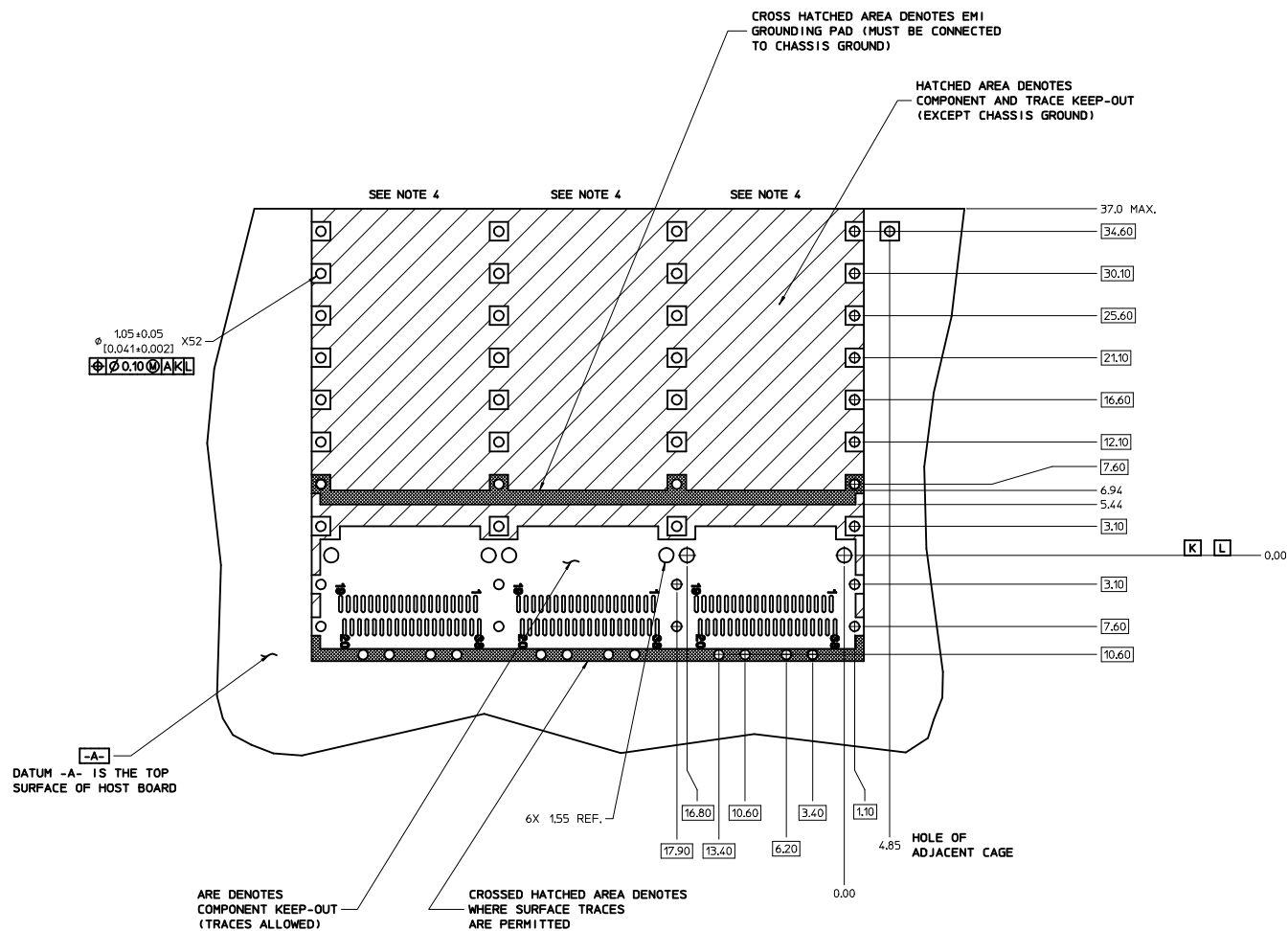


### NOTES:

1. PADS AND VIAS CONNECT TO CHASSIS GROUND (RECOMMEND 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 QSFP MSA WILL ACCOMMODATE MOLEX CONNECTOR 75586-0010 OR 75586-0011.
4. HOLE PATTERN REPEATS FOR EACH PORT. SPACING BETWEEN PORTS IS 19.00 [0.748].
5. LED SHOULD BE PLACED RELATIVE TO THE QSFP CONNECTOR POST HOLES

SEE REV HISTORY EC NO: CPG2014-2132 DRAWN: JERWIN CHECKED: GABRIELLA APPR: KLLOYD	2013/12/08	QUALITY SYMBOLS GENERAL TOLERANCES (UNLESS SPECIFIED)	DESCRIPTION	mm	INCH	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	2013/12/08					MM ONLY	4:1	METRIC		PROJECTION	
	2014/02/03					DRAWN BY	DATE	TITLE	QSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED		
						JERWIN	2011/05/11				
						CHECKED BY	DATE				
						CHIRSCY	2011/05/11				
						APPROVED BY	DATE				
						ANGULAR ± 1°		MATERIAL NO.	DOCUMENT NO.	SD-74768-0501	
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 4			
						SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	D							5 OF 9			

# PCB LAYOUT FOR BELLY TO BELLY MOUNTING



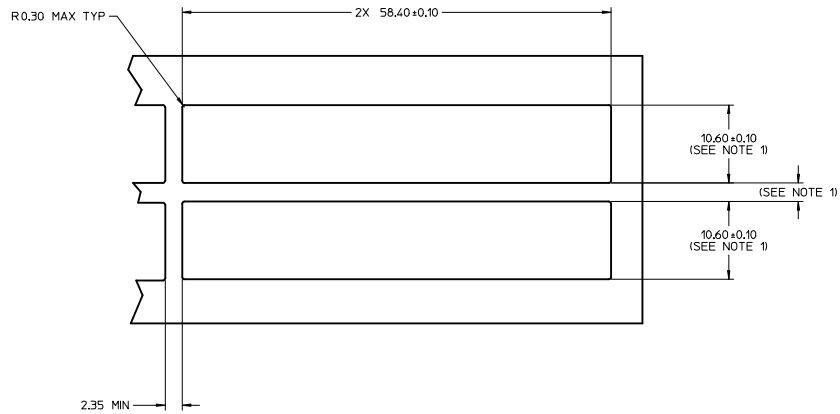
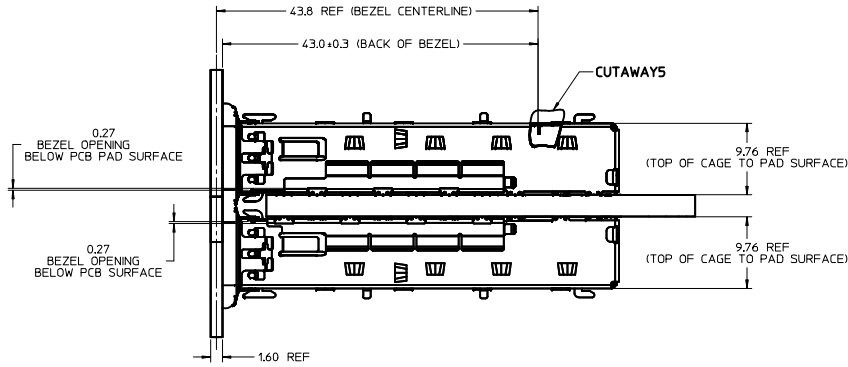
NOTE:  
SEE PREVIOUS SHEET FOR  
HOST CONNECTOR AND  
LED LOCATION DETAILS

## NOTES:

1. PADS AND VIAS CONNECT TO CHASSIS GROUND (RECOMMEND 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 QSFP MSA WILL ACCOMMODATE MOLEX CONNECTOR 75586-0010 OR 75586-0011.
4. HOLE PATTERN REPEATS FOR EACH PORT. SPACING BETWEEN PORTS IS 19.00 [0.748].

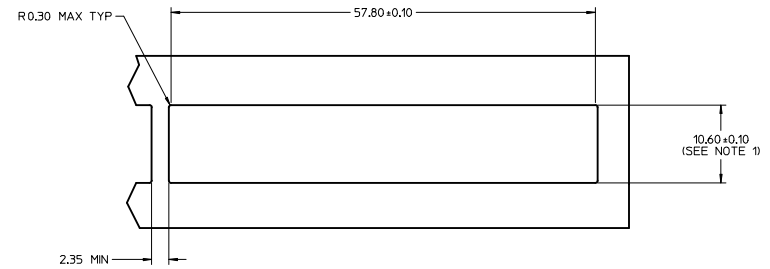
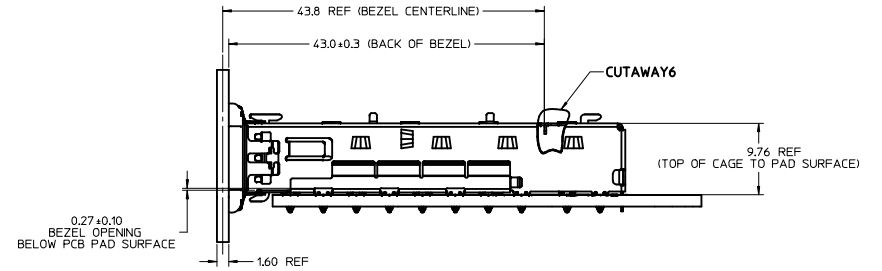
REV		DESCRIPTION		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
SEE REV HISTORY		EC NO: CPG2014-2132		DRAWN: JERWIN		2013/12/08		MM ONLY		4:1		METRIC		THIRD ANGLE PROJECTION	
G		CHKD: GBARELLA		2013/12/03		4 PLACES ± ---		DATE		2011/05/11		TITLE		QSFP+ 1X3 GANGED CAGE	
		APPR: K LLOYD		2014/02/03		3 PLACES ± ---		DATE						FULLY ASSEMBLED	
						2 PLACES ± 0.15		DATE							
						1 PLACE ± 0.25		DATE							
						0 PLACE ± ---		DATE							
						ANGULAR ± 1 °		MATERIAL NO.		DOCUMENT NO.					
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 4		SD-74768-0501					
								THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

BOARD AND BEZEL POSITION DIMENSIONS  
FOR BELLY TO BELLY MOUNTING



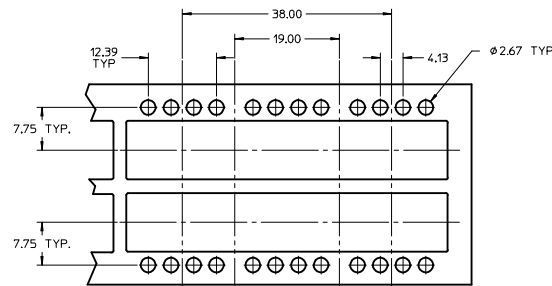
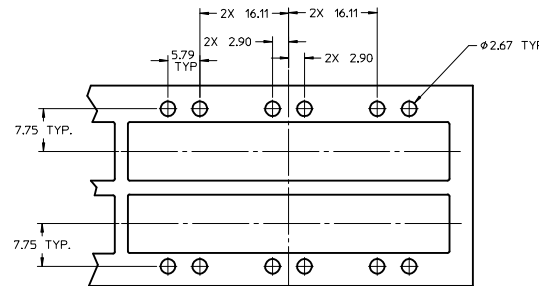
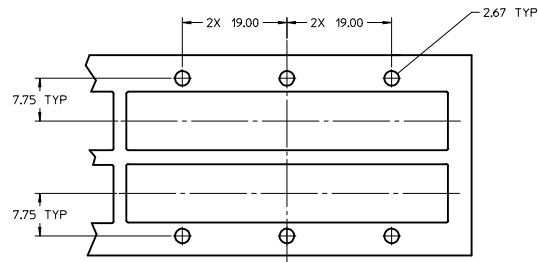
NOTES:  
1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING  
BEZEL OPENING, SIZE AND LOCATION.

BOARD AND BEZEL POSITION DIMENSIONS  
FOR SINGLE SIDE MOUNTING



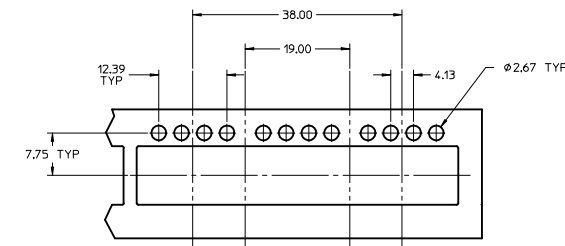
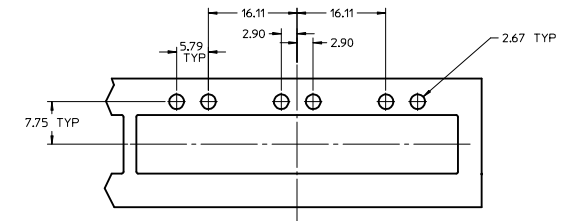
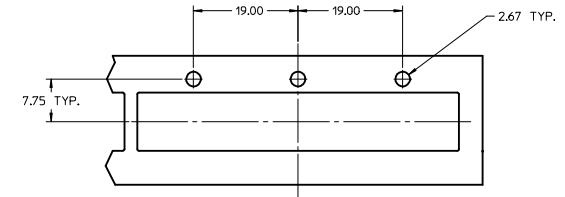
SEE REV HISTORY EC NO: CPG2014-2132 DRAWN BY: JERWIN CHECKED BY: CHYKOSBARELLA APPROVAL NO: 2011/02/05	QUALITY SYMBOLS  ▽=0  ▽=0  ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
							TITLE		
					DRAWN BY DATE		QSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED  <b>molex</b>  DOCUMENT NO. SD-74768-0501		
					JERWIN 2011/05/11				
					CHECKED BY DATE				
		CHIRSCY 2011/05/11							
REV			mm INCH		APPROVED BY DATE		SHEET NO. 7 OF 9		
			4 PLACES ± --- ± ---						
			3 PLACES ± --- ± ---						
			2 PLACES ± 0.15 ± ---						
			1 PLACE ± 0.25 ± ---						
0 PLACE ± --- ± ---				MATERIAL NO.					
		ANGULAR ± 1 °		SEE SHEET 4		SD-74768-0501			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE D		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

# BEZEL AND LIGHT PIPE CUTOUT DIMENSIONS FOR BELLY TO BELLY MOUNTING



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

# BEZEL AND LIGHT PIPE CUTOUT DIMENSIONS FOR SINGLE SIDED MOUNTING



<b>SEE REV HISTORY</b> IEC NO: CPG2014-2132 DRAWN BY: JERWIN CHECKED BY: CHYK-GARDELLA APPR: KLOYD DATE: 2013/12/08 DATE: 2013/12/03 DATE: 2014/02/03	<b>QUALITY SYMBOLS</b> ▽=0 ▽=0 ▽=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY	<b>SCALE</b> 2.25:1	<b>DESIGN UNITS</b> METRIC	<b>THIRD ANGLE PROJECTION</b>
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.15 ± --- 1 PLACE ± 0.25 ± --- 0 PLACE ± --- ± ---	mm    INCH ANGULAR ± 1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: JERWIN DATE: 2011/05/11 CHECKED BY: CHIRSCHY DATE: 2011/05/11 APPROVED BY:	MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SD-74768-0501	SHEET NO. 8 OF 9

TITLE  
QSFP+ 1X3 GANGED CAGE FULLY ASSEMBLED

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