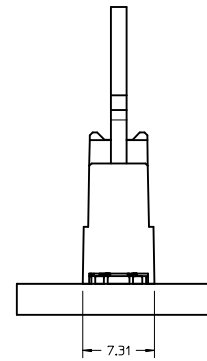
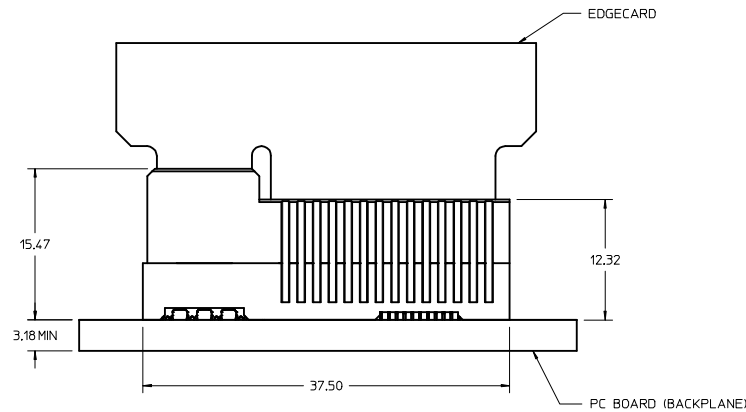
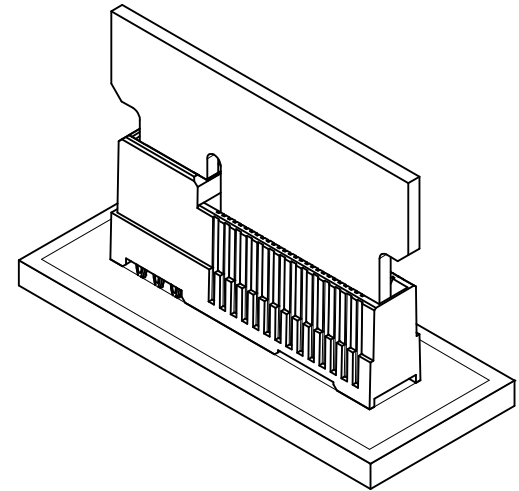
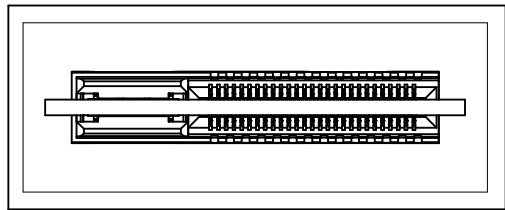


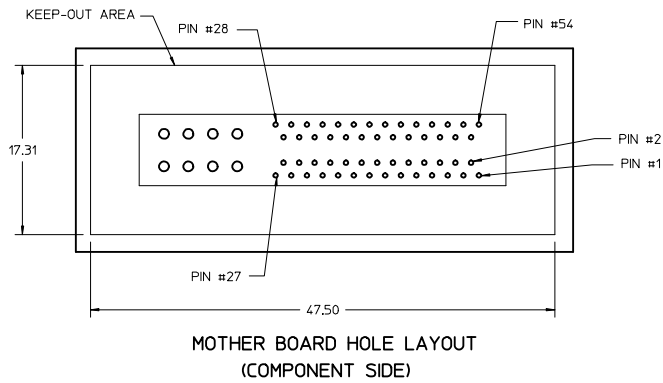
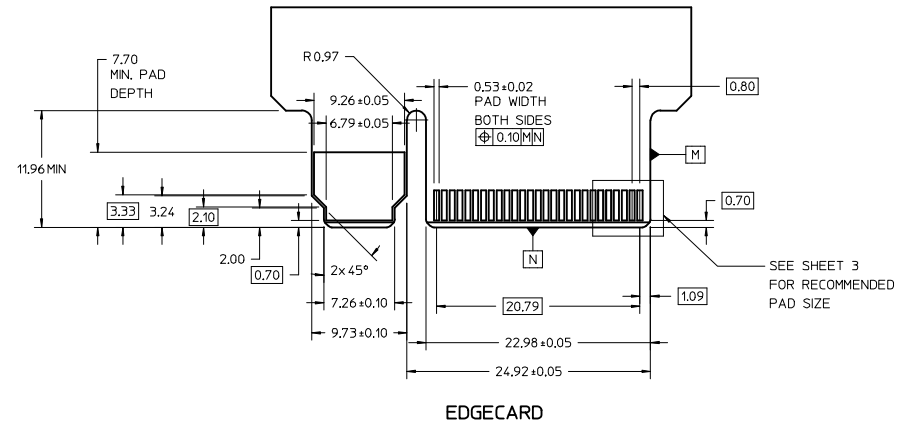
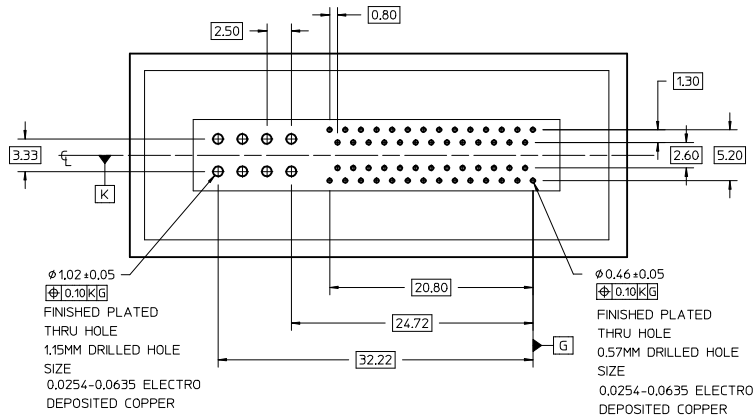
# P.C. BOARD MOUNTING



**NOTES:**

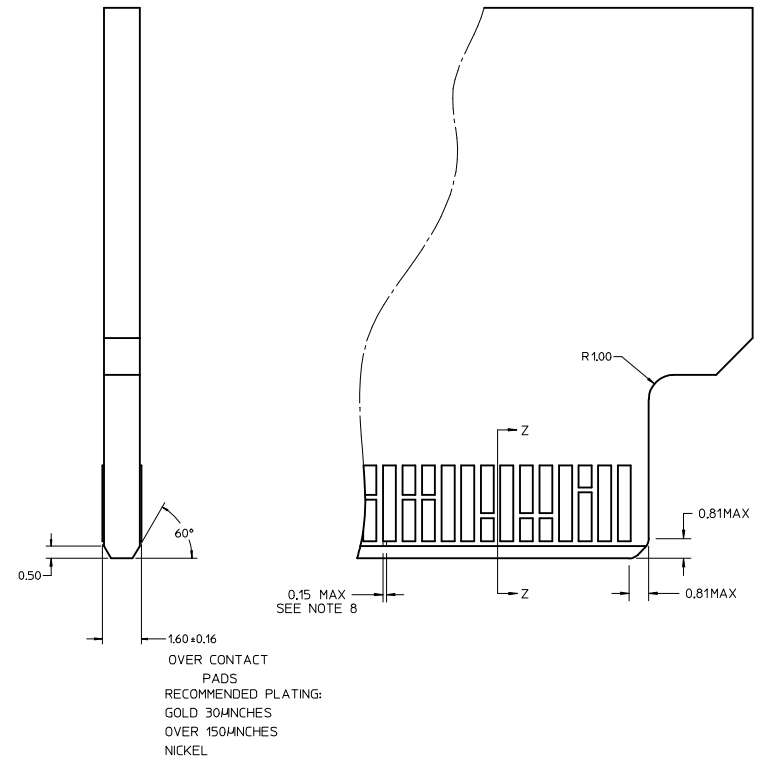
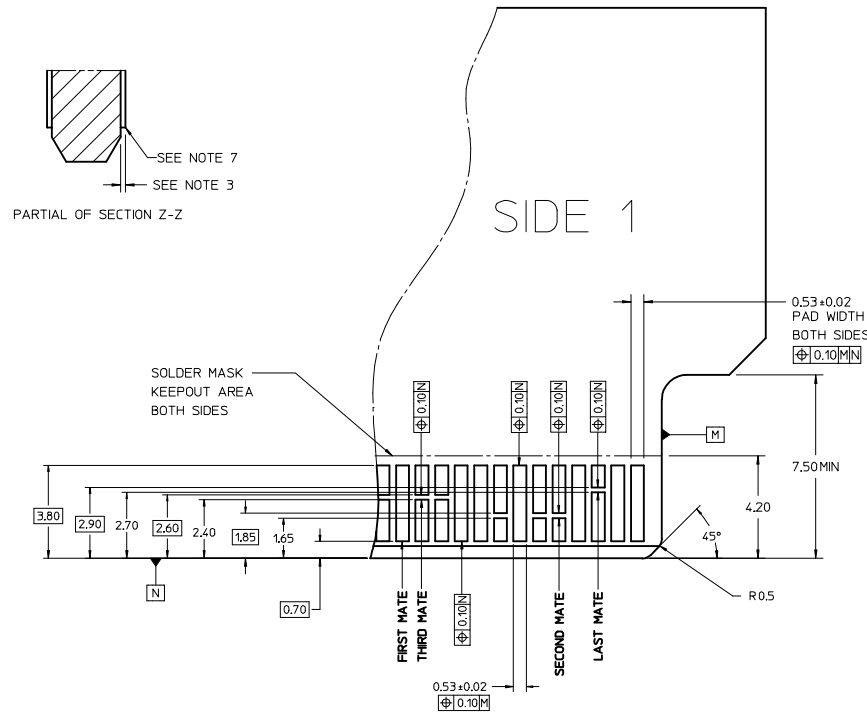
1. MATERIAL:  
HOUSING - GLASS FILLED THERMOPLASTIC, 94-V0, BLACK  
TERMINALS - COPPER ALLOY
2. FINISH:  
CONTACT AREA: HARD GOLD -0.76µm MIN OVER 3.80µm NICKEL  
COMPLIANT AREA: TIN - 0.76/1.52µm OVER NICKEL
3. REFER TO PS-76861-100 PRODUCT SPECIFICATION FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL 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

<b>EDGECARD SPEC UPDATED</b> EC NO: UCP2015-1286 DRWNGS: 2014/09/29 CHYK:MPFF 2014/10/13 APPRS:SMILLER 2015/01/29	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0	4 PLACES ± --- + ---	MM ONLY	4:1	METRIC	☑	
	▽=0	3 PLACES ± --- + ---	INCH	DRAWN BY	DATE	TITLE	ESP 12.5GB
	▽=0	2 PLACES ± 0.13 + ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MPOFF	2014/05/20	0.062"PCB/0.8MM PITCH	54 CKTS
REV	DESCRIPTION	ANGULAR ± 2 °	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	
D	SMILLER	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SMILLER	2014/07/23	76861-1130	SD-76861-1130	
SIZE	D	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	molex				SHEET NO.
						1 OF 4	



<b>SEE SHEET 1</b> EC NO: UCP2015-1286 2014/09/29 CHKO: MPOFF 2014/10/13 APPR: SMILLER 2015/01/29	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$ $\nabla=0$	4 PLACES ± mm ± INCH 3 PLACES ± 0.13 ± 2 PLACES ± 0.25 ± 1 PLACE ± ± 0 PLACE ± ±	MM ONLY	4:1	METRIC		
		ANGULAR ± 2°	DRAWN BY	DATE	TITLE		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MPOFF	2014/05/20	ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS		
			CHECKED BY	DATE			
			DMORGAN	2014/05/20			
			APPROVED BY	DATE	DOCUMENT NO.		
			SMILLER	2014/07/23	SD-76861-1130		
			MATERIAL NO.	DATE	SHEET NO.		
					2 OF 4		
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

# MODULE EDGE CARD CONTACT DETAIL



## MATING PCB NOTES:

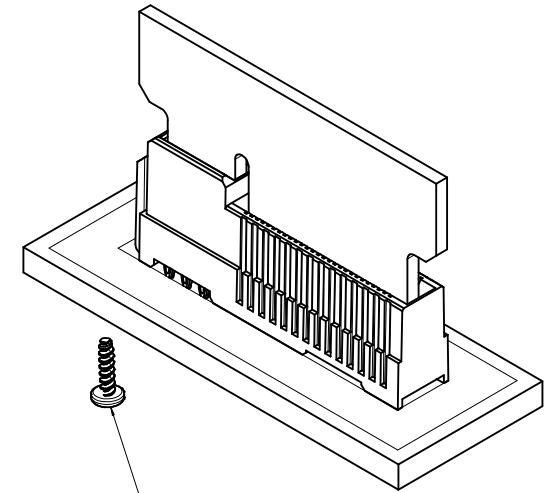
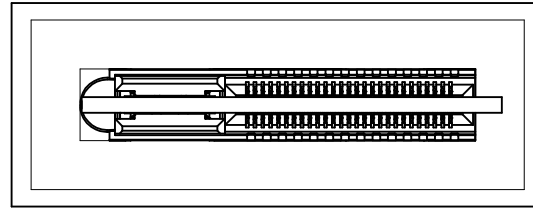
- CONNECTOR LAND CONDITIONS SHALL MEET THE MOST CURRENT REVISION OF PCB SPECIFICATION IPC-6012C-2010 SECTION 3.5.4.4.
- DIMENSIONS APPLY TO LANDS ON BOTH SIDES OF THE BOARD.
- THE THICKNESS OF THE OUTER METAL LAYERS, INCLUDING FOIL, COPPER PLATING, AND THE PROTECTIVE SURFACE FINISH, SHALL BE 0.066mm MAX.
- CHAMFER ROUGHNESS NOT TO EXCEED 3.17 MICROMETERS.
- CHAMFER PROCESS SHALL NOT DAMAGE THE GOLD EDGE LANDS.
- EDGE CARD CHAMFER NOT TO GO THRU GOLD LANDS.
- 0.03mm MAX PLATING OVERHANG ON ALL GOLD LAND EDGES.
- MOLEX RECOMMENDS NO TIE-BARS ON THE LEADING EDGE OF THE GOLD LAND. IF TIE-BARS ARE USED, THEY SHALL BE PLACED TO ONE SIDE OF THE GOLD LAND. APPLIES TO ALL GOLD LANDS.

<b>SEE SHEET 1</b> IEC NO: UCP2015-1286 DRAWN BY: CHYK/MP/OFF DATE: 2014/09/29 2014/10/13 APPR: SMILLER DATE: 2015/01/29	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\nabla=0$ $\nabla=0$	4 PLACES ± mm ± INCH 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- 0 PLACE ± --- ± ---	MM ONLY	10:1	METRIC	ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS <b>molex</b>
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	ANGULAR ± 2 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: MPOFF DATE: 2014/05/20 CHECKED BY: DMORGAN DATE: 2014/05/20 APPROVED BY: SMILLER DATE: 2014/07/23	MATERIAL NO. <b>SEE SHEET 1</b>	DOCUMENT NO. SD-76861-1130	SHEET NO. 3 OF 4
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

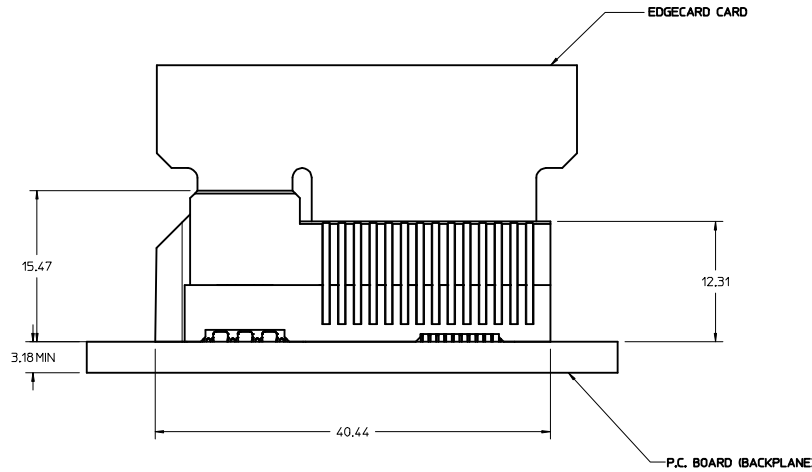
LEGEND EDGELINE 54 CIRCUITS / 0.062"PCB									
COMPONENT SIDE 1					COMPONENT SIDE 2				
PIN NO.	SIGNAL	ALLEGRO PIN NO.				SIGNAL	PIN NO.		
54	GND	○			○	SIGNAL 1	1		
53	SATA0_TX_P	○	○		○	SIGNAL 2	2		
52	SATA0_TX_N	○			○	SIGNAL 3	3		
51	GND	○	○		○	SIGNAL 4	4		
50	SATA0_RX_N	○			○	SIGNAL 5	5		
49	SATA0_RX_P	○	○		○	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		

<b>SEE SHEET 1</b> IEC NO: UICP2015-1286 2014/09/29 CHYKOMP OFF 2014/10/13 APPR:SMILLER 2015/01/29	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
		4 PLACES ±0.13 ±0.005 3 PLACES ±0.25 ±0.01 2 PLACES ±0.50 ±0.02 1 PLACE ±1.00 ±0.05 0 PLACE ±1.50 ±0.10	DRAWN BY MPOFF DATE 2014/05/20	TITLE <b>ESP 12.5GB          0.062"PCB/0.8MM PITCH          54 CKTS</b>			
		ANGULAR ± 2 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DMORGAN DATE 2014/05/20	<b>molex</b>			
		MATERIAL NO. <b>SEE SHEET 1</b>	APPROVED BY SMILLER DATE 2014/07/23	DOCUMENT NO. <b>SD-76861-1130</b>	SHEET NO. <b>4 OF 4</b>		

# P.C. BOARD MOUNTING



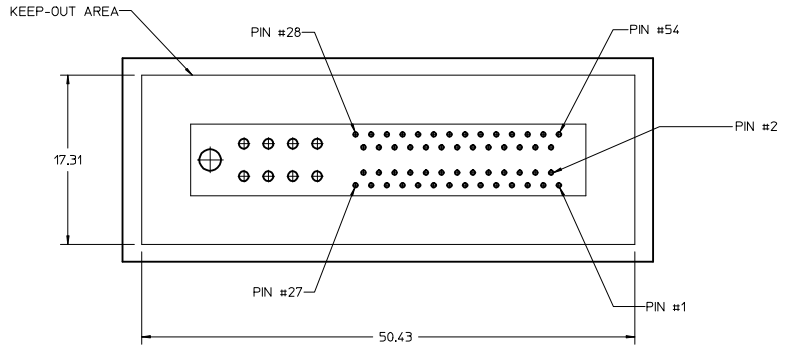
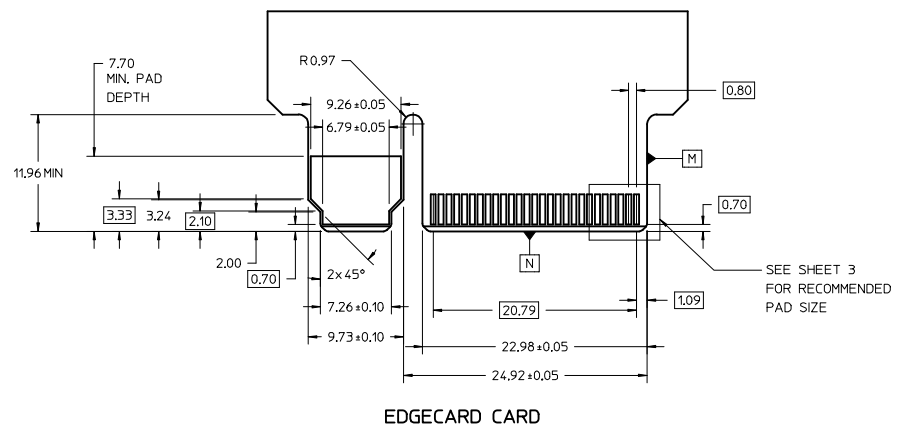
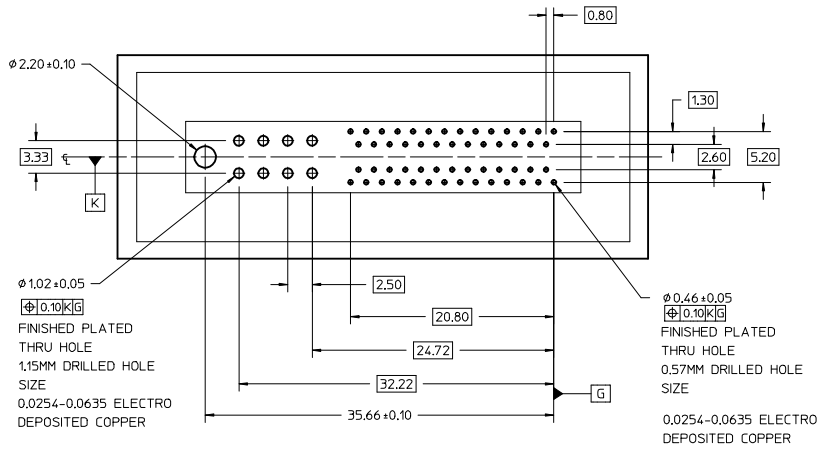
RECOMMENDED THREAD-FORMING SCREW  
M1.8x8 (NOT SUPPLIED BY MOLEX)  
SEE NOTE 8



**NOTES:**

1. MATERIAL:  
HOUSING - GLASS FILLED THERMOPLASTIC, 94-VO, BLACK  
TERMINALS - COPPER ALLOY
2. FINISH:  
CONTACT AREA: HARD GOLD -0.76 $\mu$ m MIN OVER 3.80 $\mu$  NICKEL  
COMPLIANT AREA: TIN - 0.76/1.52 $\mu$ m OVER NICKEL
3. REFER TO PS-76861-100 PRODUCT SPECIFICATION FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS.
4. REFER TO PK-76861-900 FOR ALL PACKAGING SPECIFICATIONS.
5. PROCESSING: PRESSFIT TO PC BOARD.
6. MATING PC BOARD THICKNESS = 1.60±0.16MM OVER CONTACT PADS.
7. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPEC PS-45499-002
8. REFER TO APPLICATION SPECIFICATION AS-76693-100 FOR MORE DETAILS

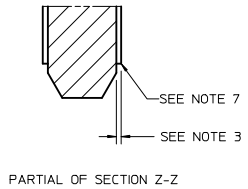
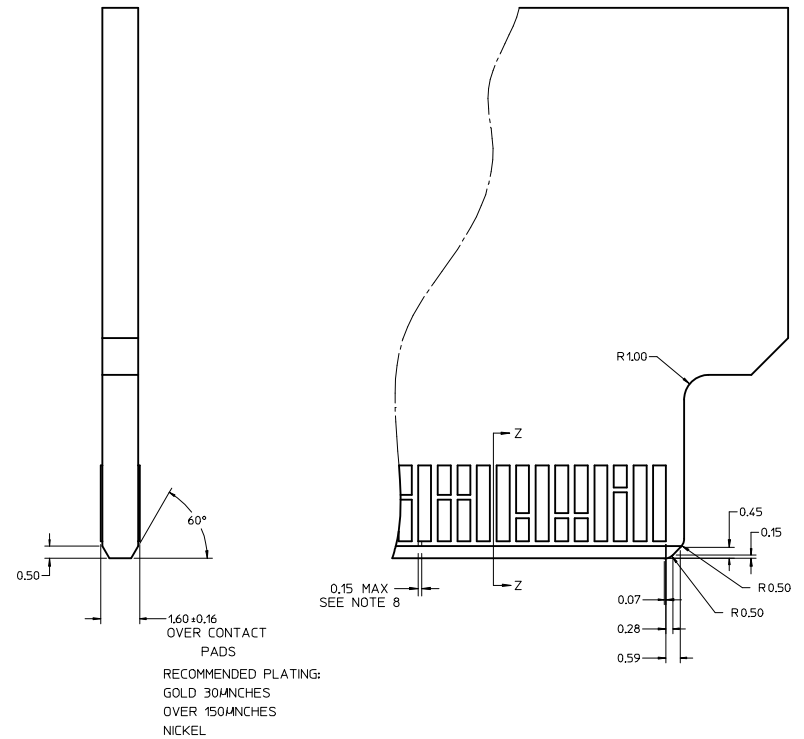
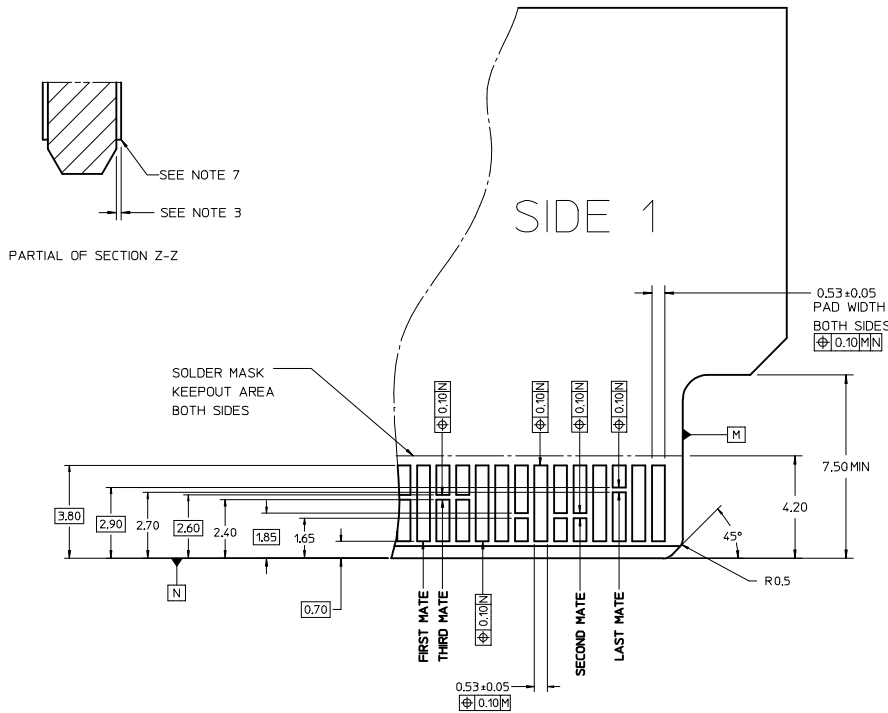
CORRECT EDGE CARD WIDTH TO PREPARE FOR DRINKS EC NO: UCP2016-4620 CHYD: APPROV: M. GOWAN	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± mm ± INCH	MM ONLY	4:1	METRIC	
	▽=0	3 PLACES ± 0.13 ± 0.005				
	▽=0	2 PLACES ± 0.25 ± 0.010				
		ANGULAR ± 2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			MATERIAL NO.	DOCUMENT NO.		
			76861-1120	SD-76861-120		
			DRAWN BY: DROSCA DATE: 8/11/09		TITLE: ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS	
			CHECKED BY: JCOMERC I DATE: 8/11/09		molex	
			APPROVED BY: JCOMERC I DATE: 8/11/09		SHEET NO. 1 OF 4	
			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 EC NO: UCP2016-4620 DRAWINGS: 2016/06/02 CHKD: APPROVED/COMAN 2016/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± 0.13 ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	MM ONLY	4:1	METRIC	ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS <b>molex</b>
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: DROSCA DATE: 8/11/09 CHECKED BY: JCOMERC I DATE: 8/11/09 APPROVED BY: JCOMERC I DATE: 8/11/09	MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-76861-120	SHEET NO. 2 OF 4	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

# MODULE EDGE CARD CONTACT DETAIL



**MATING PCB NOTES:**

1. CONNECTOR LAND CONDITIONS SHALL MEET THE MOST CURRENT REVISION OF PCB SPECIFICATION IPC-6012C-2010 SECTION 3.5.4.4.
2. DIMENSIONS APPLY TO LANDS ON BOTH SIDES OF THE BOARD.
3. THE THICKNESS OF THE OUTER METAL LAYERS, INCLUDING FOIL, COPPER PLATING, AND THE PROTECTIVE SURFACE FINISH, SHALL BE 0.066mm MAX.
4. CHAMFER ROUGHNESS NOT TO EXCEED 3.17 MICROMETERS.
5. CHAMFER PROCESS SHALL NOT DAMAGE THE GOLD EDGE LANDS.
6. EDGE CARD CHAMFER NOT TO GO THRU GOLD LANDS.
7. 0.03mm MAX PLATING OVERHANG ON ALL GOLD LAND EDGES.
8. MOLEX RECOMMENDS NO TIE-BARS ON THE LEADING EDGE OF THE GOLD LAND. IF TIE-BARS ARE USED, THEY SHALL BE PLACED TO ONE SIDE OF THE GOLD LAND. APPLIES TO ALL GOLD LANDS.

<b>SEE SHEET 1</b> EC NO: UCP2016-4620 DRAWINGS: 2016/06/02 CHKD: APPROV: JGOWAN APPR: JGOWAN 2016/06/13	QUALITY SYMBOLS ∇=0 ∇=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>±---</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> </tbody> </table>			mm	INCH	4 PLACES	±---	±---	3 PLACES	±---	±---	2 PLACES	±0.13	±---	1 PLACE	±0.25	±---	0 PLACE	±---	±---	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>10:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
			mm	INCH																					
4 PLACES	±---	±---																							
3 PLACES	±---	±---																							
2 PLACES	±0.13	±---																							
1 PLACE	±0.25	±---																							
0 PLACE	±---	±---																							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWN BY: DROSCA DATE: 8/11/09	CHECKED BY: JCOMERCI DATE: 8/11/09	APPROVED BY: JCOMERCI DATE: 8/11/09	TITLE <b>ESP 12.5GB                  0.062"PCB/0.8MM PITCH                  54 CKTS</b>																				
		MATERIAL NO. <b>SEE SHEET 1</b>	DOCUMENT NO. <b>SD-76861-120</b>		SHEET NO. <b>3 OF 4</b>																				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																									

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	

<b>SEE SHEET 1</b> IEC NO: UICP2016-4620 DRAWN BY: CHYD APPROVED: DMCOWAN DATE: 2016/06/02 REV: 1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0	4 PLACES ± 0.13	MM ONLY	4:1	METRIC		
	▽=0	3 PLACES ± 0.25					
	▽=0	1 PLACE ± 0.25					
	ANGULAR ± 2°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: DROSCA	DATE: 8/11/09	TITLE: ESP 12.5GB 0.062"PCB/0.8MM PITCH 54 CKTS		
			CHECKED BY: JCOMERC I	DATE: 8/11/09	<b>molex</b>		
			APPROVED BY: JCOMERC I	DATE: 8/11/09			
			MATERIAL NO.	DOCUMENT NO.		SHEET NO.	
			<b>SEE SHEET 1</b>	SD-76861-120		4 OF 4	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				