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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

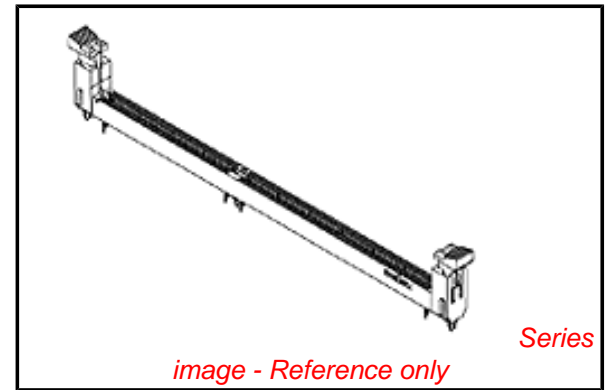
Product Family Memory Module Sockets
 Series [78321](#)
 Component Type Socket
 JEDEC Outline MO-269
 Product Name DDR3 DIMM

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
 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

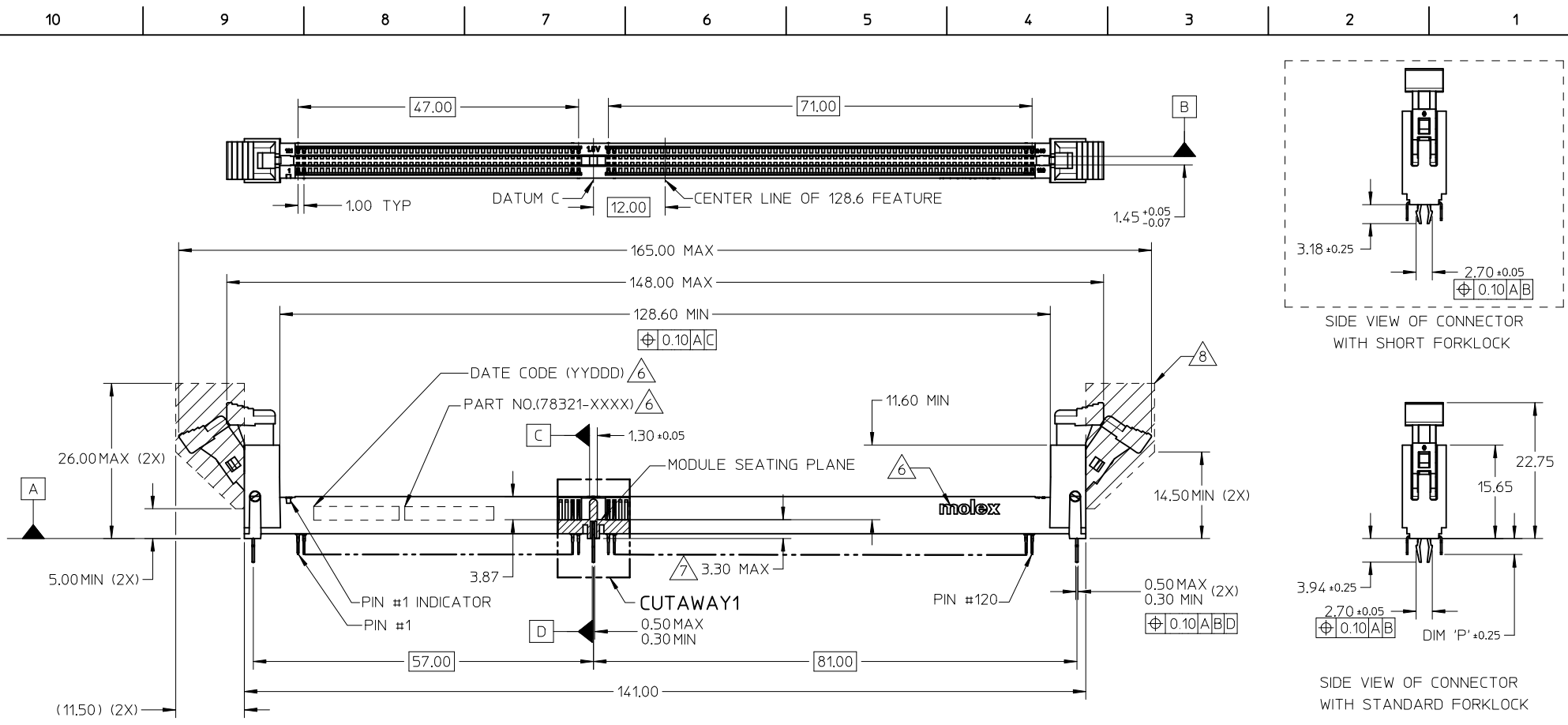
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	2
Process Temperature max. C	260

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:
 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±0.10MM MODULE THICKNESS (MEASURED FROM PC PADS)

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

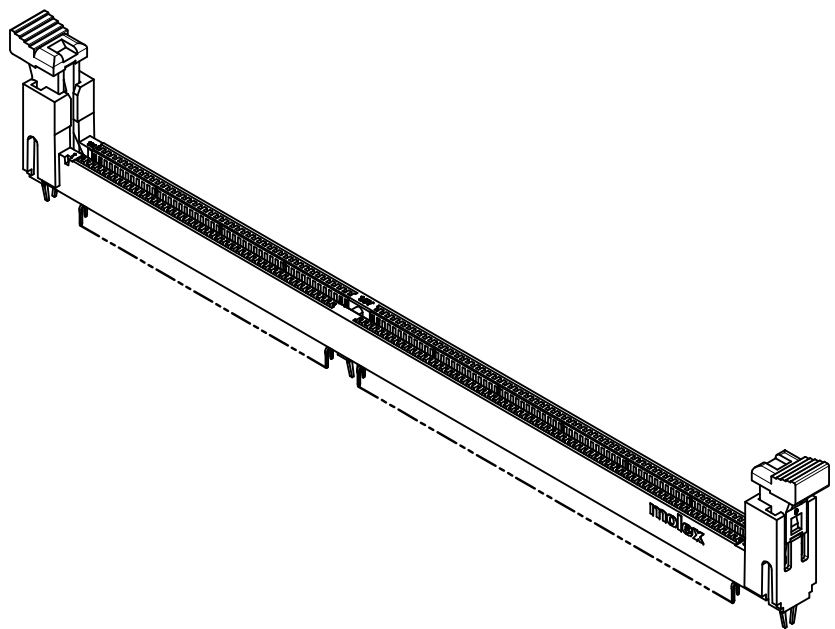
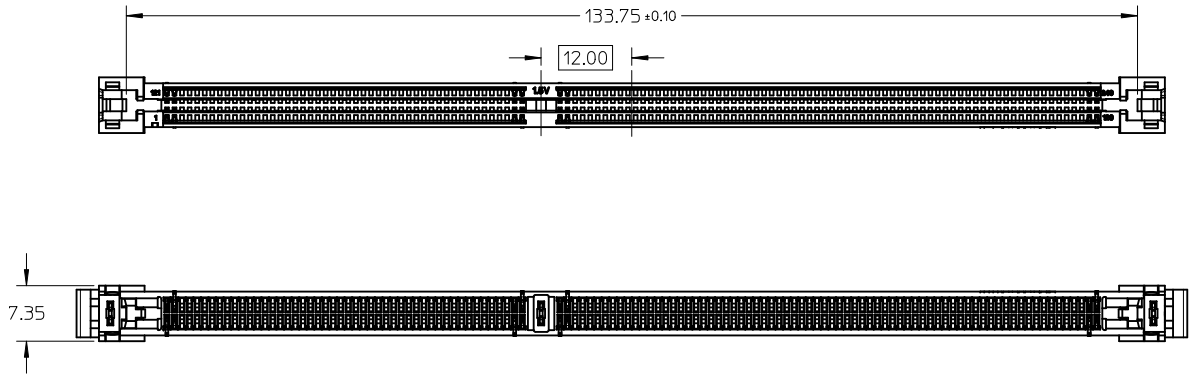
7. MODULE SEATING PLANE FROM TOP OF PCB

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.

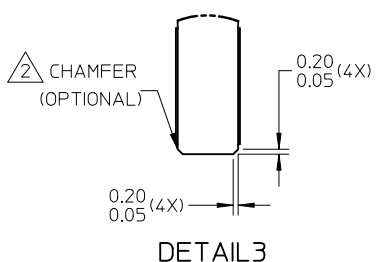
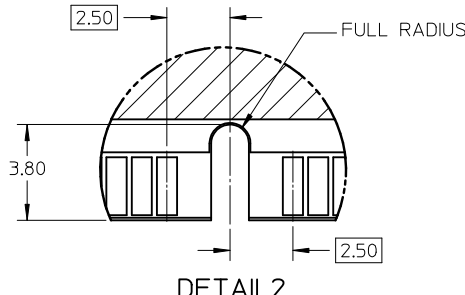
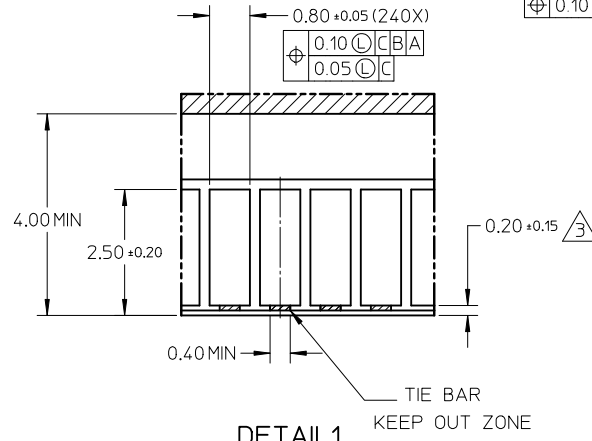
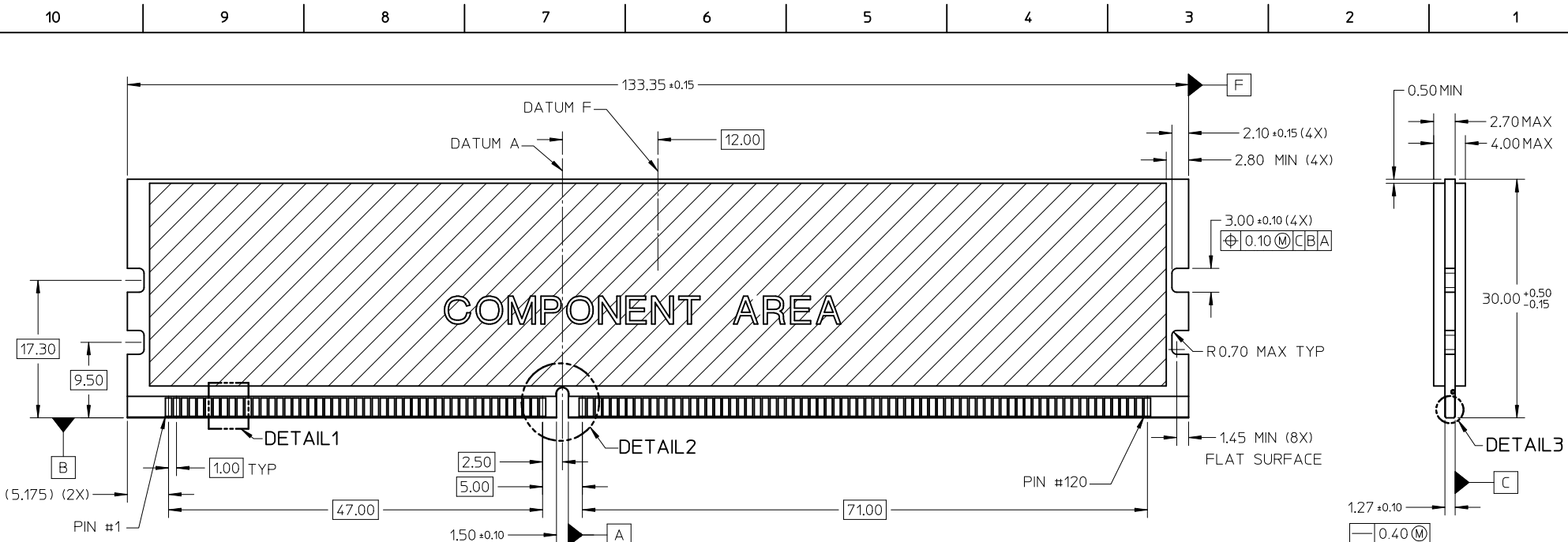
FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEVEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_B=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY YTYANG01	DATE 2007/09/24	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL, T/H LOW LLLCR			
		4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2007/11/12	MOLEX INCORPORATED 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 °		SIZE A3		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							

10 9 8 7 6 5 4 3 2 1



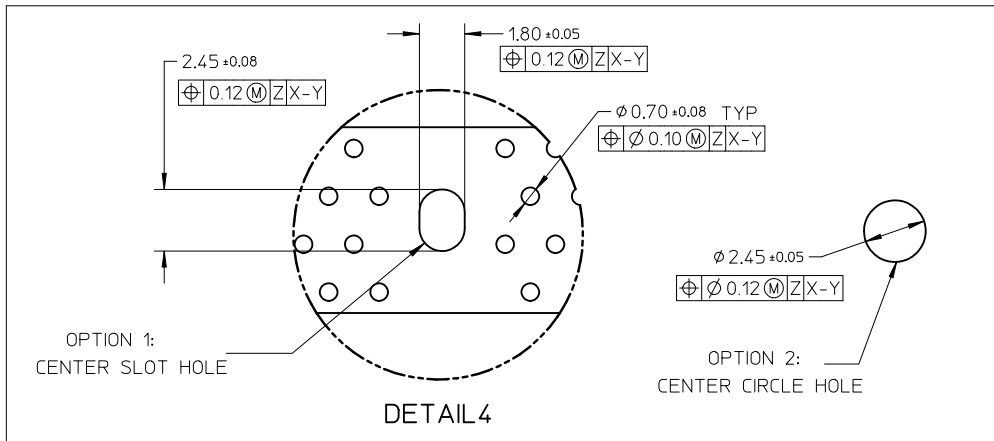
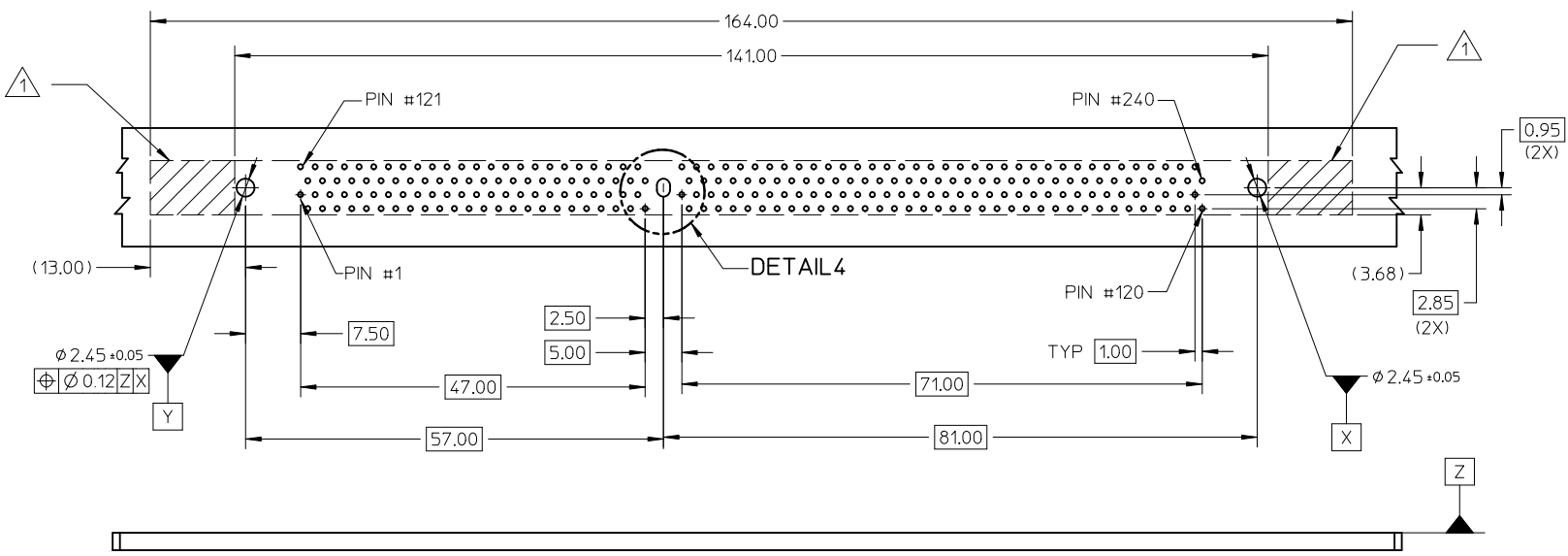
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	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-78321-001	SHEET NO. 2 OF 7		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
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9 8 7 6 5 4 3 2 1



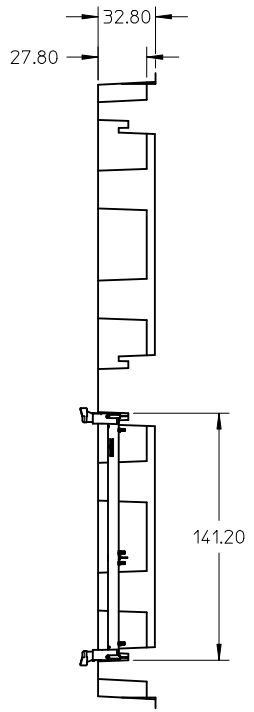
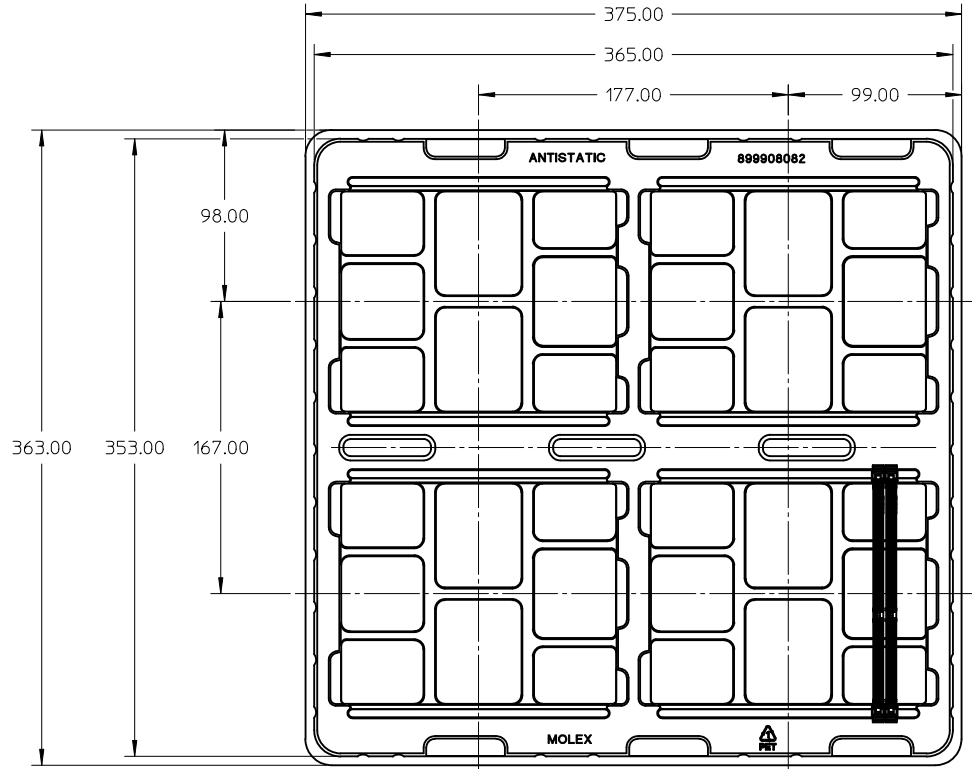
NOTES:
 1. RECOMMENDED PLATING FOR CONTACT PADS:
 PREFERRED: 0.76 MICROMETERS GOLD PLATING MIN OVER 2.00 MICROMETERS NICKEL
 ALTERNATIVE: 0.05-0.75 MICROMETERS GOLD PLATING OVER 2.00 MICROMETERS NICKEL MUST USE AN ELECTRONIC CONTACT GRADE CORROSIVE BARRIER LUBRICANT
 2. CHAMFER IS OPTIONAL AND IS NOT TO HIT THE GOLD PADS
 3. LEADING EDGE OF GOLD PADS SPECIFIED BY KEEP-OUT 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	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																
	$F_A=0$ $F_G=0$ $F_P=0$	<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		
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REV	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																				



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 DOCUMENT NO. SD-78321-001 SHEET NO. 4 OF 7			
	$F_P=0$	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						



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

FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEWEW 2010/04/23 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	DESCRIPTION REV 10	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	DRAWN BY: YTYANG01 DATE: 2007/09/24 CHECKED BY: CCTEH DATE: 2007/11/12 APPROVED BY: SHLENI DATE: 2010/06/10	TITLE: DDR3 DIMM, 1.00MM PITCH 240 CKTS, VERTICAL, T/H LOW LCCR
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	MOLEX INCORPORATED DOCUMENT NO. SD-78321-001		SHEET NO. 5 OF 7	
		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
78321-0011	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)	

FORKLOCK UPDATED 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															
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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	10	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MOLEX INCORPORATED		SHEET NO. 6 OF 7															
			SIZE A3	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	BLACK (OFF-WHITE)	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		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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10	A3	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
		SHLENI	2010/06/10		SD-78321-001	7 OF 7	
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