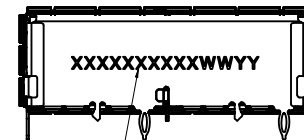
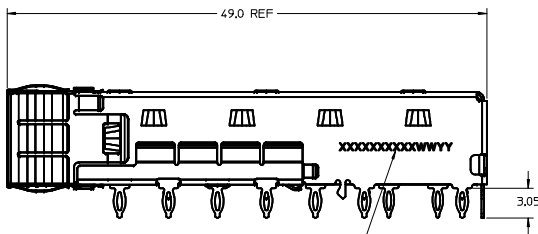
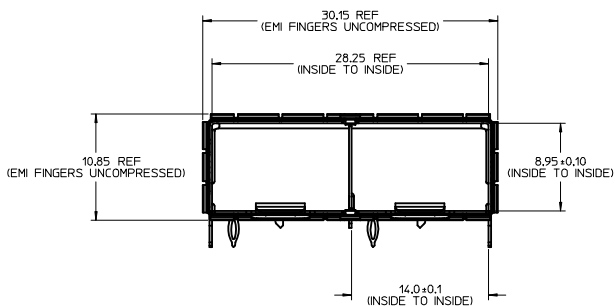
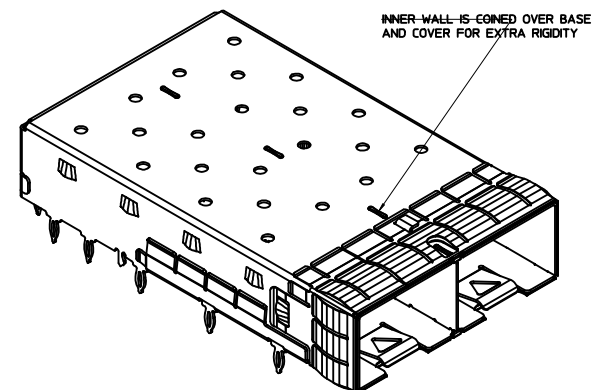
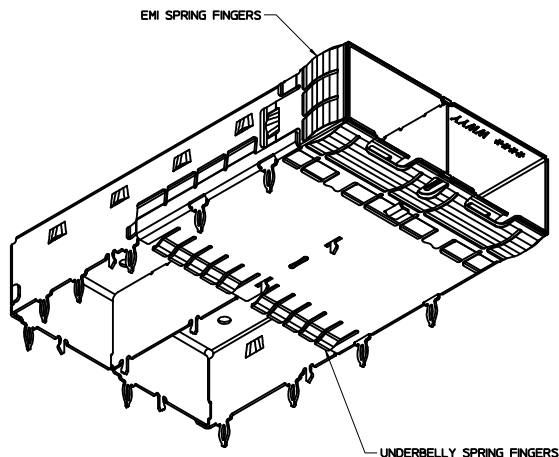
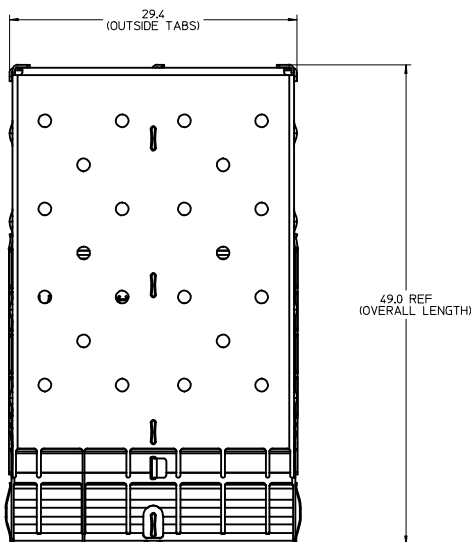


### BASE CAGE DETAILS

747540220



P/N/DATE CODE TO BE PRINTED IN APPROXIMATE AREA AS SHOWN FOR 11112 SERIES CAGE

P/N/DATE CODE TO BE PRINTED ON THE BACK OF COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN FOR 74754 AND 10013 SERIES CAGE (747540247 NO NEED PRINTED)

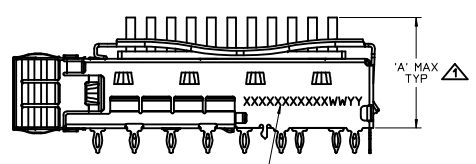
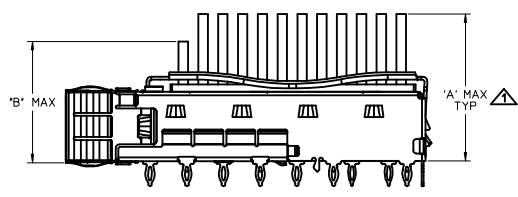
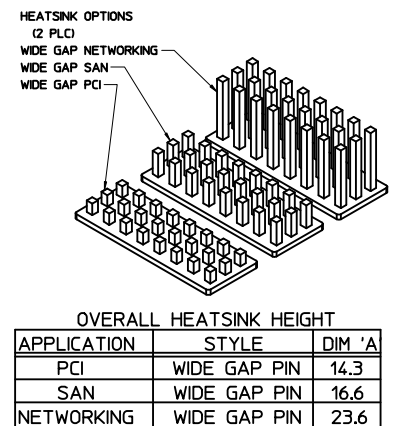
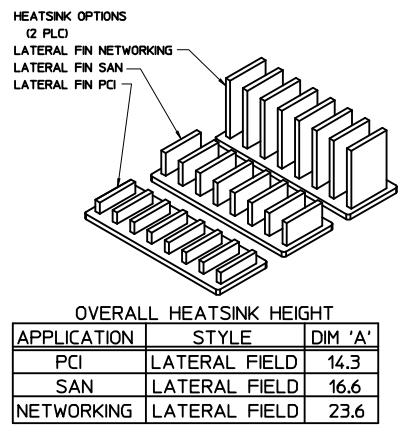
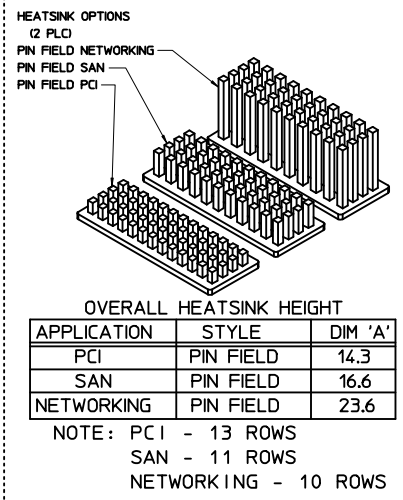
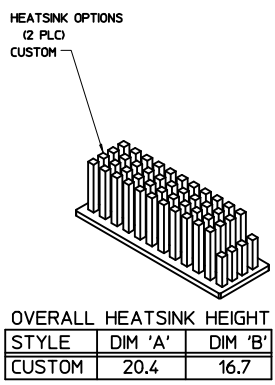
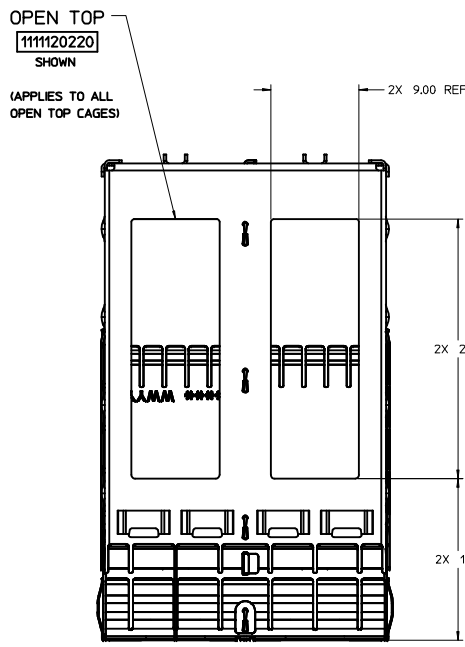
**NOTES:**

- MATERIAL:**  
CAGE: 0.25mm THICK COPPER ALLOY, NICKEL PLATED.  
SPRING FINGERS: 0.10mm THICK COPPER ALLOY, NICKEL PLATED.  
HEATSINK: ALUMINUM, NICKEL PLATED.  
HEATSINK SPRING CLIP: STAINLESS STEEL.
- PRESS FIT LEGS 3.05mm [.120 INCH] LONG
- PORTS ARE DESIGNED FOR SFP+ TRANSCEIVERS AND ARE COMPATIBLE WITH SFP TRANSCEIVERS. THE TOP SURFACE OF THE MODULE MUST BE FLAT (NO PRODUCT LABEL RECESS) AND THERMALLY CONDUCTIVE TO FUNCTION OPTIMALLY.
- WELD SPOT MAY SHOW SLIGHT MATERIAL DISCOLORATION.
- NO ROHS EXEMPTIONS.
- CUSTOM HEATSINKS AVAILABLE UPON REQUEST.

WEEK/YEAR DATE CODE TABLE	
WW	01 THRU 52 OR 53 EXAMPLE: 01 = FIRST WEEK OF YEAR 52 = LAST WEEK OF YEAR
YY	11, 12, 13 ETC. EXAMPLE: YEAR 2013 = 13

SEE REVISION SHEET IEC NO: CPG2015-5742 DRAWN BY: JERWIN CHYK: 2015/05/04 APPR: RCHEN08 REV: 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± mm	MM ONLY	4:1	METRIC	☉
	▽=0	3 PLACES ± INCH				
	▽=0	2 PLACES ± 0.13				
		1 PLACE ± 0.25				
		0 PLACE ± ---				
		ANGULAR ± ---				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			DRAWN BY: JERWIN	DATE: 2013/11/21	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS	
			CHECKED BY: GBARDELLA	DATE: 2013/11/21	molex	
			APPROVED BY: DATE		MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SD-11112-2220
					SIZE D	SHEET NO. 1 OF 8
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

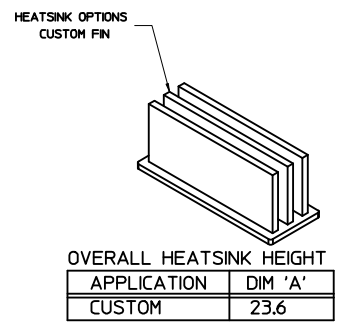
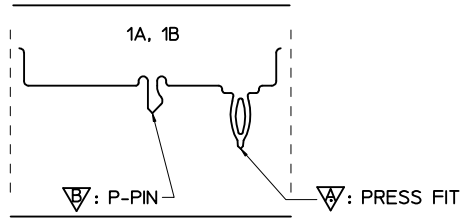
### CAGE ASSEMBLY OPTIONS



PN/DATE CODE TO BE PRINTED ON THE SIDE OF COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN, FOR 11112 SERIES CAGES

WEEK/YEAR DATE CODE TABLE	
WW	01 THRU 52 OR 53 EXAMPLE: 01 = FIRST WEEK OF YEAR 52 = LAST WEEK OF YEAR
YY	11, 12, 13 ETC. EXAMPLE: YEAR 2013 = 13

### REAR LEG OPTIONS (PER PORT)



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

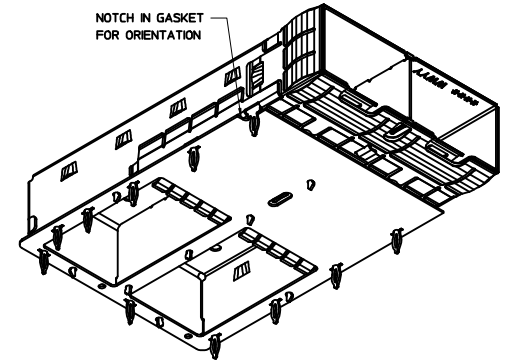
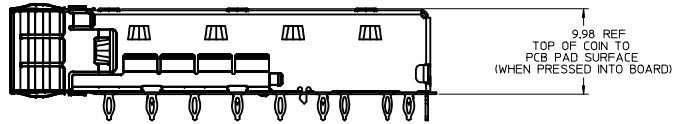
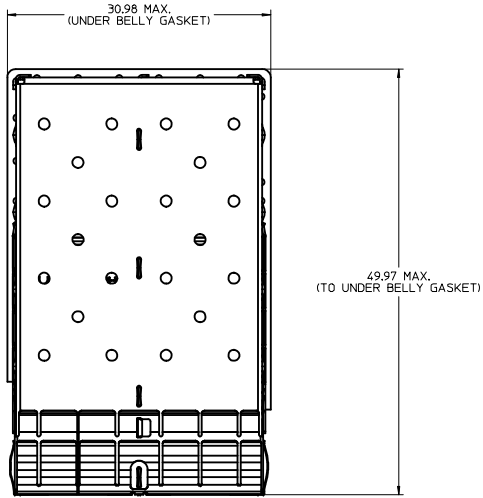
SEE REVISION SHEET EIC NO: CPG2015-5742 DRAWN BY: HJW/THSU CHYD: APPR:RCHEN08 2015/05/04 2015/08/26	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±--- ±--- 3 PLACES ±0.13 ±--- 2 PLACES ±0.25 ±--- 1 PLACE ±--- ±--- 0 PLACE ±--- ±--- ANGULAR ±--- DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY DRAWN BY: JERWIN DATE: 2013/11/21 CHECKED BY: GBARDELLA DATE: 2013/11/21 APPROVED BY: DATE:	SCALE: 3:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS molex	MATERIAL NO.: SEE SHEET 4	DOCUMENT NO.: SD-11112-2220	SHEET NO.: 2 OF 8
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
	SIZE D							
	SEE SHEET 4							

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

### OPTIONAL GEN 2 zSFP+ UNDER BELLY GASKET

1001130220

SHOWN

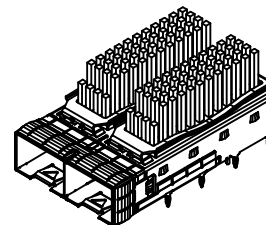
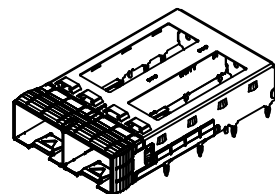
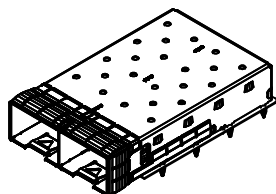
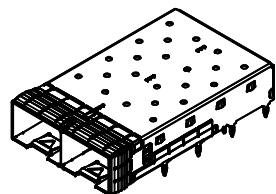


**NOTE:**  
1. UNDER BELLY GASKET IS UL94 V-0 RATED.

<b>SEE REVISION SHEET</b> EEC NO: CPG2015-5742 DRAWN BY: JERWIN CHYK: 2015/05/04 APPR: RCHEN08 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	∇=0 ∇=0 ∇=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- 0 PLACE ± --- ± ---	MM ONLY	3.5:1	METRIC	☉ THIRD ANGLE PROJECTION
	DESCRIPTION	ANGULAR ± --- DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: JERWIN DATE: 2013/11/21 CHECKED BY: GBARDELLA DATE: 2013/11/21 APPROVED BY:	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS		MATERIAL NO. SEE SHEET 4 DOCUMENT NO. SD-111112-2220
	REV		SIZE D	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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

PART NUMBER SELECTION

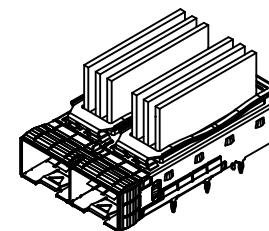
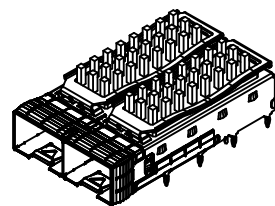
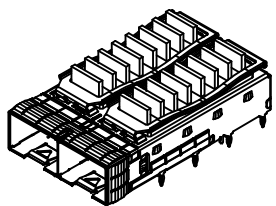
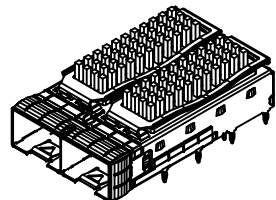


SFP+ CLOSED TOP BASE CAGE	
PART NO.	DESCRIPTION
747540220	SFP FOOTPRINT (STD B TO B), 5 WELD POINTS
747540222	SFP FOOTPRINT (STD B TO B), 16 WELD POINTS
747540247	SAME AS ABOVE BUT NO PN/DATE CODE PRINTED

zSFP+ GEN 2 CLOSED TOP	
PART NO.	DESCRIPTION
1001130220	

SFP+ OPEN TOP BASE CAGE FOR HEATSINK	
PART NO.	DESCRIPTION
1111120220	

SFP+ CUSTOM HEATSINK OPTION	
PART NO.	DESCRIPTION
1111120226	



SFP+ PIN FIELD HEATSINK OPTION	
PART NO.	APPLICATION
1111121220	PCI
1111122220	SAN
1111123220	NETWORKING

SFP+ LATERAL FIN HEATSINK OPTION	
PART NO.	APPLICATION
1111124220	PCI
1111125220	SAN
1111126220	NETWORKING

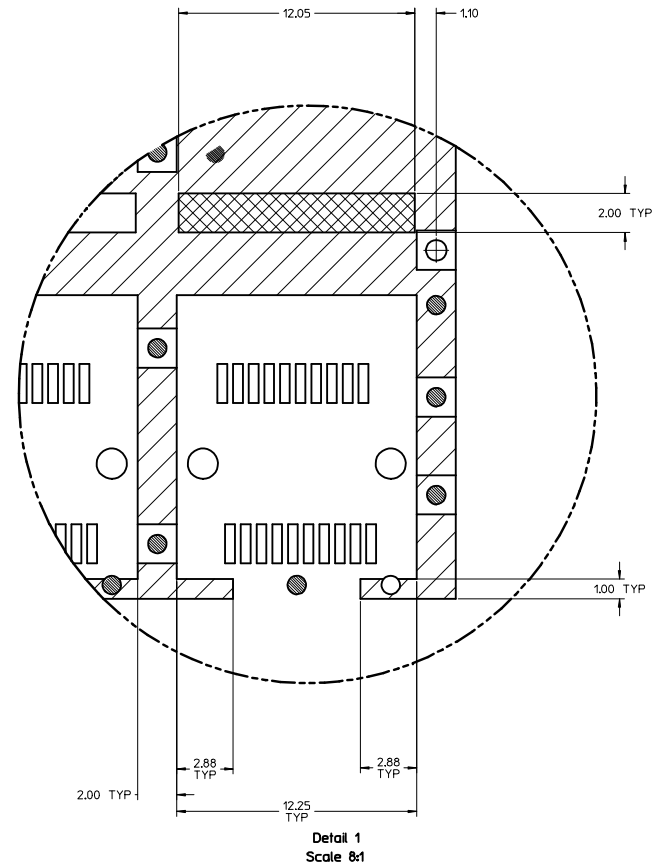
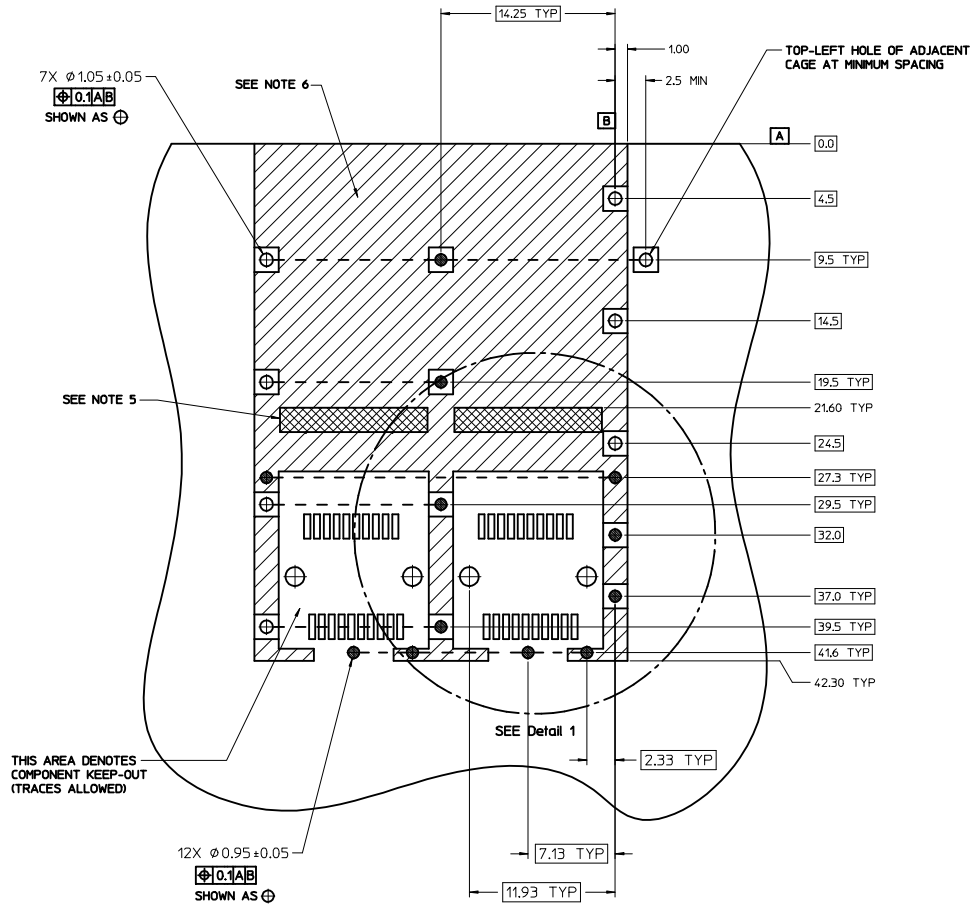
SFP+ LATERAL FIN HEATSINK OPTION	
PART NO.	APPLICATION
1111127220	PCI
1111128220	SAN
1111129220	NETWORKING

SFP+ CUSTOM FIN HEATSINK OPTION	
PART NO.	DESCRIPTION
1111126221	

NOTE: PCI - 13 ROWS  
 SAN - 11 ROWS  
 NETWORKING - 10 ROWS

SEE REVISION SHEET EC NO. CPC2015-5742 DRAWN:THSU CHKD:CHXC APPR:RCHEN08 2015/05/04 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	2:1	METRIC	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE	
	▽=0	3 PLACES ± --- ± ---	JERWIN	2013/11/21	SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS	
	2 PLACES ± 0.13 ± ---	CHECKED BY	DATE			
	1 PLACE ± 0.25 ± ---	GBARDELLA	2013/11/21			
	0 PLACE ± --- ± ---	APPROVED BY	DATE			
	ANGULAR ± ---	MATERIAL NO.	DOCUMENT NO.			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLES	SD-111112-2220			SHEET NO. 4 OF 8
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

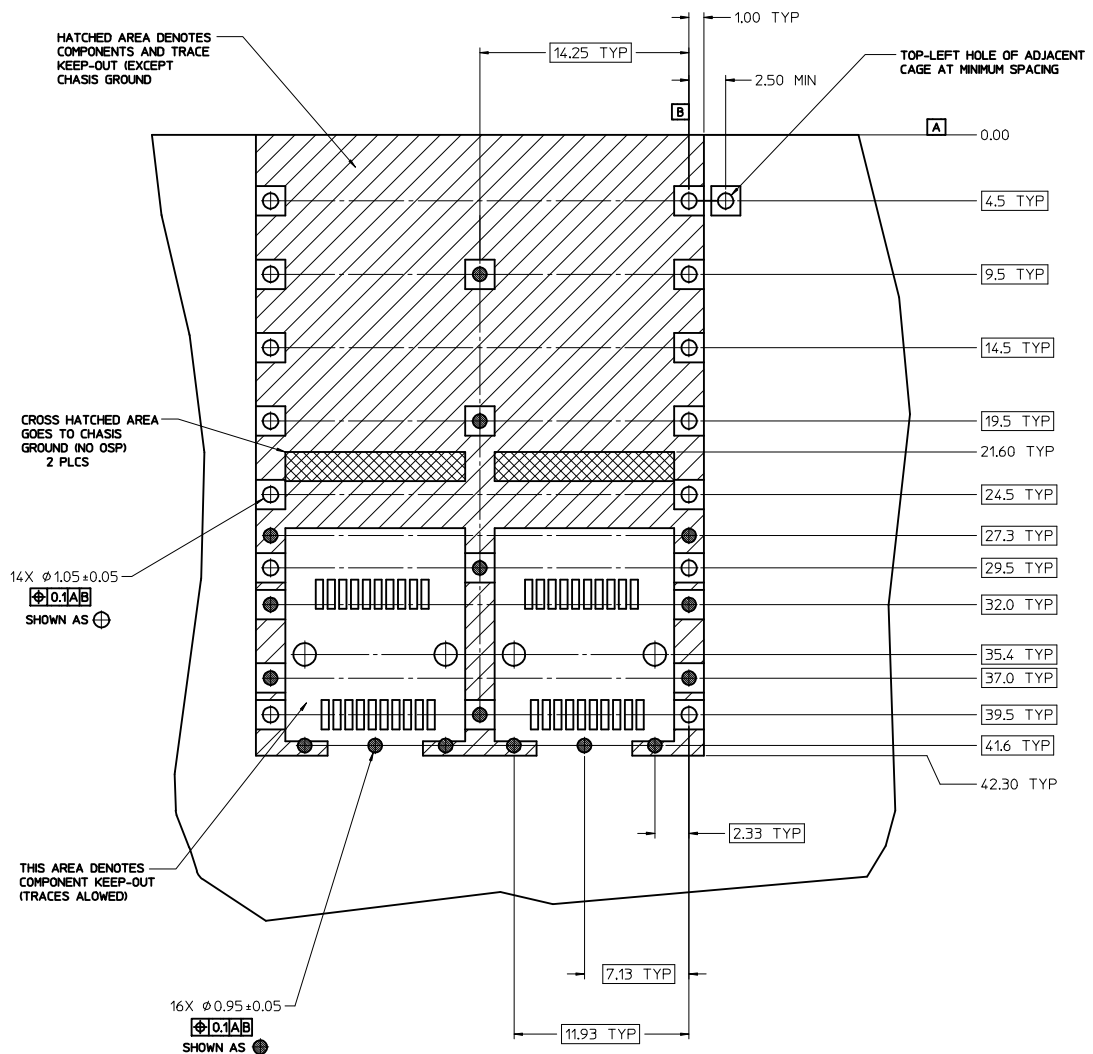
PCB LAYOUT - SINGLE SIDE ONLY



- 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 SFP+ MSA WILL ACCOMMODATE MOLEX CONNECTOR SERIES 74441 OR EQUIVALENT.
  - SPACING BETWEEN PORTS IS 14.25mm
  - CROSS-HATCHED AREA IS EXPOSED CHASSIS GROUND (NO OSP)
  - HATCHED AREA IS COMPONENT AND TRACE KEEP-OUT (EXCEPT CHASSIS GROUND)
  - 1.57mm [.062 INCH] MINIMUM PCB THICKNESS FOR SINGLE SIDED USE.

SEE REVISION SHEET IEC NO: CPG2015-5742 DRAWN BY: H CHYK: APPR: RCHEN08 DESCRIPTION: 2015/05/04 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	5:1	METRIC	☉
	▽=0	4 PLACES ± --- ± ---	DRAWN BY: JERWIN	DATE: 2013/11/21	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS	
	▽=0	3 PLACES ± --- ± ---	CHECKED BY: GBARDELLA	DATE: 2013/11/21	APPROVED BY: DATE	
	ANGULAR ± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SD-11112-2220	SHEET NO. 5 OF 8	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

# PCB LAYOUT FOR BELLY TO BELLY MOUNTING

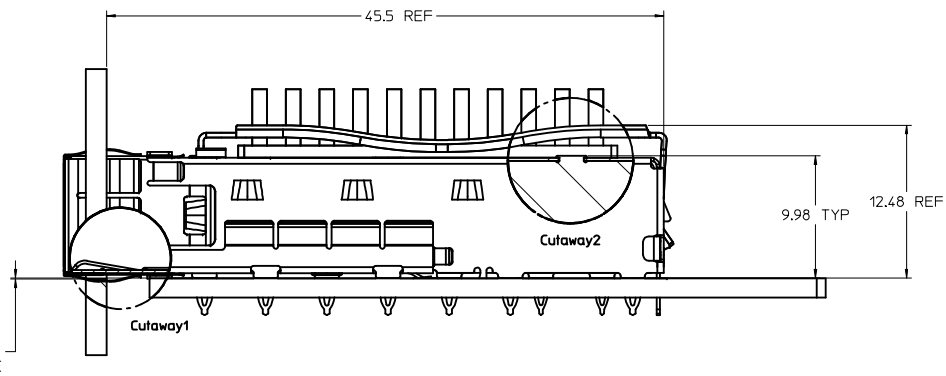
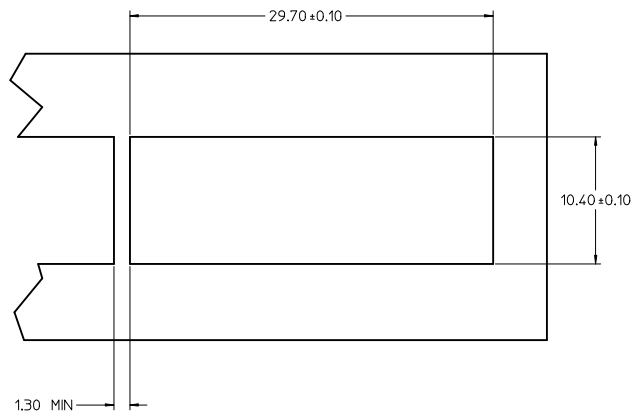


NOTE:  
SEE SHEET 5 FOR HOST  
CONNECTOR DETAIL

- 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 SFP+ MSA WILL ACCOMODATE MOLEX CONNECTOR SERIES 74441 OR EQUIVALENT.
  - SPACING BETWEEN PORTS IS 14.25mm
  - 3.00mm [1.18 INCH] MINIMUM PCB THICKNESS FOR BELLY TO BELLY USE.

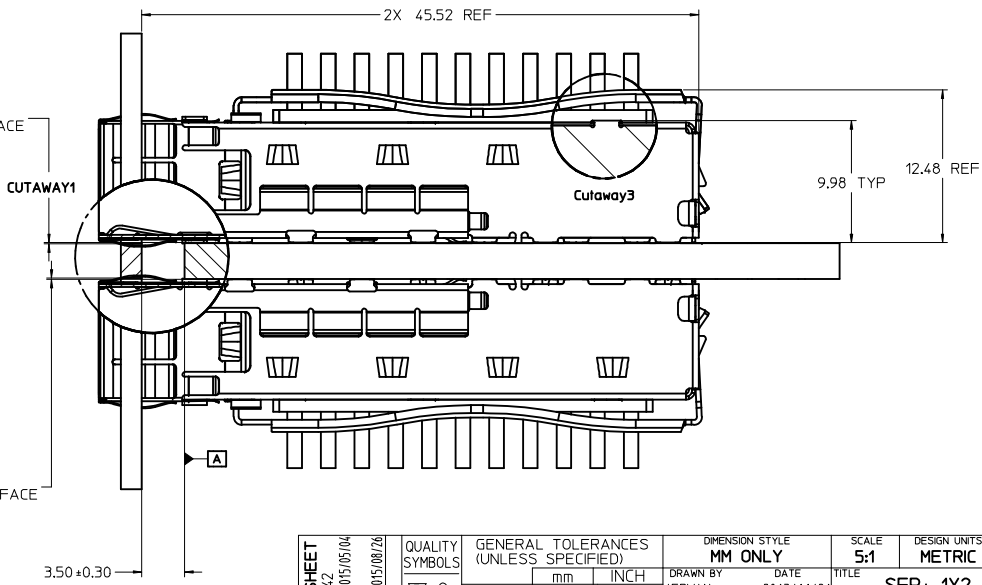
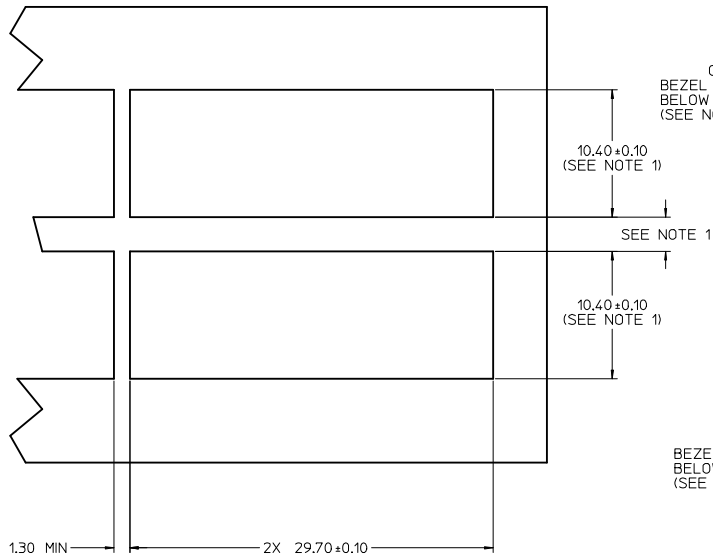
SEE REVISION SHEET IEC NO: CPG2015-5742 DRAWN BY: H CHYK: APPR:RCHEN08 2015/05/04 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	6:1	METRIC	☉
	▽=0	4 PLACES ± --- ± ---	DRAWN BY: JERWIN	DATE: 2013/11/21	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS	
	▽=0	3 PLACES ± --- ± ---	CHECKED BY: GBARDELLA	DATE: 2013/11/21		
		ANGULAR ± ---	MATERIAL NO.	DOCUMENT NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 4	SD-111112-2220		SHEET NO. 6 OF 8
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

BEZEL AND BOARD POSITION DIMENSIONS FOR SINGLE SIDE MOUNTING  
(SPRING FINGER)



0.09 ± 0.10  
BEZEL OPENING  
BELOW PCB PAD SURFACE

BEZEL AND BOARD POSITION DIMENSIONS FOR BELLY TO BELLY MOUNTING  
(SPRING FINGER)



0.09 ± 0.10  
BEZEL OPENING  
BELOW PCB PAD SURFACE  
(SEE NOTE 1)


0.09 ± 0.10  
BEZEL OPENING  
BELOW PCB PAD SURFACE  
(SEE NOTE 1)

NOTE:

1. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING SIZE AND LOCATION.
2. CAGE LEG STANDOFF WILL PIERCE BELLY GASKET WHEN PROPERLY PRESSED INTO PCB.

SEE REVISION SHEET IEC NO: CPG2015-5742 DRAWN BY: CHYK CHKD: APPR: RCHEN08 DATE: 2015/05/04 APPR: RCHEN08 DATE: 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0	4 PLACES ± mm	MM ONLY	5:1	METRIC	☉	
	▽=0	3 PLACES ± INCH					
	▽=0	2 PLACES ± 0.13					
		1 PLACE ± 0.25					
		0 PLACE ±					
		ANGULAR ±					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
			MATERIAL NO.	DOCUMENT NO.			
			SEE SHEET 4	SD-11112-2220			
						SHEET NO. 7 OF 8	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

DATE	REV	DESCRIPTION
2011/06/10	A	INITIAL RELEASE
2011/06/15	A1	SHEET 1: REMOVED HEATSINK OPENING REFERENCE DIMENSIONS AND WEEK 52 REFERENCE, SHEET 4: ADDED NOTES POINTING TO THE INNER WALL COINED OVER THE COVER.
2011/07/22	B	ADDED HOLES IN CAGE FOR LIGHTPIPES, MOVED DATE CODE, REVISED ROHS NOTE 5, CHANGED HEATSINK HEIGHT FROM 8.63 TO 6.5, TABULARIZED PCI, SAN, AND NETWORKING, AND ADDED HEATSINK HEIGHT WITH MODULE INSERTED.
2011/08/19	B1	UPDATED CAGE AND SPRING CLIP MODELS.
2012/10/25	C	SHEET 1: REMOVED HEATSINKS, AND ALL DIMS AND ANNOTATIONS RELATING TO THEM, FROM ALL VIEWS; REMOVED NOTE 6; REMOVED EXPLODED VIEW; REMOVED PART NUMBER TABLE; ADDED TITLE. NEW SHEET 2: ISO VIEWS OF CAGE WITH NO HEATSINKS AND VIEWS WITH EACH OF FOUR TYPES AND SIZES OF HEATSINK; ANNOTATIONS ON EACH VIEW INDICATING EACH HEATSINK TYPE AND SIZE, RIGHT SIDE VIEW WITH DIM OF HEATSINK HEIGHT; TABLE UNDER EACH VIEW WITH HEATSINK SIZES AND DIMS; NOTE 1; SHEET TITLE. NEW SHEET 3: ISO VIEWS OF CAGE WITH NO HEATSINKS AND VIEWS WITH EACH OF FOUR DIFFERENT TYPES OF HEATSINK; TABLES UNDER EACH VIEW WITH PART NUMBERS OF EACH SIZE; SHEET TITLE.
2014/02/07	D	SHEET 1: REVISED ALL BASE CAGE DETAILS AND VIEWS FROM 111112-0232 TO 74754-0220. REMOVED INSERTION FORCE INTO PCB FROM NOTE 2. REVISED NOTE 4: "WAS" WELD SPOT WILL SHOW SLIGHT MATERIAL DISCOLORATION. "NOW READS" WELD SPOT MAY SHOW SLIGHT MATERIAL DISCOLORATION. SHEET 2: REVISED ALL HEAT SINK CAGE ASSEMBLY OPTIONS, ADDED OPEN TOP VIEW WITH DIMENSIONS, AND REAR LEG OPTION VIEW. ADDED SHEET 3 WITH ZSFP+ OPTIONS SHEET 4: ADDED PART NUMBERS 747540220, 1001130220. UPDATED TITLE BLOCK.
2014/08/13	E	SHEET 1: ADDED "REF" TO DIM 10.85 AND 28.25. ADDED 14.0 ±0.1. MOVED "MINIMUM PCB THICKNESS" NOTES FROM SHEET 1 TO SHEETS 5 AND 6.
2014/08/21	F	SHEET 1: ADDED 747540247 NO NEED PRINTED @C6. SHEET 1: ADDED P/N AND DATE CODE PRINTED NOTE @D11. SHEET 4: ADDED P/N 747540247 IN TABLE @I18.
2015/02/26	G	SHEET 3: ADDED NOTE 1 "UNDER BELLY GASKET IS UL94 V-0 RATED." SHEET 4: ADDED "5 WELD POINTS" INTO 747540220 @I17. SHEET 4: ADDED P/N 747540222 @I17. SHEET 7: ADDED NOTE 2 "CAGE LEG STANDOFF WILL PIERCE BELLY GASKET WHEN PROPERLY PRESSED INTO PCB."
2015/08/26	H	SHEET 2: E3 : ADDED NEW CUSTOM FIN HEATSINK ISOVIEW SHEET 4: E3 : ADDED PART NO. 111112-6221 ISOVIEW MODIFIED PCB LAYOUT PER SFF-8433 SHEET 5: K19 : CHANGED TURE POSITION OF PCB HOLES FORM 0.05 TO 0.1 D17 : CHANGED TURE POSITION OF PCB HOLES FORM 0.05 TO 0.1 SHEET 6: G19 : CHANGED TURE POSITION OF PCB HOLES FORM 0.05 TO 0.1 B18 : CHANGED TURE POSITION OF PCB HOLES FORM 0.05 TO 0.1

<b>SEE REVISION SHEET</b> IEC NO: CPG2015-5742 DRAWN BY: H CHYK: 2015/05/04 APPROV: 2015/08/26 APPR: RCHEN08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	2:1	METRIC	☉
	▽=0	4 PLACES ±--- ±---	DRAWN BY: JERWIN DATE: 2013/11/21	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS		
	▽=0	3 PLACES ±--- ±---	CHECKED BY: GBARDELLA DATE: 2013/11/21			
	2 PLACES ±0.13 ±---	1 PLACE ±0.25 ±---	APPROVED BY: DATE:	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	0 PLACE ±--- ±---	ANGULAR ±---°		SEE SHEET 4	SD-11112-2220	8 OF 8
		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		