

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

**Part Number:** [0783210001](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR3 DIMM Socket, LLCR, Vertical, Through Hole, with Beveled Metal Pins, Black Housing and Latches, 0.38µm (15µ") Gold (Au) Plating, 2.67mm (.105") Solder Tail Length, 1.57mm (.062") PCB Thickness, 240 Circuits, Lead free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-78321-002 \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

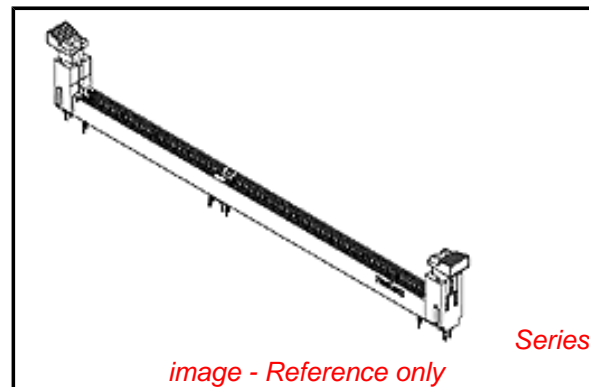
Product Family Memory Module Sockets  
 Series [78321](#)  
 Component Type Socket  
 JEDEC Outline MO-269  
 Product Name DDR3 DIMM

**Physical**

Circuits (Loaded) 240  
 Circuits (maximum) 240  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Entry Angle Vertical  
 Flammability 94V-0  
 Function Key None  
 Keying to Mating Part Yes  
 Material - Metal Copper Alloy  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 PC Tail Length (in) 0.105 In  
 PC Tail Length (mm) 2.67 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.57 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.039 In  
 Pitch - Mating Interface (mm) 1.00 mm  
 Pitch - Term. Interface (in) 0.039 In  
 Pitch - Term. Interface (mm) 1.00 mm  
 Plating min: Mating (µin) 15  
 Plating min: Mating (µm) 0.38  
 Plating min: Termination (µin) 100  
 Plating min: Termination (µm) 2.54  
 Temperature Range - Operating -55°C to +85°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 30V AC (RMS)/DC  
 Voltage Key Center



**EU RoHS**

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

**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**

[78321Series](#)

**Mates With**

JEDEC standard 1.27mm modules

**Material Info**

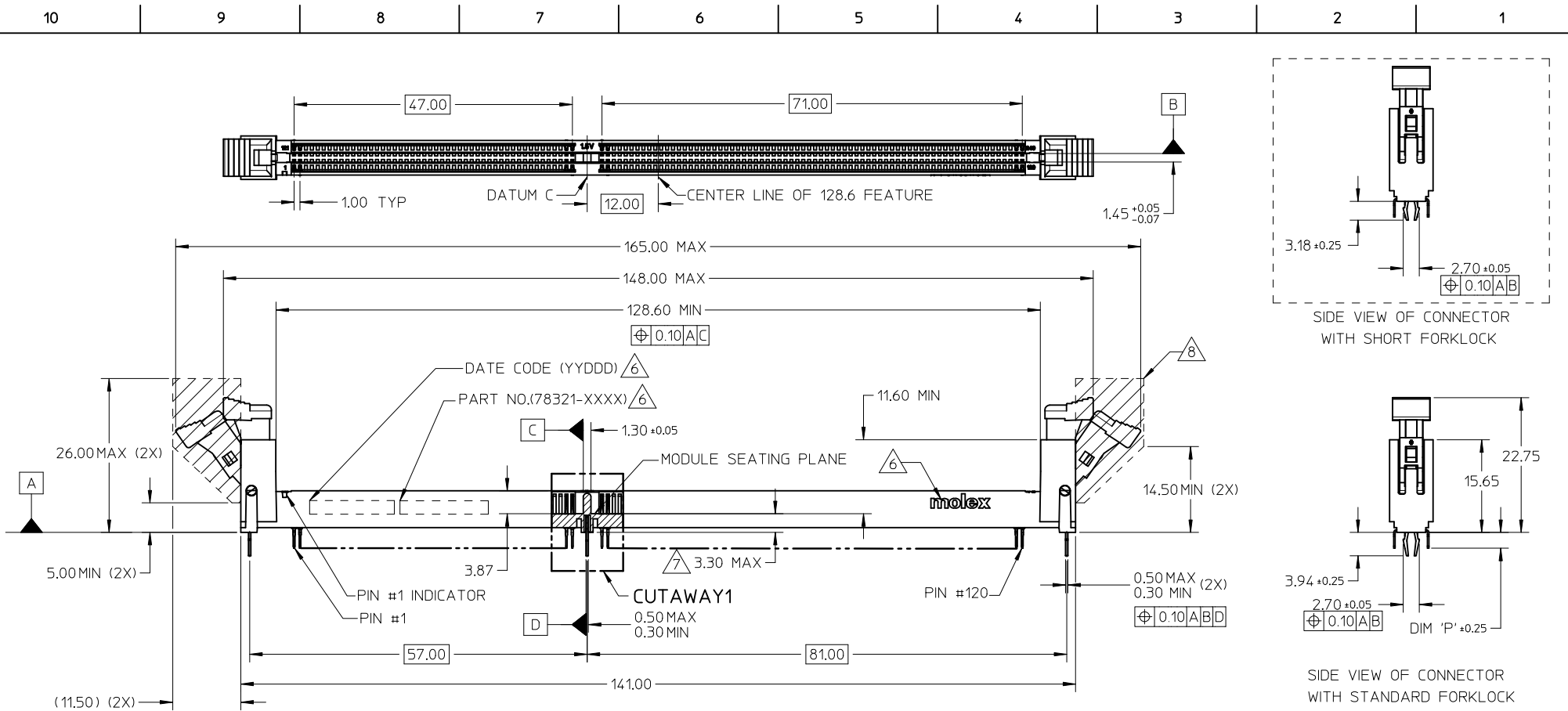
**Reference - Drawing Numbers**

Packaging Specification  
Product Specification  
Sales Drawing

PK-78321-001  
PS-78321-002  
SD-78321-001

This document was generated on 06/08/2010

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NOTES:

- MATERIAL: HOUSING - HIGH TEMP NYLON, GLASS FILLED, UL 94V-0  
COLOR: SEE TABLE ON SHEET 6 & 7  
LATCH - HIGH TEMP NYLON, GLASS FILLED, UL 94V-0  
COLOR: SEE TABLE ON SHEET 6 & 7  
TERMINAL: COPPER ALLOY

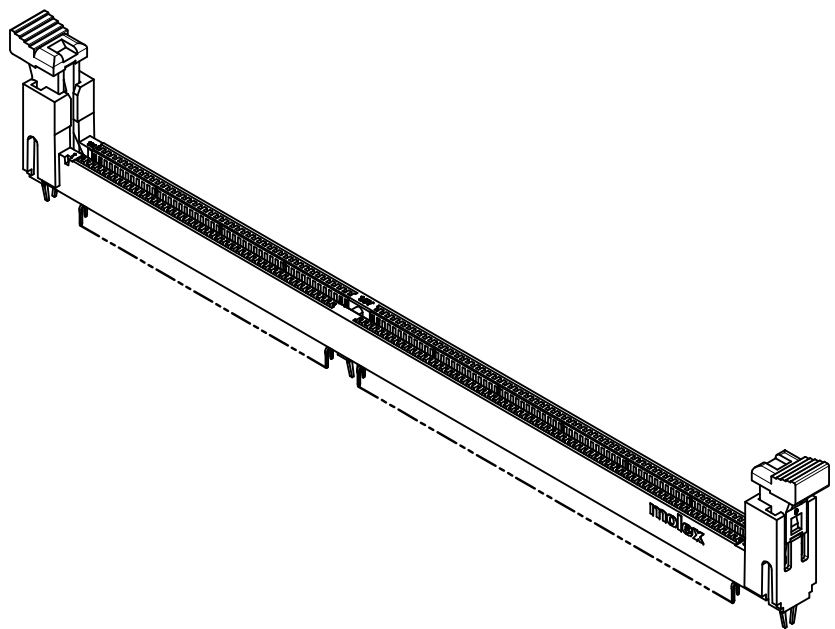
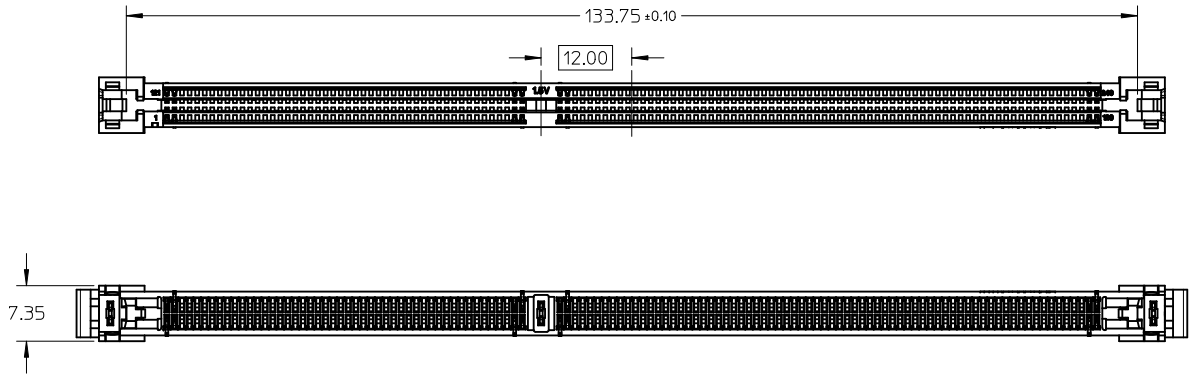
- FINISHES:  
TERMINAL PLATING OPTIONS - SEE TABLE ON SHEET 6 & 7
- PRODUCT SPECIFICATION: SEE TABLE ON SHEET 6 & 7
- PACKAGING INFORMATION: PRODUCT SHALL BE PACKED IN TRAY
- CARD SLOTS ACCEPTS 1.27±0.10MM MODULE THICKNESS (MEASURED FROM PC PADS)

- MOLEX LOGO, DATE CODE AND PART NO. INDICATED ON HOUSING
- MODULE SEATING PLANE FROM TOP OF PCB
- KEEP OUT ZONE RESERVED FOR LATCH

THIS DESIGN IS BASED ON DESIGN OBJECTIVES AND IS STRICTLY TENTATIVE. IT MAY CHANGE BASED ON RESULTS OF ADDITIONAL DESIGN REVIEWS & VERIFICATIONS.

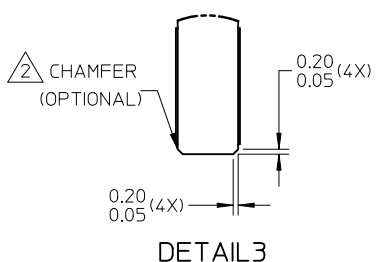
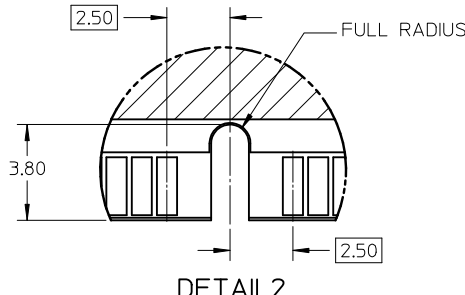
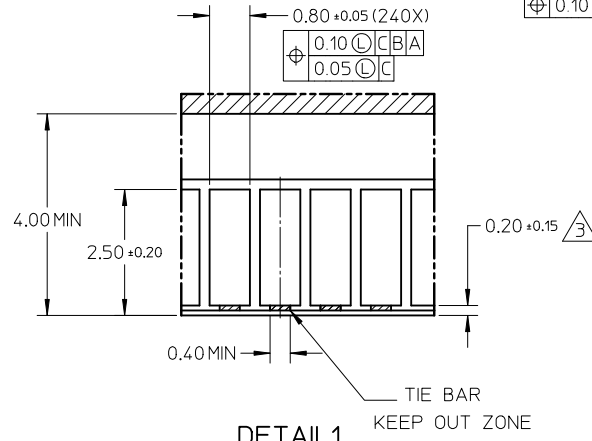
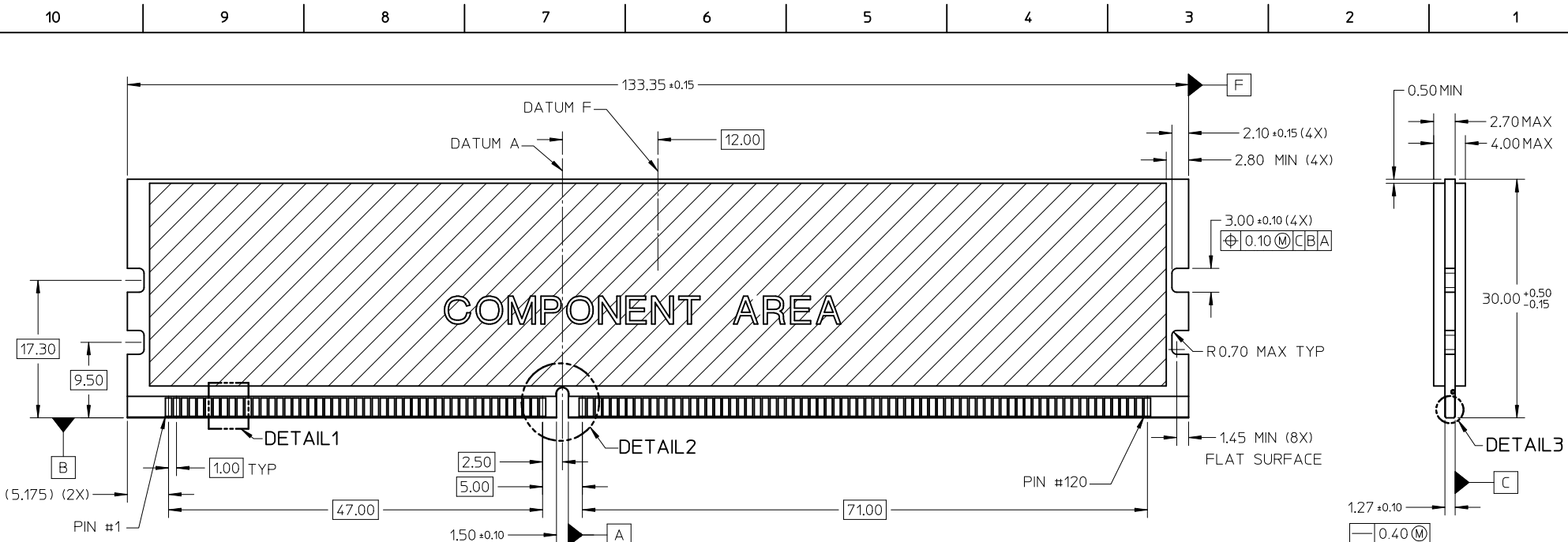
<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEVIEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_B=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL, T/H LOW LLLCR			
		4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	<b>MOLEX INCORPORATED</b> DOCUMENT NO. SD-78321-001 SHEET NO. 1 OF 7			
		3 PLACES	± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10				
2 PLACES	± 0.2	± ---	ANGULAR ± 1 °		MATERIAL NO.		SEE TABLE			
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

10 9 8 7 6 5 4 3 2 1



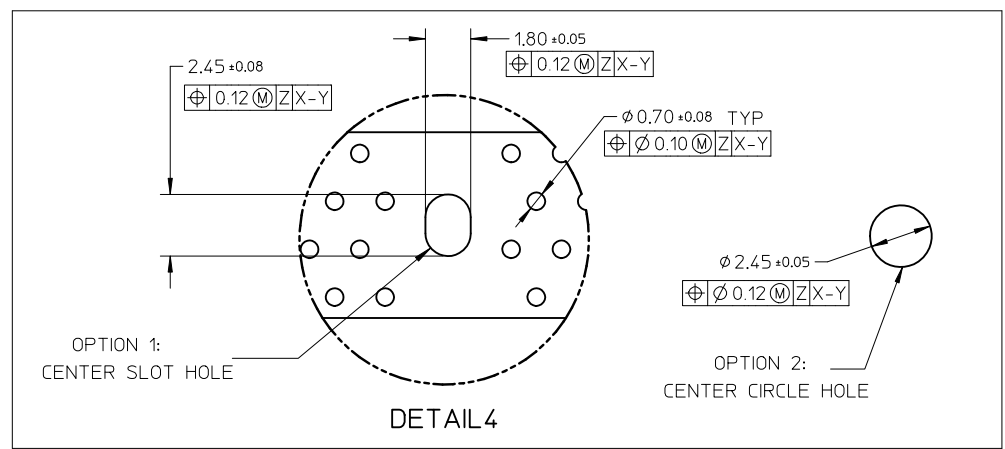
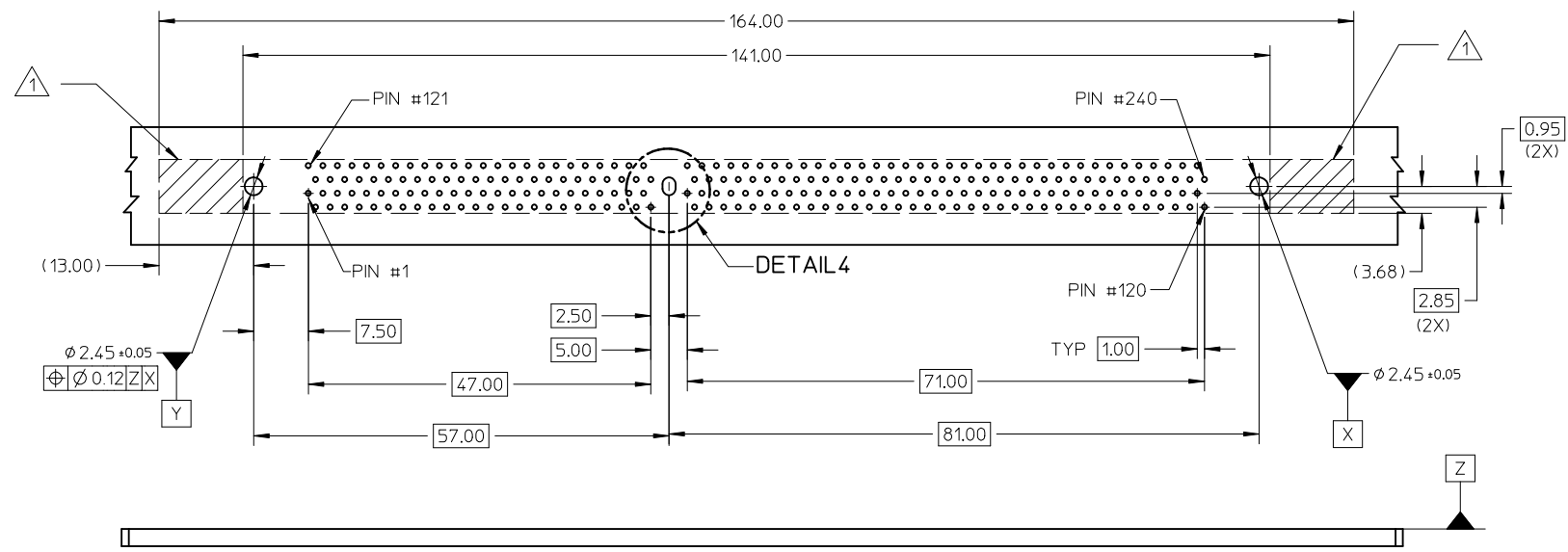
FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEVEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla_A = 0$ $\nabla_C = 0$ $\nabla_P = 0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1 °	MM ONLY	NTS	METRIC	☉ □ THIRD ANGLE PROJECTION
	REV	DESCRIPTION	DRAWN BY	DATE	TITLE	
	10		YTYANG01	2007/09/24	DDR3 DIMM, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LLCR	
		CCTEH	2007/11/12	MOLEX INCORPORATED		
		SHLENI	2010/06/10	DOCUMENT NO. SD-78321-001		
			SEE TABLE	SHEET NO. 2 OF 7		
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1



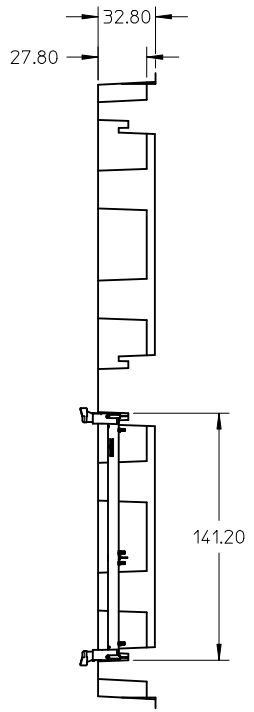
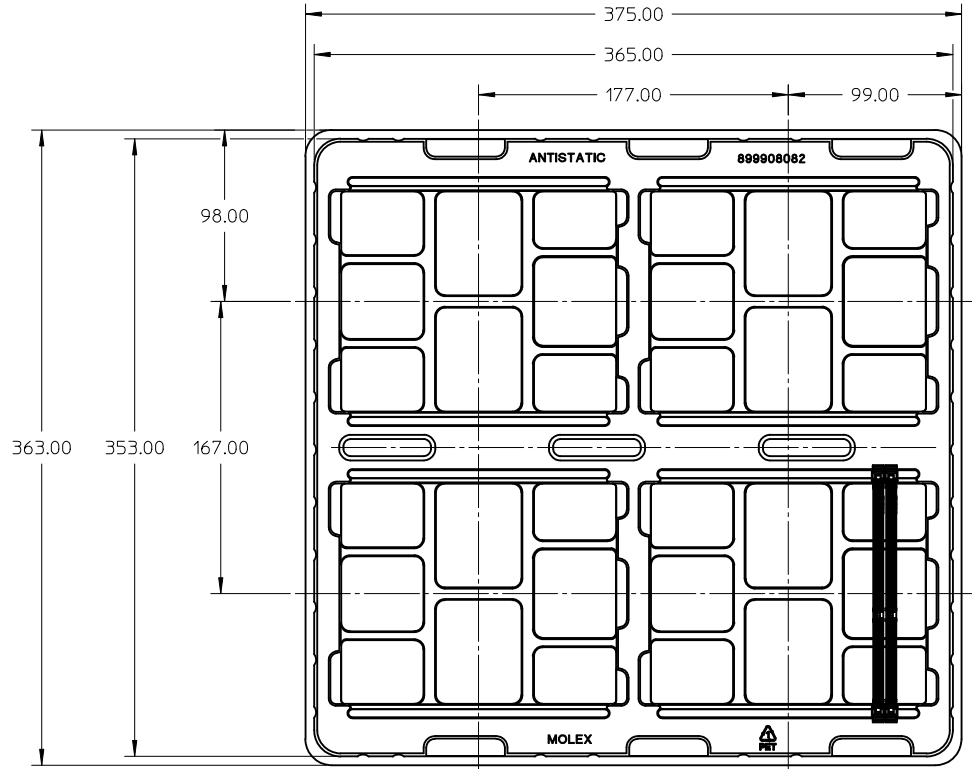
NOTES:  
 1. RECOMMENDED PLATING FOR CONTACT PADS:  
 PREFERRED: 0.76 MICROMETERS GOLD PLATING MIN OVER 2.00 MICROMETERS NICKEL  
 ALTERNATIVE: 0.05-0.75 MICROMETERS GOLD PLATING OVER 2.00 MICROMETERS NICKEL MUST USE AN ELECTRONIC CONTACT GRADE CORROSIVE BARRIER LUBRICANT  
 2. CHAMFER IS OPTIONAL AND IS NOT TO HIT THE GOLD PADS  
 3. LEADING EDGE OF GOLD PADS SPECIFIED BY KEEPOUT ZONE SHALL BE FREE OF BURRS AND EXTERNAL TIE BARS

FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEW 2010/04/23 CHYD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	$F_A=0$	mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL, T/H LOW LLLCR			
	$F_G=0$	4 PLACES ± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED			
	$F_P=0$	2 PLACES ± 0.2	± ---	APPROVED BY SHLENI	DATE 2010/06/10	DOCUMENT NO. SD-78321-001		SHEET NO. 3 OF 7	
10	DESCRIPTION	ANGULAR ± 1 °		MATERIAL NO. SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								



NOTE:  
 1. KEEP-OUT AREA IS THE AREA WHERE THE CONNECTOR (INCLUDING LATCH) IS MOUNTED ON PCB

FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEWEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	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><math>\pm</math> ---</td> <td><math>\pm</math> ---</td> </tr> <tr> <td>3 PLACES</td> <td><math>\pm</math> ---</td> <td><math>\pm</math> ---</td> </tr> <tr> <td>2 PLACES</td> <td><math>\pm 0.2</math></td> <td><math>\pm</math> ---</td> </tr> <tr> <td>1 PLACE</td> <td><math>\pm</math> ---</td> <td><math>\pm</math> ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	$\pm$ ---	$\pm$ ---	3 PLACES	$\pm$ ---	$\pm$ ---	2 PLACES	$\pm 0.2$	$\pm$ ---	1 PLACE	$\pm$ ---	$\pm$ ---	DIMENSION STYLE MM ONLY DRAWN BY: YTYANG01 DATE: 2007/09/24 CHECKED BY: CCTEH DATE: 2007/11/12 APPROVED BY: SHLENI DATE: 2010/06/10	SCALE: NTS DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL, T/H LOW LLLCR MOLEX INCORPORATED
		mm	INCH																	
	4 PLACES	$\pm$ ---	$\pm$ ---																	
	3 PLACES	$\pm$ ---	$\pm$ ---																	
2 PLACES	$\pm 0.2$	$\pm$ ---																		
1 PLACE	$\pm$ ---	$\pm$ ---																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.: SEE TABLE DOCUMENT NO.: SD-78321-001 SHEET NO.: 4 OF 7																			
SIZE: A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				
REV: 10																				



NOTES:  
1. QTY OF CAVITY : 20 X 4 = 80 PCS

<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEWEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LLCR			
		4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	<b>MOLEX INCORPORATED</b> DOCUMENT NO. SD-78321-001 SHEET NO. 5 OF 7			
		3 PLACES	± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10				
2 PLACES	± 0.2	± ---	ANGULAR ± 1 °		MATERIAL NO.		SEE TABLE			
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ASSEMBLY PART NO.	VOLTAGE KEY	DIM 'P'	FORKLOCK LENGTH	RECOMMENDED PCB THICKNESS	PLATING OPTION	HOUSING COLOUR	LATCH COLOUR	PRODUCT SPECIFICATION
78321-0011	CENTRE (1.5V)	2.67	3.94	1.57	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD ON CONTACT 2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN (MATTE) ON SOLDER TAILS 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	BLACK	BLACK	PS-78321-001
78321-0016							NATURAL (OFF-WHITE)	
78321-0013		3.00		2.18			BLACK	
78321-0017							NATURAL (OFF-WHITE)	
78321-0012		3.18		2.36			BLACK	
78321-0018							NATURAL (OFF-WHITE)	
78321-0001		2.67		1.57	0.38 MICROMETER/ 15 MICROINCH MIN. GOLD ON CONTACT 2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN (MATTE) ON SOLDER TAILS 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE		BLACK	PS-78321-002
78321-0006							NATURAL (OFF-WHITE)	
78321-0003		3.00		2.18			BLACK	
78321-0007							NATURAL (OFF-WHITE)	
78321-0002		3.18		2.36			BLACK	
78321-0008							NATURAL (OFF-WHITE)	

<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEWEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla_A = 0$ $\nabla_C = 0$ $\nabla_P = 0$	<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>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC	
		mm	INCH																		
	4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																			
2 PLACES	± 0.2	± ---																			
1 PLACE	± ---	± ---																			
DESCRIPTION	DRAWN BY: YTYANG01 CHECKED BY: CCTEH APPROVED BY: SHLENI DATE: 2007/09/24 DATE: 2007/11/12 DATE: 2010/06/10	TITLE	DDR3 DIMM, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LLCR																		
REV	10	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MOLEX INCORPORATED																	
			SIZE: A3	DOCUMENT NO. SD-78321-001		SHEET NO. 6 OF 7															
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ASSEMBLY PART NO.	VOLTAGE KEY	DIM 'P'	FORKLOCK LENGTH	RECOMMENDED PCB THICKNESS	PLATING OPTION	HOUSING COLOUR	LATCH COLOUR	PRODUCT SPECIFICATION
78321-0051	CENTRE (1.5V)	3.18	3.18	2.36	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD ON CONTACT 2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN (MATTE) ON SOLDER TAILS 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	BLACK	NATURAL (OFF-WHITE)	PS-78321-001
78321-0052						NATURAL (OFF-WHITE)		
78321-0053						BLUE		
78321-0055						GREEN		
78321-0151						BLACK		
78321-0152						NATURAL (OFF-WHITE)		
78321-0153		BLUE						
78321-0155		GREEN						
78321-0061		BLACK	0.38 MICROMETER/ 15 MICROINCH MIN. GOLD ON CONTACT 2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN (MATTE) ON SOLDER TAILS 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	PS-78321-002				
78321-0062		NATURAL (OFF-WHITE)						
78321-0063		BLUE						
78321-0065		GREEN						
78321-0161		BLACK						
78321-0162		NATURAL (OFF-WHITE)						
78321-0163		BLUE						
78321-0165		GREEN						
78321-0261		BLACK			BLACK			
78321-0262		NATURAL (OFF-WHITE)						
78321-0263		BLUE						
78321-0265		GREEN						
78321-0361		BLACK						
78321-0362		NATURAL (OFF-WHITE)						
78321-0363		BLUE						
78321-0365		GREEN						

<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$F_A=0$ $F_G=0$ $F_P=0$	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1 °	MM ONLY	NTS	METRIC		
	DESCRIPTION		DRAWN BY	DATE	TITLE		
			YTYANG01	2007/09/24	DDR3 DIMM, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LLCR		
		CCTEH	2007/11/12	MOLEX INCORPORATED			
		SHLENI	2010/06/10	SD-78321-001			
				SHEET NO. 7 OF 7			
				SEE TABLE			
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