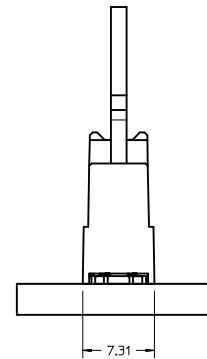
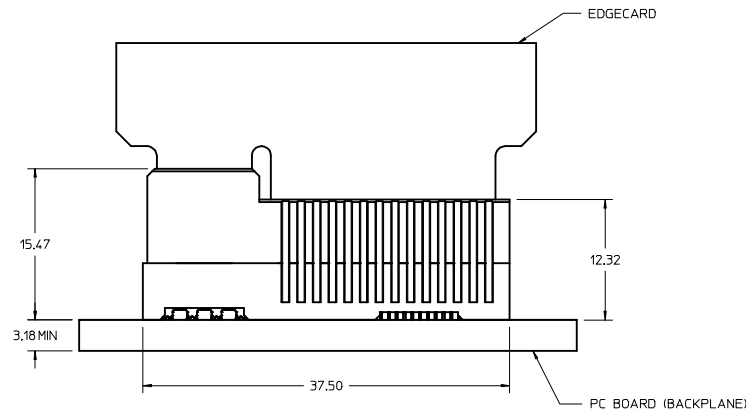
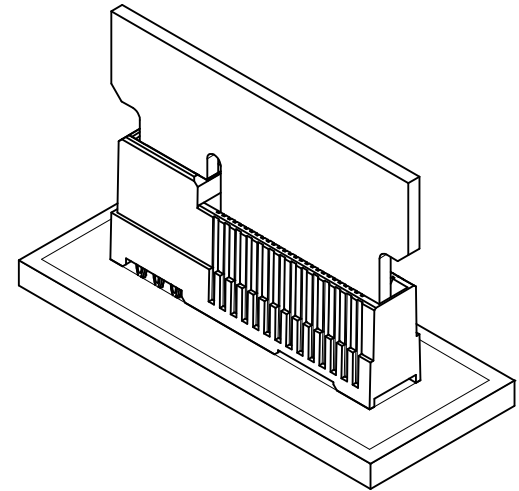
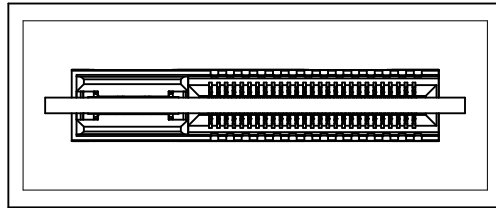


P.C. BOARD MOUNTING

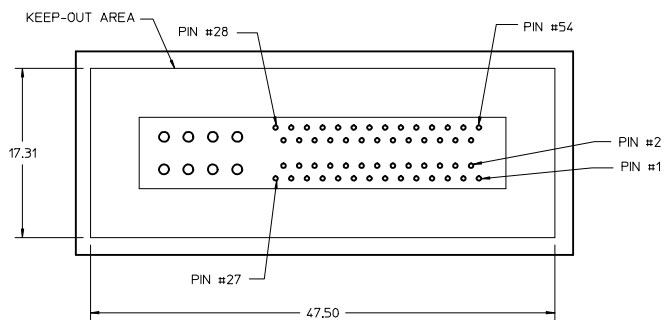


NOTES:

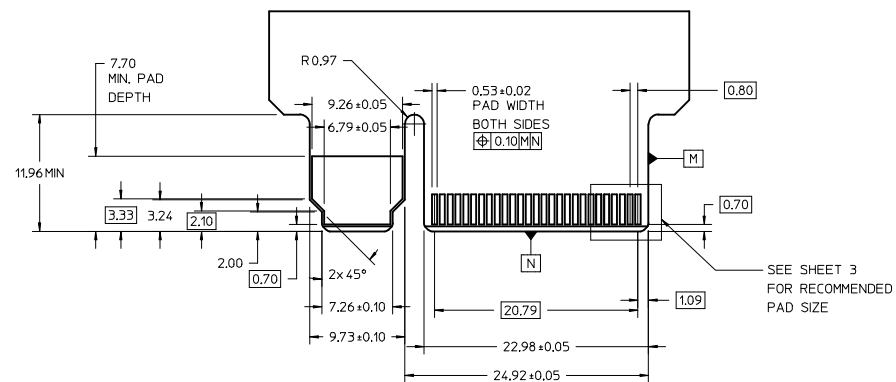
1. MATERIAL:
HOUSING - GLASS FILLED THERMOPLASTIC, 94-VO, BLACK
TERMINALS - COPPER ALLOY
2. FINISH:
CONTACT AREA: HARD GOLD -0.76 μ m MIN OVER 3.80 μ NICKEL
COMPLIANT AREA: TIN - 0.76/152 μ m OVER NICKEL
3. REFER TO PS-76861-100 PRODUCT SPECIFICATION FOR ALL ELECTRICAL, MECHANICAL AND ENVIROMENTAL SPECIFICATIONS.
4. REFER TO PK-76861-900 FOR ALL PACKAGING SPECIFICATIONS.
5. APPLICATION SPECIFICATION: AS-76693-100.
6. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPEC PS-45499-002

INITIAL RELEASE EC NO: UCP2015-0257 DRAWN BY: DRYNHPOFF CHECKED BY: CHYKODMORGAN APPROVED BY: APPRS:SMILLER DATE: 2014/05/20 DATE: 2014/05/20 DATE: 2014/07/23	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±--- ±--- 3 PLACES ±--- ±--- 2 PLACES ±0.13 ±--- 1 PLACE ±0.25 ±--- 0 PLACE ±--- ±--- ANGULAR ±1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	TITLE ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS		
			DRAWN BY MPOFF	DATE 2014/05/20	DOCUMENT NO. SD-76861-1130			SHEET NO. 1 OF 4		
			CHECKED BY DMORGAN	DATE 2014/05/20	APPROVED BY SMILLER			DATE 2014/07/23		
			MATERIAL NO. 76861-1130		DATE 2014/07/23			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

molex



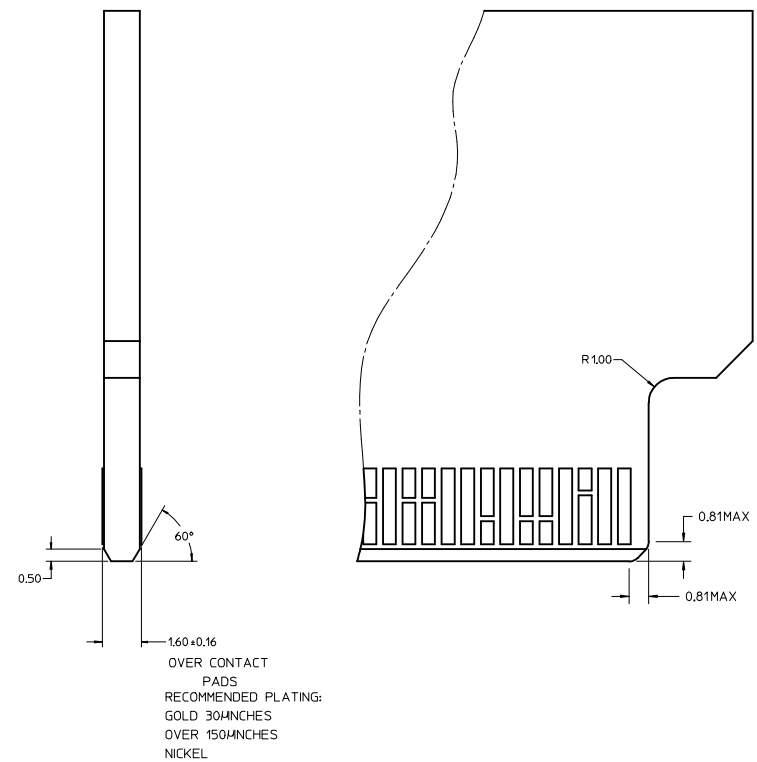
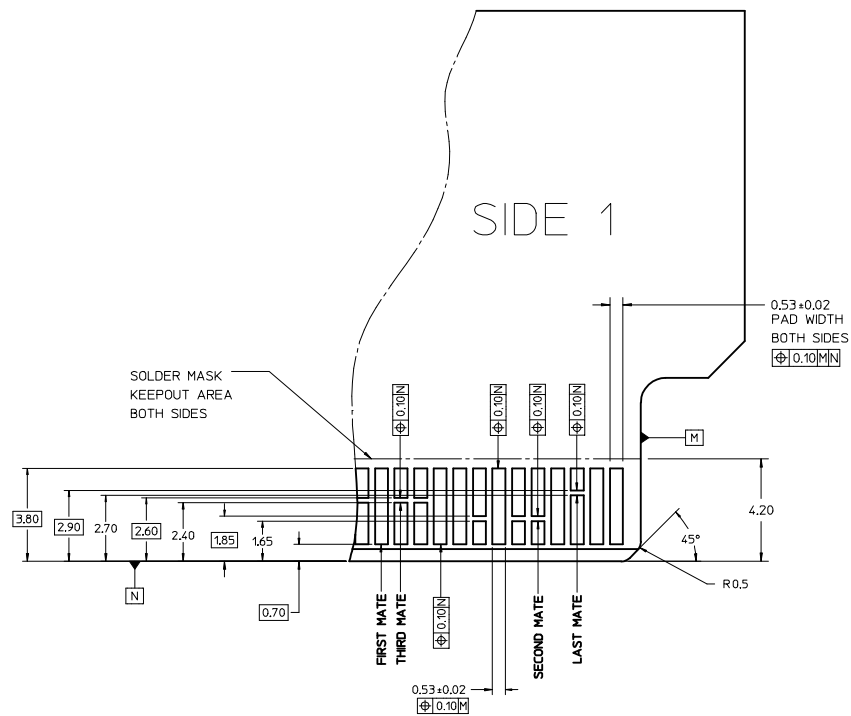
MOTHER BOARD HOLE LAYOUT
(COMPONENT SIDE)



EDGE CARD

SEE SHEET 1 EC NO: UCP2015-0257 DDW/MORGAN 2014/05/20 CHH/MORGAN 2014/05/20 APPR: MILLER 2014/07/23 A	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	✓=0	mm	INCH	DRAWN BY	DATE	TITLE	ESP 12.5GB		
	✓=1	4 PLACES ± .005	± .0005	MPOFF	2014/05/20		0.062"PCB/0.8MM PITCH		
	✓=2	3 PLACES ± .003	± .0003	CHECKED BY	DATE		54 KCTS		
	✓=3	2 PLACES ± .013	± .0025	DMORGAN	2014/05/20		molex		
	✓=0	1 PLACE ± .025	± .005	APPROVED BY	DATE				
		0 PLACE ± .000	± .000	SMILLER	2014/07/23				
		ANGULAR ± 1/2°		MATERIAL NO.		DOCUMENT NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-76861-1130		SHEET NO. 2 OF 4	
				SIZE D	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

MODULE EDGE CARD CONTACT DETAIL



NOTE:

THESE ARE GENERIC DETAILS THAT DESCRIBE THE CONFIGURATION OF VARIOUS PCB DESIGN ELEMENTS. THE CUSTOMER MUST DETERMINE WHERE AND WHEN TO USE EACH ELEMENT TO ACCOMMODATE THEIR SPECIFIC APPLICATION.*

SEE SHEET 1 EC NO. UC2005-0057 A DRAWING OF CHUKO MORGAN 2014/05/20 APPR. SMILLER 2014/07/23	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table><tr><th></th><th>mm</th><th>INCH</th></tr><tr><td>4 PLACES</td><td>±---</td><td>±---</td></tr><tr><td>3 PLACES</td><td>±---</td><td>±---</td></tr><tr><td>2 PLACES</td><td>±0.13</td><td>±---</td></tr><tr><td>1 PLACE</td><td>±0.25</td><td>±---</td></tr><tr><td>0 PLACE</td><td>±---</td><td>±---</td></tr></table>		mm	INCH	4 PLACES	±---	±---	3 PLACES	±---	±---	2 PLACES	±0.13	±---	1 PLACE	±0.25	±---	0 PLACE	±---	±---	DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
				mm	INCH																				
			4 PLACES	±---	±---																				
			3 PLACES	±---	±---																				
			2 PLACES	±0.13	±---																				
1 PLACE	±0.25	±---																							
0 PLACE	±---	±---																							
DRAWN BY MPOFF DATE 2014/05/20		TITLE ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS																							
CHECKED BY DMORGAN DATE 2014/05/20		molex																							
APPROVED BY SMILLER DATE 2014/07/23		MATERIAL NO. SEE SHEET 1 DOCUMENT NO. SD-76861-1130																							
REV	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. 3 OF 4																		

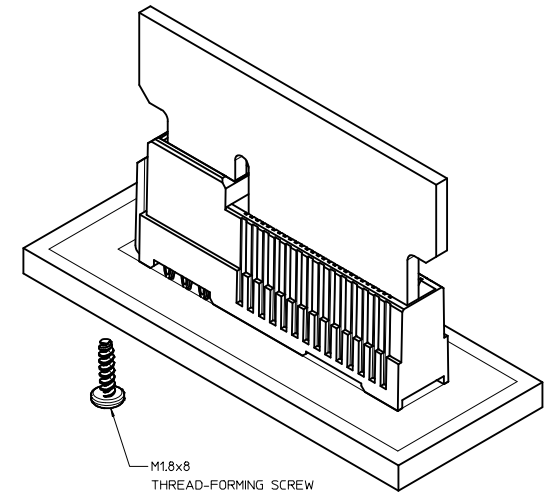
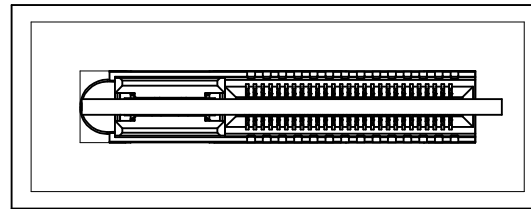
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

LEGEND EDGELINE 54 CIRCUITS / 0.062"PCB										
COMPONENT SIDE 1					COMPONENT SIDE 2					
PIN NO.	SIGNAL	ALLEGRO PIN NO.				SIGNAL	PIN NO.			
54	GND	○				SIGNAL 1	1			
53	SATA0_TX_P	○	○			SIGNAL 2	2			
52	SATA0_TX_N	○			○	SIGNAL 3	3			
51	GND	○	○			SIGNAL 4	4			
50	SATA0_RX_N	○				SIGNAL 5	5			
49	SATA0_RX_P	○	○			SIGNAL 6	6			
48	GND	○				PSV_STBY1	7			
47	SATA1_TX_P	○	○			SIGNAL 7	8			
46	SATA1_TX_N	○				SIGNAL 8	9			
45	GND	○	○			SIGNAL 9	10			
44	SATA1_RX_N	○				SIGNAL 10	11			
43	SATA1_RX_P	○	○			SIGNAL 11	12			
42	GND	○				SIGNAL 12	13			
41	SATA2_TX_P	○	○			SIGNAL 13	14			
40	SATA2_TX_N	○				SIGNAL 14	15			
39	GND	○	○			PSV_STBY2	16			
38	SATA2_RX_N	○				SIGNAL 15	17			
37	SATA2_RX_P	○	○			SIGNAL 16	18			
36	GND	○				GND	19			
35	SATA3_TX_P	○	○			SATA3_RX_P	20			
34	SATA3_TX_N	○				SATA3_RX_N	21			
33	GND	○	○			GND	22			
32	RESERVE	○				RESERVE	23			
31	TBD	○	○			TBD	24			
30	TBD	○				TBD	25			
29	TBD	○	○			TBD	26			
28	TBD	○				TBD	27			
POWER		LPH POWER, 2 CIRCUIT								RETURN

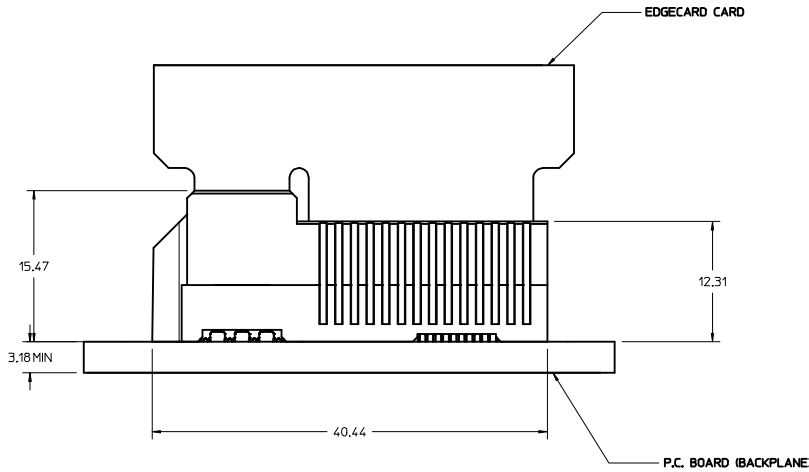
SEE SHEET 1 EC NO. UCP2015-0257 A CHYKDMORGAN 2014/05/20 DRAWN BY APPR: SMILLER 2014/07/23 REV	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0 DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION					
				DRAWN BY MPOFF	DATE 2014/05/20	TITLE ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS molex							
				CHECKED BY DMORGAN	DATE 2014/05/20								
				APPROVED BY SMILLER	DATE 2014/07/23	DOCUMENT NO. SD-76861-1130							
		ANGULAR ±1/2°		MATERIAL NO.						SHEET NO. 4 OF 4			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1									
		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

P.C. BOARD MOUNTING



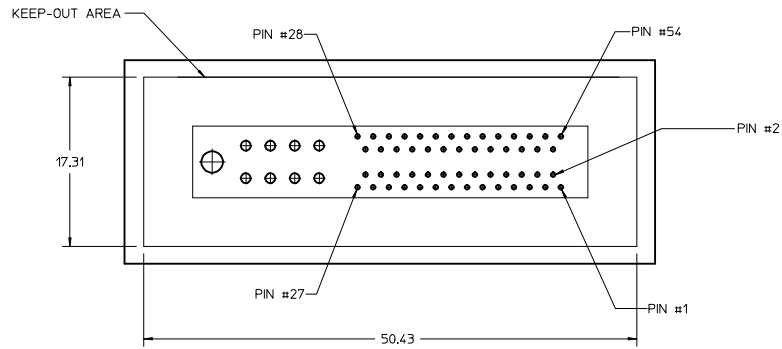
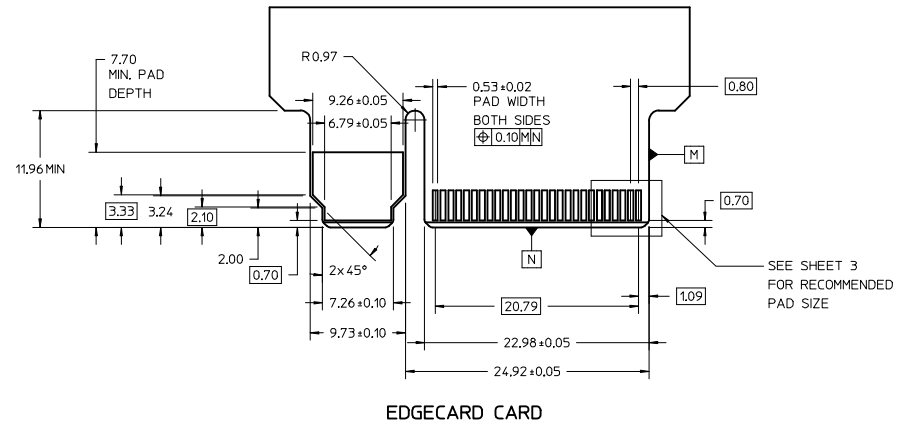
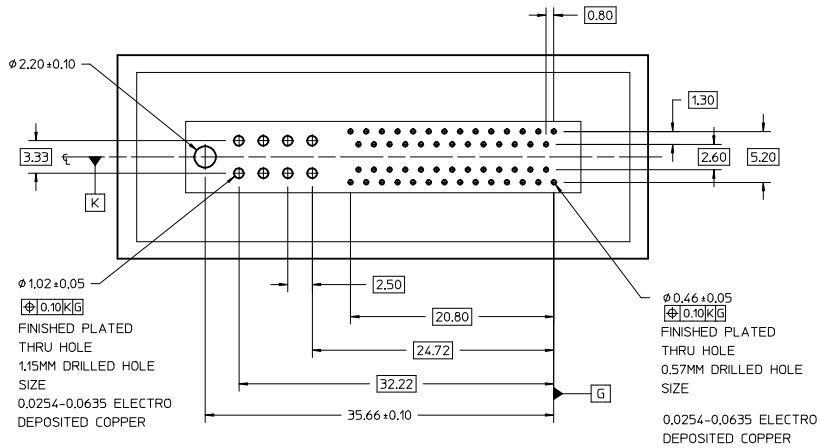
M1.8x8
THREAD-FORMING SCREW
SUGGESTED SOURCE:
ACUMENT
6125 EIGHTEEN MILE ROAD
STERLING HEIGHTS, MICHIGAN 48314
TEL.: 1.800.544.6117
P/N: 3BTP8567-00
(NOT SUPPLIED BY MOLEX)



NOTES:

- MATERIAL:
HOUSING - GLASS FILLED THERMOPLASTIC, 94-V0, BLACK
TERMINALS - COPPER ALLOY
- FINISH:
CONTACT AREA: HARD GOLD -0.76 μ m MIN OVER 3.80 μ NICKEL
COMPLIANT AREA: TIN - 0.76/1.52 μ m OVER NICKEL
- REFER TO PS-76861-100 PRODUCT SPECIFICATION FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS.
- REFER TO PK-76861-900 FOR ALL PACKAGING SPECIFICATIONS.
- PROCESSING: PRESSFIT TO PC BOARD.
- MATING PC BOARD THICKNESS = 1.60±0.16MM OVER CONTACT PADS.
- PRODUCT IS ELV AND RoHS COMPLIANT. LEVEL OF COMPLIANCE: 6/6
ALL BANNED SUBSTANCES ARE REMOVED:
Pb (LEAD)
HEXAVALENT CHROMIUM (CrVI)
CADMIUM
MERCURY
POLYBROMINATED BIPHENYL (PBB)
POLYBROMINATED DIPHENYL ETHER (PBDE)
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPEC PS-45499-002
- MAXIMUM SCREW TORQUE FORCE 0.12Nm.

CHANGE PTH TOLERANCE EC NO: UCP2014-1613 DRAWN BY: JDRW/WHIPPLE CHECKED BY: CHYK/ADOFF APPROVED BY: APPR/SMILLER REV	DESCRIPTION 2013/11/25 2013/11/25 2013/12/16	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1		DESIGN UNITS METRIC		 THIRD ANGLE PROJECTION
			mm	INCH	DRAWN BY DROSCA	DATE 8/11/09	TITLE ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS		DOCUMENT NO. SD-76861-120		
			4 PLACES ±.005		±.005	CHECKED BY JCOMERC I	DATE 8/11/09	molex		SHEET NO. 1 OF 4	
			3 PLACES ±.013		±.013						
			2 PLACES ±0.25		±.025						
			1 PLACE ±.005		±.005						
			0 PLACE ±.005		±.005						
			ANGULAR ±1/2°		MATERIAL NO. 76861-1120		DOCUMENT NO. SD-76861-120				
			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				

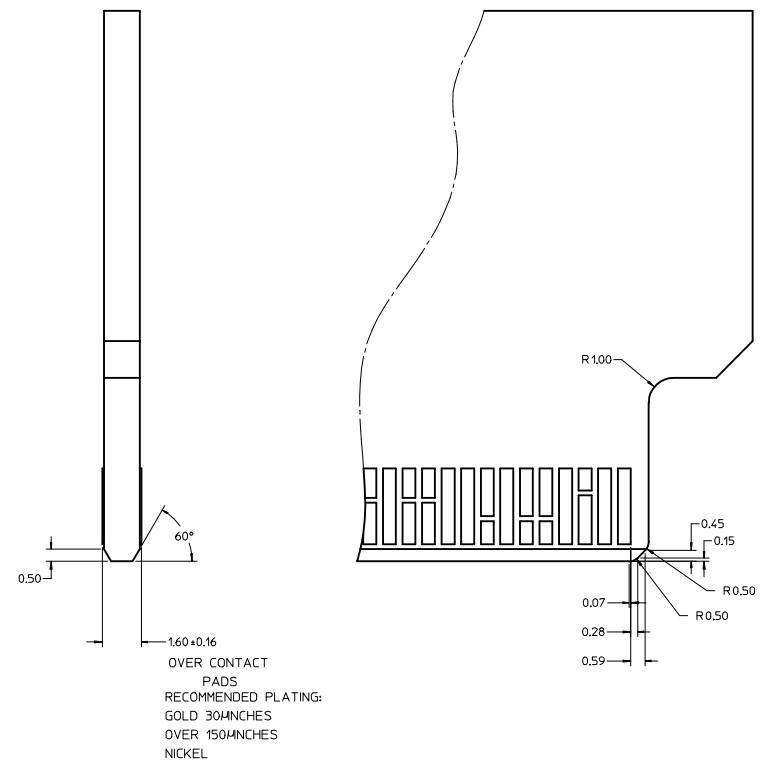
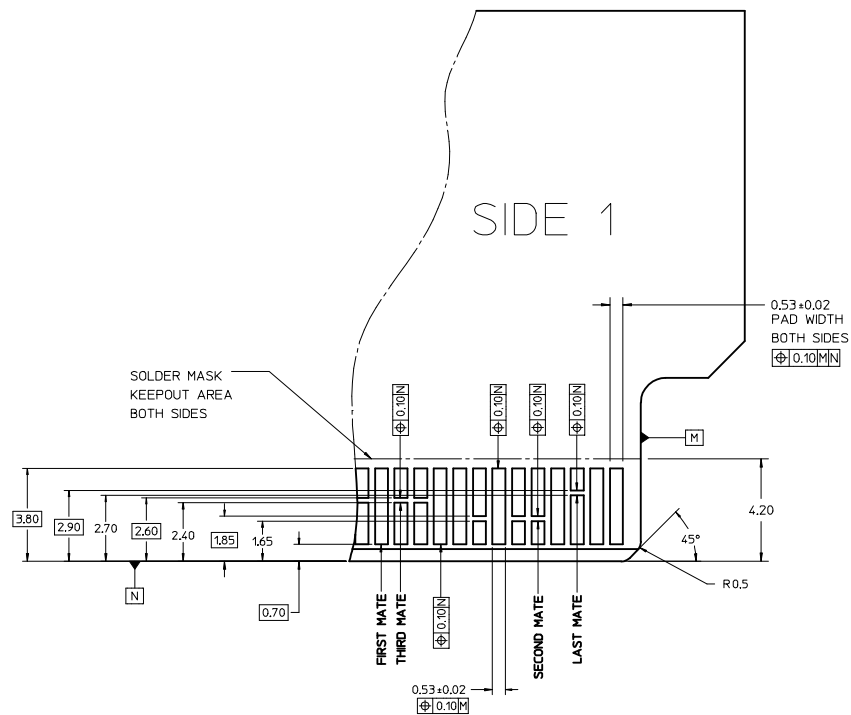


MOTHER BOARD HOLE LAYOUT
(COMPONENT SIDE)

SEE SHEET 1 IEC NO: UCP2014-1613 DRAWN BY: JORDANWHIPPLE CHECKED BY: CHYKOPHOFF APPROVED BY: APPR:SKILLER 2013/11/25 2013/11/25 2013/12/16	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY	DATE	TITLE			
			4 PLACES ±---	±---	DROSCA	8/11/09	ESP 12.5GB			
			3 PLACES ±---	±---	CHECKED BY	DATE	0.062"PCB/0.8MM PITCH			
			2 PLACES ±0.13	±---	JCOMERC I	8/11/09	54 CKTS			
1 PLACE ±0.25	±---	APPROVED BY	DATE	molex						
0 PLACE ±---	±---	JCOMERC I	8/11/09							
ANGULAR ±1/2°		MATERIAL NO.		DOCUMENT NO.				SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-76861-120				2 OF 4		
PREP	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

moLEX

MODULE EDGE CARD CONTACT DETAIL



NOTE:

THESE ARE GENERIC DETAILS THAT DESCRIBE THE CONFIGURATION OF VARIOUS PCB DESIGN ELEMENTS. THE CUSTOMER MUST DETERMINE WHERE AND WHEN TO USE EACH ELEMENT TO ACCOMMODATE THEIR SPECIFIC APPLICATION.*

SEE SHEET 1 ECN NO.: UC-P2014-743 UPPERMATERIAL CHUCKEROFFE APPROVALS APPR. BY MILLER DATE 2013/11/25 DATE 2013/11/25 DATE 2013/12/16	QUALITY SYMBOL	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	DESCRIPTION	mm	INCH	DRAWN BY	DATE	TITLE	
	▽=0	4 PLACES ±----	±----	DROSCA	8/11/09	ESP 12.5GB	
	▽=0	3 PLACES ±----	±----	CHECKED BY	DATE	0.062"PCB/0.8MM PITCH	
	▽=0	2 PLACES ±0.13	±----	JCOMERC I	8/11/09	54 CKTS	
	▽=0	1 PLACE ±0.25	±----	APPROVED BY	DATE	molex	
NEW		0 PLACE ±----	±----	JCOMERC I	8/11/09		
		ANGULAR ±1/2°		MATERIAL NO.		DOCUMENT NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-76861-120	
				SIZE D		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
						SHEET NO. 3 OF 4	

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

LEGEND EDGELINE 54 CIRCUITS / 0.062"PCB											
COMPONENT SIDE 1						COMPONENT SIDE 2					
PIN NO.	SIGNAL		ALLEGRO PIN NO.			SIGNAL		PIN NO.			
54	GND	○			○	SIGNAL 1		1			
53	SATA0_TX_P	○			○	SIGNAL 2		2			
52	SATA0_TX_N	○			○	SIGNAL 3		3			
51	GND	○			○	SIGNAL 4		4			
50	SATA0_RX_N	○			○	SIGNAL 5		5			
49	SATA0_RX_P	○			○	SIGNAL 6		6			
48	GND	○			○	PSV_STBY1		7			
47	SATA1_TX_P	○			○	SIGNAL 7		8			
46	SATA1_TX_N	○			○	SIGNAL 8		9			
45	GND	○			○	SIGNAL 9		10			
44	SATA1_RX_N	○			○	SIGNAL 10		11			
43	SATA1_RX_P	○			○	SIGNAL 11		12			
42	GND	○			○	SIGNAL 12		13			
41	SATA2_TX_P	○			○	SIGNAL 13		14			
40	SATA2_TX_N	○			○	SIGNAL 14		15			
39	GND	○			○	PSV_STBY2		16			
38	SATA2_RX_N	○			○	SIGNAL 15		17			
37	SATA2_RX_P	○			○	SIGNAL 16		18			
36	GND	○			○	GND		19			
35	SATA3_TX_P	○			○	SATA3_RX_P		20			
34	SATA3_TX_N	○			○	SATA3_RX_N		21			
33	GND	○			○	GND		22			
32	RESERVE	○			○	RESERVE		23			
31	TBD	○			○	TBD		24			
30	TBD	○			○	TBD		25			
29	TBD	○			○	TBD		26			
28	TBD	○			○	TBD		27			
POWER		LPH POWER, 2 CIRCUIT								RETURN	

SEE SHEET 1 EC NO. UCP2014-1613 DRAWN BY: CHYKORHPPLE CHECKED BY: CHYKORHPPLE APPR. MILLER REV: 1	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					DRAWN BY	DATE	TITLE ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS				
					CHECKED BY	DATE					
			4 PLACES ± — ± —		JCOMERC I	8/11/09	molex				
			3 PLACES ± — ± —		APPROVED BY	DATE					
			2 PLACES ± 0.13 ± —		JCOMERC I	8/11/09	DOCUMENT NO. SD-76861-120				
			1 PLACE ± 0.25 ± —		MATERIAL NO.						
			0 PLACE ± — ± —		SEE SHEET 1		SHEET NO. 4 OF 4				
			ANGULAR ±1/2°		SIZE						
			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						