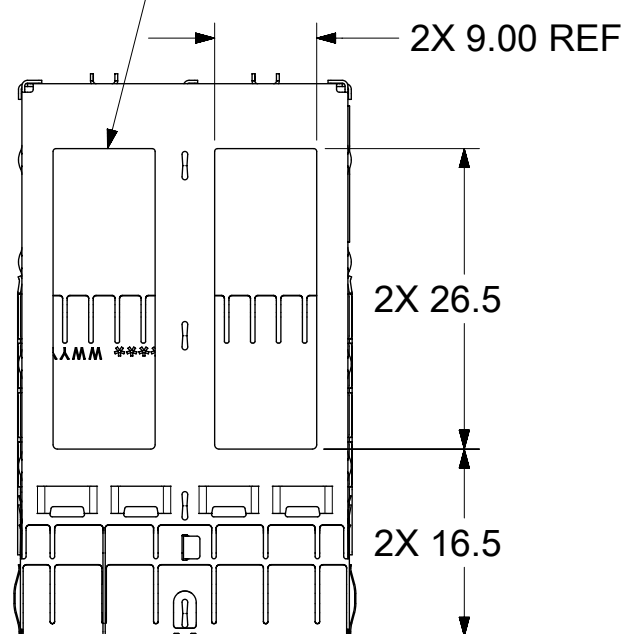


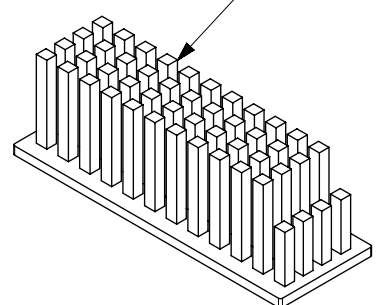


# CAGE ASSEMBLY OPTIONS

OPEN TOP  
1111120220  
SHOWN  
(APPLIES TO ALL  
OPEN TOP CAGES)



HEATSINK OPTIONS  
(2 PLC)  
CUSTOM

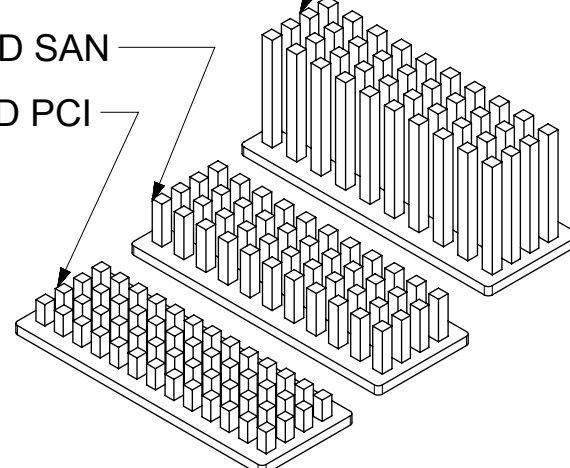


OVERALL HEATSINK HEIGHT

STYLE	DIM 'A'	DIM 'B'
CUSTOM	20.4	16.7

HEATSINK OPTIONS  
(2 PLC)

PIN FIELD NETWORKING  
PIN FIELD SAN  
PIN FIELD PCI



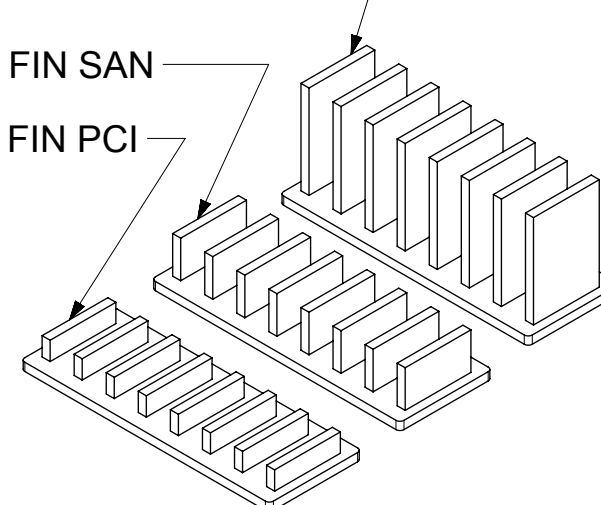
OVERALL HEATSINK HEIGHT

APPLICATION	STYLE	DIM 'A'
PCI	PIN FIELD	14.3
SAN	PIN FIELD	16.6
NETWORKING	PIN FIELD	23.6

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

HEATSINK OPTIONS  
(2 PLC)

LATERAL FIN NETWORKING  
LATERAL FIN SAN  
LATERAL FIN PCI

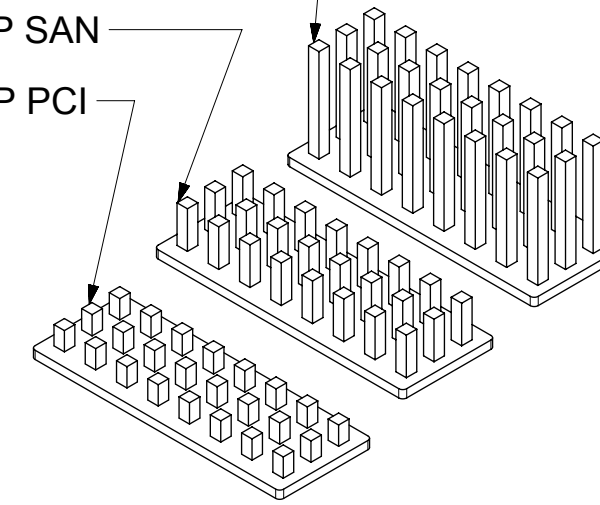


OVERALL HEATSINK HEIGHT

APPLICATION	STYLE	DIM 'A'
PCI	LATERAL FIELD	14.3
SAN	LATERAL FIELD	16.6
NETWORKING	LATERAL FIELD	23.6

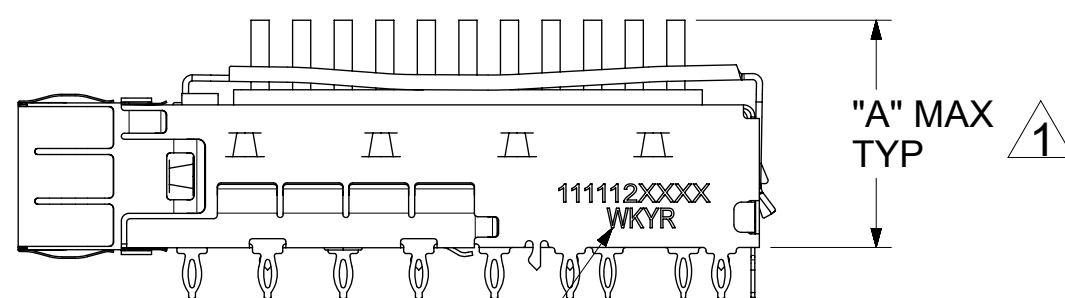
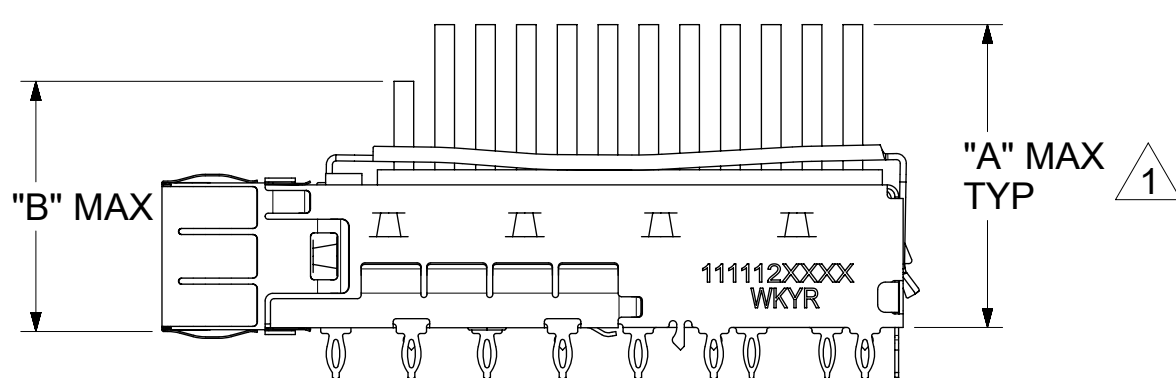
HEATSINK OPTIONS  
(2 PLC)

WIDE GAP NETWORKING  
WIDE GAP SAN  
WIDE GAP PCI



OVERALL HEATSINK HEIGHT

APPLICATION	STYLE	DIM 'A'
PCI	WIDE GAP PIN	14.3
SAN	WIDE GAP PIN	16.6
NETWORKING	WIDE GAP PIN	23.6



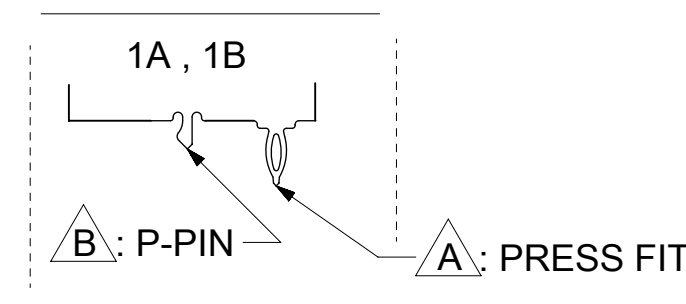
PN/DATE CODE TO BE PRINTED ON THE SIDE OF  
COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN.  
FOR 111112 SERIES CAGES

WEEK/YEAR DATE CODE TABLE

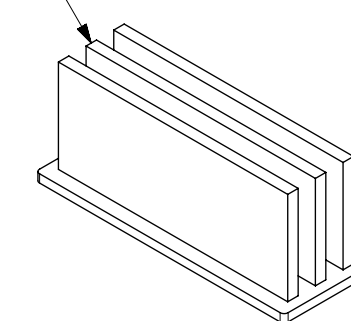
WW	01 THRU 52 OR 53	EXAMPLE: 01 = FIRST WEEK OF YEAR 52 = LAST WEEK OF YEAR
YY	16, 17, 18 ETC.	EXAMPLE: YEAR 2016 = 16

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

REAR LEG OPTIONS  
(PER PORT)



HEATSINK OPTIONS  
CUSTOM FIN

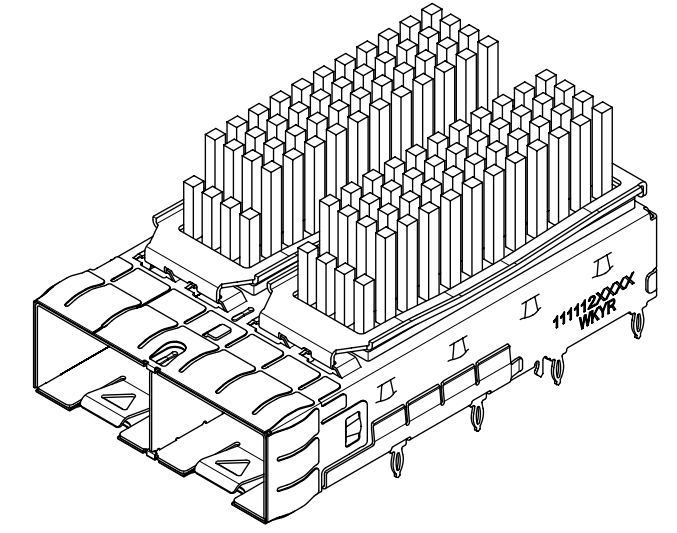
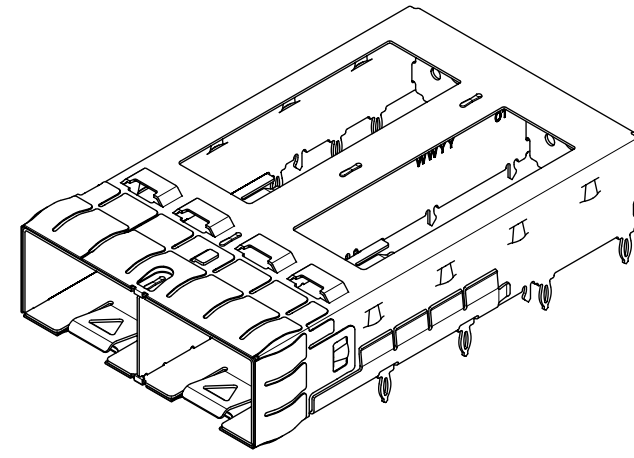
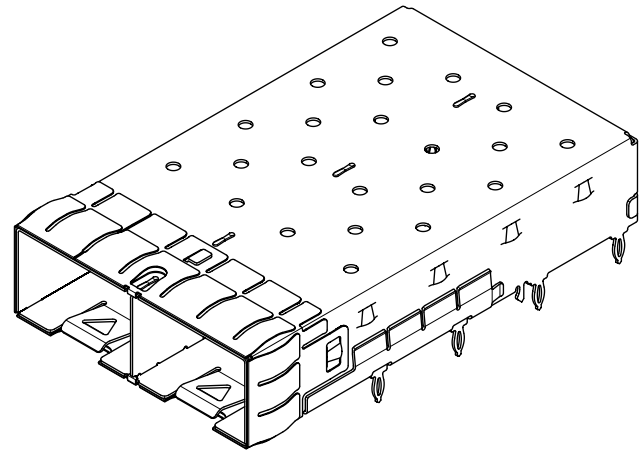


OVERALL HEATSINK HEIGHT

APPLICATION	DIM 'A'
CUSTOM	23.6

QUALITY SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS		SCALE
	MM	1.5:1			
▽ = 0	SEE REVISION TABLE EC NO: 111626 DRWN: SJLG CHKD: DSUN15 REV: APPR: RCHEN08 DATE: 2016/12/15 DATE: 2016/12/21 DATE: 2016/12/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN BY	DATE
▽ = 0		ANGULAR TOL ± 1.0 °		MKEMPEGOWDA	2016/04/13
▽ = 0		4 PLACES ±		CHKD BY	DATE
▽ = 0		3 PLACES ±		DSUN15	2016/07/31
▽ = 0		2 PLACES ± 0.13		APPR BY	DATE
▽ = 0		1 PLACE ± 0.25		RCHEN08	2016/08/04
▽ = 0	0 PLACES ±		DRAWING SIZE	THIRD ANGLE PROJECTION	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		C		
PRODUCT CUSTOMER DRAWING SERIES: 111112 MATERIAL NUMBER: SEE SHEET 3 CUSTOMER:			DOCUMENT NUMBER: 1111122220 DOC TYPE: PSD DOC PART: ASY SHEET NUMBER: 2 OF 7		

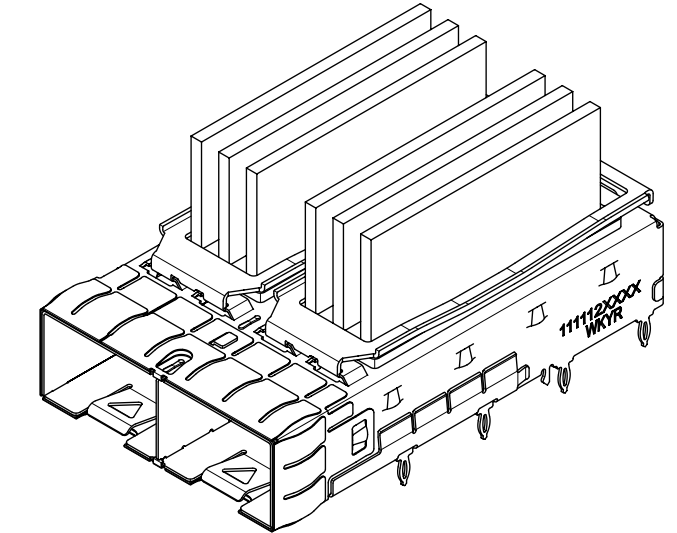
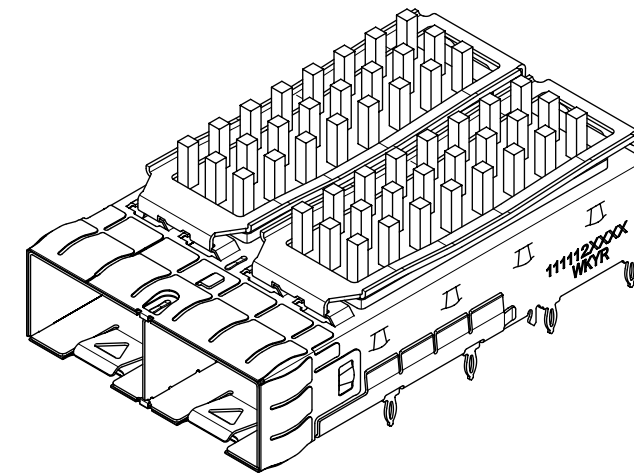
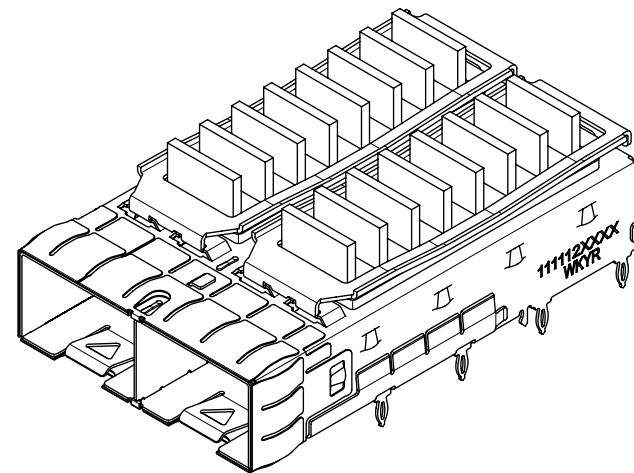
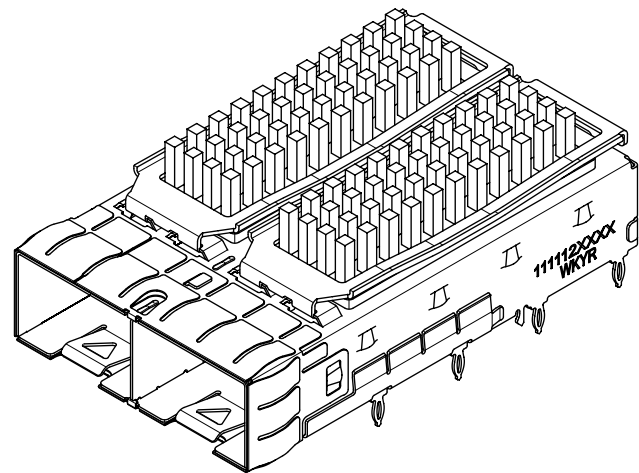
# PART NUMBER SELECTION



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

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

SFP+ CUSTOM HEATSINK OPTION	
PART NO.	
	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

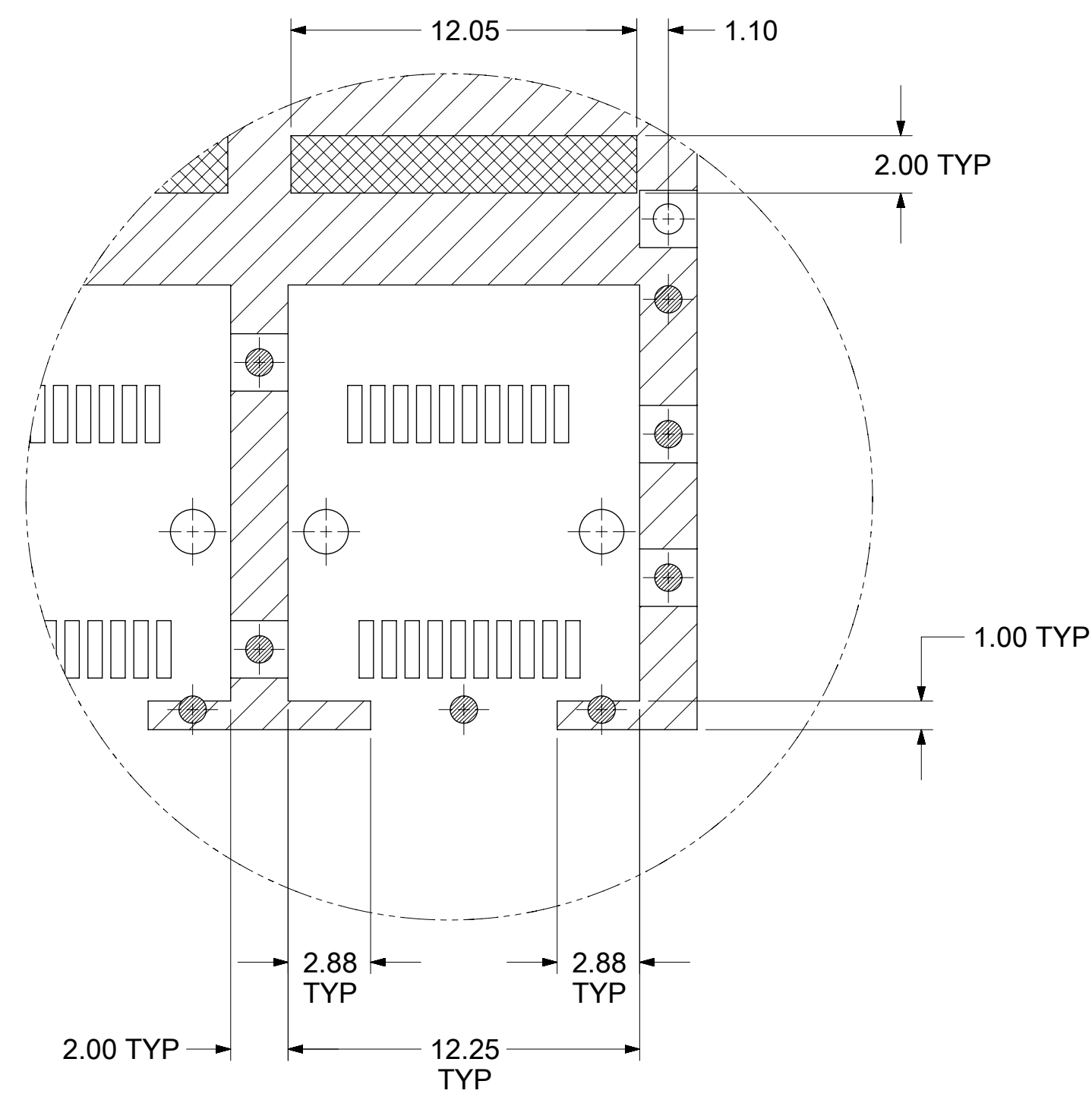
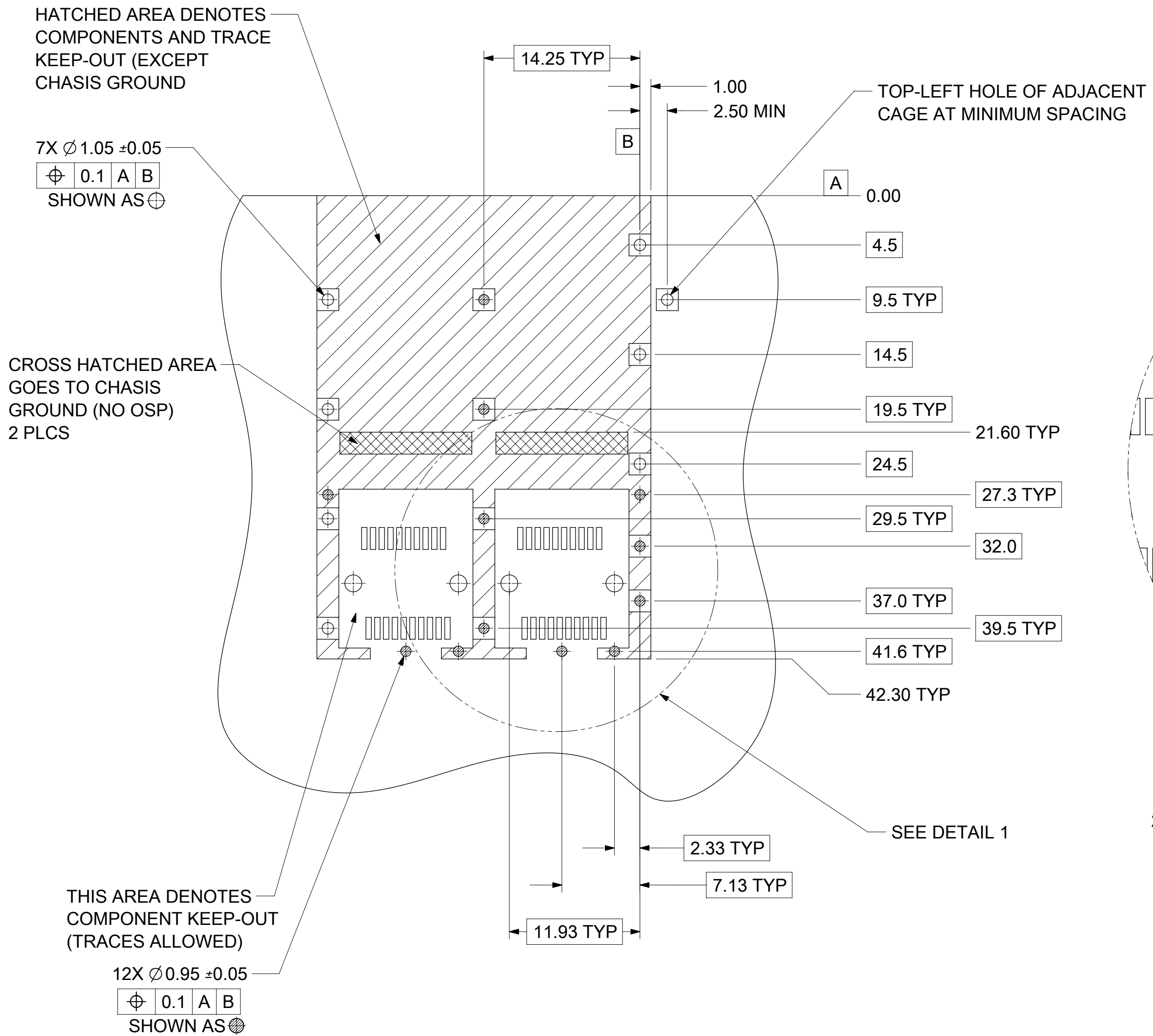
SFP+ LATERAL FIN HEATSINK OPTION	
PART NO.	APPLICATION
1111127220	PCI
1111128220	SAN
1111129220	NETWORKING

SFP+ CUSTOM FIN HEATSINK OPTION	
PART NO.	
	1111126221

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

QUALITY SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
	SEE REVISION TABLE EC NO: 111626 DRWN: SJLG CHKD: DSUN15 REV: APPR: RCHEN08		2016/12/15 2016/12/21 2016/12/21		GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.13 1 PLACE ± 0.25 0 PLACES ±			DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13						
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: C		THIRD ANGLE PROJECTION		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04		PRODUCT CUSTOMER DRAWING					
	SERIES: 111112		MATERIAL NUMBER: SEE SHEET 3		CUSTOMER:		DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04			
	DOCUMENT NUMBER: 1111122220		DOC TYPE: PSD		DOC PART: ASY		SHEET NUMBER: 3 OF 7		DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04	
	RELEASE STATUS: P1		RELEASE DATE: 04.08.2016		03:01:58		DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04		DIMENSION UNITS: MM SCALE: 1.25:1	
	DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04		DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04	
	DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04		DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04	
	DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04		DIMENSION UNITS: MM SCALE: 1.25:1		DRWN BY: MKEMPEGOWDA DATE: 2016/04/13		CHKD BY: DSUN15 DATE: 2016/07/31		APPR BY: RCHEN08 DATE: 2016/08/04	
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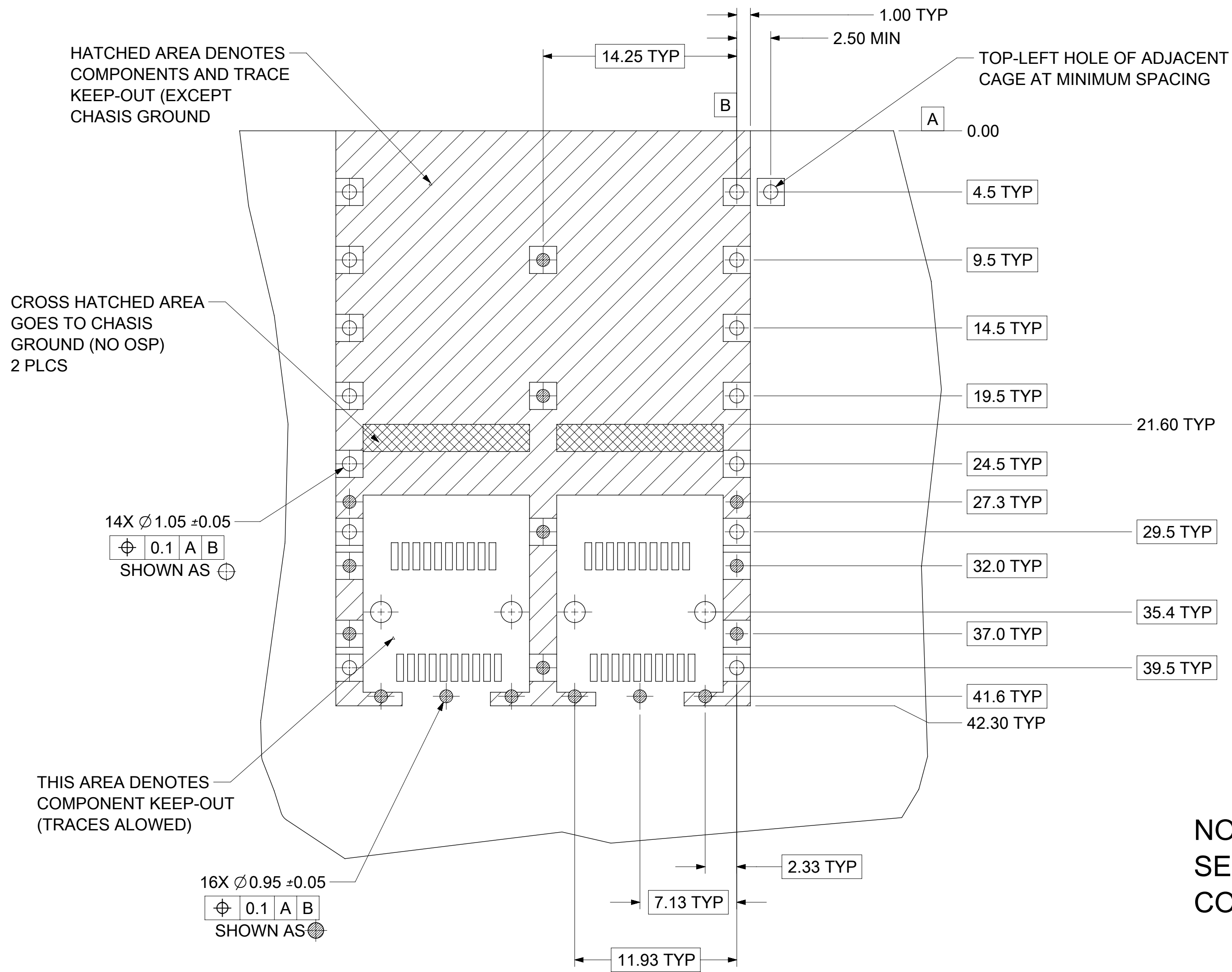
# PCB LAYOUT - SINGLE SIDE ONLY



- 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 SFP+ MSA WILL ACCOMODATE MOLEX CONNECTOR SERIES 74441 OR EQUIVALENT.
  4. SPACING BETWEEN PORTS IS 14.25mm
  5. 1.57mm MINIMUM PCB THICKNESS FOR SINGLE SIDED USE.

QUALITY SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
▽ = 0	▽ = 0	SEE REVISION TABLE EC NO: 111626 DRWN: SJLG CHKD: DSUN15 REV: APPR: RCHEN08 DATE: 2016/12/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS
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▽ = 0	▽ = 0		4 PLACES ±	3 PLACES ±	MM
▽ = 0	▽ = 0		2 PLACES ± 0.13	1 PLACE ± 0.25	1:1
⊗ = 0	⊗ = 0		0 PLACES ±	DRWN BY DATE	
■ = 0	■ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MKEMPEGOWDA 2016/04/13
▽ = 0	▽ = 0	DRWN BY DATE		CHKD BY DATE	
▽ = 0	▽ = 0	RCHEN08 2016/08/04		DSUN15 2016/07/31	
▽ = 0	▽ = 0	APPR BY DATE		APPR BY DATE	
▽ = 0	▽ = 0	RCHEN08 2016/08/04		RCHEN08 2016/08/04	
▽ = 0	▽ = 0	DRAWING SIZE		THIRD ANGLE PROJECTION	
▽ = 0	▽ = 0	C			
RELEASE STATUS		P1		RELEASE DATE	
04.08.2016		03:01:58			
SERIES		MATERIAL NUMBER		CUSTOMER	
111112		SEE SHEET 3			
DOCUMENT NUMBER		DOC TYPE		DOC PART	
111122220		PSD		ASY	
SHEET NUMBER		SHEET NUMBER		SHEET NUMBER	
4 OF 7		4 OF 7		4 OF 7	

# PCB LAYOUT FOR BELLY TO BELLY MOUNTING



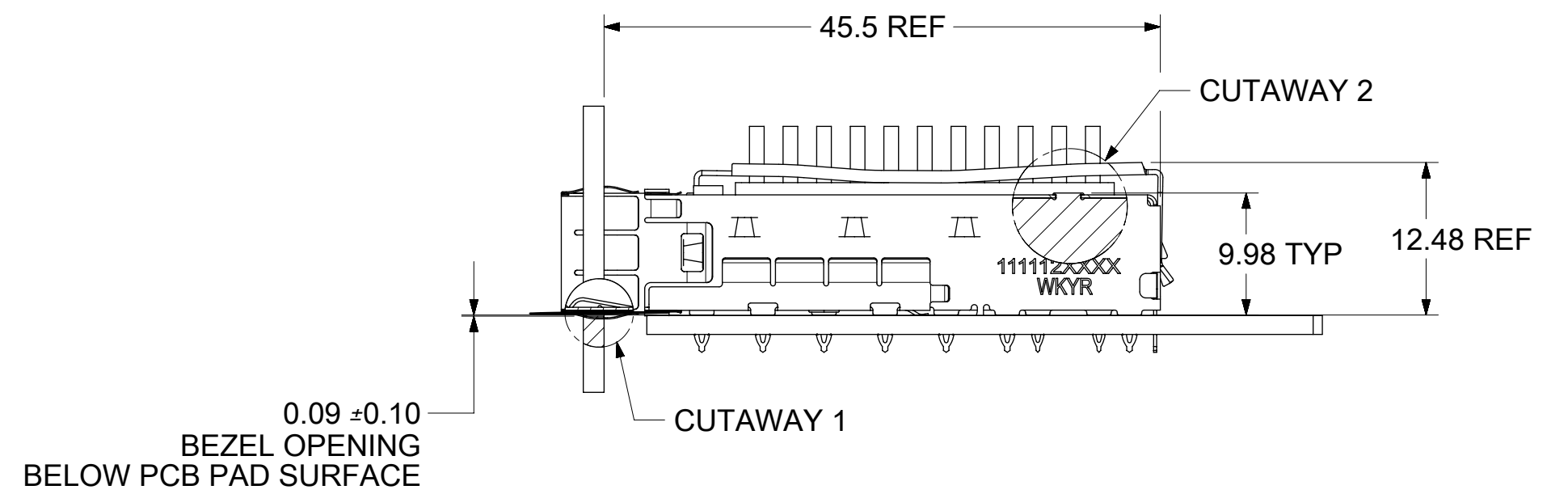
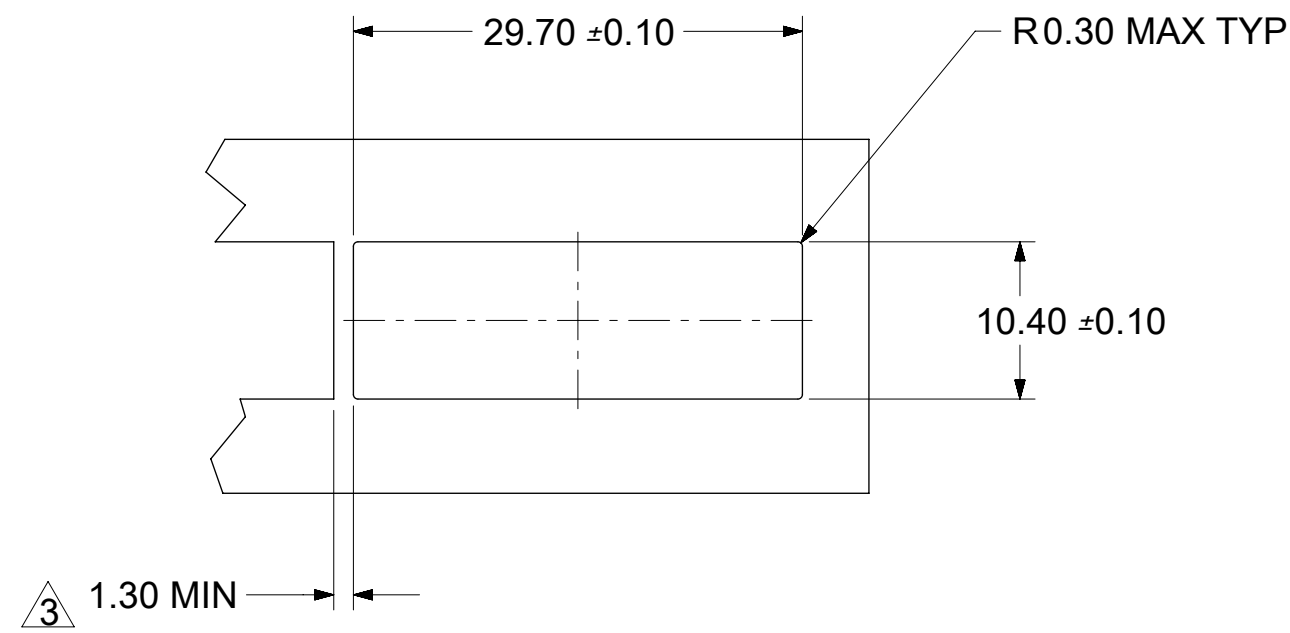
**NOTE:**  
SEE SHEET 4 FOR HOST CONNECTOR DETAIL

**NOTES:**

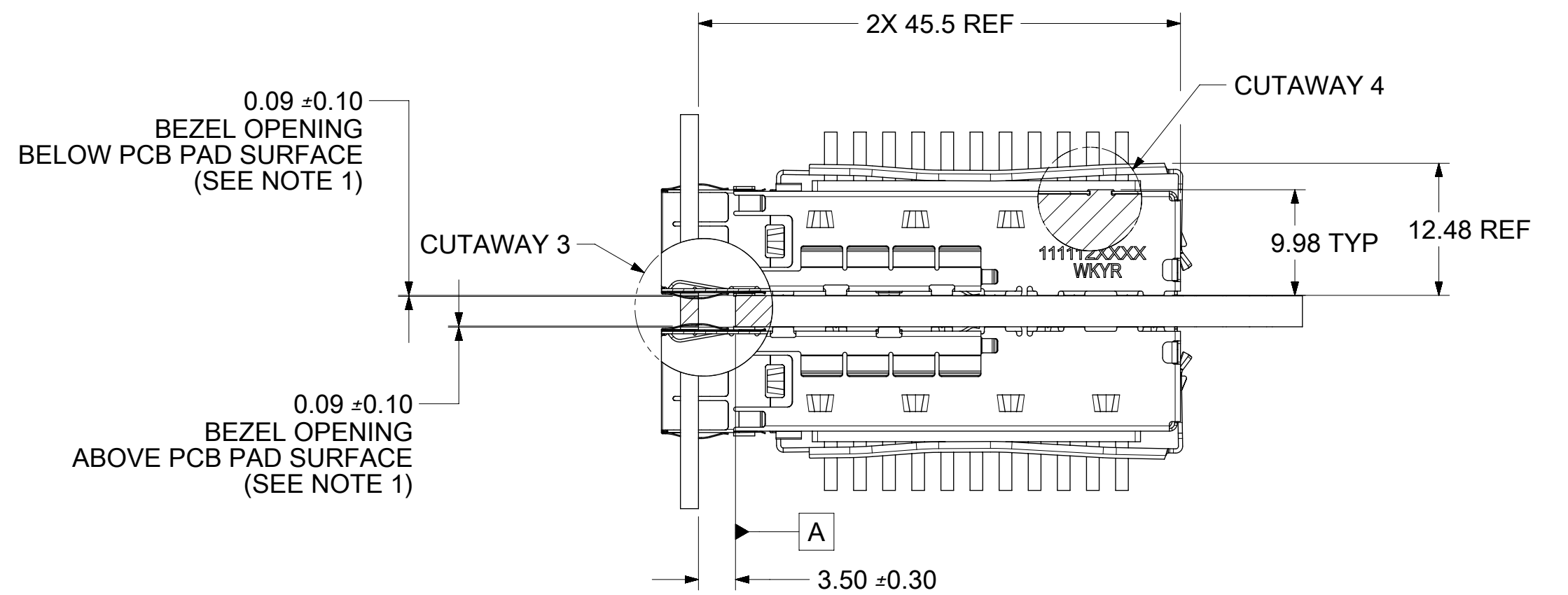
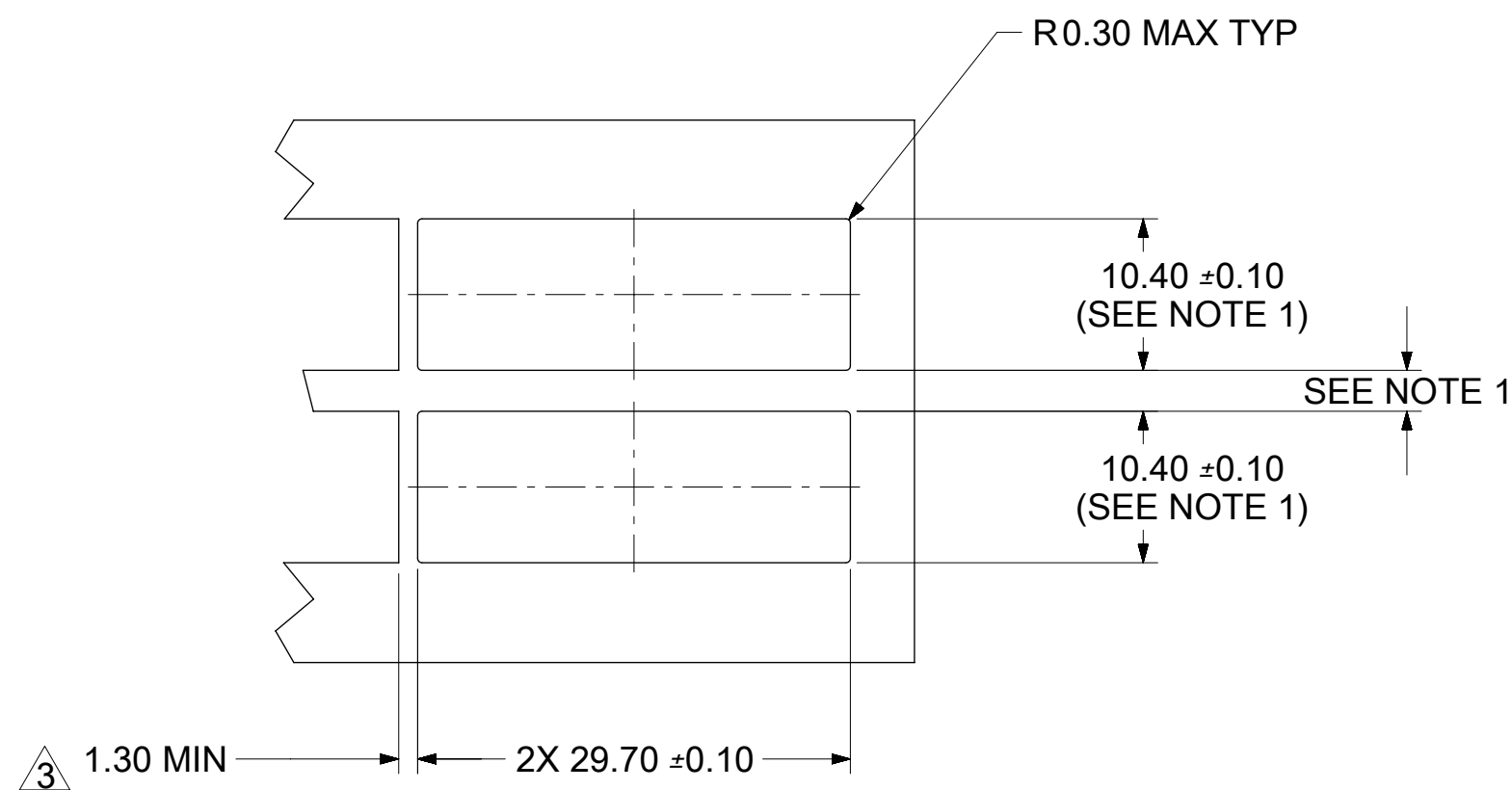
1. PADS AND VIAS CONNECT TO CHASSIS GROUND  
RECOMMEND PADS TO BE 2.00mm SQUARE
2. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN)
3. CONNECTOR PAD LAYOUT PER SFP+ MSA WILL ACCOMODATE MOLEX CONNECTOR SERIES 74441 OR EQUIVALENT.
4. SPACING BETWEEN PORTS IS 14.25mm
5. 3.00mm [.118 INCH] MINIMUM PCB THICKNESS FOR BELLY TO BELLY USE.

QUALITY SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
$\nabla$ = 0	SEE REVISION TABLE EC NO: 111626 DRWN: SJLKG CHKD: DSUN15 REV / APPR: RCHEN08 2016/12/15 2016/12/21 2016/12/21	GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION UNITS		SCALE					
$\nabla$ = 0		ANGULAR TOL $\pm 1.0^\circ$				MM		4:1					
$\nabla$ = 0		4 PLACES $\pm$		DRWN BY		DATE		MKEMPEGOWDA 2016/04/13					
$\nabla$ = 0		3 PLACES $\pm$		CHKD BY		DATE							
$\nabla$ = 0		2 PLACES $\pm 0.13$		DSUN15		2016/07/31		PRODUCT CUSTOMER DRAWING					
$\nabla$ = 0		1 PLACE $\pm 0.25$		APPR BY		DATE							
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$\blacksquare$ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRAWING SIZE						THIRD ANGLE PROJECTION	
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								1111222220		PSD ASY 5 OF 7			

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




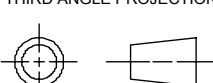
## BEZEL AND BOARD POSITION DIMENSIONS FOR BELLY TO BELLY MOUNTING (SPRING FINGER)



- 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.
  3. THIS DIMENSION IS FOR REF ONLY. USER CAN MODIFY IT DEPENDS ON APPLICATION. HOLE OF ADJACENT CAGE ON PCB LAYOUT VARIES ON MODIFICATION.

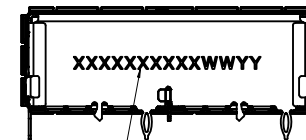
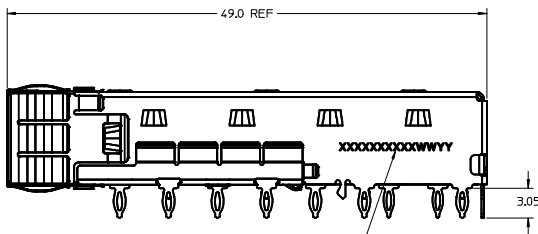
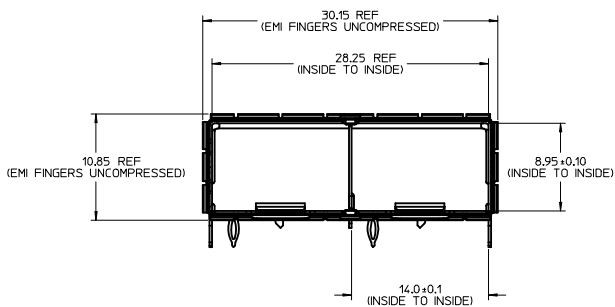
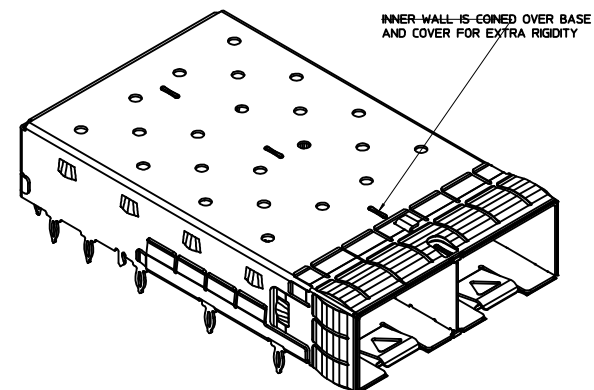
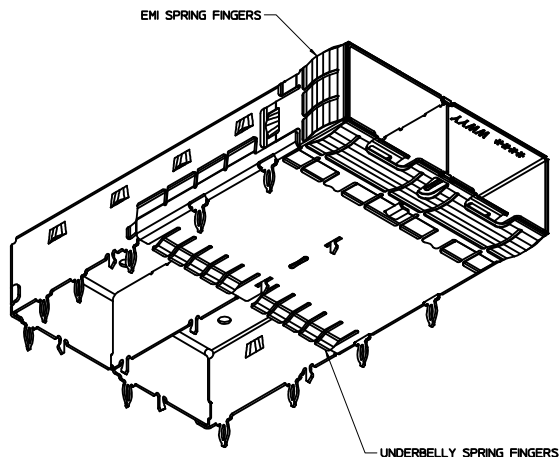
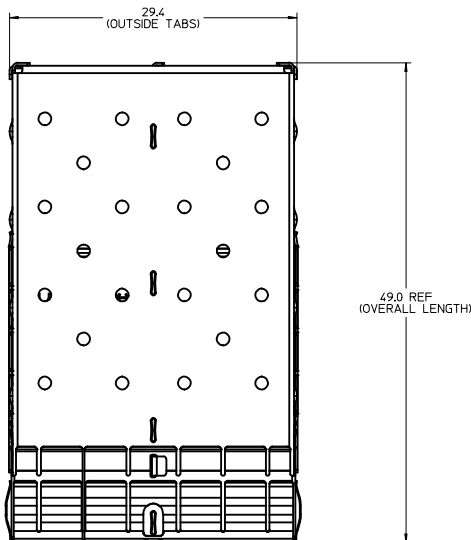
QUALITY SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS		SCALE		<b>molex</b> <sup>®</sup>	
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▽ = 0	▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		MKEMPEGOWDA		2016/04/13		SFP+ 1X2 CAGE, 3.05 MM PRESS FIT, HEAT SINK, EMI SPRING FINGERS	
▽ = 0	▽ = 0	ANGULAR TOL ± 1.0 °		CHKD BY		DATE			
▽ = 0	▽ = 0	4 PLACES ±		DSUN15		2016/07/31		PRODUCT CUSTOMER DRAWING	
▽ = 0	▽ = 0	3 PLACES ±		RCHEN08		2016/08/04			
▽ = 0	▽ = 0	2 PLACES ± 0.13		DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES: 111112 MATERIAL NUMBER: SEE SHEET 3 CUSTOMER: 1111122220	
▽ = 0	▽ = 0	1 PLACE ± 0.25		C		C			
▽ = 0	▽ = 0	0 PLACES ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		C		DOCUMENT NUMBER: 1111122220 DOC TYPE: PSD DOC PART: ASY SHEET NUMBER: 6 OF 7	
□ = 0	■ = 0	SEE REVISION TABLE		EC NO: 111626 DRWN: SJ/KG CHKD: DSUN15 APPR: RCHEN08		J2			

REV	DATE	DESCRIPTION
A	2011/06/10	INITIAL RELEASE
A1	2011/06/15	SHEET 1: REMOVED HEATSINK OPENING REFERENCE DIMENSIONS AND WEEK 52 REFERENCE; SHEET 4: ADDED NOTES POINTING TO THE INNER WALL COINED OVER THE COVER.
B	2011/07/22	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.
B1	2011/08/19	UPDATED CAGE AND SPRING CLIP MODELS.
C	2012/10/25	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.
D	2014/02/07	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. SHEET 3: ADDED SHEET 3 WITH ZSFP+ OPTIONS SHEET 4: ADDED PART NUMBERS 747540220, 1001130220. UPDATED TITLE BLOCK.
E	2014/08/13	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.
F	2014/08/21	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.
G	2015/02/26	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."
H	2015/08/26	SHEET 2: E3 : ADDED NEW CUSTOM FIN HEATSINK ISO VIEW SHEET 4: E3 : ADDED PART NO. 111112-6221 ISO VIEW 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
J	2016/06/28	REMASTERED FROM SD-111112-2220 REV H TO "1111122220 REV_J" NX SHEET 2: E10: CHANGED THE PN /DATE CODE STYLE FROM 1 ROW TO 2 ROWS SHEET 7: A19:ADDED A NOTE "THIS DIM IS FOR REF ONLY. USER CAN MODIFY IT DEPENDS ON APPLICATION.HOLE OF ADJACENT CAGE ON PCB LAYOUT VARIES BASED ON MODIFICATION." SEPARATED ZSFP+ SERIES TO 1001130220 PSD ASY
J2	2016/12/16	SHEET 4/5: CORRECTED TYPO TO UPDATE PCB VIEW

QUALITY SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
▽ = 0	SEE REVISION TABLE EC NO: 111626 DRWN: SJLG CHKD: DSUN15 REV APPR: RCHEN08 2016/12/15 2016/12/21 2016/12/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE						
▽ = 0		ANGULAR TOL ± 1.0 °		MM	1:1						
▽ = 0		4 PLACES ±		DRWN BY	DATE	SFP+ 1X2 CAGE, 3.05 MM PRESS FIT, HEAT SINK, EMI SPRING FINGERS					
▽ = 0		3 PLACES ±		MKEMPEGOWDA	2016/04/13						
▽ = 0		2 PLACES ± 0.13		CHKD BY	DATE	PRODUCT CUSTOMER DRAWING					
▽ = 0		1 PLACE ± 0.25		DSUN15	2016/07/31						
□ = 0		0 PLACES ±		APPR BY	DATE	SERIES MATERIAL NUMBER CUSTOMER 111112 SEE SHEET 3					
■ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		RCHEN08	2016/08/04						
▽ = 0		J2	DRAWING SIZE	THIRD ANGLE PROJECTION	DOCUMENT NUMBER		DOC TYPE		DOC PART	SHEET NUMBER	
			C		1111122220	PSD	ASY	7 OF 7			

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:

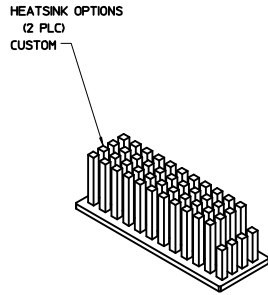
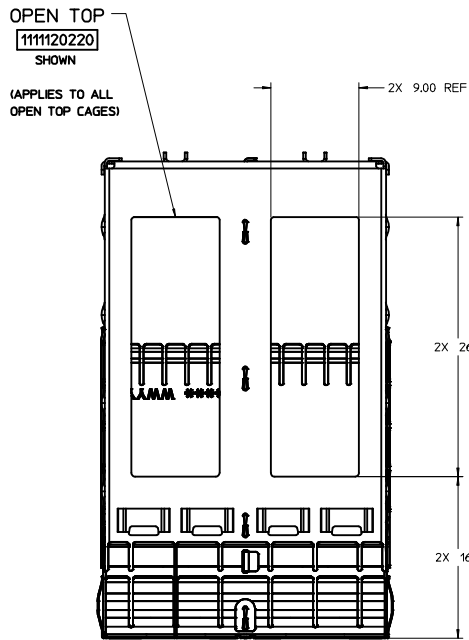
- MATERIAL:  
CAGE: 0.25mm THICK COPPER ALLOY, NICKEL PLATED.  
SPRING FINGERS: 0.10mm THICK COPPER ALLOY, NICKEL PLATED.  
HEATSINK: ALUMINUM, NICKEL PLATED.  
HEATSINK SPRING CLIP: STAINLESS STEEL.
- PRESS FIT LEGS 3.05mm (.120 INCH) LONG
- PORTS ARE DESIGNED FOR SFP+ TRANSCEIVERS AND ARE COMPATIBLE 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: HJ CHYK: APPR:RCHEN08 2015/05/04 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± mm INCH	MM ONLY	4:1	METRIC	☉
	▽=0	3 PLACES ± --- ± ---	DRAWN BY: JERWIN DATE: 2013/11/21			
	▽=0	2 PLACES ± 0.13 ± ---	CHECKED BY: GBARDELLA DATE: 2013/11/21			
		1 PLACE ± 0.25 ± ---	APPROVED BY: DATE:			
		0 PLACE ± --- ± ---				
		ANGULAR ± ---	MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SD-11112-2220		SHEET NO. 1 OF 8
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

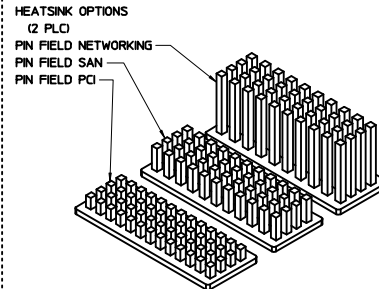


### CAGE ASSEMBLY OPTIONS



HEATSINK OPTIONS  
(2 PLD)  
CUSTOM

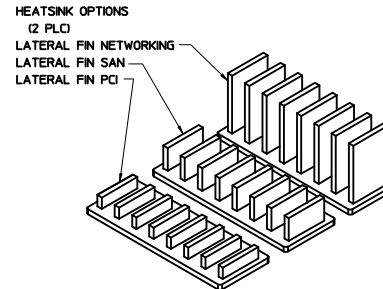
STYLE	DIM 'A'	DIM 'B'
CUSTOM	20.4	16.7



HEATSINK OPTIONS  
(2 PLD)  
PIN FIELD NETWORKING  
PIN FIELD SAN  
PIN FIELD PCI

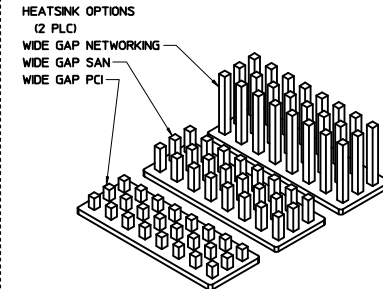
APPLICATION	STYLE	DIM 'A'
PCI	PIN FIELD	14.3
SAN	PIN FIELD	16.6
NETWORKING	PIN FIELD	23.6

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



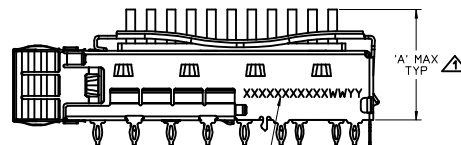
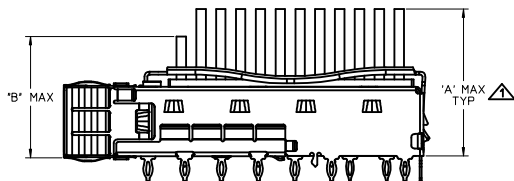
HEATSINK OPTIONS  
(2 PLD)  
LATERAL FIN NETWORKING  
LATERAL FIN SAN  
LATERAL FIN PCI

APPLICATION	STYLE	DIM 'A'
PCI	LATERAL FIELD	14.3
SAN	LATERAL FIELD	16.6
NETWORKING	LATERAL FIELD	23.6



HEATSINK OPTIONS  
(2 PLD)  
WIDE GAP NETWORKING  
WIDE GAP SAN  
WIDE GAP PCI

APPLICATION	STYLE	DIM 'A'
PCI	WIDE GAP PIN	14.3
SAN	WIDE GAP PIN	16.6
NETWORKING	WIDE GAP PIN	23.6

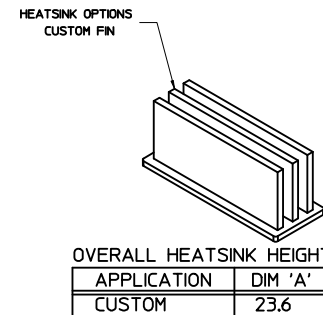
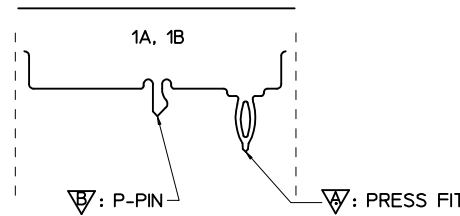


PN/DATE CODE TO BE PRINTED ON THE SIDE OF COMPLETED CAGE ASSEMBLY APPROXIMATELY AS SHOWN, FOR 11112 SERIES CAGES

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

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

### REAR LEG OPTIONS (PER PORT)



HEATSINK OPTIONS  
CUSTOM FIN

APPLICATION	DIM 'A'
CUSTOM	23.6

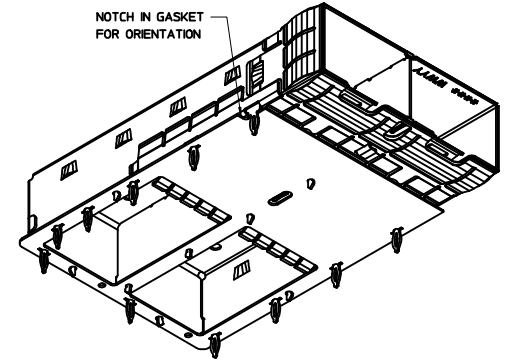
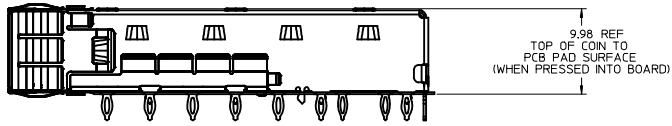
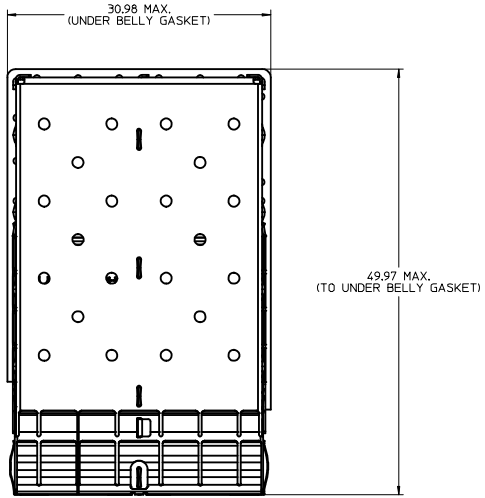
SEE REVISION SHEET EIC NO: CPG2015-5742 DRAWN BY: JERWIN CHYD: APPR: RCHEN08 2015/05/04 2015/08/26	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±--- ±--- 3 PLACES ±0.13 ±--- 2 PLACES ±0.25 ±--- 1 PLACE ±--- ±--- 0 PLACE ±--- ±--- ANGULAR ±--- DRAFT WHERE APPLICABLE 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							
	19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1							

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

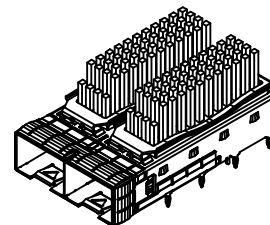
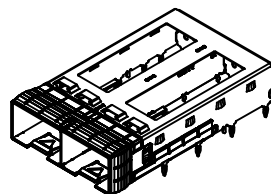
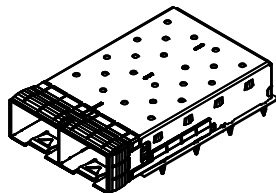
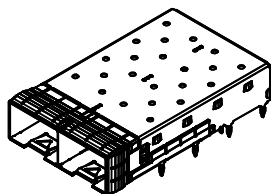


**NOTE:**  
1. UNDER BELLY GASKET IS UL94 V-0 RATED.

<b>SEE REVISION SHEET</b> IEC 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	MM ONLY	3.5:1	METRIC		
	4 PLACES ±--- 3 PLACES ±--- 2 PLACES ±0.13 1 PLACE ±0.25 0 PLACE ±---	4 PLACES ±--- 3 PLACES ±--- 2 PLACES ±0.13 1 PLACE ±0.25 0 PLACE ±---	DRAWN BY: JERWIN DATE: 2013/11/21 CHECKED BY: GBARDELLA DATE: 2013/11/21 APPROVED BY:	DATE:	DATE:	DATE:	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS
	ANGULAR ±--- DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.: <b>SEE SHEET 4</b>	DOCUMENT NO.: SD-111112-2220	SHEET NO.: 3 OF 8			

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

PART NUMBER SELECTION

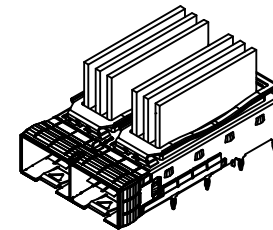
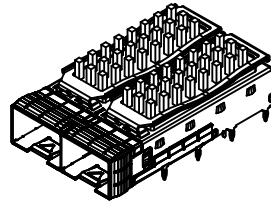
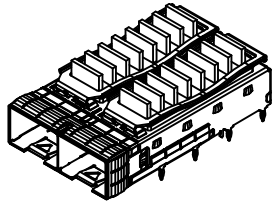
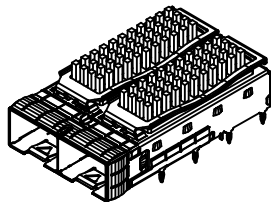


SFP+ CLOSED TOP BASE CAGE	
PART NO.	DESCRIPTION
747540220	SFP FOOTPRINT (STD B TO B), 5 WELD POINTS
747540222	SFP FOOTPRINT (STD B TO B), 16 WELD POINTS
747540247	SAME AS ABOVE BUT NO PN/DATE CODE PRINTED

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

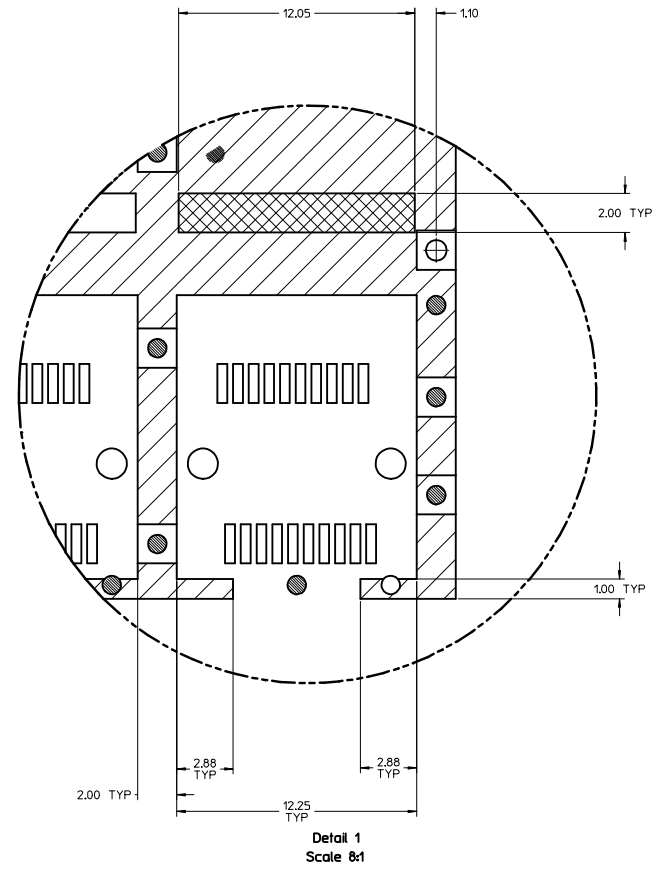
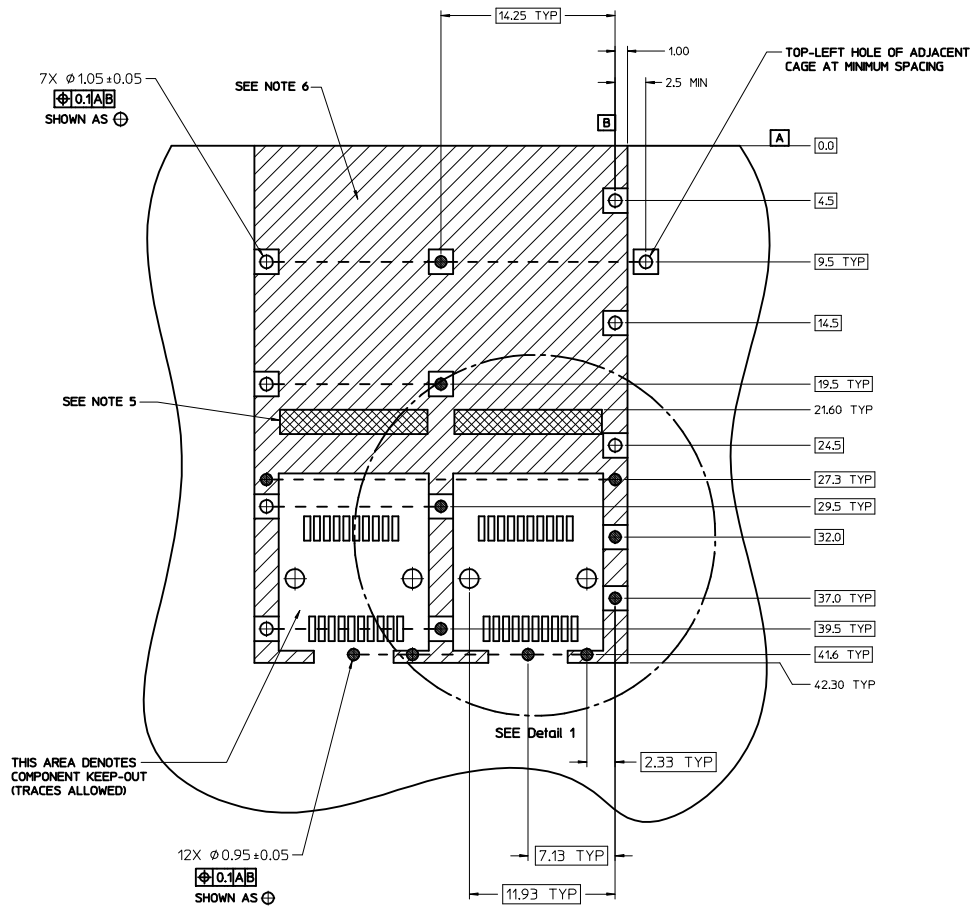
SFP+ LATERAL FIN HEATSINK OPTION	
PART NO.	APPLICATION
1111127220	PCI
1111128220	SAN
1111129220	NETWORKING

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: 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

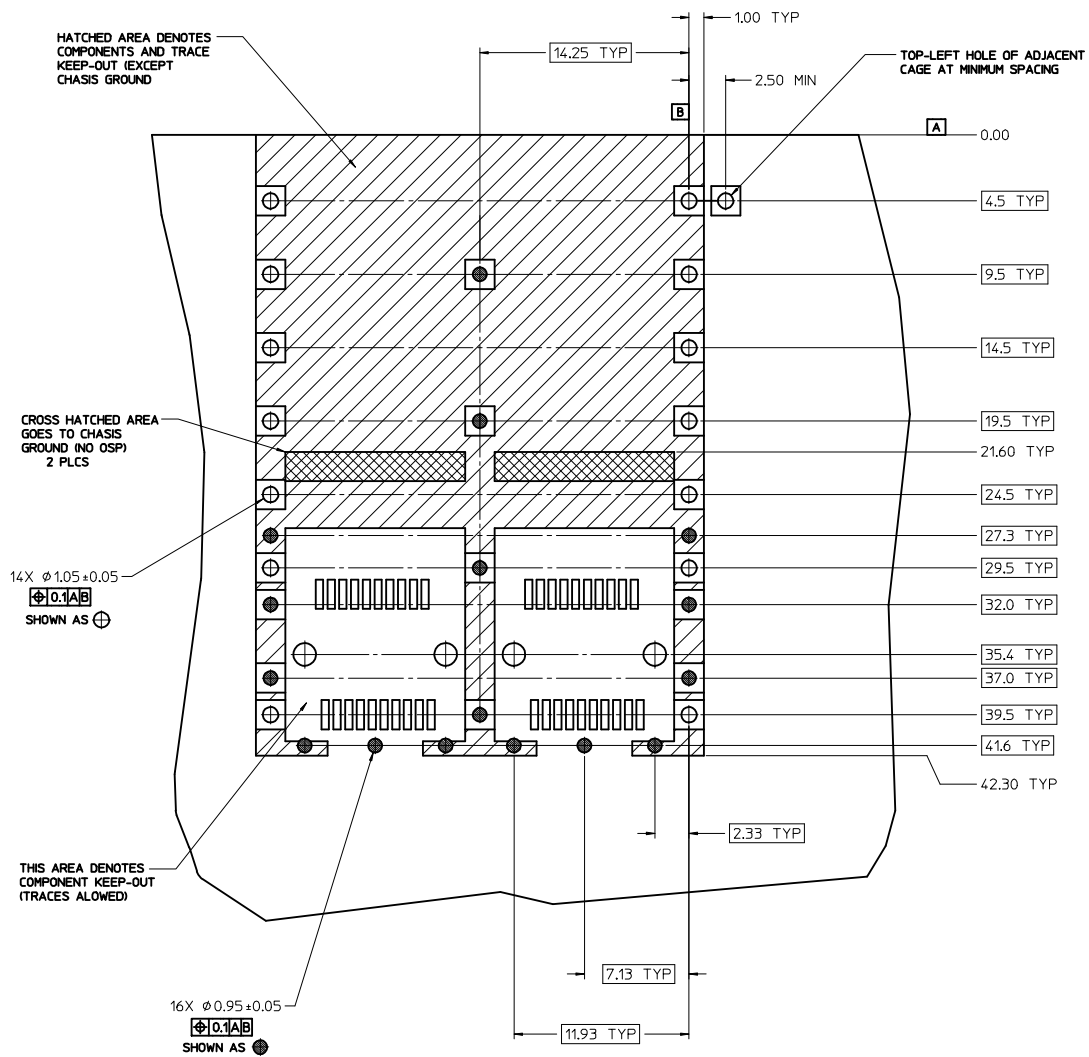


THIS AREA DENOTES COMPONENT KEEP-OUT (TRACES ALLOWED)

- 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: JERWIN CHYK: GBARDELLA APPR: RCHEN08 DESCRIPTION: 2015/05/04 DATE: 2013/11/21	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± mm ± INCH	MM ONLY	5:1	METRIC	☉
	▽=0	3 PLACES ± --- ± ---				
	▽=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. 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

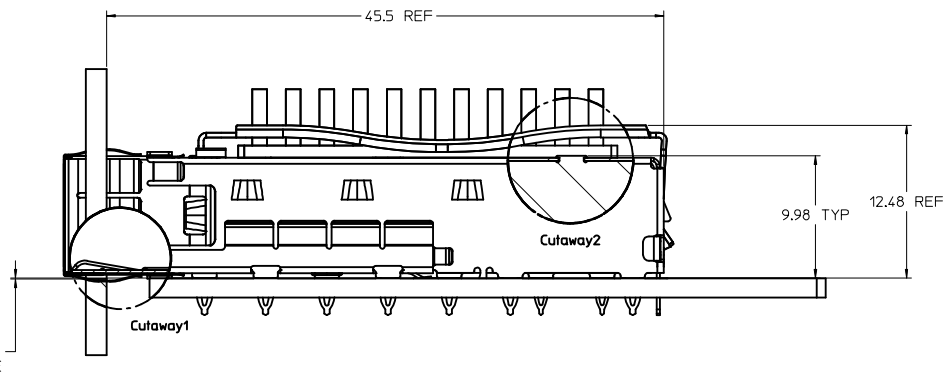
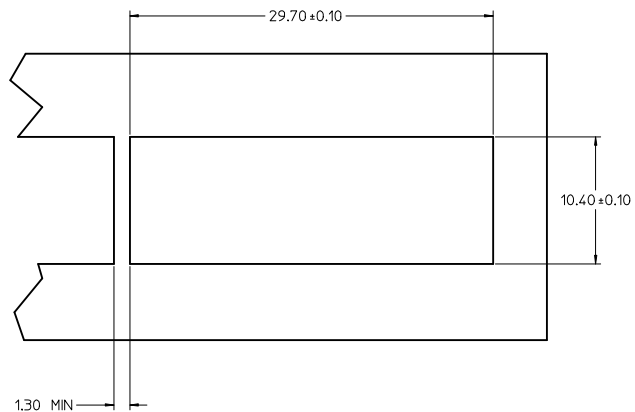


NOTE:  
SEE SHEET 5 FOR HOST  
CONNECTOR DETAIL

- 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 ACCOMMODATE 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.

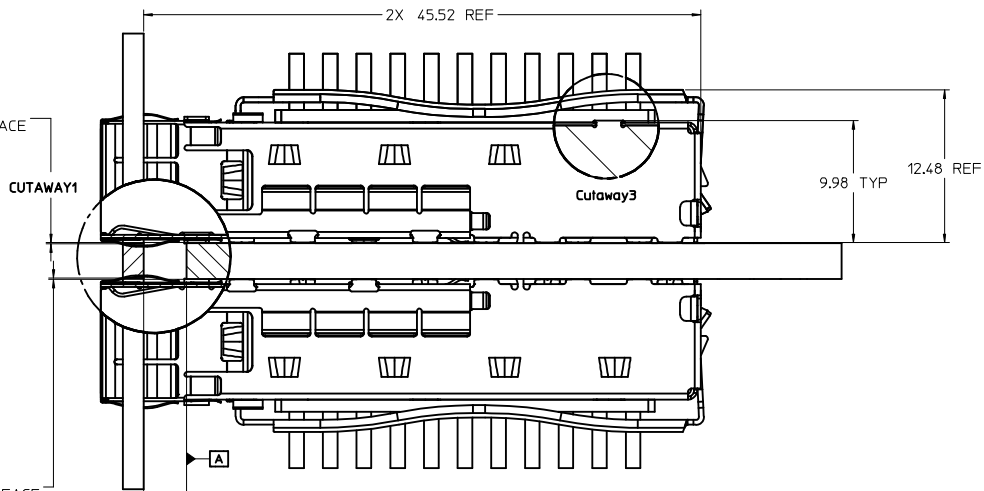
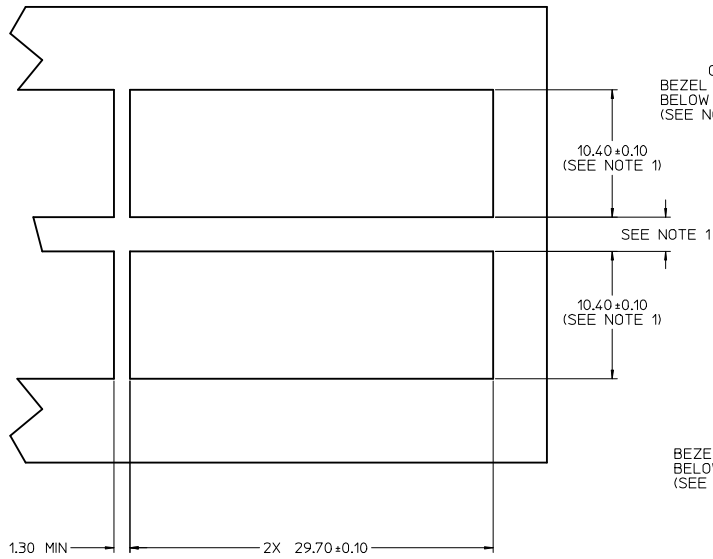
SEE REVISION SHEET IEC NO: CPG2015-5742 DRAWN BY: 2015/05/04 CHYK: APPR:RCHEN08 2015/08/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	6:1	METRIC	☉
	▽=0	4 PLACES ± --- ± ---	DRAWN BY: JERWIN	DATE: 2013/11/21	TITLE: SFP+ 1X2 CAGE, .120 INCH PRESS FIT, HEAT SINK, EMI SPRING FINGERS	
	▽=0	3 PLACES ± --- ± ---	CHECKED BY: GBARDELLA	DATE: 2013/11/21	APPROVED BY: DATE:	
	ANGULAR ± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SD-11112-2220	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 DETERMING 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 ± INCH	MM ONLY	5:1	METRIC	☉	
	▽=0	3 PLACES ± 0.13					
	▽=0	1 PLACE ± 0.25					
		ANGULAR ±					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	DOCUMENT NO.		SHEET NO.	
			SEE SHEET 4	SD-11112-2220		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 APPR: RCHEN08 2015/08/26 DESCRIPTION:	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	MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SD-11112-2220	SHEET NO. 8 OF 8
▽=0	2 PLACES ±0.13 ±---	1 PLACE ±0.25 ±---	APPROVED BY: DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
▽=0	0 PLACE ±--- ±---	ANGULAR ±---°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			