

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0744410007](#)  
**Status:** **Active**  
**Overview:** x2\_xenpak\_xpak\_host\_connector  
**Description:** 0.80mm (.031") Pitch XFP Host Connector, Z-Axis Pluggable, Right Angle, SMT, 30 Circuits, 0.38µm (15µ") Gold (Au)

**Documents:**

[3D Model](#) [Product Specification PS-74441-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

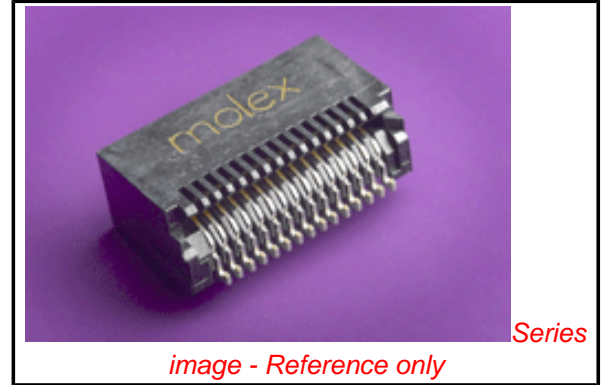
CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [74441](#)  
 Application Module-to-Board  
 Component Type Receptacle  
 Overview [x2\\_xenpak\\_xpak\\_host\\_connector](#)  
 Product Name Z-Axis Pluggable  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 30  
 Circuits (maximum) 30  
 Circuits Detail 30  
 Color - Resin Black  
 Durability (mating cycles max) 200  
 Flammability 94V-0  
 Gender Receptacle  
 Keying to Mating Part Yes  
 Lock to Mating Part Yes  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 PCB Locator Yes  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Panel Mount No  
 Pitch - Mating Interface (in) 0.031 In  
 Pitch - Mating Interface (mm) 0.80 mm  
 Pitch - Term. Interface (in) 0.031 In  
 Pitch - Term. Interface (mm) 0.80 mm  
 Plating min: Mating (µin) 15.2  
 Plating min: Mating (µm) 0.38  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes  
 Polarized to PCB No  
 Ports 1  
 Surface Mount Compatible (SMC) Yes



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
 Status**

**China RoHS**



**Need more information on product  
 environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[74441Series](#)

**Mates With**

XFP Modules

Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Surface Mount
Waterproof / Dustproof	No
Wire Size AWG	N/A

### **Electrical**

Current - Maximum per Contact	0.5A
Grounding to Panel	Yes
Shielded	No
Voltage - Maximum	30V AC (RMS)/DC

### **Solder Process Data**

Lead-free Process Capability	Reflow Capable (SMT only)
Process Temperature max. C	260

### **Material Info**

### **Reference - Drawing Numbers**

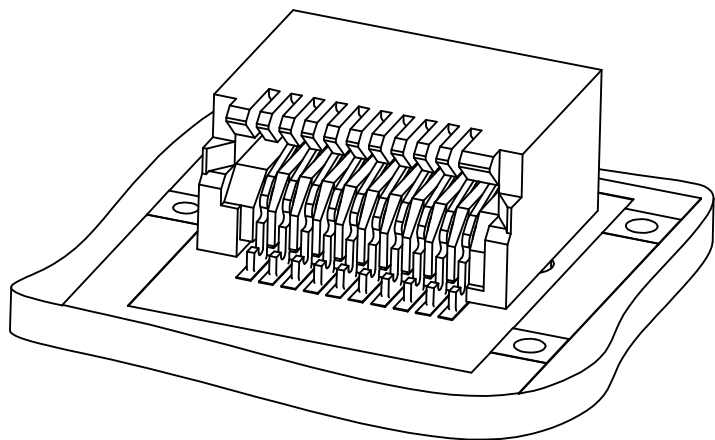
Application Specification	AS-74441-001
Product Specification	PS-74441-001
Sales Drawing	SD-74441-001
Test Summary	TS-74441-002, TS-74441-004, TS-74441-010

This document was generated on 05/19/2010

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SALES ASSEMBLY DRAWINGS FOR SMALL FORM-FACTOR AND Z AXIS PLUGGABLE CONNECTORS

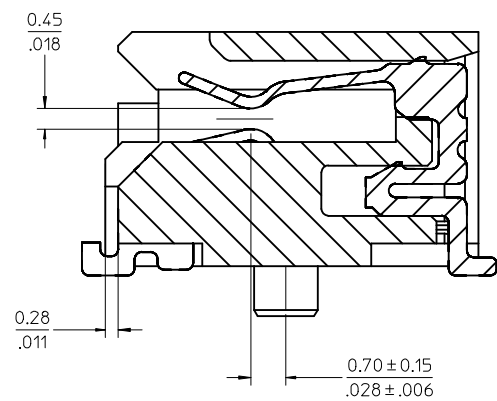
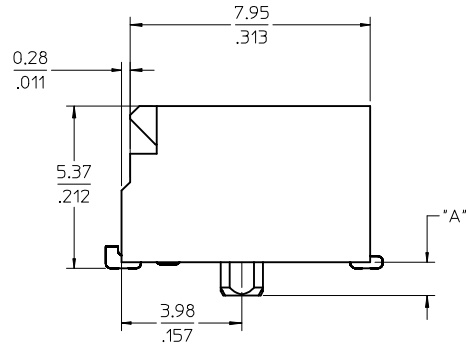
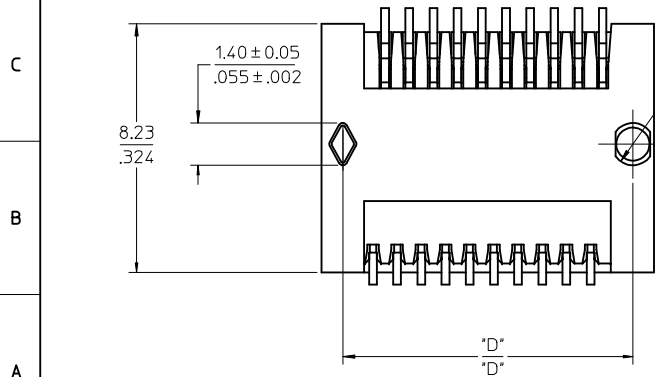
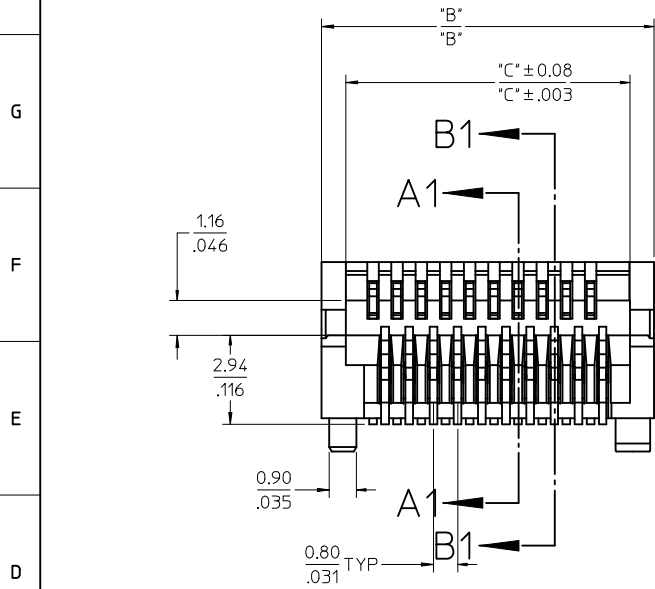
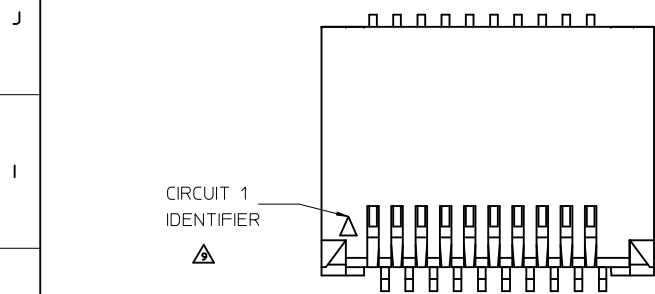
CKT SIZE	PART NUMBER	TOOLED	DESCRIPTION	"A"	"B"	"C"	"D"	MULTI-SOURCE AGREEMENT	CONNECTOR DRAWING	CIRCUIT BOARD DRAWING
20	74441-0001	YES	PLATED PER NOTE 2	1.10/.043	11.00/.433	9.40/.370	9.60/.378	SFP	PAGE 2	PAGE 3
	74441-0004	NO*	PLATED PER NOTE 2	0.76/.030						
	74441-0010	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0014	NO*	PLATED PER NOTE 3	0.76/.030						
	74441-0021	YES	PLATED PER NOTE 4	1.10/.043						
	74441-0031	YES	PLATED PER NOTE 5	1.10/.043						
30	74441-0007	YES	PLATED PER NOTE 2	1.10/.043	15.00/.591	13.40/.528	13.60/.535	XFP	PAGE 2	PAGE 4
	74441-0017	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0027	YES	PLATED PER NOTE 4	1.10/.043						
40	74441-0005	YES	PLATED PER NOTE 2	1.10/.043	19.00/.748	17.40/.685	17.60/.693		PAGE 2	PAGE 5
	74441-0015	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0025	YES	PLATED PER NOTE 4	1.10/.043						
50	74441-0008	YES	PLATED PER NOTE 2	1.10/.043	23.00/.906	21.40/.843	21.60/.850		PAGE 2	PAGE 6
	74441-0018	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0028	YES	PLATED PER NOTE 4	1.10/.043						
	74441-0038	YES	PLATED PER NOTE 5	1.10/.043						
70	74441-0003	YES	PLATED PER NOTE 2	1.10/.043	31.00/1.220	29.40/1.157	29.60/1.165	XENPAK XPAK X2	PAGE 2	PAGE 7
	74441-0013	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0023	YES	PLATED PER NOTE 4	1.10/.043						
	74441-0033	YES	PLATED PER NOTE 5	1.10/.043						



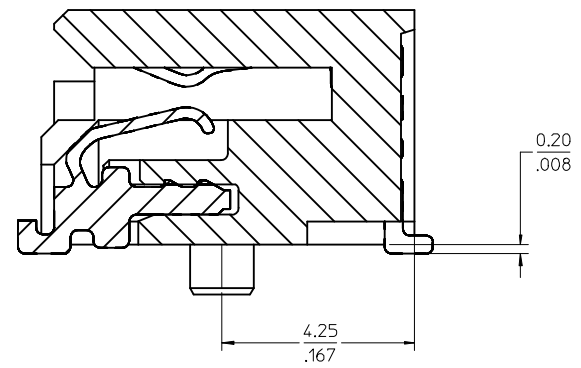
NOTES

- MATERIAL:**  
HOUSING - HIGH TEMPERATURE THERMOPLASTIC GLASS FILLED, UL 94V-0, BLACK  
TERMINALS - COPPER ALLOY
- PLATING:**  
CONTACT AREA - 0.38 μm MIN GOLD OVER 2.54 μm MIN NICKEL  
SOLDER FOOT AREA - 2.54 - 5.09 μm TIN OVER 2.54 μm MIN NICKEL.
- PLATING:**  
CONTACT AREA - 0.76 μm MIN GOLD OVER 2.54 μm NICKEL  
SOLDER AREA - 2.54 -5.09 μm TIN OVER 2.54 μm MIN NICKEL
- PLATING:**  
CONTACT AREA - 0.76 μm MIN GOLD OVER 2.54 μm NICKEL, LUBRICATED  
SOLDER AREA: GOLD FLASH OVER 2.54 μm MIN NICKEL.
- PLATING:**  
CONTACT AREA - 0.76 μm MIN GOLD OVER 2.54 μm NICKEL,  
SOLDER AREA: GOLD FLASH OVER 2.54 μm MIN NICKEL.
- PLATING:**  
CONTACT AREA - 0.38 μm MIN GOLD OVER 2.54 μm NICKEL,  
SOLDER AREA: GOLD FLASH OVER 2.54 μm MIN NICKEL.
- TERMINAL SOLDER FEET TO BE COPLANAR WITHIN 0.10/.004 FOR 20, 30 AND 40 CIRCUIT CONNECTORS  
TERMINAL SOLDER FEET TO BE COPLANAR WITHIN 0.15/.006 FOR 70 CIRCUIT CONNECTOR
- \* CONTACT PLANT FOR MORE INFORMATION
- DATE CODE: 4 DIGIT (3 DIGIT DATE, 1 DIGIT YEAR)
- CIRCUIT 1 IDENTIFIER LOCATED ON ALL PART NUMBERS

ADD -0041 EC NO: UCP2009-1455 DRWN:MS BARRA 2009/01/15 CHKD:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	MM/IN	1:1	METRIC		
		4 PLACES ± --- ± ---	DRAWN BY DATE	SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR			
		3 PLACES ± --- ± ---	HAVERY 00/04/06				
2 PLACES ± 0.13 ± .005	CHECKED BY DATE	MOLEX INCORPORATED SD-74441-001					
1 PLACE ± 0.25 ± .010	KSWEENEY 00/04/06						
ANGULAR ± 1/2°	APPROVED BY DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	MBANAKIS 00/04/06						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	SEE TABLE	DOCUMENT NO.	SHEET NO.			
				1 OF 7			

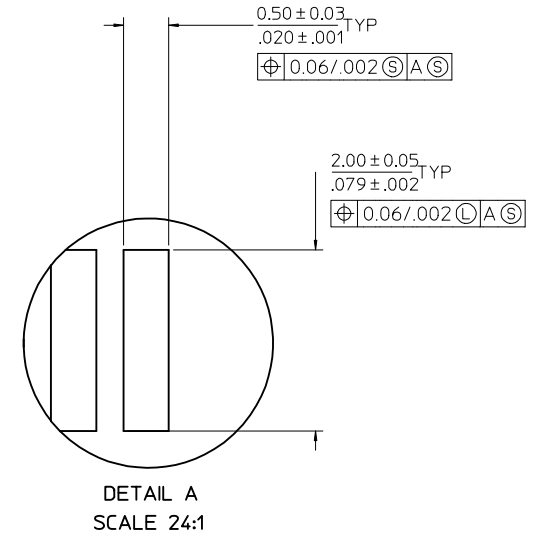
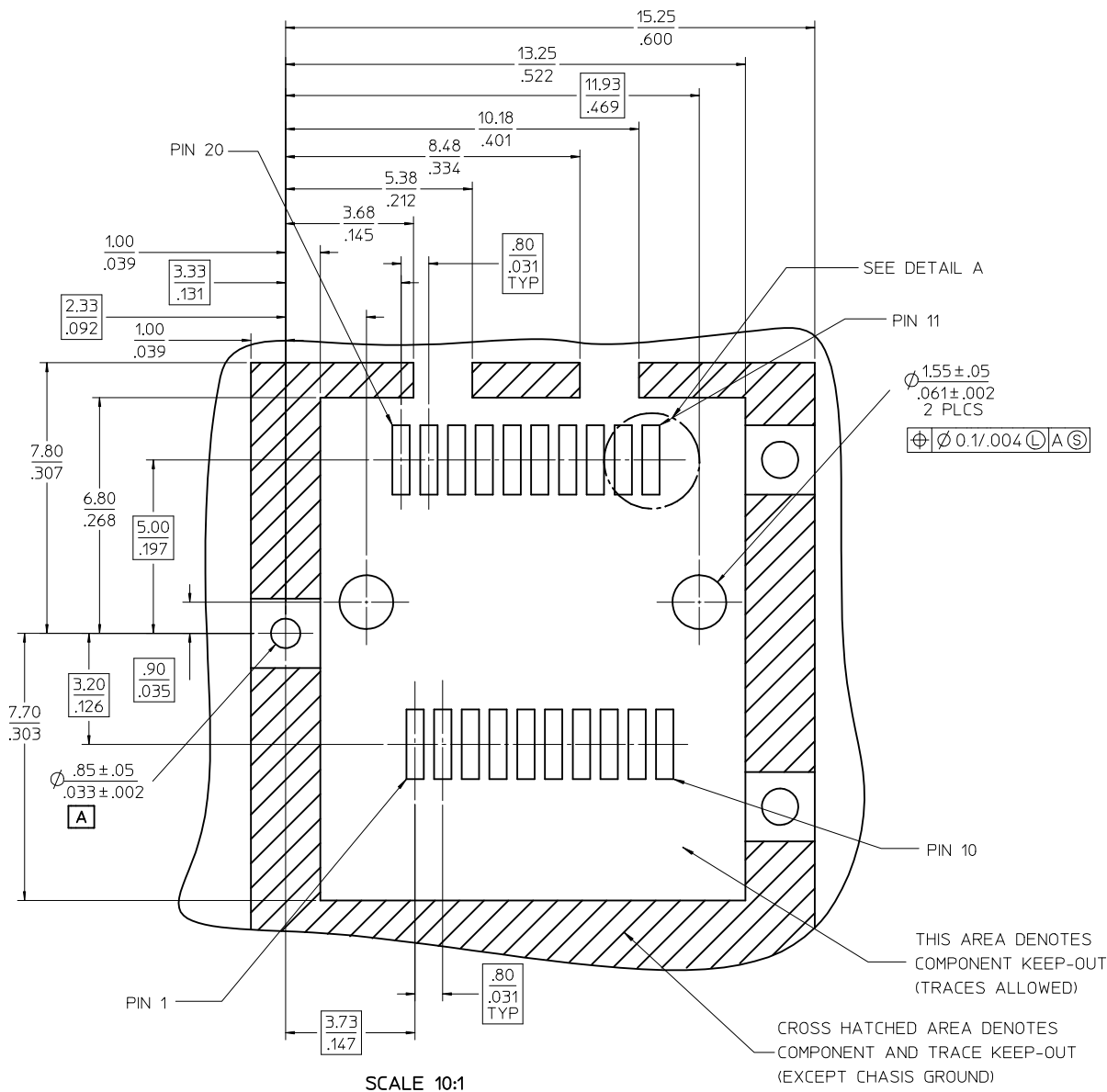


SECTION A1-A1  
SCALE 12:1



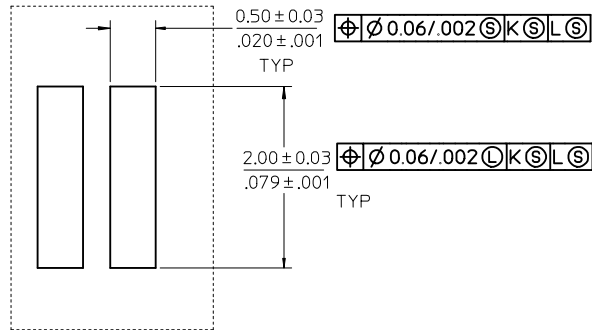
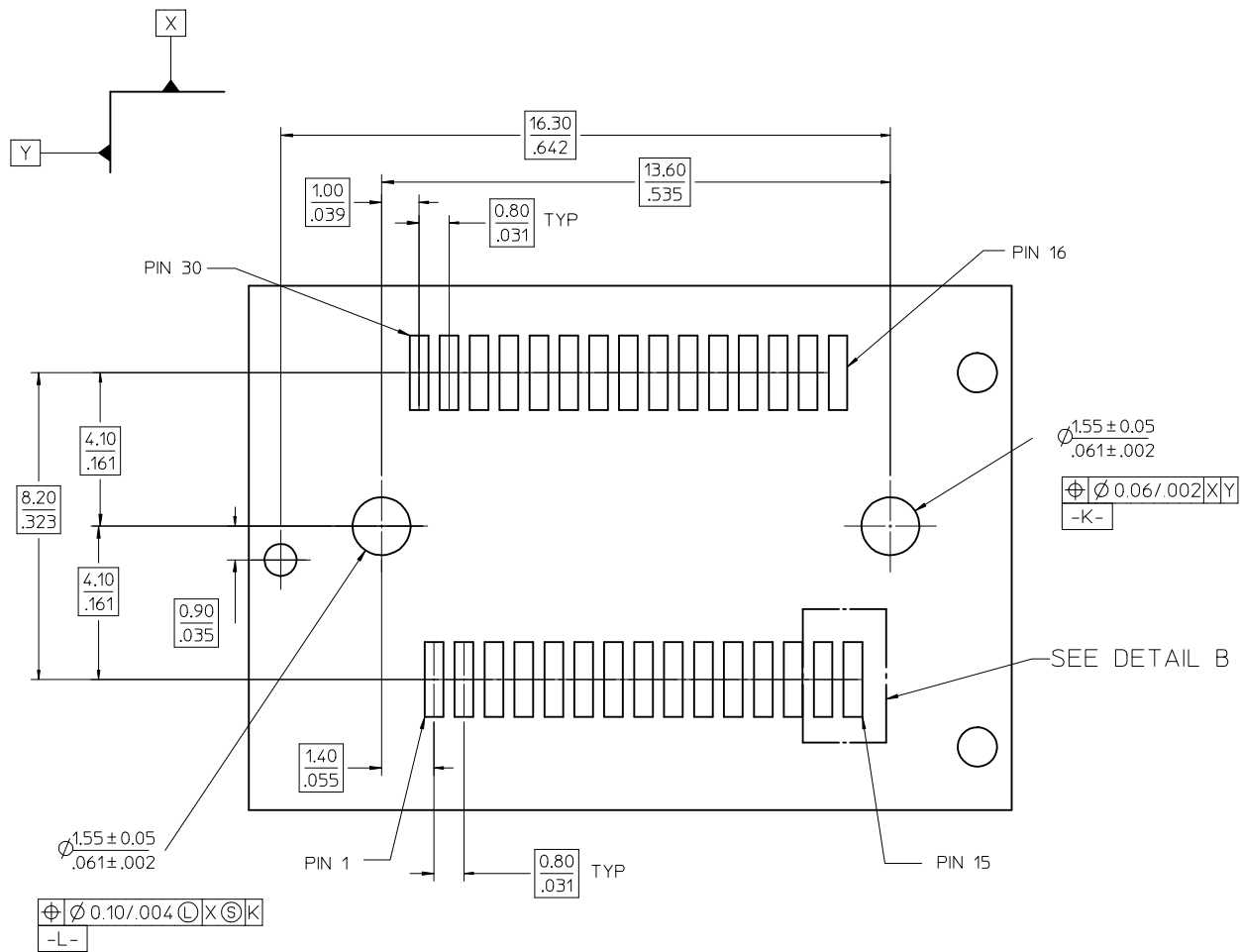
SECTION B1-B1  
SCALE 12:1

SEE SHEET 1 EC NO: UCP2009-1455 DRWN:MS BARRA 2009/01/15 CHKD:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 6:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.13 ± .005	1 PLACE ± 0.25 ± .010	DRAWN BY HAVERY	DATE 00/04/06	SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR		
		ANGULAR ±1/2°				CHECKED BY KSWEENEY	DATE 00/04/06			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY MBANAKIS	DATE 00/04/06	MOLEX INCORPORATED		SHEET NO. 2 OF 7



# 20 CIRCUIT MOTHER BOARD RECOMMENDED PCB LAYOUT

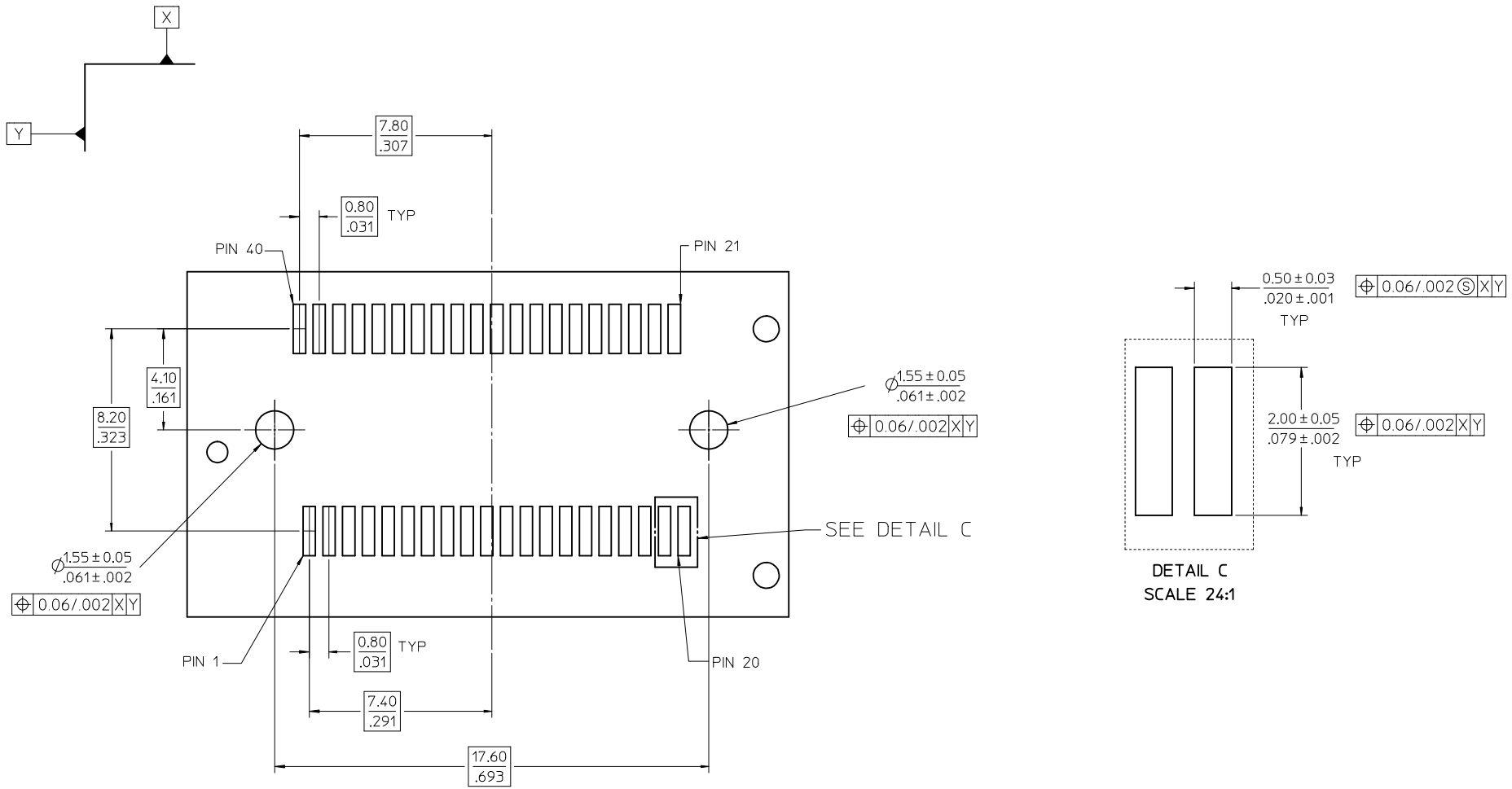
<b>SEE SHEET 1</b> EC NO: UCP2009-1455 DRAWN BY: DRWIN/MSI/BARRA CHKD BY: SM/ART APPR: SM/LLER DATE: 2009/01/15 DATE: 2009/01/15 DATE: 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .005</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td colspan="3">ANGULAR ± 1/2°</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .005	± .0005	2 PLACES	± 0.13	± .005	1 PLACE	± 0.25	± .010	ANGULAR ± 1/2°			DIMENSION STYLE <b>MM/IN</b> DRAWN BY: HAVERY DATE: 00/04/06 CHECKED BY: KSWEENEY DATE: 00/04/06 APPROVED BY: MBANAKIS DATE: 00/04/06	SCALE <b>8:1</b> DESIGN UNITS <b>METRIC</b> THIRD ANGLE PROJECTION	TITLE <b>SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR</b> <b>molex MOLEX INCORPORATED</b> DOCUMENT NO. SD-74441-001 SHEET NO. 3 OF 7
		mm	INCH																				
	4 PLACES	± .005	± .0005																				
	3 PLACES	± .005	± .0005																				
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				
REV:		SIZE: C																					



DETAIL B  
SCALE 24:1

# 30 CIRCUIT MOTHER BOARD RECOMMENDED PCB LAYOUT

<b>SEE SHEET 1</b> EC NO: UCP2009-1455 DRWN:MS BARRA 2009/01/15 CHYK:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <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>± .005</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> </table>		mm	INCH	4 PLACES	± .---	± .---	3 PLACES	± .---	± .---	2 PLACES	± 0.13	± .005	1 PLACE	± 0.25	± .010	DIMENSION STYLE <b>MM/IN</b> DRAWN BY: HAVERY DATE: 00/04/06 CHECKED BY: KSWEENEY DATE: 00/04/06 APPROVED BY: MBANAKIS DATE: 00/04/06	SCALE <b>6:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES	± .---	± .---																		
	3 PLACES	± .---	± .---																		
2 PLACES	± 0.13	± .005																			
1 PLACE	± 0.25	± .010																			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. <b>SD-74441-001</b>	SHEET NO. <b>4 OF 7</b>	<b>MOLEX INCORPORATED</b>																
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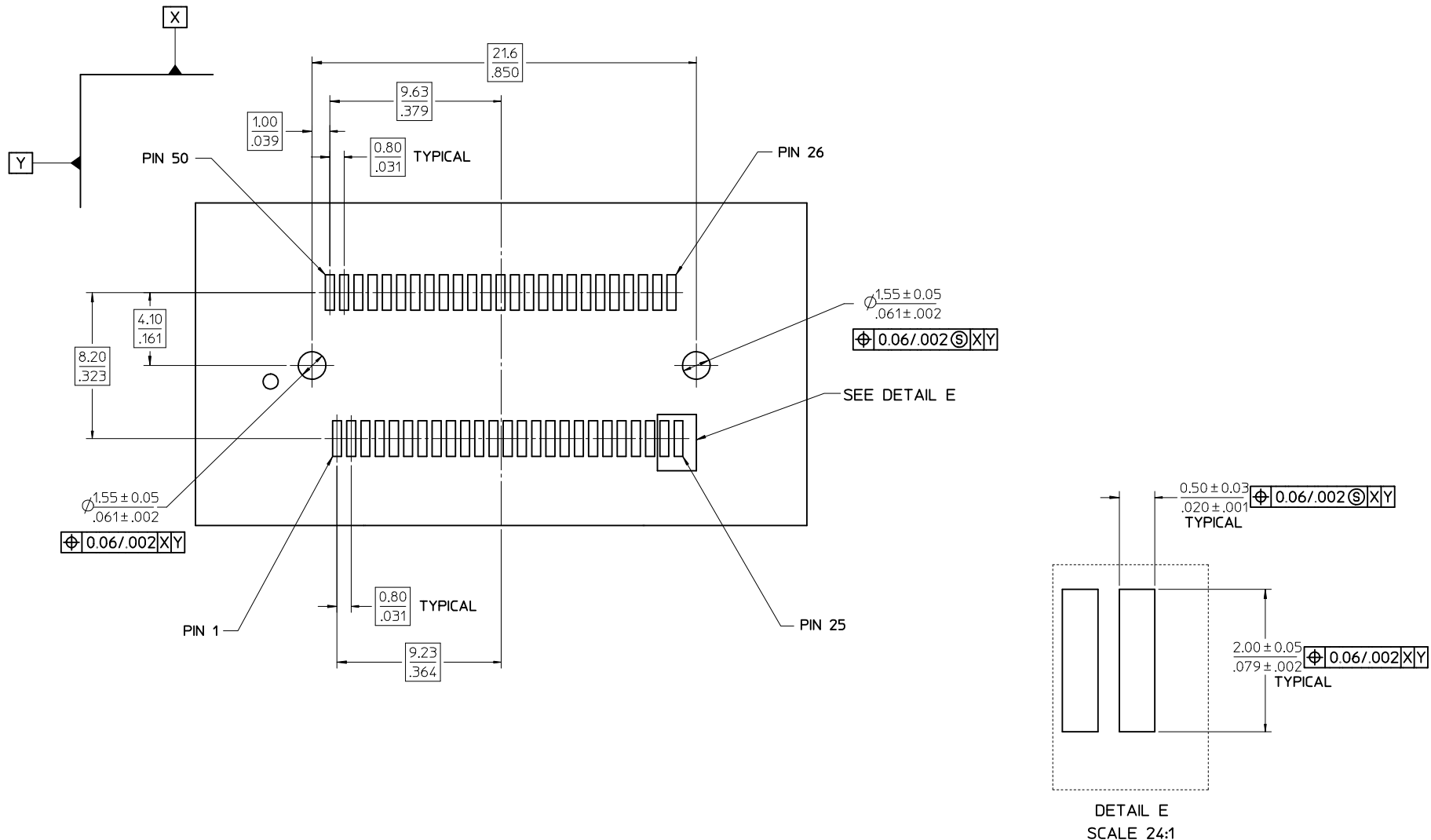
40 CIRCUIT MOTHER BOARD  
RECOMMENDED PCB LAYOUT

SEE SHEET 1	QUALITY SYMBOLS
EC NO: UCP2009-1455	▽=0
DRWN:MSI BARRA 2009/01/15	▽=0
CHKD:BSMART 2009/01/15	
APPR:SMILLER 2009/01/16	
REV	DESCRIPTION
1	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	±.010 ±.0005
3 PLACES	±.015 ±.0005
2 PLACES	±.025 ±.0010
1 PLACE	±.050 ±.0020
ANGULAR ±1/2°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
HAVERY	00/04/06
CHECKED BY	DATE
KSWEENEY	00/04/06
APPROVED BY	DATE
MBANAKIS	00/04/06
MATERIAL NO.	
SEE TABLE	
SIZE	C

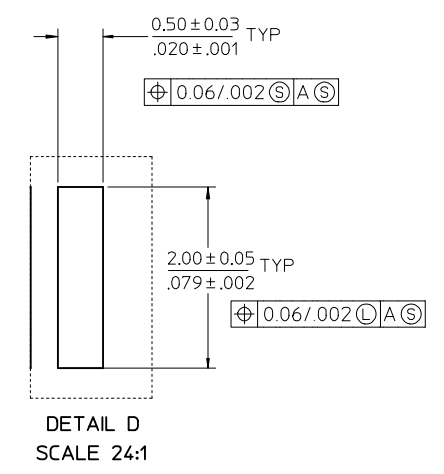
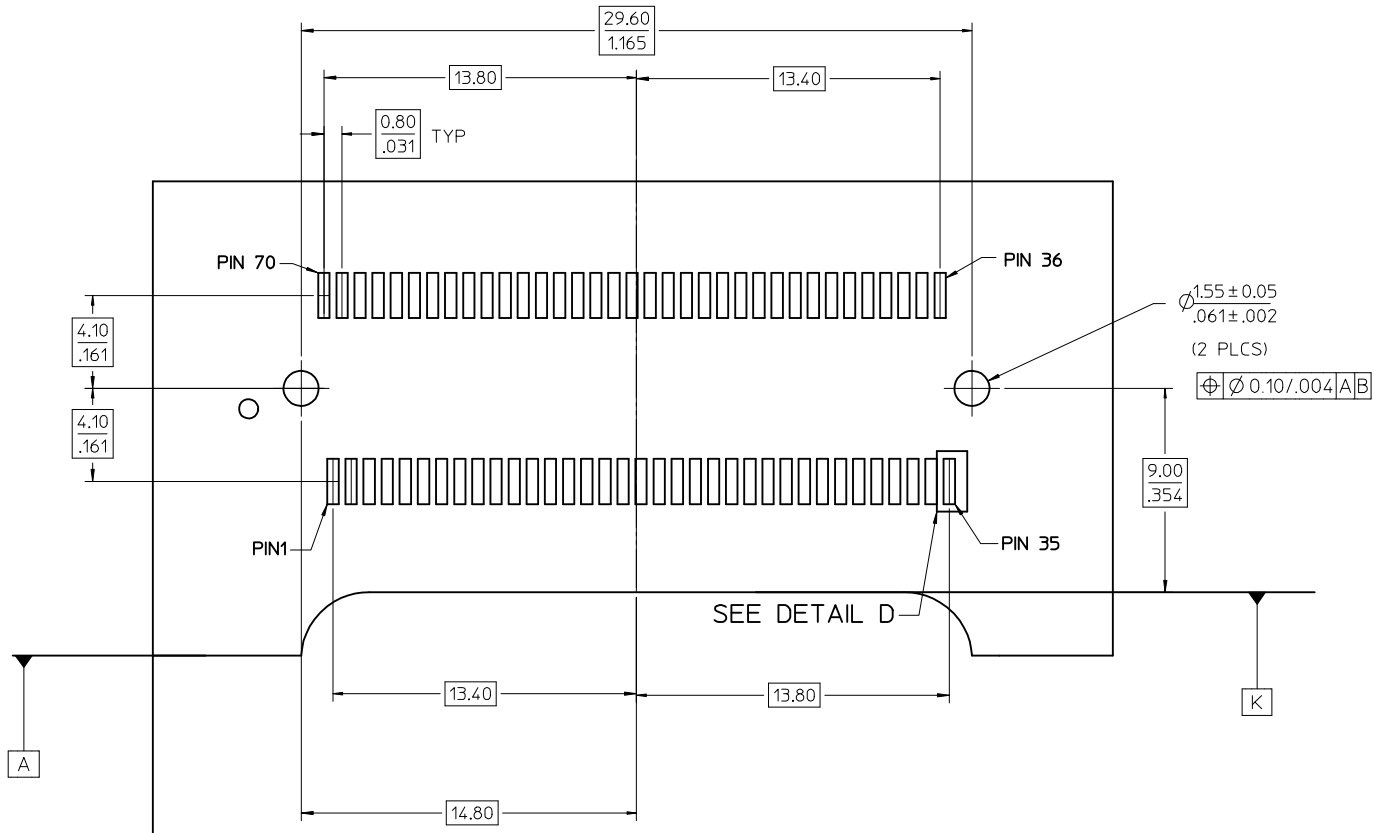
SCALE	6:1	DESIGN UNITS	METRIC	THIRD ANGLE PROJECTION
TITLE				
SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR				
MOLEX MOLEX INCORPORATED			SHEET NO. 5 OF 7	
DOCUMENT NO. SD-74441-001				
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50 CIRCUIT MOTHER BOARD  
RECOMMENDED PCB LAYOUT

SEE SHEET 1 EC NO: UCP2009-1455 DRAWN BY: IBARRA 2009/01/15 CHKD BY: SMART 2009/01/15 APPR: MILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>3 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .005</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> </tbody> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .13	± .005	3 PLACES	± .13	± .005	2 PLACES	± 0.13	± .005	1 PLACE	± 0.25	± .010	DIMENSION STYLE MM/IN DRAWN BY: HAVERY DATE: 00/04/06 CHECKED BY: KSWEENEY DATE: 00/04/06 APPROVED BY: MBANAKIS DATE: 00/04/06	SCALE 6:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	TITLE SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR	MOLEX INCORPORATED	DOCUMENT NO. SD-74441-001	SHEET NO. 6 OF 7																
	SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			





70 CIRCUIT MOTHER BOARD  
RECOMMENDED PCB LAYOUT

SEE SHEET 1 EC NO: UCP2009-1455 DRAWN BY: DRWN:MS.BARRA 2009/01/15 CHECKED BY: CHKD:BS.SMART 2009/01/15 APPROVED BY: APPR:SMILLER 2009/01/16	DESCRIPTION REVISIONS 0=0 0=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 6:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.13 ± .005	1 PLACE ± 0.25 ± .010	DRAWN BY HAVERY	DATE 00/04/06	TITLE SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR			
		ANGULAR ±1/2°				CHECKED BY KSWEENEY	DATE 00/04/06	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY MBANAKIS	DATE 00/04/06	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74441-001	SHEET NO. 7 OF 7	

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