

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

**Part Number:** [0783210163](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR3 DIMM Socket, LLCR, Vertical, Through Hole, with Beveled Metal Pins, Blue Housing, Natural (Off-White) 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**

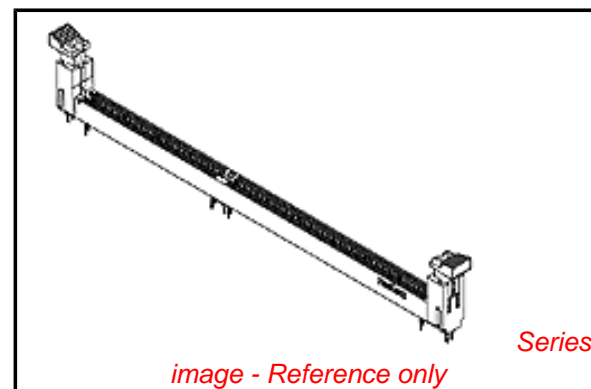
Product Family Memory Module Sockets  
 Series [78321](#)  
 Component Type Socket  
 JEDEC Outline MO-269  
 Product Name DDR3 DIMM

**Physical**

Circuits (Loaded) 240  
 Circuits (maximum) 240  
 Color - Resin Blue, Natural  
 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



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC  
 Contains SVHC: No  
 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**

[78321Series](#)

**Mates With**

JEDEC standard 1.27mm modules

Voltage Key

Center

**Solder Process Data**

Duration at Max. Process Temperature (seconds)

10

Lead-free Process Capability

SMC & Wave Capable (TH only)

Max. Cycles at Max. Process Temperature

2

Process Temperature max. C

260

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification

PK-78321-001

Product Specification

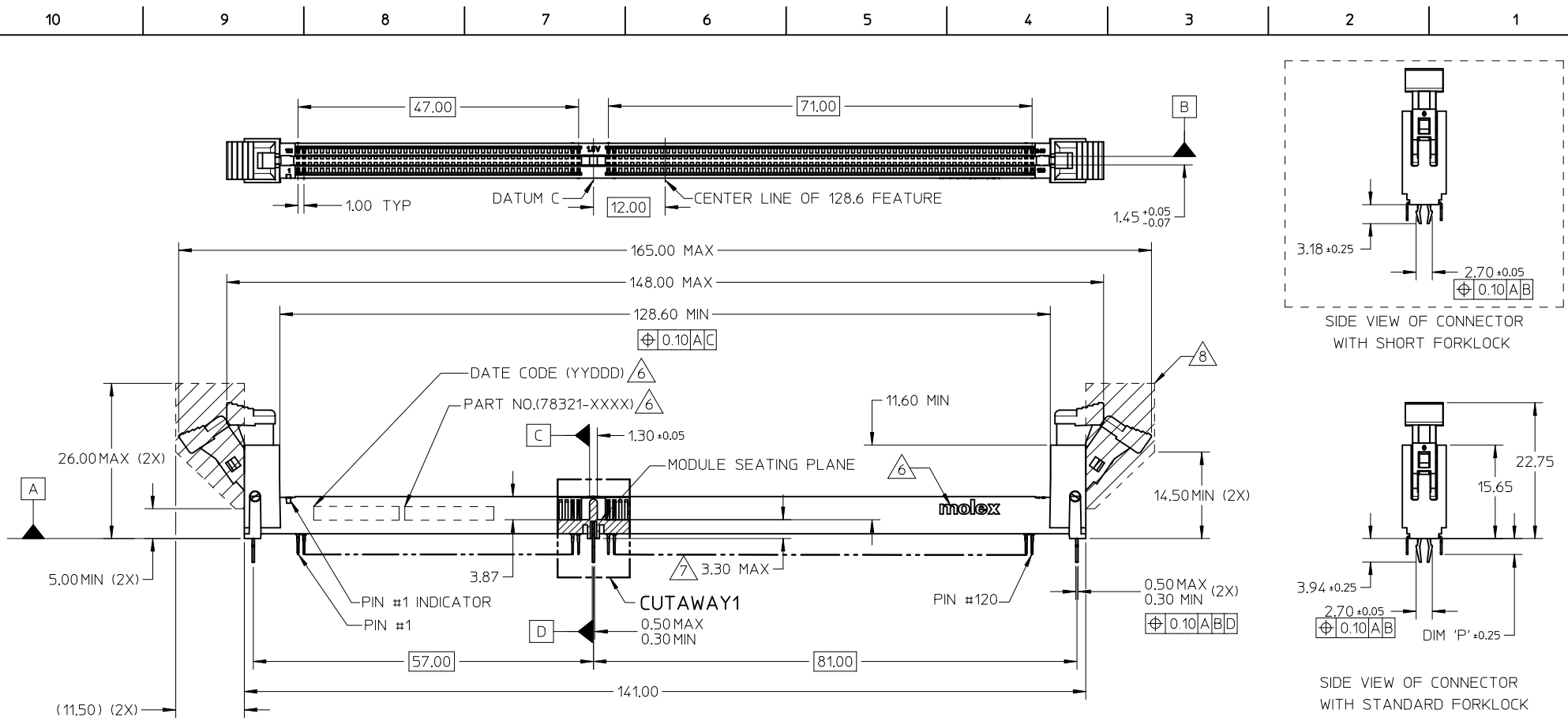
PS-78321-002

Sales Drawing

SD-78321-001

This document was generated on 06/08/2010

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NOTES:  
 1. 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

2. FINISHES:  
 TERMINAL PLATING OPTIONS - SEE TABLE ON SHEET 6 & 7

3. PRODUCT SPECIFICATION: SEE TABLE ON SHEET 6 & 7

4. PACKAGING INFORMATION: PRODUCT SHALL BE PACKED IN TRAY

5. CARD SLOTS ACCEPTS 1.27 $\pm$ 0.10MM MODULE THICKNESS  
 (MEASURED FROM PC PADS)

6. MOLEX LOGO, DATE CODE AND PART NO. INDICATED ON HOUSING

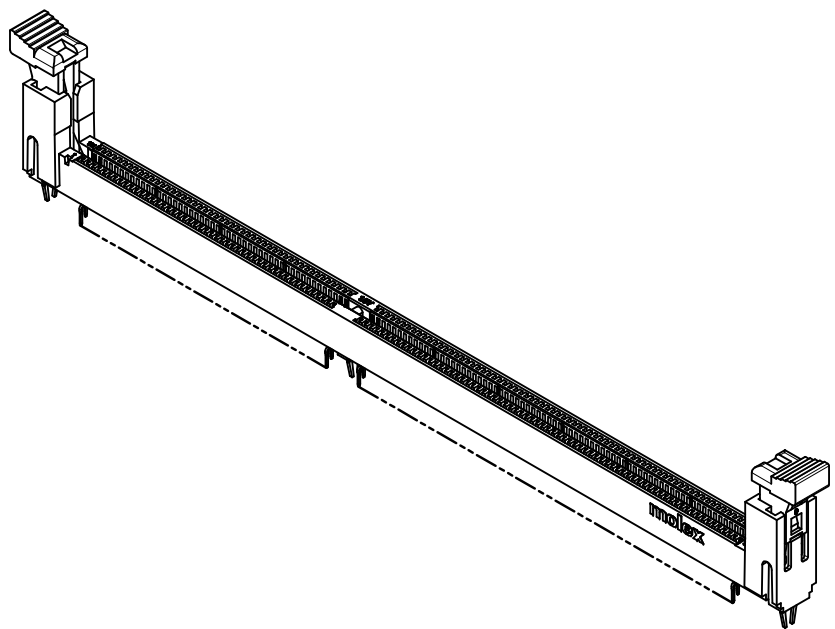
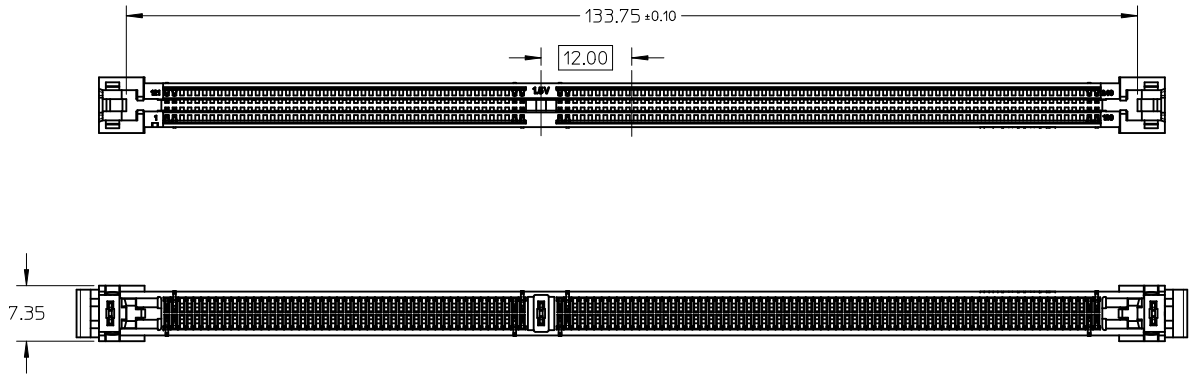
7. MODULE SEATING PLANE FROM TOP OF PCB

8. 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.

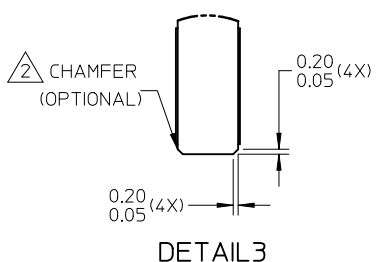
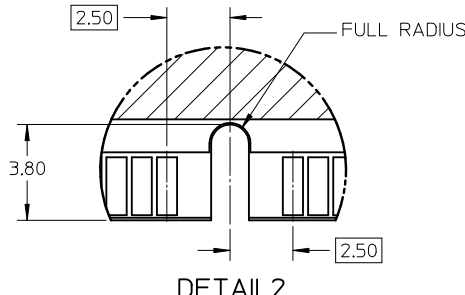
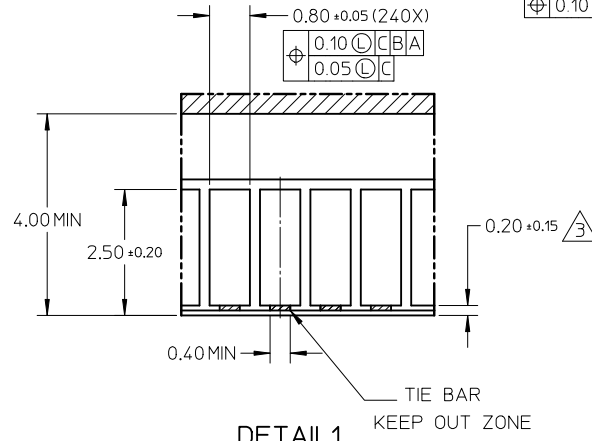
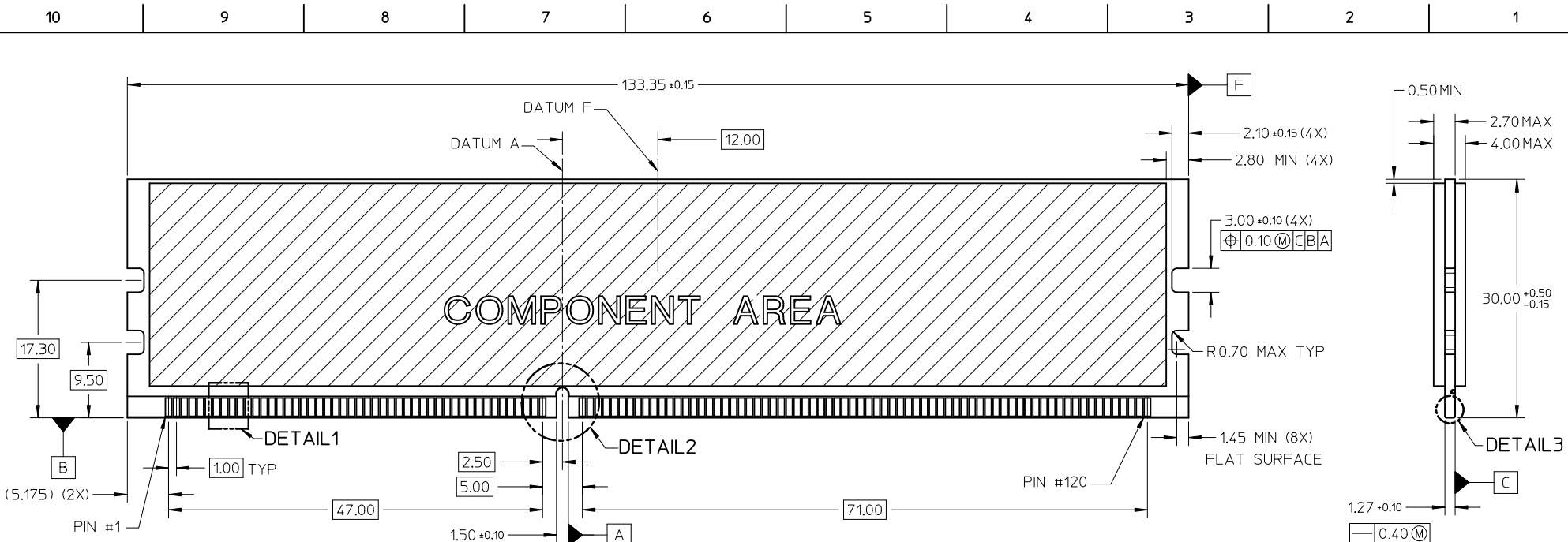
<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEVIEW CHKD: CCTEH APPR: SHLENI	DESCRIPTION 2010/04/23 2010/06/10 2010/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		$\nabla_A = 0$	mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL, T/H LOW LLLCR			
		$\nabla_C = 0$	4 PLACES $\pm$ ---	$\pm$ ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED DOCUMENT NO. SD-78321-001 SHEET NO. 1 OF 7			
		$\nabla_B = 0$	3 PLACES $\pm$ ---	$\pm$ ---	APPROVED BY SHLENI	DATE 2010/06/10				
		2 PLACES $\pm 0.2$	$\pm$ ---	MATERIAL NO.		SEE TABLE				
		1 PLACE $\pm$ ---	$\pm$ ---	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				

10 9 8 7 6 5 4 3 2 1



FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEWEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	REV 10	DESCRIPTION QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	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, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LLCR				
			4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED DOCUMENT NO. SD-78321-001 SHEET NO. 2 OF 7				
			3 PLACES	± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10					
2 PLACES	± 0.2	± ---	ANGULAR ± 1 °		MATERIAL NO. SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3							

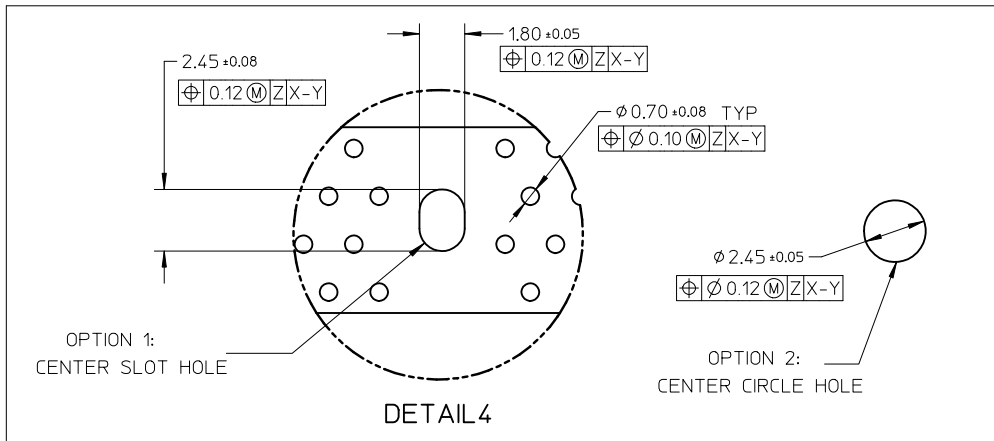
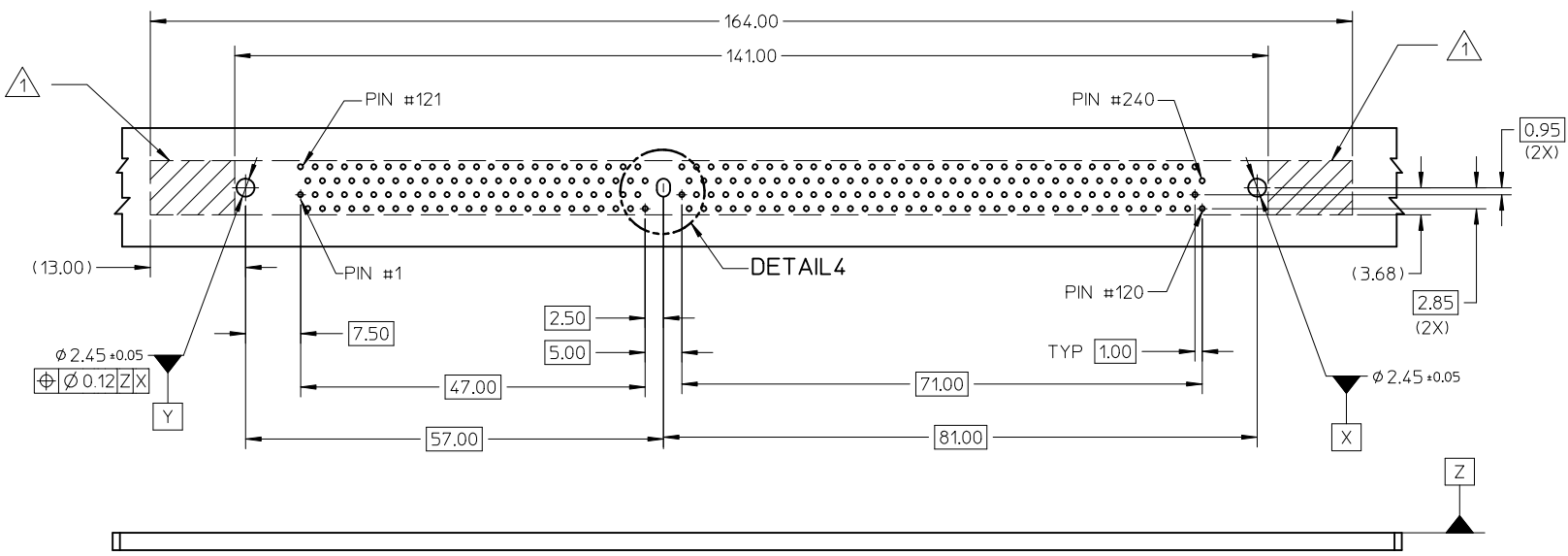
9 8 7 6 5 4 3 2 1



- NOTES:
- 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
  - CHAMFER IS OPTIONAL AND IS NOT TO HIT THE GOLD PADS
  - LEADING EDGE OF GOLD PADS SPECIFIED BY KEEPOUT ZONE SHALL BE FREE OF BURRS AND EXTERNAL TIE BARS

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			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	MOLEX INCORPORATED DOCUMENT NO. SD-78321-001 SHEET NO. 3 OF 7			
		3 PLACES	± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10				
2 PLACES	± 0.2	± ---	MATERIAL NO.		SEE TABLE					
1 PLACE	± ---	± ---	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					
ANGULAR ± 1°										

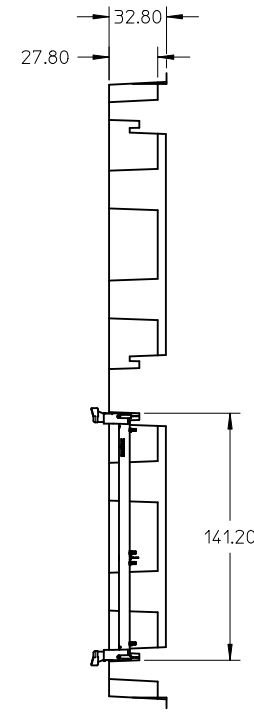
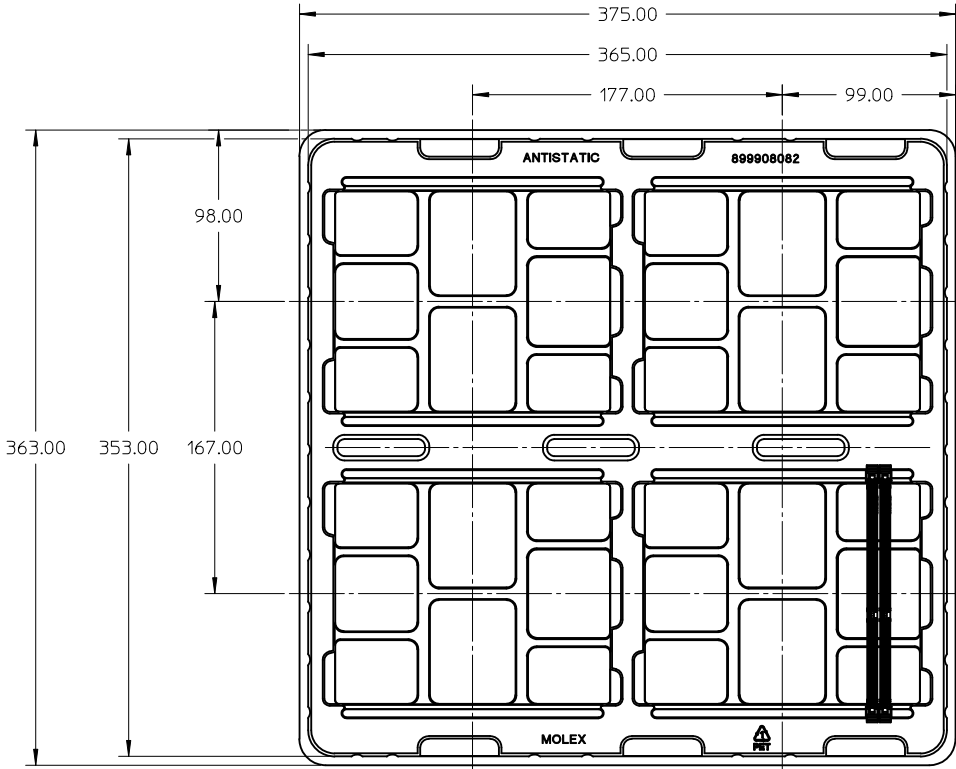
10 9 8 7 6 5 4 3 2 1



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

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	$F_C=0$	4 PLACES $\pm$ ---	$\pm$ ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED DOCUMENT NO. SD-78321-001 SHEET NO. 4 OF 7			
	$F_P=0$	3 PLACES $\pm$ ---	$\pm$ ---	APPROVED BY SHLENI	DATE 2010/06/10				
	2 PLACES $\pm 0.2$	$\pm$ ---	MATERIAL NO. SEE TABLE						
	1 PLACE $\pm$ ---	$\pm$ ---	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	ANGULAR $\pm 1^\circ$		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						

9 8 7 6 5 4 3 2 1



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

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			mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LCCR			
		4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED 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"> <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>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC	
		mm	INCH																		
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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	MATERIAL NO. DOCUMENT NO. SHEET NO.	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	MOLEX INCORPORATED SD-78321-001	6 OF 7																



