

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

**Part Number:** [0783150001](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR3 DIMM Socket, Very Low Profile, Vertical, Press-Fit, with Pegs, Black Housing and Latches, 0.76µm (30µ") Gold (Au)Plating, 1.85mm (.073") Compliant Pin Length, 2.40mm (.094") PCB Thickness, 240 Circuits, Lead free

**Documents:**

[3D Model](#) [Product Specification PS-78315-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

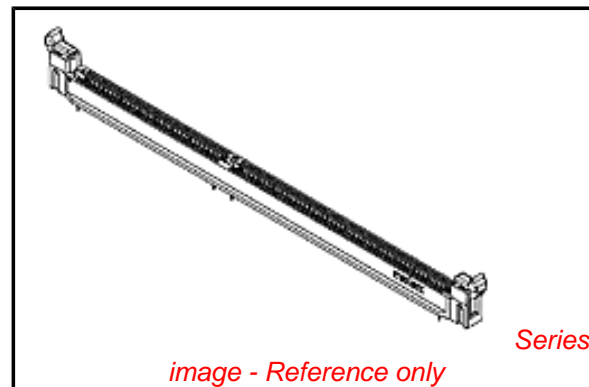
Product Family Memory Module Sockets  
 Series [78315](#)  
 Component Type Socket  
 JEDEC Outline MO-269  
 Product Name DDR3 DIMM

**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 Nylon  
 PC Tail Length (in) 0.073 In  
 PC Tail Length (mm) 1.85 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.095 In  
 PCB Thickness Recommended (mm) 2.40 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) 15  
 Plating min: Termination (µm) 0.38  
 Temperature Range - Operating -55°C to +85°C  
 Termination Interface: Style Through Hole - Compliant Pin

**Electrical**

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



**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**

[78315Series](#)

**Mates With**

JEDEC standard 1.27mm modules

**Material Info**

**Reference - Drawing Numbers**

Product Specification

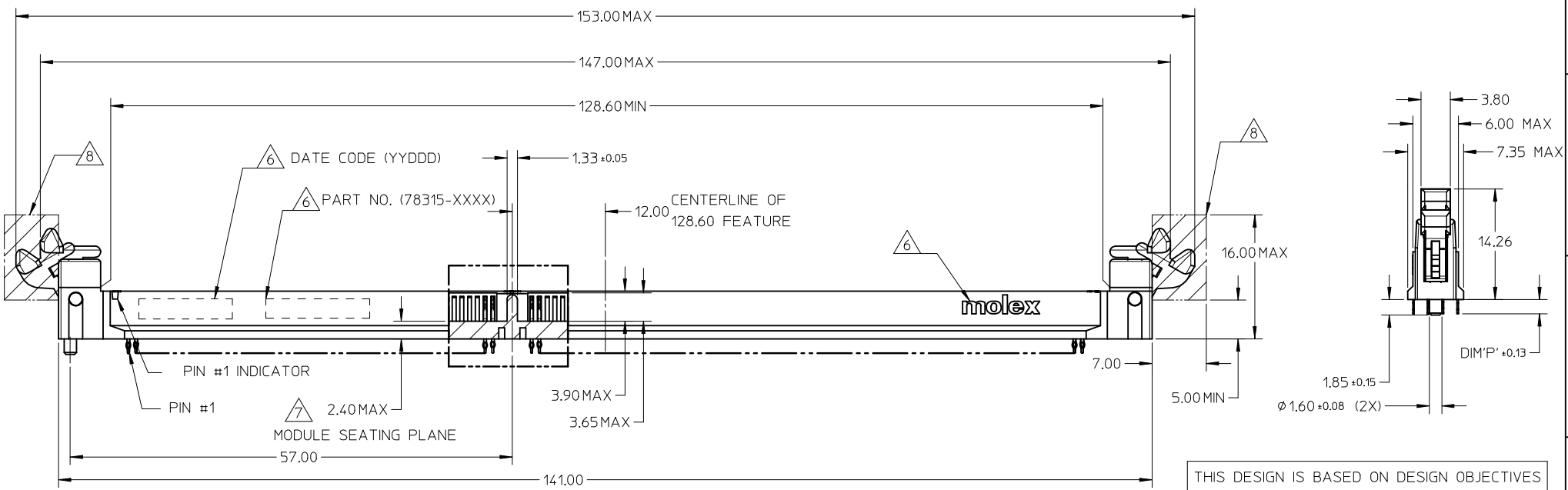
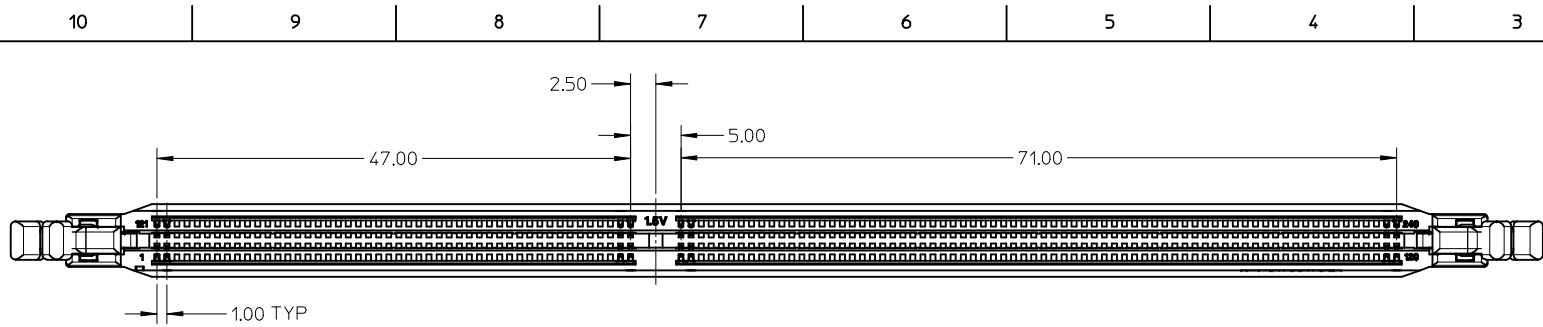
Sales Drawing

PS-78315-001, RPS-78315-001

SD-78315-001

This document was generated on 04/13/2010

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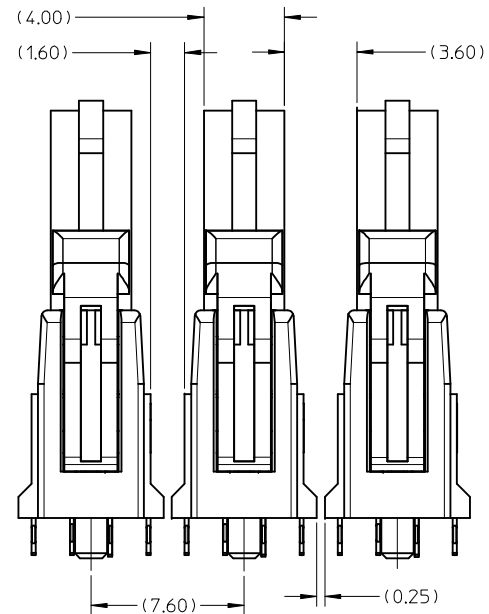
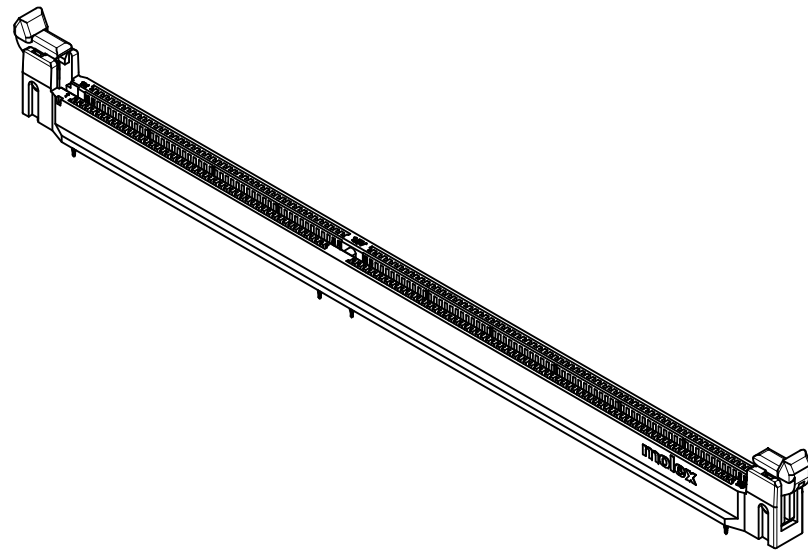
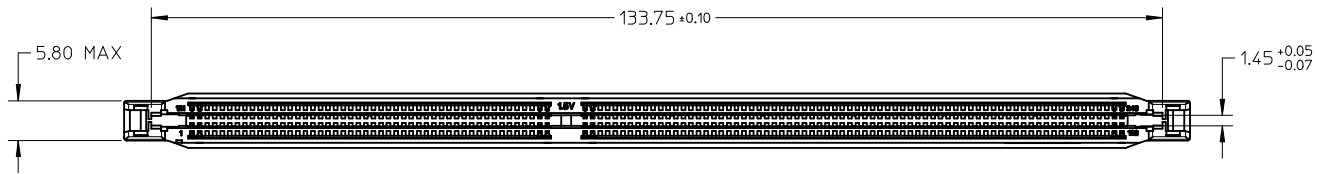


THIS DESIGN IS BASED ON DESIGN OBJECTIVES AND IS STRICTLY TENTATIVE. IT MAY CHANGE BASED ON RESULTS OF ADDITIONAL DESIGN REVIEWS & VERIFICATIONS.

- NOTES:
- MATERIAL:  
HOUSING - POLYAMIDE (PA) GLASS FILLED, UL 94V-0, COLOR - BLACK  
LATCH - POLYAMIDE (PA) GLASS FILLED, UL 94V-0, COLOR - BLACK  
TERMINAL - COPPER ALLOY
  - FINISHES: TERMINAL PLATING SEE TABLE ON SHEET 5
  - PRODUCT SPECIFICATION: PS-78315-001
  - PACKAGING SPECIFICATION: PRODUCT SHALL BE PACKED IN TRAYS
  - CARD SLOT ACCEPTS 1.27 +/- 0.10MM MODULE THICKNESS (MEASURED FROM PC PADS)
- △ 6 MOLEX LOGO, DATE & PART NUMBERS INDICATED ON HOUSING  
 △ 7 MODULE SEATING PLANE FROM TOP OF PCB  
 △ 8 KEEP OUT ZONE RESERVED FOR LATCH

ADDED OPTION EC NO: S2009-0332 DRW: CCTEH 2009/05/25 CHKD: CGTAN 2009/05/25 APPR: SHLENI 2009/05/27	QUALITY SYMBOLS ▽ = 0 ◻ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	MM ONLY	NTS	METRIC		
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE	
		3 PLACES	± ---	± ---	CMTED	2008/07/17	DDR3 DIMM (LSP, VLP)	
			2 PLACES	± 0.20	± ---	CCTEH	2008/07/30	1.00MM PITCH, 240 CKTS
			1 PLACE	± ---	± ---	SHLENI	2008/08/01	VERTICAL P/F, LOWLLCR
			ANGULAR ± 1 °		APPROVED BY	DATE		MOLEX MOLEX INCORPORATED
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.		SD-78315-001
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				SHEET NO.
			A3					1 OF 6

10 9 8 7 6 5 4 3 2 1



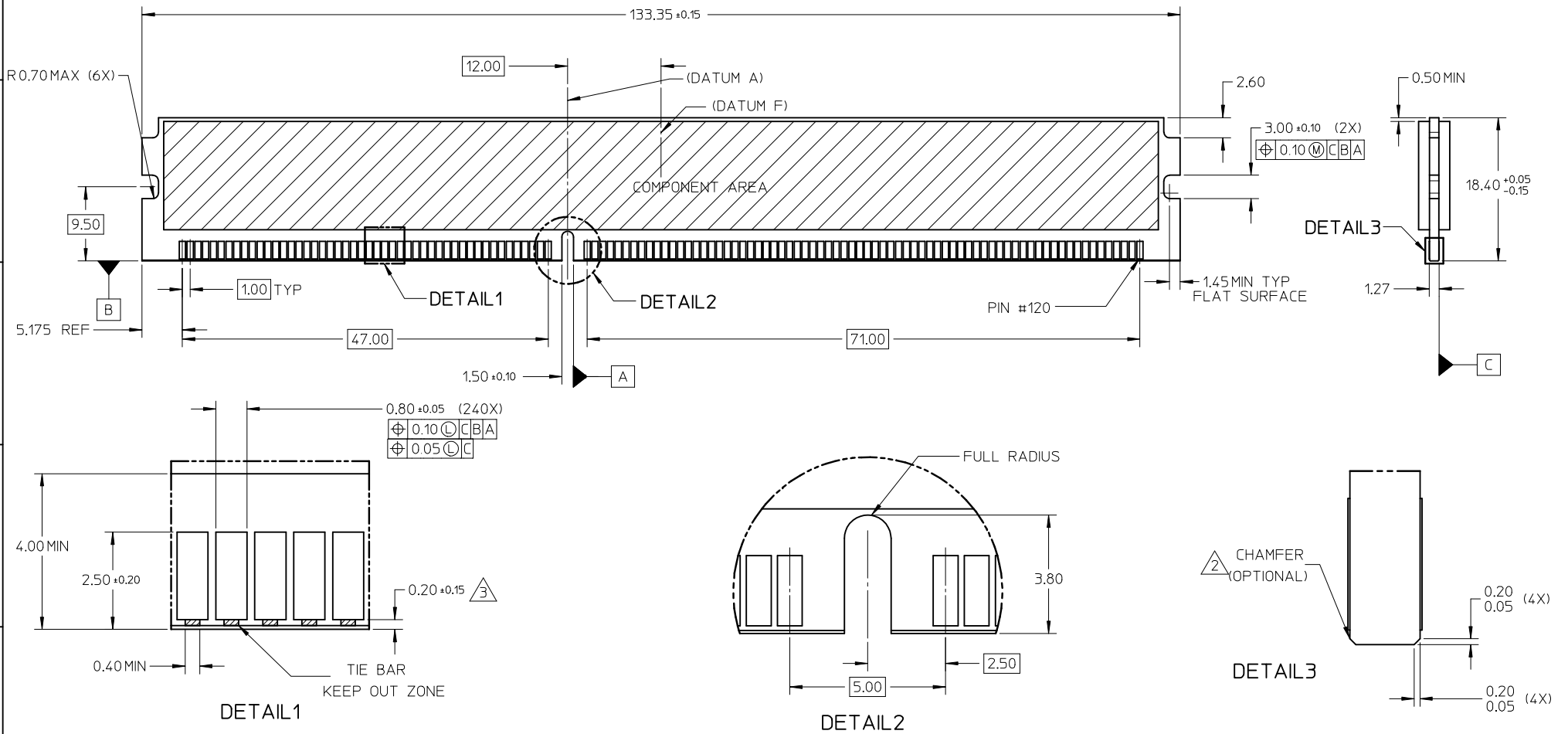
MINIMUM ROW TO ROW SPACING RECOMMENDATION  
(USING 4.00MM MODULE CARD)

ADDED OPTION EC NO: S2009-0332 DRWN: CCTEH 2009/05/25 CHKD: CGTAN 2009/05/25 APPR: SHLENI 2009/05/27	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY CMTEO	DATE 2008/07/17	TITLE DDR3 DIMM (LSP, VLP) 1.00MM PITCH, 240 CKTS VERTICAL P/F, LOWLLCR			
		4 PLACES	± ---	± ---	CHECKED BY CCTEH	DATE 2008/07/30	MATERIAL NO. SD-78315-001			
		3 PLACES	± ---	± ---	APPROVED BY SHLENI	DATE 2008/08/01	DOCUMENT NO. SD-78315-001			
			2 PLACES	± 0.20	± ---	MOLEX INCORPORATED				
			1 PLACE	± ---	± ---	SHEET NO. 2 OF 6				
			ANGULAR ± 1 °		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

009MODULE CARD  
 DDR3 DUAL INLINE MEMORY MODULE FAMILY 1.00 CONTACT CENTERS  
 (JEDEC MO-269, ISSUE A, 12/05)

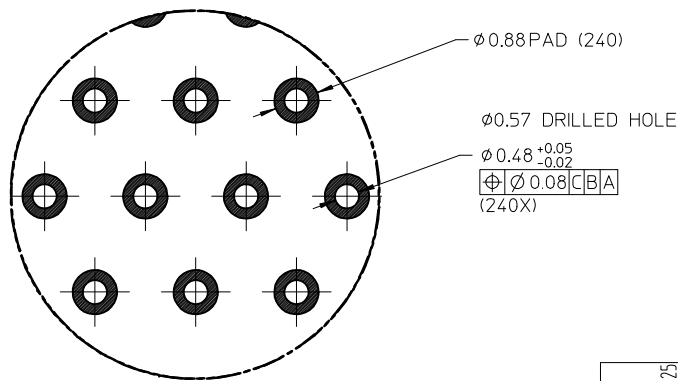
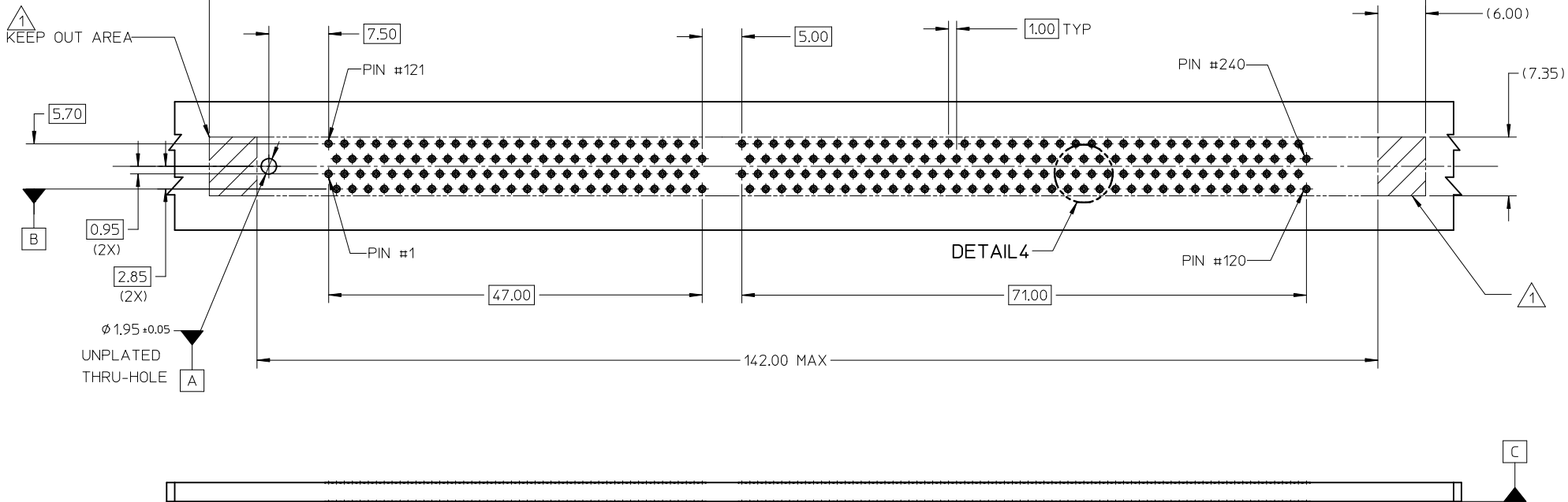


- NOTES:
- RECOMMENDED PLATING FOR CONTACT PADS:  
 PREFERRED: 0.76 MICROMETERS GOLD PLATING MIN  
 OVER 2.00 MICROMETERS NICKEL  
 ALTERNATIVE: 0.05-0.75 MICROMETERS GOLD PLATING  
 OVER 2.00 MICROMETERS NICKEL MUST  
 USE AN ELECTRONIC CONTACT GRADE  
 CORROSIVE BARRIER LUBRICANT
  - CHAMFER IS OPTIONAL 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

ADDED OPTION EC NO: S2009-0332 DRW: CCTEH 2009/05/25 CHKD: CGTAN 2009/05/25 APPR: SHLENI 2009/05/27	QUALITY SYMBOLS ▽=0 ⊕=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 ± ---	± ---	CMTEO	2008/07/17	DDR3 DIMM (LSP, VLP)				
		3 PLACES ± ---	± ---	CCTEH	2008/07/30	1.00MM PITCH, 240 CKTS				
		ANGULAR ± 1 °		APPROVED BY	DATE	MOLEX INCORPORATED				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	2008/08/01	DOCUMENT NO.			SHEET NO.	
		SEE TABLE		SD-78315-001			3 OF 6			
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

10 9 8 7 6 5 4 3 2 1



DETAIL 4

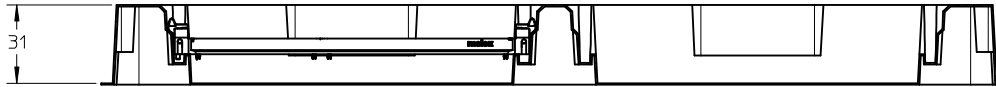
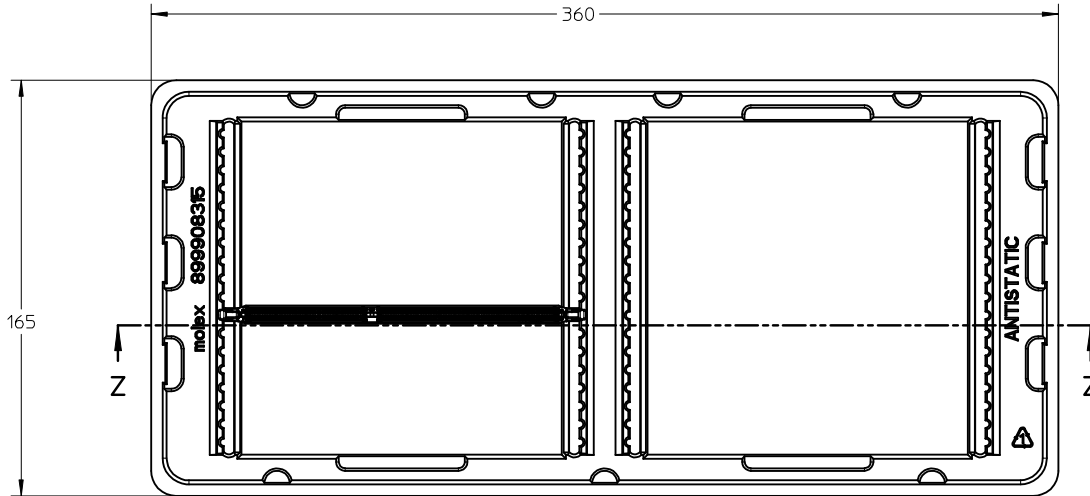
NOTES:

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

<b>ADDED OPTION</b> EC NO: S2009-0332 DRWN: CCTEH 2009/05/25 CHKD: CGTAN 2009/05/25 APPR: SHLENI 2009/05/27	QUALITY SYMBOLS ▽=0 ◻=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>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>NTS</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES	± ---	± ---																		
	3 PLACES	± ---	± ---																		
2 PLACES	± 0.20	± ---																			
1 PLACE	± ---	± ---																			
		DRAWN BY: CMTEO CHECKED BY: CCTEH APPROVED BY: SHLENI	DATE: 2008/07/17 DATE: 2008/07/30 DATE: 2008/08/01	TITLE <b>DDR3 DIMM (LSP, VLP)          1.00MM PITCH, 240 CKTS          VERTICAL P/F, LOWLLCR</b>																	
		MATERIAL NO. <b>SEE TABLE</b>			DOCUMENT NO. <b>SD-78315-001</b>		SHEET NO. <b>4 OF 6</b>														
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																			

9 8 7 6 5 4 3 2 1

VIEW FOR PACKAGING TRAY






SECTION Z-Z

NOTE:

1. NO. OF CAVITY - 18 X 2 =36

ADDED OPTION EC NO: S2009-0332 U DRWN: CCTEH 2009/05/25 CHKD: CGTAN 2009/05/25 APPR: SHLENI 2009/05/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▼=0 □=0	mm	INCH	MM ONLY	NTS	METRIC		
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE	
		3 PLACES	± ---	± ---	CMTEO	2008/07/17	DDR3 DIMM (LSP, VLP)	
	2 PLACES	± 0.20	± ---	CHECKED BY	DATE	1.00MM PITCH, 240 CKTS		
	1 PLACE	± ---	± ---	CCTEH	2008/07/30	VERTICAL P/F, LOWLLCR		
		ANGULAR ± 1 °		APPROVED BY	DATE	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHLENI	2008/08/01	SD-78315-001		
				MATERIAL NO.	SEE TABLE	DOCUMENT NO.	SHEET NO.	
				SIZE	A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

PART NO.	KEY POS.	DIM 'P'	RECOMMENDED PCB THICKNESS	PLATING OPTION	
				CONTACT AREA	TAIL AREA
78315-0001	CENTER (1.5V)	1.85	2.40	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD OVER 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	0.38 TO 1.52 MICROMETER/15 TO 60 MICROINCH MIN TIN (MATT) OVER 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE
78315-0201				0.76 MICROMETER/ 30 MICROINCH MIN. GOLD OVER 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	0.38 TO 1.52 MICROMETER/15 TO 60 MICROINCH MIN TIN/LEAD (BRIGHT) OVER 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE
78315-0011		2.85	2.60	0.76 MICROMETER/ 30 MICROINCH MIN. GOLD OVER 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE	0.38 TO 1.52 MICROMETER/15 TO 60 MICROINCH MIN TIN (MATT) OVER 1.27 MICROMETER/ 50 MICROINCH MIN. NICKEL UNDERPLATE

<b>ADDED OPTION</b> EC NO: S2009-0332 DRWN: CCTEH 2009/05/25 CHKD: CGTAN 2009/05/25 APPR: SHLENI 2009/05/27	QUALITY SYMBOLS  = 0  = 0.20	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	DRAWN BY CMTEO	DATE 2008/07/17	TITLE DDR3 DIMM (LSP, VLP) 1.00MM PITCH, 240 CKTS VERTICAL P/F, LOWLLCR				
		3 PLACES ± --- ± ---	CHECKED BY CCTEH	DATE 2008/07/30	MOLEX INCORPORATED				
		2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1 °	APPROVED BY SHLENI	DATE 2008/08/01	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-78315-001	SHEET NO. 6 OF 6		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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