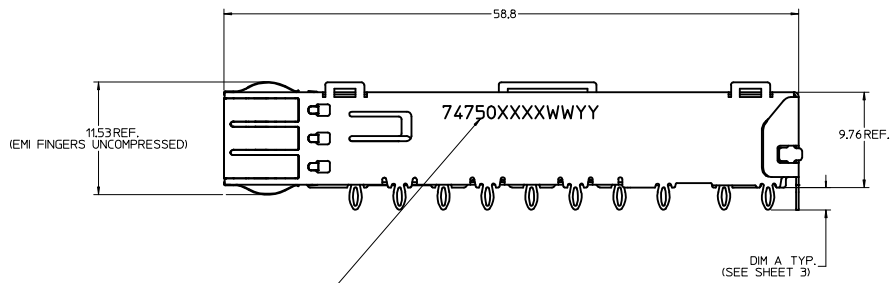
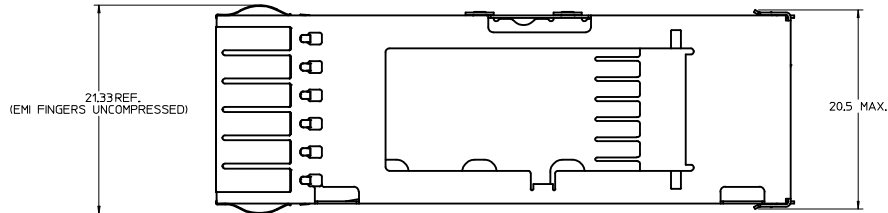
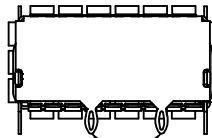
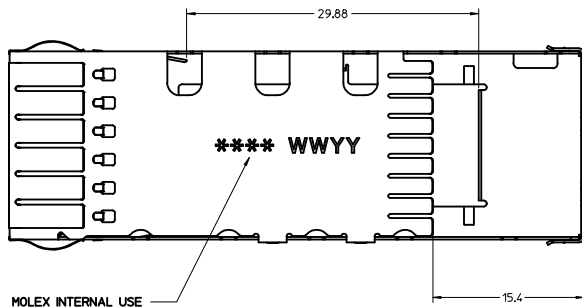


CAGE DETAILS
(APPLIES TO ALL CAGES IN THIS DRAWING)

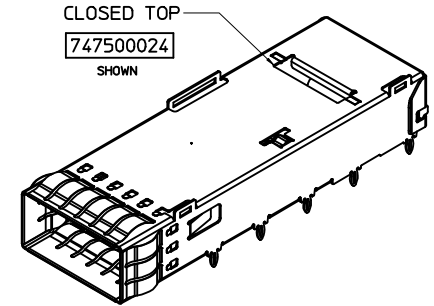
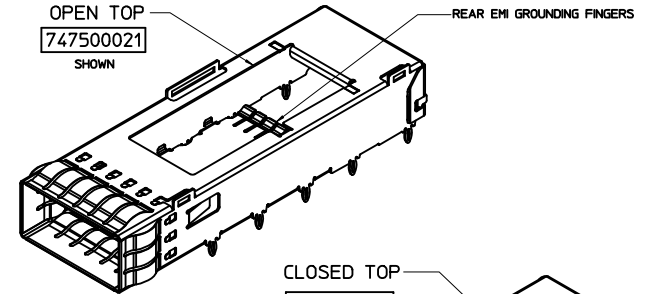


PART NO. AND WEEK/YEAR DATE CODE TO BE PRINTED ON
SIDE OF COMPLETED CAGE ASSEMBLY AS SHOWN.

WEEK/YEAR DATE CODE TABLE	
WW	01 THRU 52 EXAMPLE: 01 = FIRST WEEK OF YEAR 52 = LAST WEEK OF YEAR
YY	11, 12, 13 ETC. EXAMPLE: YEAR 2013 = 13




REAR LEGS ARE OPTIONAL
(SEE CHART)

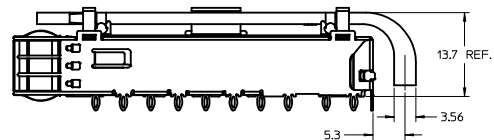
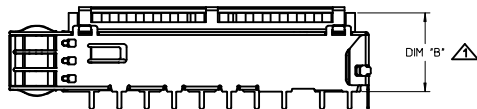
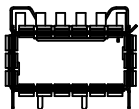
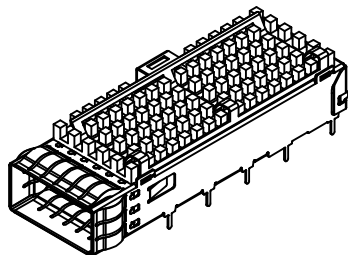
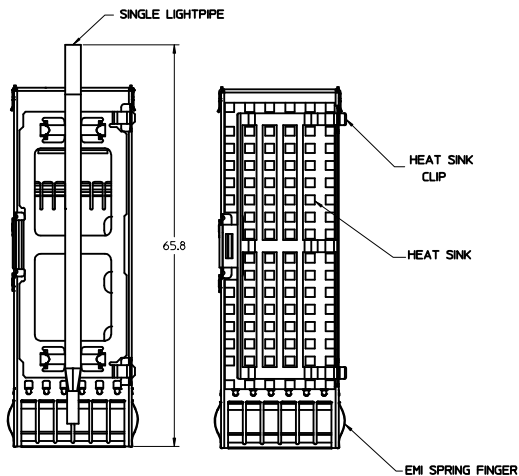


NOTES:

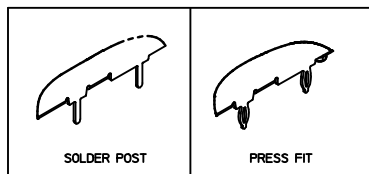
- PRESS FIT LEGS 2.28 / 3.05 mm LONG
- SOLDER POST LEGS 1.90 / 2.90 mm LONG
- SINGLE SIDED BOARD THICKNESS
NOMINAL: 1.60
MINIMUM: 1.44
BELLY TO BELLY BOARD THICKNESS
NOMINAL: 2.30
MINIMUM: 2.07
- MATERIAL: COPPER ALLOY (PLATED PRIOR TO CUTTING AND FORMING)
CAGE: 0.25 mm THICK COPPER ALLOY, NICKEL PLATED OR TIN
SPRING FINGER: 0.08 mm THICK COPPER ALLOY, NICKEL PLATED
HEAT SINK CLIP: STAINLESS STEEL
LIGHT PIPES: POLYCARBONATE (UL 94-V0 RATED)
HEATSINKS: ANNODIZED ALUMINUM
- REFERENCE DOCUMENTS: PRODUCT SPECIFICATION: QSFP MSA
- CUSTOM HEATSHINKS AVAILABLE UPON REQUEST
- QSFP+ ASSEMBLES ALSO AVAILABLE IN 1X2 (74767 SERIES),
1X3 (74768 SERIES), 1X4 (74769 SERIES) AND 1X6 (74771 SERIES).
- PACKAGED IN TRAY.
- NO RoHS EXEMPTIONS.

SEE REVISION SHEET EC NO.: CPG2015-1999 DRAWN: ERWIN 2014/10/13 CHECKED: GABRIELLA 2014/10/13 APPROVED: 2014/10/17	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED):		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	TITLE QSFP+ CAGE ASSEMBLY WITH SPRING FINGERS molex	DOCUMENT NO. SD-74750-0021	SHEET NO. 1 OF 8				
		mm		INCH								DRAWN BY CHIRSCHY		DATE 2007/07/23	
		3 PLACES		+---+---+								CHECKED BY BRUSSELL		DATE 2007/07/23	
		2 PLACES		±0.13								APPROVED BY RAHMOOD		DATE 2010/11/01	
		1 PLACE		±0.25								MATERIAL NO. SEE SHEET 3		DATE	
REV	DESCRIPTION	ANGULAR ± 1 °		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
		DRAFT WHERE APPLICABLE		D											
		MUST REMAIN WITHIN DIMENSIONS													

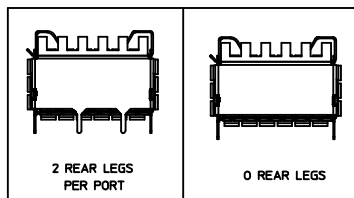
CAGE ASSEMBLY OPTIONS



LEG TYPE OPTIONS



REAR LEG OPTIONS



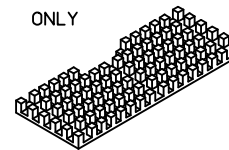
HEATSINK HEIGHT OPTIONS

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

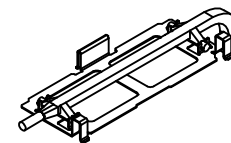
HEIGHT OF HEATSINK WITH MODULE INSERTED.
DIMENSION MAY BE LESS DUE TO MODULE AND HEATSINK VARIATIONS.

HEATSHINK AND LIGHT PIPE OPTIONS

HEAT SINK ONLY

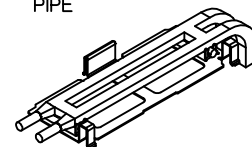


SINGLE LIGHT PIPE



MOLEX P/N: 747500030

DUAL LIGHT PIPE

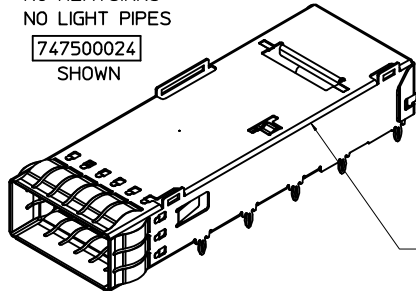


MOLEX P/N: 747500031

<div>SEE REVISION SHEET</div> <div>EC NO: CPG2015-1999</div> <div>DRAWN: ERWIN</div> <div>CHYKOGARDELLA</div> <div>APPROVED: 2014/10/17</div> <div>REV DESCRIPTION</div>	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	▽=0	<div>mm</div> <div>INCH</div>		DRAWN BY CHIRSCY	DATE 2007/07/23	TITLE QSPF+ CAGE ASSEMBLY WITH SPRING FINGERS			
	▽=0	4 PLACES ± .005 ± .004		CHECKED BY BRUSSELL	DATE 2007/07/23	<div>molex</div>			
	▽=0	3 PLACES ± .004 ± .003		APPROVED BY RMAHMOOD					DATE 2010/11/01
	▽=0	2 PLACES ± .003 ± .002		MATERIAL NO. SEE SHEET 3					DOCUMENT NO. SD-74750-0021
		1 PLACE ± .002 ± .001		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 2 OF 8			

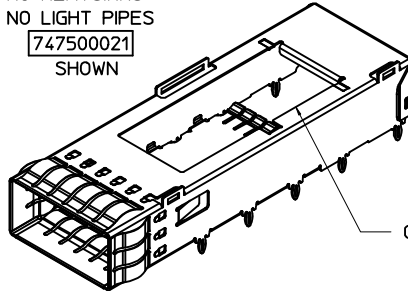
PART NUMBER SELECTION

NO HEATSINKS
NO LIGHT PIPES
747500024
SHOWN



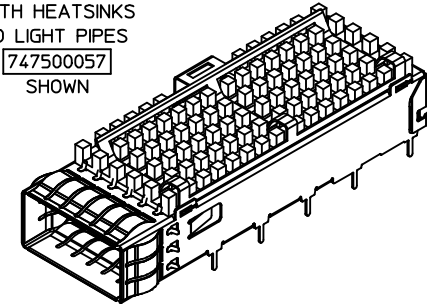
CLOSED TOP

NO HEATSINKS
NO LIGHT PIPES
747500021
SHOWN



OPEN TOP

WITH HEATSINKS
NO LIGHT PIPES
747500057
SHOWN

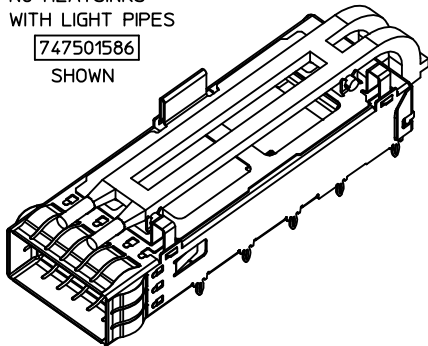


MOLEX P/N		# OF REAR LEGS PER PORT	DIM A	PLATING
LEG TYPE PRESS FIT	LEG TYPE SOLDER POST			
747500024	---	2	2.28	NICKEL
---	747500051	2	1.9	NICKEL
---	747500053	2	1.9	MATTE TIN
---	747500056	2	1.9	BRIGHT TIN

MOLEX P/N		# OF REAR LEGS PER PORT	DIM A	PLATING
LEG TYPE PRESS FIT	LEG TYPE SOLDER POST			
747500012	---	2	3.05	NICKEL
747500021	---	2	2.28	NICKEL
747500023	---	0	2.28	NICKEL
---	747500058	2	2.90	NICKEL
---	747500062 *	2	2.90	NICKEL

MOLEX P/N		# OF REAR LEGS PER PORT	DIM A	DIM B	PLATING
LEG TYPE PRESS FIT	LEG TYPE SOLDER POST				
---	747500057	2	2.9	13.7	NICKEL
747500040	---	2	2.28	16.0	NICKEL
747500042	---	0	2.28	16.0	NICKEL
747500044	---	2	2.28	13.7	NICKEL
747500046	---	2	2.28	23.0	NICKEL

NO HEATSINKS
WITH LIGHT PIPES
747501586
SHOWN



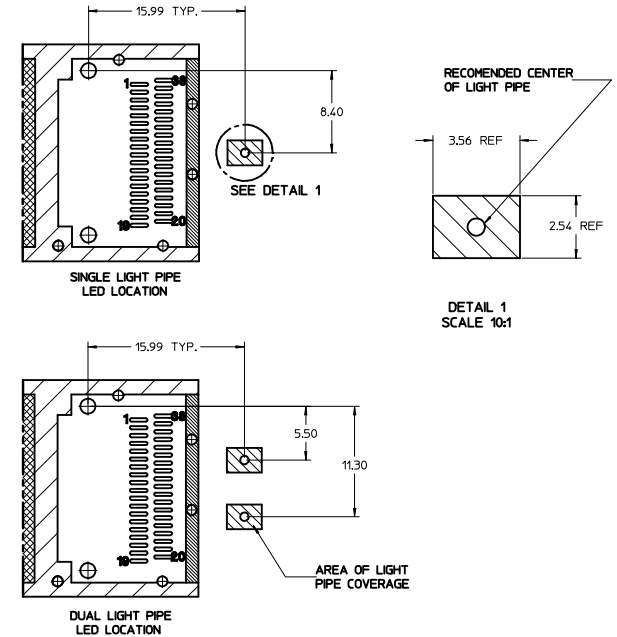
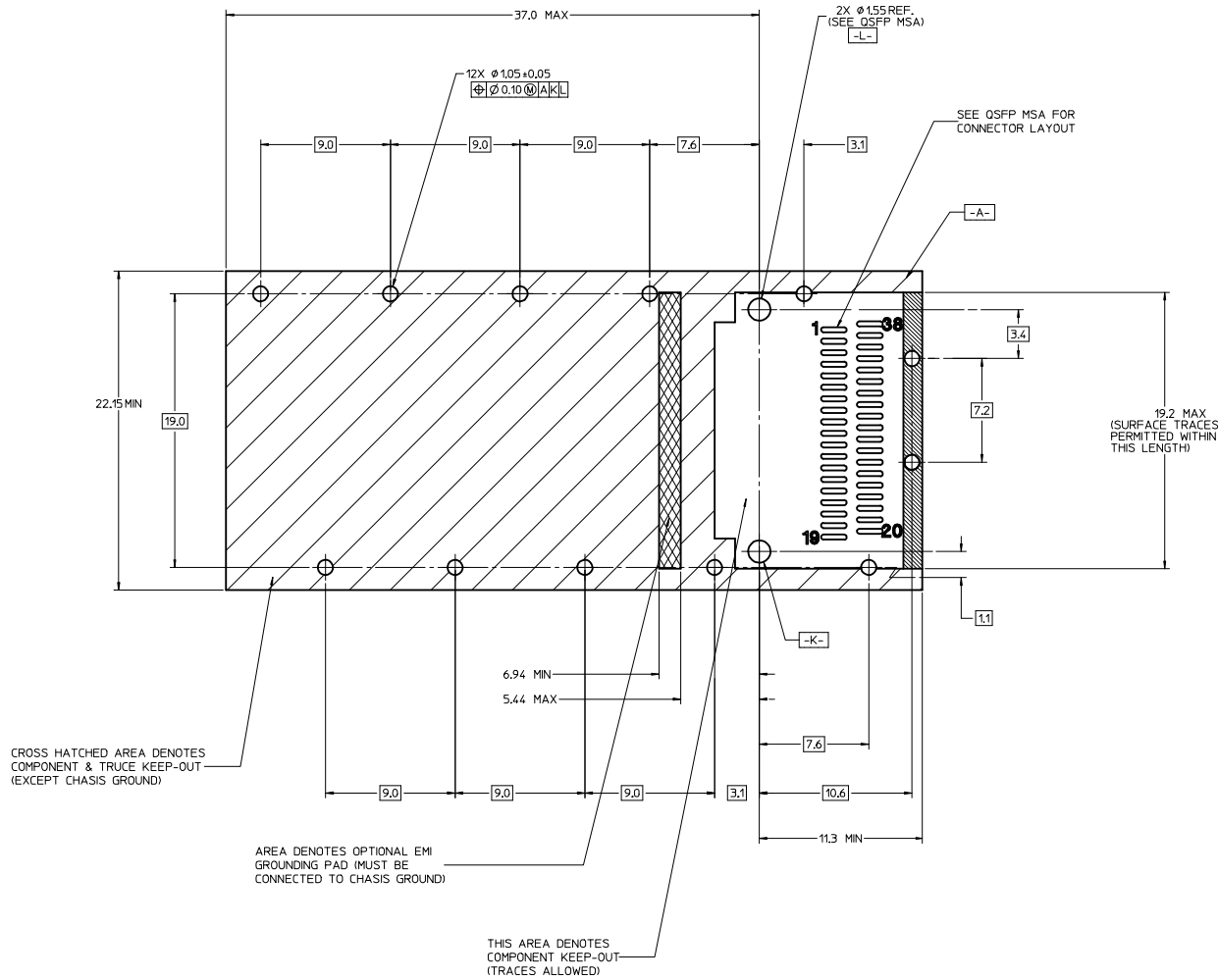
MOLEX ASSEMBLY P/N	MOLEX P/N		LIGHT PIPE ASSEMBLY P/N	#OF REAR LEGS PER PORT	DIM A	PLATING
	LEG TYPE PRESS FIT	LEG TYPE SOLDER POST				
747501586	747500024	---	747500031	2	2.28	NICKEL

* HEATSINK/LIGHT PIPE CLIP FEATURE REMOVED.

SEE REVISION SHEET IEC NO: CPG2015-1999 DRAWN: ERWIN 2014/10/13 CHECKED: GARDIELLA 2014/10/13 APPR: BREED 2014/10/17 REV: 1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\nabla=0$ $\nabla=0$	4 PLACES \pm --- mm 3 PLACES \pm --- mm 2 PLACES \pm 0.13 mm 1 PLACE \pm 0.25 mm 0 PLACE \pm --- mm	MM ONLY	3:1	METRIC	TITLE: QSFP+ CAGE ASSEMBLY WITH SPRING FINGERS DATE: 2007/07/23 DATE: 2007/07/23 DATE: 2010/11/01
	ANGULAR \pm 1° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 3 DOCUMENT NO. SD-74750-0021	SHEET NO. 3 OF 8			
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				


PCB LAYOUT FOR SINGLE SIDED APPLICATIONS

FOR CAGE ASSEMBLIES WITH LIGHT PIPES

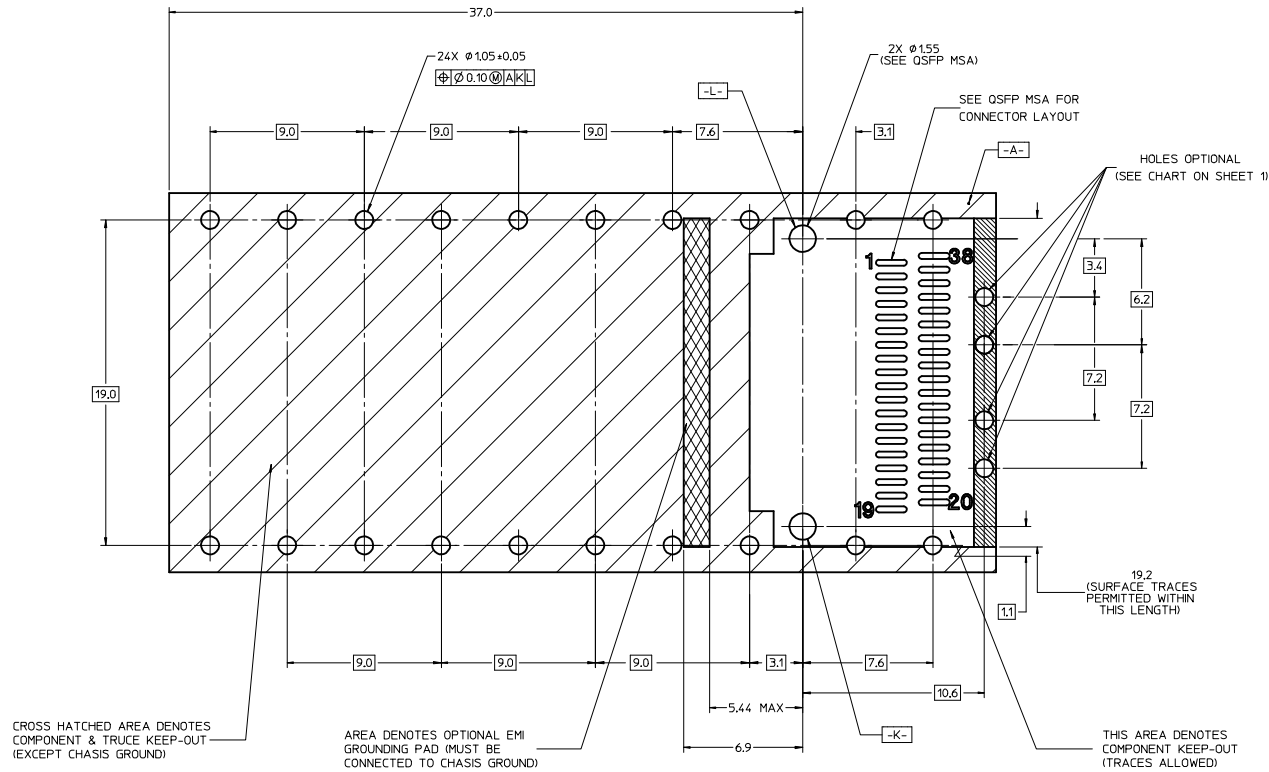


NOTES:

1. DATUM -A- IS TOP SURFACE OF HOST BOARD PER MSA
2. FINISHED HOLE SIZE (AFTER PLATING)
3. DATUM -K- IS HOST BOARD THRU HOLE #1 TO ACCEPT CONNECTOR GUIDE POST PER MSA
4. DATUM -L- IS HOST BOARD THRU HOLE #2 TO ACCEPT CONNECTOR GUIDE POST PER MSA

SEE REVISION SHEET EC NO: CPG2015-1999 DRAWN: JERWIN 2014/10/13 CHKD: GABRIELLA 2014/10/13 APPROVED: 2014/10/17	QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	
	▽=0		mm		DRAWN BY CHIRSCHY		DATE 2007/07/23		TITLE QSFP+ CAGE ASSEMBLY WITH SPRING FINGERS			
	▽=0		INCH		CHECKED BY BRUSSELL		DATE 2007/07/23					
	▽=0		±0.13		APPROVED BY RMAHMOOD		DATE 2010/11/01					
	▽=0		±0.25									
			±						molex		SHEET NO. 4 OF 8	
			±									
			±									
			ANGULAR ± 1 °		MATERIAL NO.		DOCUMENT NO.		SD-74750-0021			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3							
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

PCB LAYOUT FOR BELLY-TO-BELLY APPLICATIONS



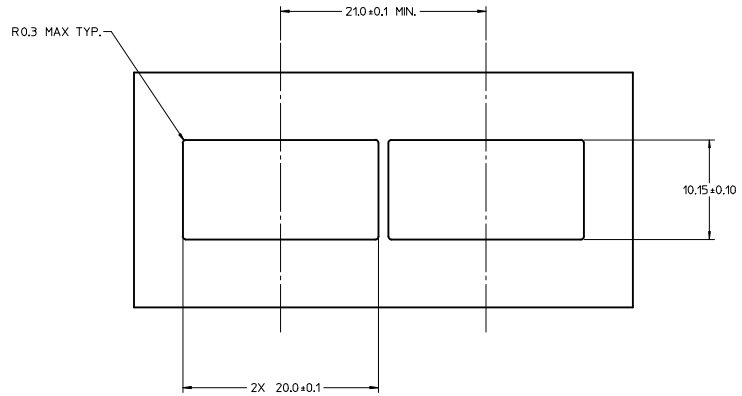
NOTE:
FOR RECOMENDED CENTER
OF LIGHT PIPES,
SEE SHEET 4

NOTES:

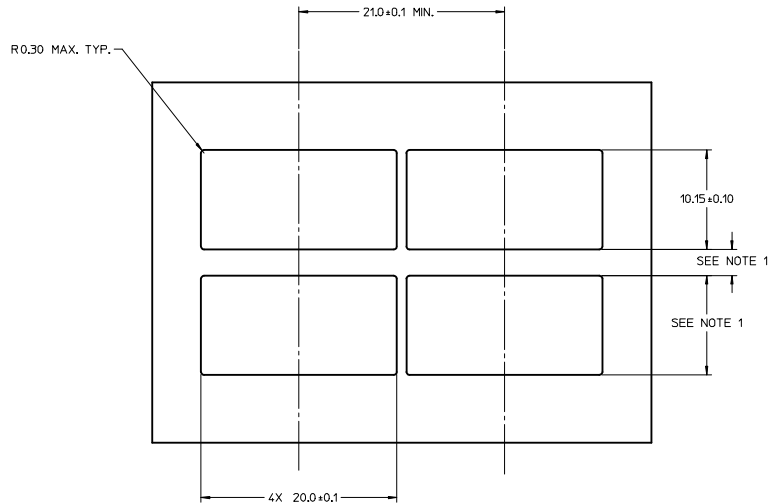
1. DATUM -A- IS TOP SURFACE OF HOST BOARD PER MSA.
2. FINISHED HOLE SIZE (AFTER PLATING).
3. DATUM -K- IS HOST BOARD THRU HOLE #1 TO ACCEPT CONNECTOR GUIDE POST PER MSA.
4. DATUM -L- IS HOST BOARD THRU HOLE #2 TO ACCEPT CONNECTOR GUIDE POST PER MSA.

REV	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			mm	INCH	MM ONLY	DATE			
1	4 PLACES ±	▽=0	±---	±---	CHIRSCHY	2007/07/23	1:1	METRIC	QSF+ CAGE ASSEMBLY WITH SPRING FINGERS
2	3 PLACES ±	▽=0	±---	±---	BRUSSELL	2007/07/23			
3	2 PLACES ±0.13	▽=0	±---	±---					
4	1 PLACE ±0.25	▽=0	±---	±---					
5	0 PLACE ±		±---	±---	APPROVED BY	DATE			
					RMAMMOOD	2010/11/01			
MATERIAL NO.			SEE SHEET 3		DOCUMENT NO.		SD-74750-0021		
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		SHEET NO. 5 OF 8		

BEZEL AND BOARD POSITION DIMENSIONS FOR SINGLE SIDE MOUNTING

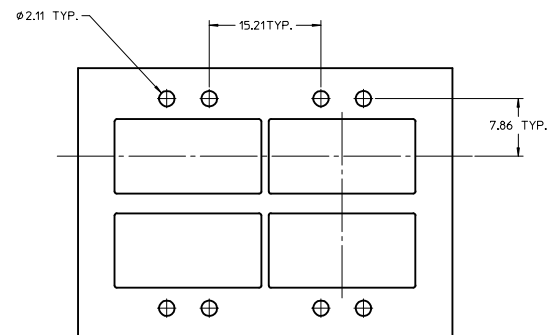
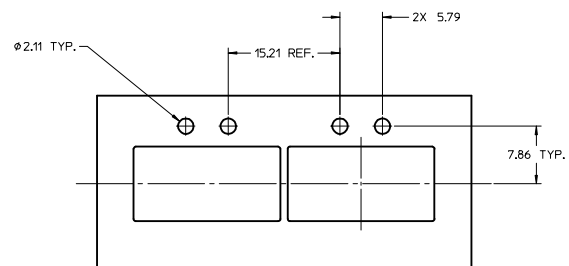


BEZEL AND BOARD POSITION DIMENSIONS FOR BELLY-TO-BELLY MOUNTING



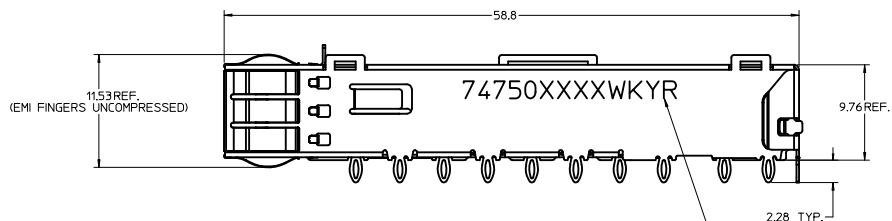
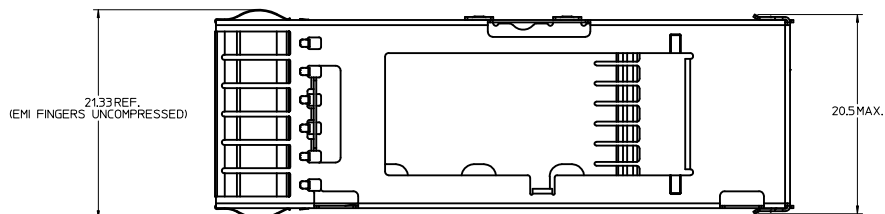
NOTE:
1. SEE QSFP MSA SPECIFICATION FOR BEZEL LOCATION TOLERANCE.
2. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING, SIZE, AND LOCATION.

REV	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	TITLE	DOCUMENT NO.	SHEET NO.
			mm	INCH		MM ONLY							
✓=0	4 PLACES	±	---	±	---	CHIRSCHY	2007/07/23	1:1	METRIC	⊙	QSFP+ CAGE ASSEMBLY WITH SPRING FINGERS	SD-74750-0021	6 OF 8
✓=0	3 PLACES	±	---	±	---	BRUSSELL	2007/07/23						
✓=0	2 PLACES	±	0.13	±	---								
	1 PLACE	±	0.25	±	---	APPROVED BY	DATE						
	0 PLACE	±	---	±	---	RAHMOOD	2010/11/01						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			ANGULAR ± 1 °			MATERIAL NO.		SEE SHEET 3		SD-74750-0021		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	



SEE REVISION SHEET EC NO: CPG2015-1999 DRAWN: JERWIN 2014/10/13 CHECKED: SABBARELLA 2014/10/13 APPR: BREED 2014/10/17	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	DESCRIPTION	mm	INCH	DRAWN BY	DATE	TITLE		
	▽=0	4 PLACES ±	±	CHIRSICHY	2007/07/23	QSPF+ CAGE ASSEMBLY WITH SPRING FINGERS		
	▽=0	3 PLACES ±	±	CHECKED BY	DATE			
		2 PLACES ±	0.13	BRUSSELL	2007/07/23			
		1 PLACE ±	0.25	APPROVED BY	DATE			
		0 PLACE ±	±	RAHMOOD	2010/11/01			
		ANGULAR ± 1°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3 SIZE D		SD-74750-0021 molex		7 OF 8
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

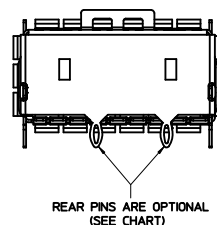
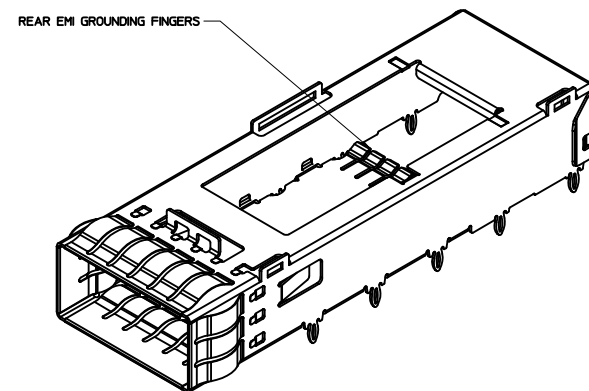
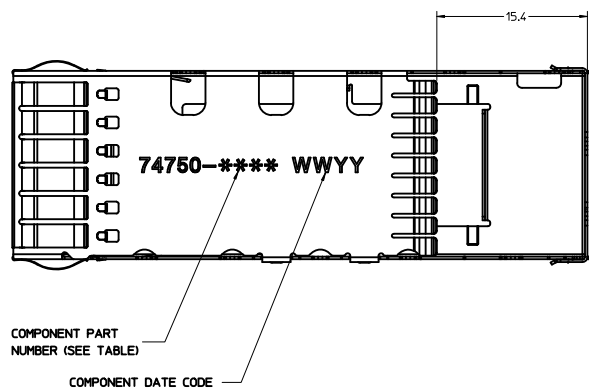


PART NO. AND WEEK/YEAR DATE CODE TO BE PRINTED ON
SIDE OF COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN.
SEE TABLE BELOW FOR DATE CODE INFORMATION.

WEEK/YEAR DATE CODE TABLE

WEEK - 01 THRU 52 EXAMPLE: 01 - FIRST WEEK OF YEAR 52 - LAST WEEK OF YEAR

YEAR - 10, 11, 12 ETC. EXAMPLE: YEAR 2010 - 10



FINISHED ASSEMBLY P/N	COMPONENT P/N (CAGE)	# OF REAR LEGS	COMMENTS
747500092	747500112	2	OPEN TOP FOR HEAT SINK
747500093	747500113	0	OPEN TOP FOR HEAT SINK

NOTES:

- PRESS FIT LEGS 2.28mm [0.090"] LONG
- SINGLE SIDED BOARD THICKNESS
NOMINAL: 1.60 [0.062"]
MINIMUM: 1.44 [0.057"]
BELLY TO BELLY BOARD THICKNESS
NOMINAL: 2.30 [0.090"]
MINIMUM: 2.07 [0.081"]
- MATERIAL: COPPER ALLOY (PLATED PRIOR TO CUTTING AND FORMING)
PLATING: NICKEL
- REFERENCE DOCUMENTS:
PRODUCT SPECIFICATION: QSFP MSA
- THIS PART MEETS THE RESTRICTION OF HAZARDOUS SUBSTANCES IN
ELECTRICAL AND ELECTRONIC EQUIPMENT (ROHS) DIRECTIVE (2002/95/EC).





INITIAL RELEASE EC NO: USJ2011-0437 DRAWN: JERWIN 2010/09/20 CHECKED: RCHY 2010/09/20 APPROVED: RMAHMOOD 2010/12/20	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	QSFP CAGE ASSEMBLY W/ SPRING FINGERS MOLEX INCORPORATED SD-74750-0092 1 OF 4
		mm INCH		DRAWN BY DATE		TITLE			
		4 PLACES ± ±		JERWIN 2010/09/20					
		3 PLACES ± ±		CHECKED BY DATE					
		2 PLACES ± 0.13 ±		CHIRSCHY 2010/09/20					
		1 PLACE ± 0.25 ±		APPROVED BY DATE					
		ANGULAR ± 1 °		RMAHMOOD 2010/12/20					
				MATERIAL NO.		DOCUMENT NO.			
				SEE TABLE					
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

— 43.8 REF. (BEZEL CENTERLINE) —

— 43.3 ± 0.3 (BACK OF BEZEL) —

-T-	6
-K-	4
-L-	5

16 REF. =

INITIAL RELEASE EC NO: US32010-0457 DRAWN: JERWIN 2010/09/20 CHECKD: CHIRSCHY 2010/09/20 APPROVED: RMAHMOOD 2010/12/20	QUALITY SYMBOLS  = 0  = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .003</td> <td>± .0002</td> </tr> <tr> <td>2 PLACES</td> <td>± .013</td> <td>± .0005</td> </tr> <tr> <td>1 PLACE</td> <td>± .025</td> <td>± .0010</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± .005	± .0004	3 PLACES	± .003	± .0002	2 PLACES	± .013	± .0005	1 PLACE	± .025	± .0010	DIMENSION STYLE MM ONLY DRAWN BY DATE JERWIN 2010/09/20 CHECKED BY DATE CHIRSCHY 2010/09/20 APPROVED BY DATE RMAHMOOD 2010/12/20	SCALE 1:1 DESIGN UNITS METRIC  THIRD ANGLE PROJECTION	QSPF CAGE ASSEMBLY W/ SPRING FINGERS  MOLEX INCORPORATED MATERIAL NO. DOCUMENT NO. SD-74750-0092 SHEET NO. 2 OF 4
		mm	INCH																	
	4 PLACES	± .005	± .0004																	
	3 PLACES	± .003	± .0002																	
2 PLACES	± .013	± .0005																		
1 PLACE	± .025	± .0010																		
DESCRIPTION DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE SIZE D THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
REV																				

1. DATUM -A- IS TOP SURFACE OF HOST BOARD PER MSA
2. FINISHED HOLE SIZE (AFTER PLATING)
3. DATUM -K- IS HOST BOARD THRU HOLE #1 TO ACCEPT CONNECTOR GUIDE POST PER MSA
4. DATUM -L- IS HOST BOARD THRU HOLE #2 TO ACCEPT CONNECTOR GUIDE POST PER MSA
5. DATUM -T- IS HARD STOP ON CAGE PER MSA

