

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

**Part Number:** [0785430051](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR3 DIMM Socket, Vertical, Through Hole, with Beveled Metal Pins, Black Housing, Off-White Latches, 0.38µm (15µ") Gold(Au) Plating, 2.67mm(.105") Solder tail, 240 Circuits, Lead free, Halogenfree

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-78543-001 \(PDF\)](#)

**General**

Product Family	Memory Module Sockets
Series	<a href="#">78543</a>
Component Type	Socket
JEDEC Outline	MO-269
Product Name	DDR3 DIMM

**Physical**

Circuits (Loaded)	240
Circuits (maximum)	240
Color - Resin	Black, Natural
Durability (mating cycles max)	25
Entry Angle	Vertical
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	No
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

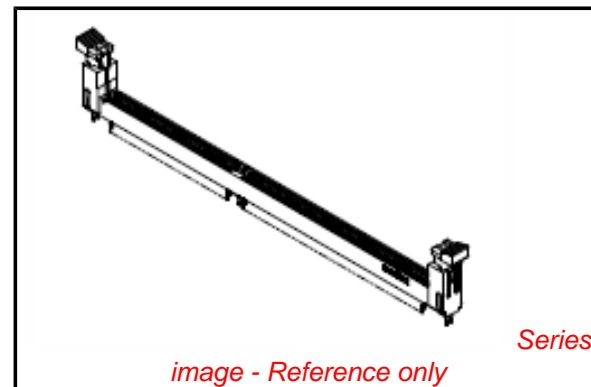
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification	PK-78543-001
Product Specification	PS-78543-001



**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**

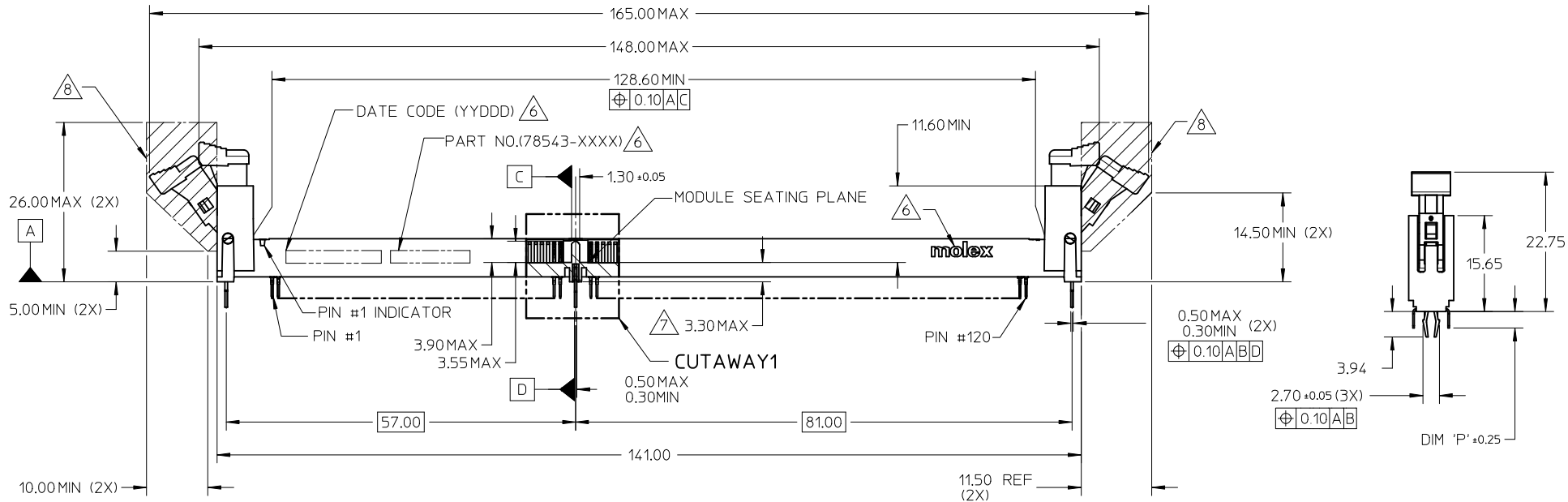
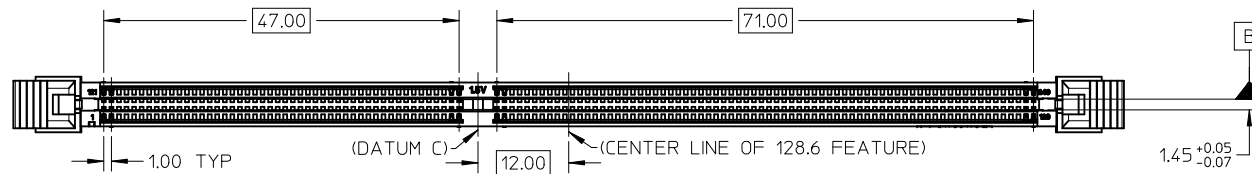
[78543Series](#)

**Mates With**

JEDEC standard 1.27mm modules

This document was generated on 05/17/2010

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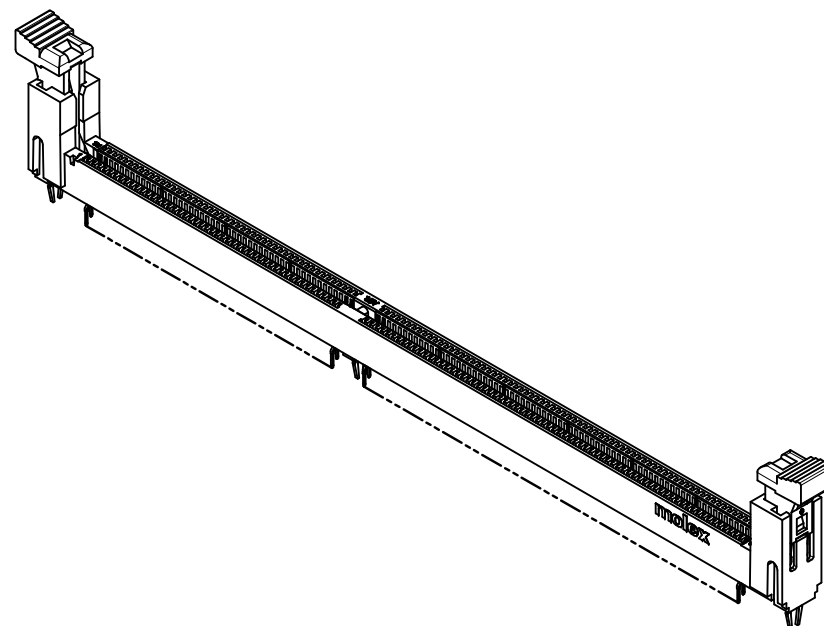
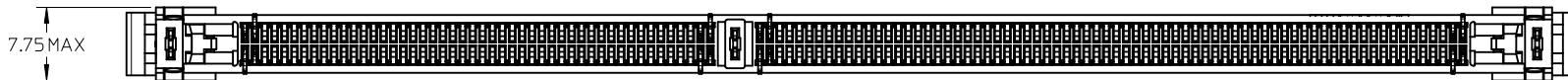
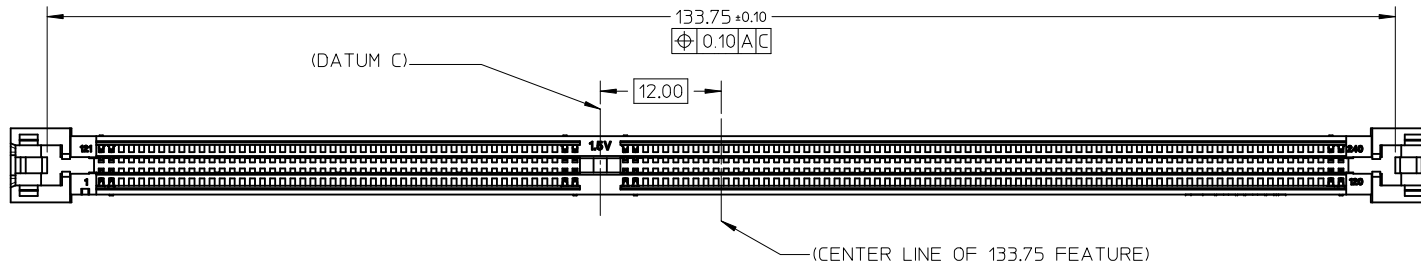


- NOTES :
- MATERIAL : HOUSING - HIGH TEMP. NYLON, GLASS FILLED, UL 94V-0  
COLOUR : SEE SHEET 6  
LATCH - HIGH TEMP NYLON, GLASS FILLED, UL 94V-0  
COLOUR : SEE SHEET 6  
TERMINAL : COPPER ALLOY.
  - TERMINAL PLATING OPTIONS: SEE TABLE ON SHEETS 6.
  - PRODUCT SPECIFICATION: SEE TABLE ON SHEETS 6.
  - PACKAGING INFORMATION: PRODUCT SHALL BE PACKED IN TRAY
  - CARD SLOT ACCEPTS 1.27±0.10MM MODULE THICKNESS (MEASURED FROM P.C. PADS).
  - MOLEX LOGO, DATE & PART NO. INDICATED ON HOUSING.
  - MODULE SEATING PLANE FROM TOP OF PCB.
  - KEEP OUT ZONE RESERVED FOR LATCH.
  - HIGH TEMPERATURE REFLOW UP TO 260°C CAPABLE.
  - HALOGEN FREE FOR ALL PLASTIC MATERIAL.

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

<b>FORKLOCK UPDATED</b> EC NO: S2010-0888 DRWN: JAKEEMEW 2010/04/22 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 <b>NTS</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	JAKEEMEW	2009/10/01	<b>DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL T/H</b>			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.2	± ---	CGTAN	2009/11/12	<b>MOLEX INCORPORATED</b>					
1 PLACE	± ---	± ---	APPROVED BY	DATE						
ANGULAR ± 1 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE TABLE</b>		DOCUMENT NO. <b>SD-78543-001</b>		SHEET NO. <b>1 OF 7</b>		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

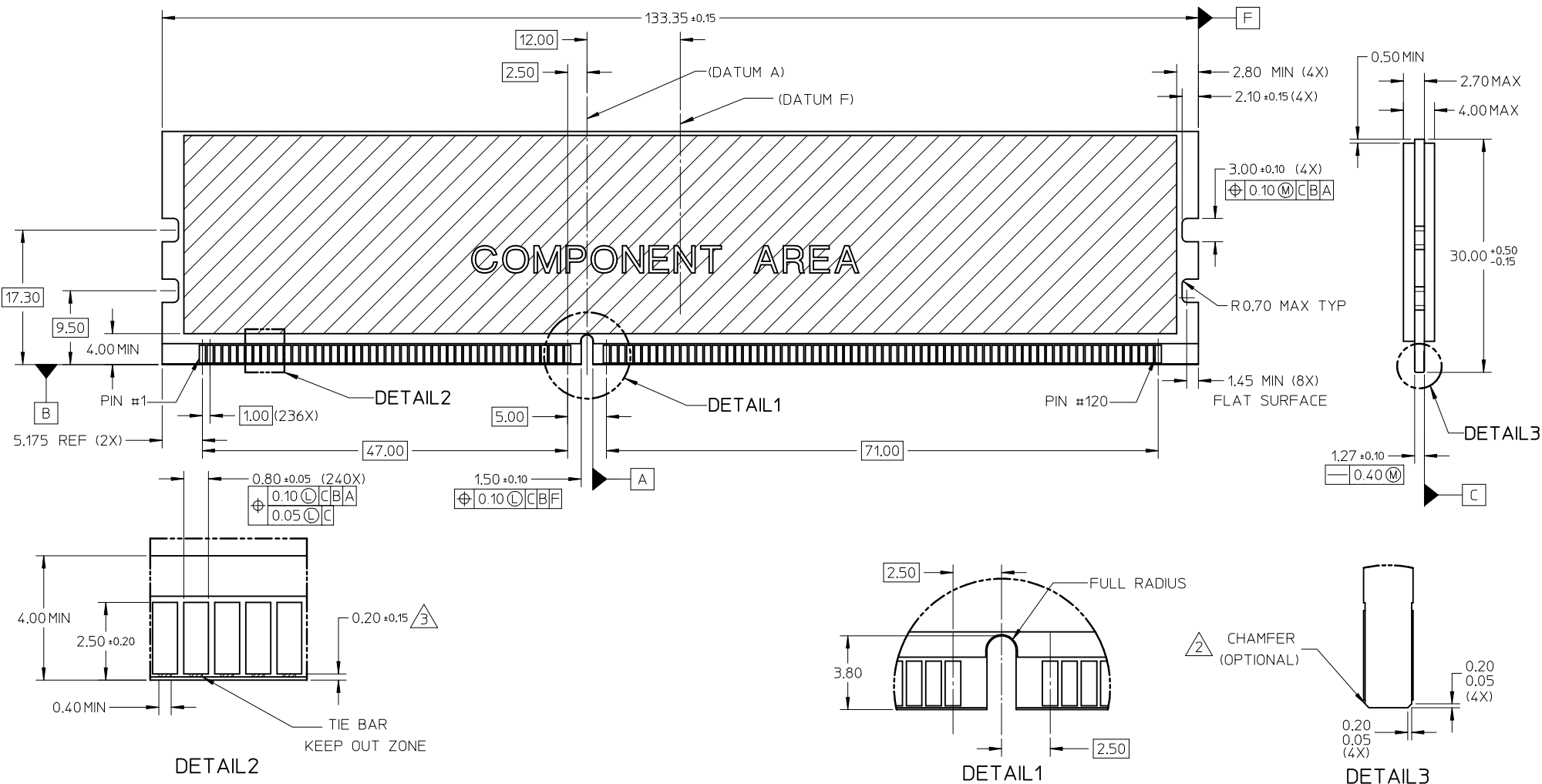
10 9 8 7 6 5 4 3 2 1



FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEMEW 2010/04/22 CHKD: CCTEH 2010/06/10 APPR: SHLENI 2010/06/13	REV 2	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 JAKEEMEW	DATE 2009/10/01	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL T/H				
			4 PLACES	± ---	± ---	CHECKED BY CGTAN	DATE 2009/11/12	MOLEX INCORPORATED				
			3 PLACES	± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-78543-001	SHEET NO. 2 OF 7		
2 PLACES	± 0.2	± ---	ANGULAR ± 1 °		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									

9 8 7 6 5 4 3 2 1

MODULE CARD  
 DDR3 DUAL IN-LINE MEMORY MODULE FAMILY 1.00MM CONTACT CENTERS  
 (JEDEC MO-269, ISSUE B, MAY 06)

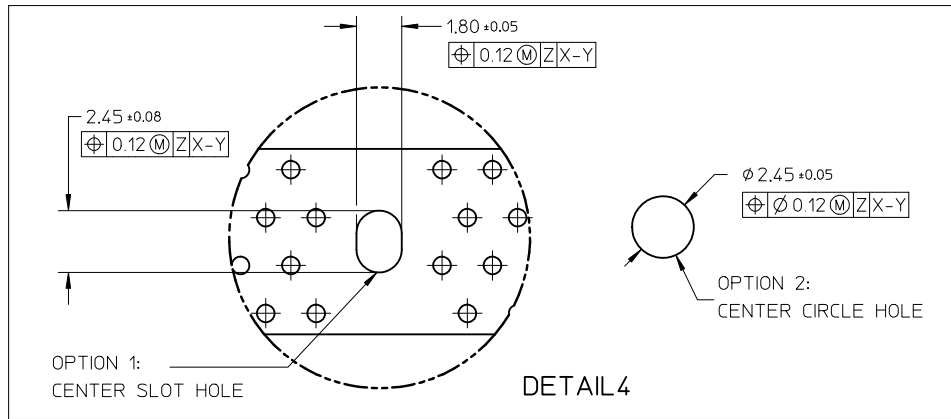
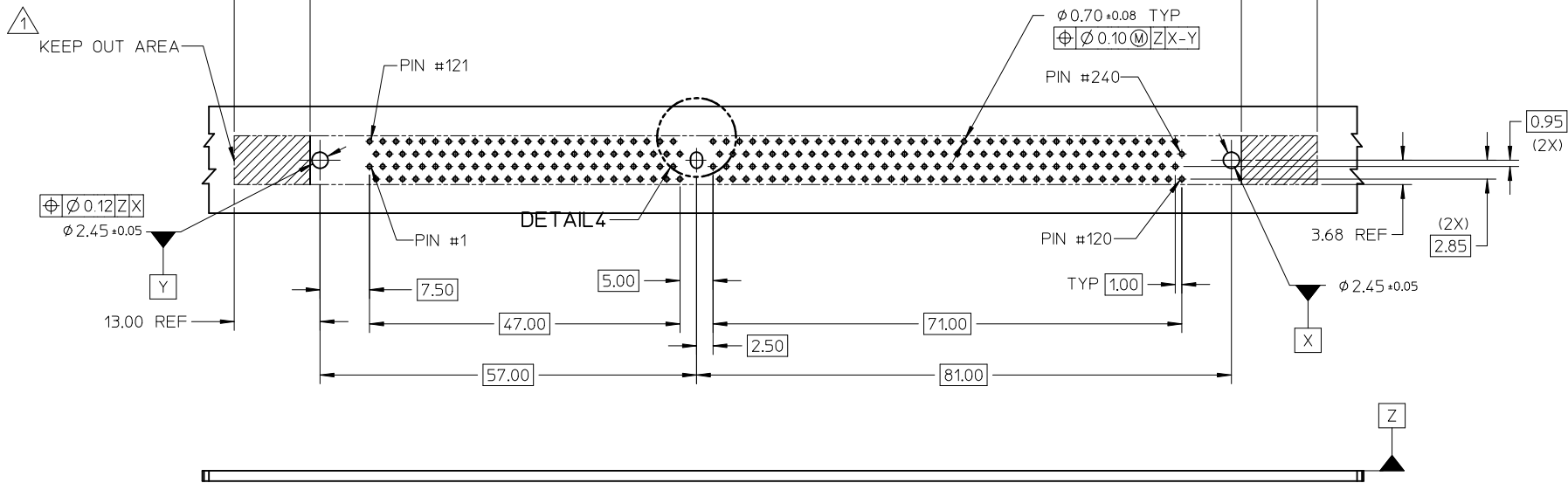


NOTES:

- 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.

FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEMEW 2010/04/22 CHYKD: 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	DATE	TITLE			
	$F_G=0$	4 PLACES ± --- ± ---	JAKEEMEW	2009/10/01	DDR3 DIMM, 1.00MM PITCH				
	$F_P=0$	3 PLACES ± --- ± ---	CHEKED BY	DATE	240 CKTS, VERTICAL T/H				
	2 PLACES ± 0.2 ± ---	CGTAN	2009/11/12	APPROVED BY					
	1 PLACE ± --- ± ---	SHLENI	2010/06/10	DATE					
	ANGULAR ± 1 °	MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE		SD-78543-001		3 OF 7			
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

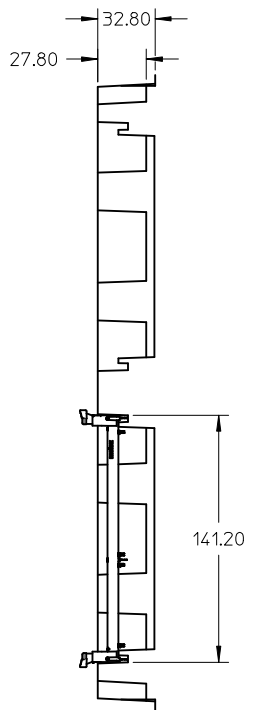
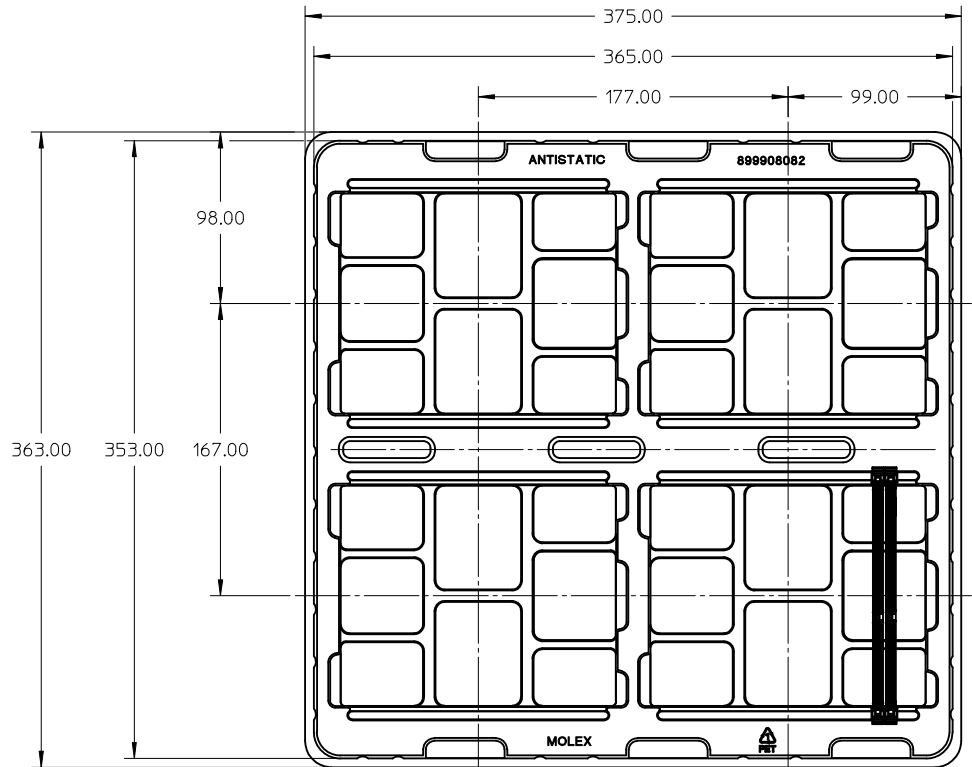
10 9 8 7 6 5 4 3 2 1



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

FORKLOCK UPDATED EC NO: S2010-0888 DRWN: JAKEEMEW 2010/04/22 CHKD: CTEH 2010/06/10 APPR: SHLENI 2010/06/13	DESCRIPTION REV	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 JAKEEMEW	DATE 2009/10/01	TITLE DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL T/H				
		$F_C=0$	4 PLACES ± ---	± ---	CHECKED BY CGTAN	DATE 2009/11/12	MOLEX INCORPORATED				
		$F_P=0$	3 PLACES ± ---	± ---	APPROVED BY SHLENI	DATE 2010/06/10					
		2 PLACES ± 0.2	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-78543-001		SHEET NO. 4 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					

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	DATE	TITLE			
			4 PLACES	± ---	± ---	JAKEEMEW	2009/10/01	<b>DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL T/H</b>				
			3 PLACES	± ---	± ---	CHECKED BY	DATE					
2 PLACES	± 0.2	± ---	CGTAN	2009/11/12	<b>MOLEX INCORPORATED</b>							
1 PLACE	± ---	± ---	APPROVED BY	DATE								
ANGULAR ± 1 °			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE TABLE</b>		DOCUMENT NO. <b>SD-78543-001</b>		SHEET NO. <b>5 OF 7</b>			
					SIZE <b>A3</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

ASSEMBLY PART NO.	VOLTAGE KEY	HOUSING COLOR	LATCH COLOR	DIM 'P'	RECOMMENDED PCB THICKNESS	PLATING OPTION	PRODUCT SPECIFICATION			
78543-0001	CENTRE (1.5V)	BLACK	BLACK	2.67	1.57	0.38 MICROMETER/ 15 MICROINCH MIN. GOLD ON CONTACT	PS-78543-001			
78543-0003				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS				
78543-0002				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE				
78543-0011				2.67	1.57	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD ON CONTACT		PS-78543-002		
78543-0013				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS				
78543-0012				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE				
78543-0021				2.67	1.57	0.076 MICROMETER/ 3 MICROINCH MIN. GOLD ON CONTACT			PS-78543-003	
78543-0023				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS				
78543-0022				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE				
78543-0031				2.67	1.57	0.51 MICROMETER/ 20 MICROINCH MIN. GOLD ON CONTACT		PS-78543-001		
78543-0033				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS				
78543-0032				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE				
78543-0051			2.67	1.57	0.38 MICROMETER/ 15 MICROINCH MIN. GOLD ON CONTACT	PS-78543-001				
78543-0053			3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS					
78543-0052			3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE					
78543-0061			NATURAL (OFFWHITE)		2.67	1.57	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD ON CONTACT	PS-78543-002		
78543-0063						3.00	2.18		2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS	
78543-0062						3.18	2.36		1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	
78543-0071						2.67	1.57		0.076 MICROMETER/ 3 MICROINCH MIN. GOLD ON CONTACT	PS-78543-003
78543-0073						3.00	2.18		2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS	
78543-0072						3.18	2.36		1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	
78543-0081					2.67	1.57	0.51 MICROMETER/ 20 MICROINCH MIN. GOLD ON CONTACT	PS-78543-001		
78543-0083					3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS			
78543-0082					3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE			

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	$F_A=0$ $F_C=0$ $F_P=0$	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1 °	DRAWN BY      DATE JAKEEMEW      2009/10/01 CHECKED BY      DATE CGTAN      2009/11/12 APPROVED BY      DATE SHLENI      2010/06/10	TITLE <b>DDR3 DIMM, 100MM PITCH                  240 CKTS, VERTICAL T/H</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. <b>SEE TABLE</b>	MOLEX INCORPORATED DOCUMENT NO. <b>SD-78543-001</b>		SHEET NO. <b>6 OF 7</b>	
	2			SIZE <b>A3</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



ASSEMBLY PART NO.	VOLTAGE KEY	HOUSING COLOR	LATCH COLOR	DIM 'P'	RECOMMENDED PCB THICKNESS	PLATING OPTION	PRODUCT SPECIFICATION
78543-0151	CENTRE (1.5V)	NATURAL (OFFWHITE)	NATURAL (OFFWHITE)	2.67	1.57	0.38 MICROMETER/ 15 MICROINCH MIN. GOLD ON CONTACT	PS-78543-001
78543-0153				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS	
78543-0152				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	
78543-0161				2.67	1.57	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD ON CONTACT	PS-78543-002
78543-0163				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS	
78543-0162				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	
78543-0171				2.67	1.57	0.076 MICROMETER/ 3 MICROINCH MIN. GOLD ON CONTACT	PS-78543-003
78543-0173				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS	
78543-0172				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	
78543-0181				2.67	1.57	0.51 MICROMETER/ 20 MICROINCH MIN. GOLD ON CONTACT	PS-78543-001
78543-0183				3.00	2.18	2.54 MICROMETER/ 100 MICROINCH MIN. PURE TIN ON SOLDERTAILS	
78543-0182				3.18	2.36	1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	

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	$F_A=0$	mm INCH	DRAWN BY DATE	TITLE		
	$F_C=0$	4 PLACES ± --- ± ---	JAKEEMEW 2009/10/01	DDR3 DIMM, 100MM PITCH 240 CKTS, VERTICAL T/H		
	$F_P=0$	3 PLACES ± --- ± ---	CHECKED BY DATE	MOLEX INCORPORATED		
	2 PLACES ± 0.2 ± ---	CGTAN 2009/11/12	MATERIAL NO. DOCUMENT NO.			
	1 PLACE ± --- ± ---	APPROVED BY DATE	SHEET NO.			
	ANGULAR ± 1 °	SHLENI 2010/06/10	SD-78543-001			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE			
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