

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

**Part Number:** [0783210012](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR3 DIMM Socket, LLCR, Vertical, Through Hole, with Beveled Metal Pins, Black Housing and Latches, 0.76µm (30µ") Gold (Au) Plating, 3.18mm (.125") Solder Tail Length, 2.36mm (.093") PCB Thickness, 240 Circuits, Lead free

**Documents:**

[3D Model](#) [Product Specification PS-78321-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

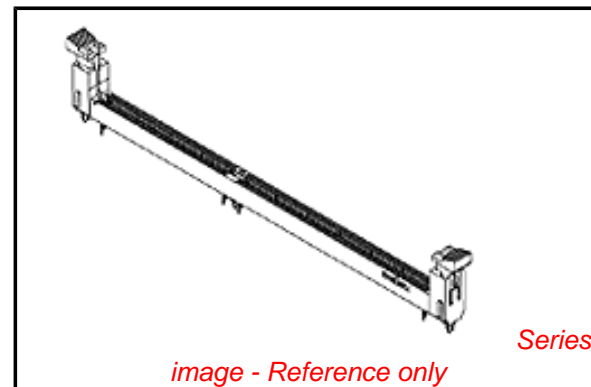
Product Family Memory Module Sockets  
 Series [78321](#)  
 Component Type Socket  
 JEDEC Outline MO-269  
 Product Name DDR3 DIMM

**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) 0.125 In  
 PC Tail Length (mm) 3.18 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.093 In  
 PCB Thickness Recommended (mm) 2.36 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) 30  
 Plating min: Mating (µm) 0.76  
 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

**Solder Process Data**

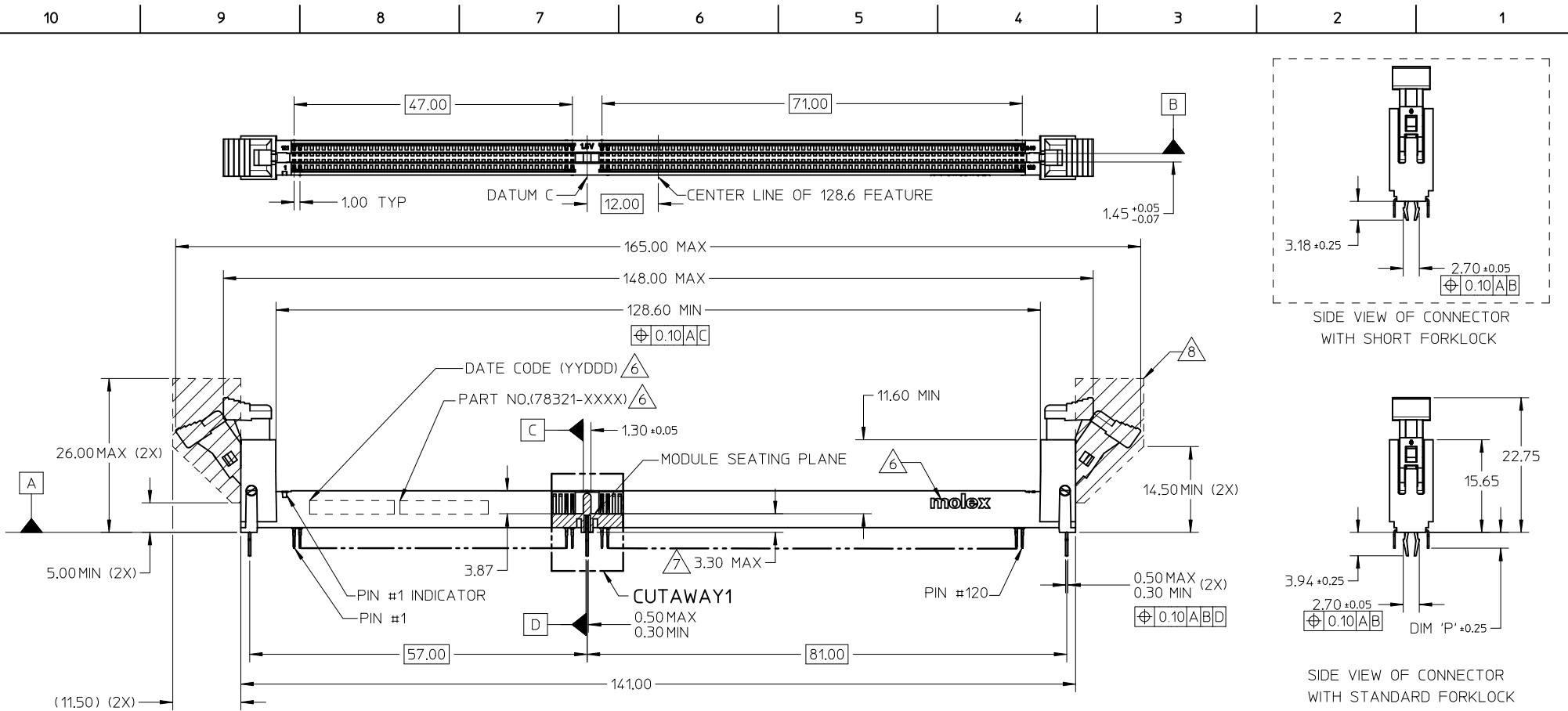
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	2
Process Temperature max. C	260

**Material Info****Reference - Drawing Numbers**

Packaging Specification	PK-78321-001
Product Specification	PS-78321-001
Sales Drawing	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

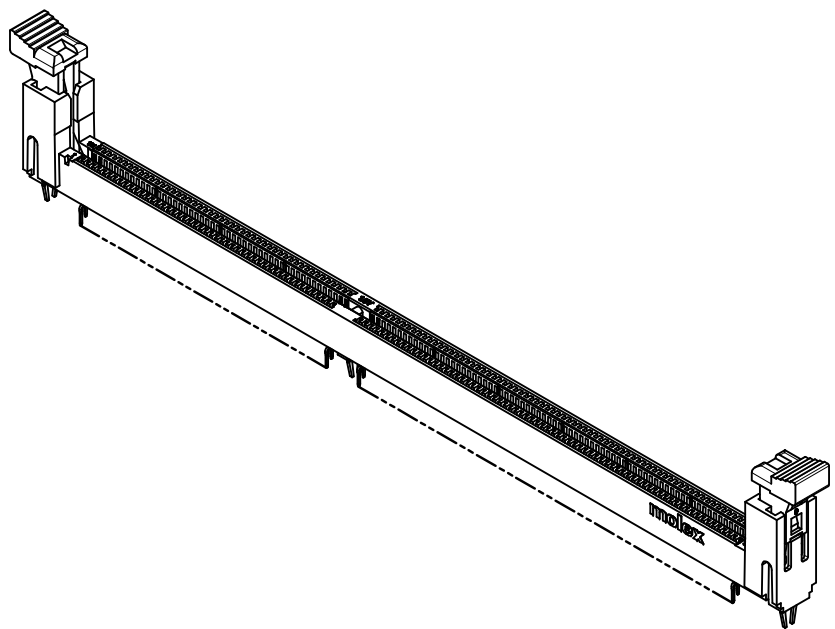
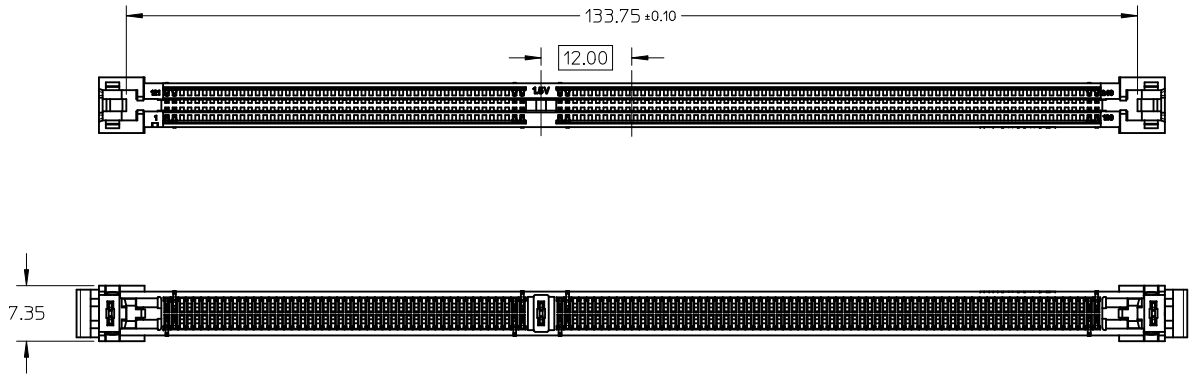
- FINISHES:  
TERMINAL PLATING OPTIONS - SEE TABLE ON SHEET 6 & 7
- PRODUCT SPECIFICATION: SEE TABLE ON SHEET 6 & 7
- PACKAGING INFORMATION: PRODUCT SHALL BE PACKED IN TRAY
- CARD SLOTS ACCEPTS 1.27±0.10MM MODULE THICKNESS (MEASURED FROM PC PADS)

- 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.

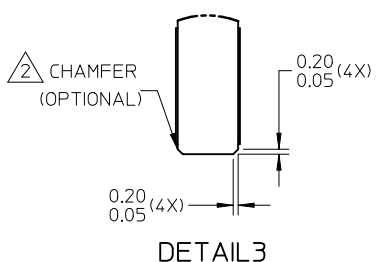
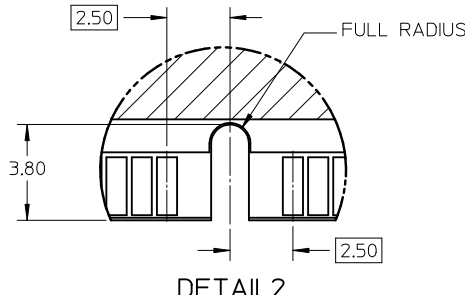
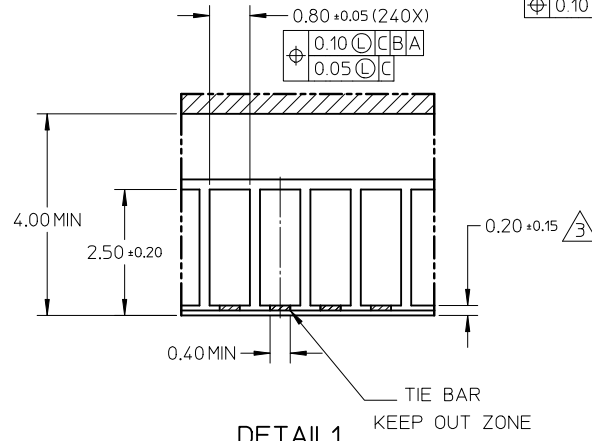
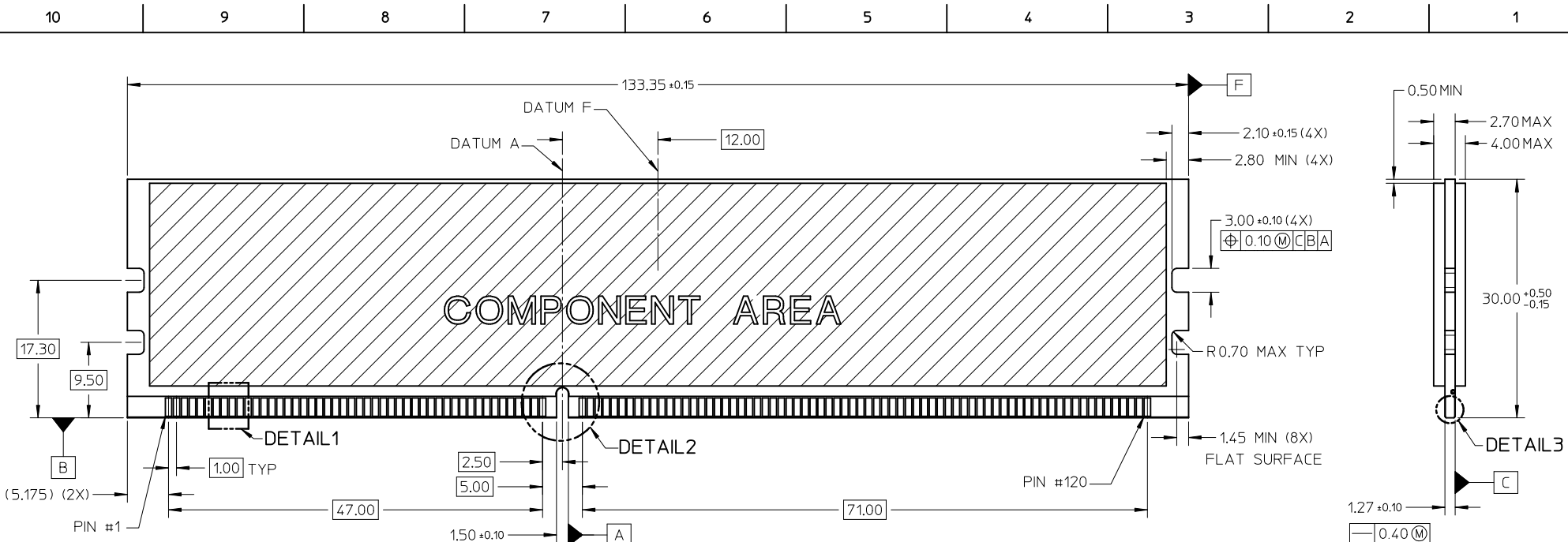
<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEVIEW CHKD: CCTEH APPR: SHLENI	DESCRIPTION 2010/04/23 2010/06/10 2010/06/13	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		$\nabla_A = 0$	mm	INCH	DRAWN BY YTYANG01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

10 9 8 7 6 5 4 3 2 1



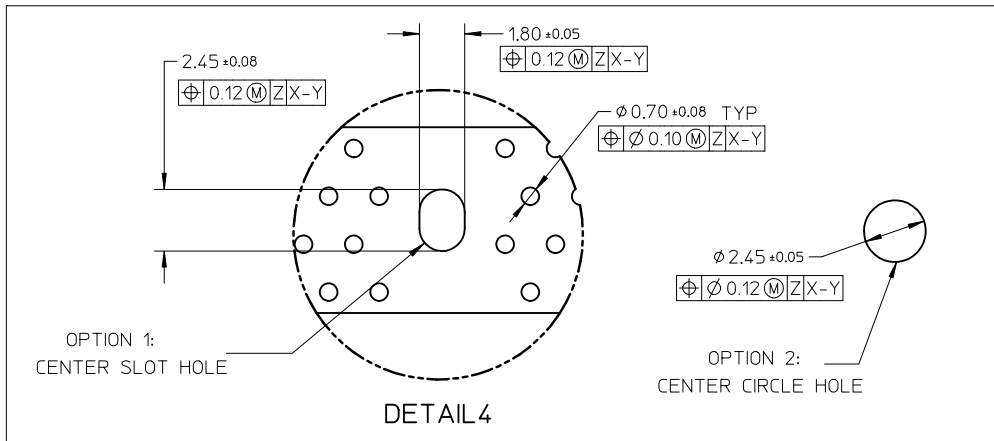
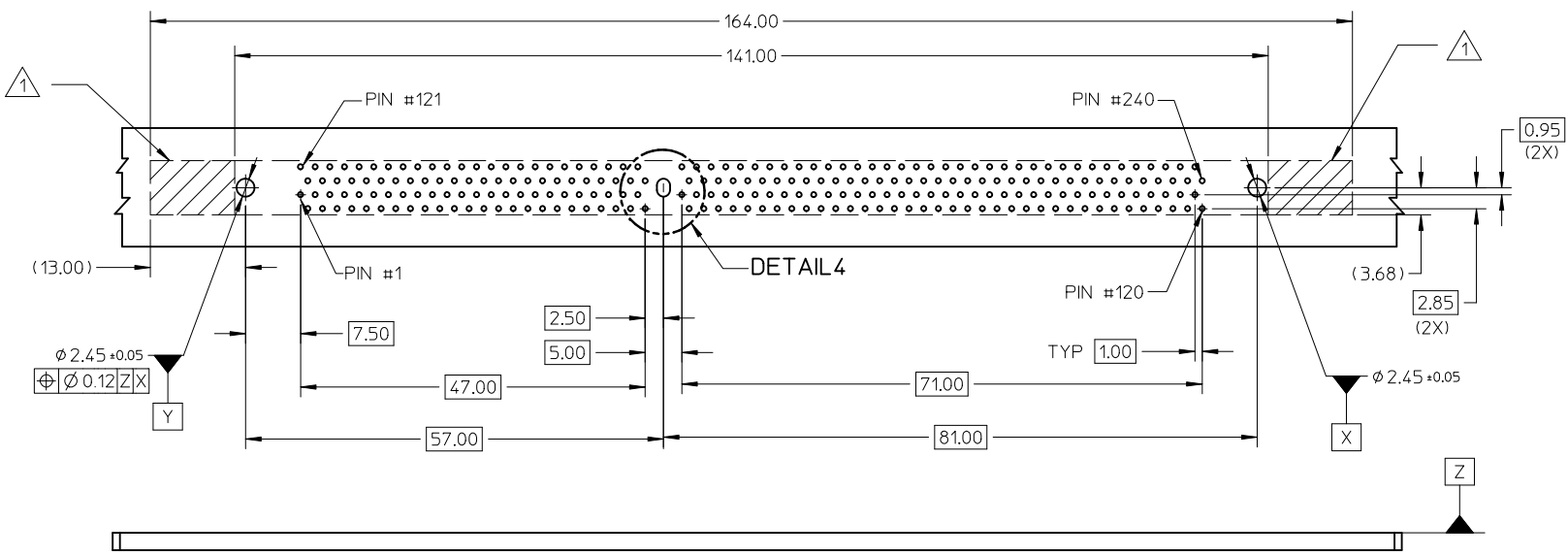
<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEVEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1 °	DIMENSION STYLE <b>MM ONLY</b> 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, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LLCR
	REV: 10	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	MOLEX INCORPORATED	DOCUMENT NO. SD-78321-001	SHEET NO. 2 OF 7	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
	SIZE: A3						

9 8 7 6 5 4 3 2 1



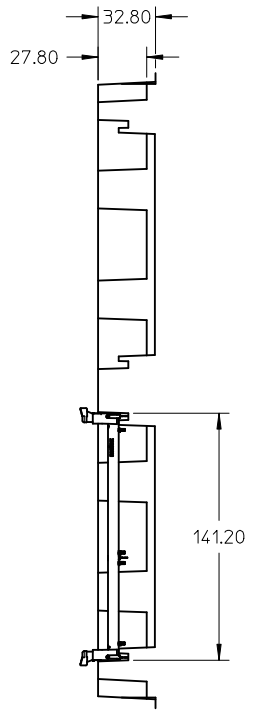
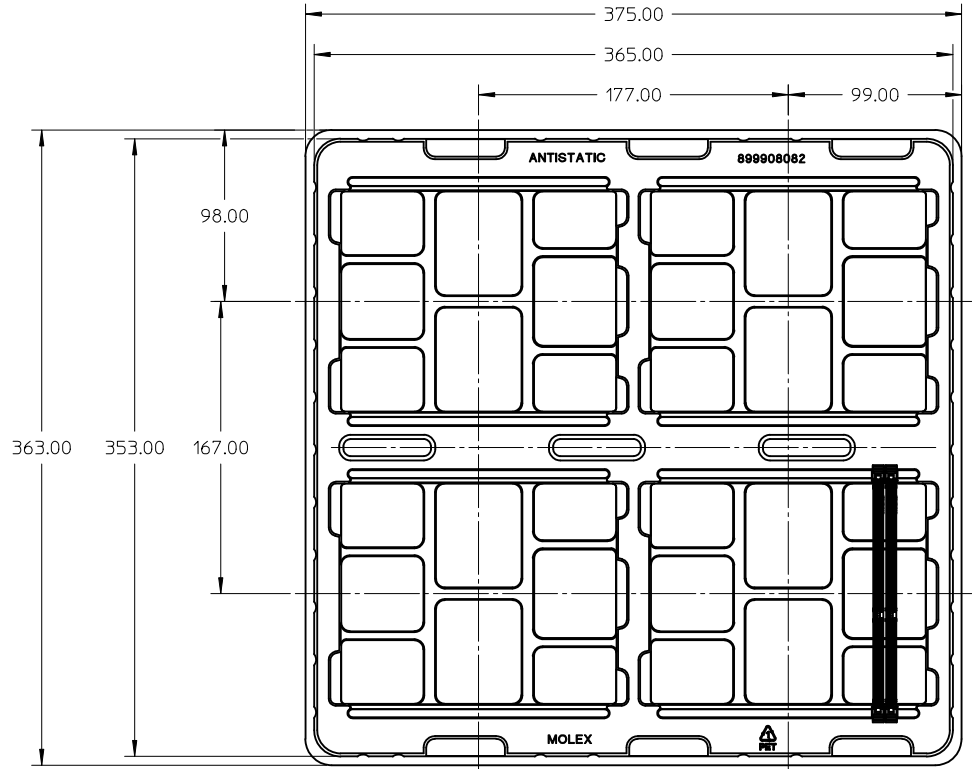
NOTES:  
 1. RECOMMENDED PLATING FOR CONTACT PADS:  
 PREFERRED: 0.76 MICROMETERS GOLD PLATING MIN OVER 2.00 MICROMETERS NICKEL  
 ALTERNATIVE: 0.05-0.75 MICROMETERS GOLD PLATING OVER 2.00 MICROMETERS NICKEL MUST USE AN ELECTRONIC CONTACT GRADE CORROSIVE BARRIER LUBRICANT  
 2. CHAMFER IS OPTIONAL AND 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: JAKEEWEW 2010/04/23 CHYKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	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, 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 °										



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

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	$F_A=0$	mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL, T/H LOW LLLCR		
	$F_C=0$	4 PLACES ± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED		
	$F_P=0$	3 PLACES ± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-78321-001	SHEET NO. 4 OF 7
		2 PLACES ± 0.2	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
		1 PLACE ± ---	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
		ANGULAR ± 1 °						



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

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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							BLACK	
78321-0017		NATURAL (OFF-WHITE)						
78321-0012		BLACK						
78321-0018		NATURAL (OFF-WHITE)						
78321-0001		2.67	3.94	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	BLACK	PS-78321-002
78321-0006							NATURAL (OFF-WHITE)	
78321-0003							BLACK	
78321-0007		NATURAL (OFF-WHITE)						
78321-0002		BLACK						
78321-0008		NATURAL (OFF-WHITE)						

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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 LLCR			
		4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	APPROVED BY SHLENI 2010/06/10			
		3 PLACES	± ---	± ---	APPROVED BY SHLENI 2010/06/10		MATERIAL NO. SEE TABLE			
2 PLACES	± 0.2	± ---	ANGULAR ± 1 °		DOCUMENT NO. SD-78321-001		SHEET NO. 6 OF 7			
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					



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		2.67	3.18	3.18		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
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		3.18	3.18	3.18	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	BLACK	PS-78321-002
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							

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	$F_A=0$	mm INCH	MM ONLY	NTS	METRIC	
	$F_G=0$	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
	$F_C=0$	3 PLACES ± --- ± ---	YTYANG01 2007/09/24	DDR3 DIMM, 1.00MM PITCH		
	$F_P=0$	2 PLACES ± 0.2 ± ---	CCTEH 2007/11/12	240 CKTS, VERTICAL, T/H		
		1 PLACE ± --- ± ---	APPROVED BY DATE	LOW LLCR		
		ANGULAR ± 1 °	SHLENI 2010/06/10	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			SEE TABLE		SD-78321-001	
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		