

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

**Part Number:** [0879160001](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR-2 DIMM Socket, 22.5 Degree Angle, Through Hole, 240 Circuits, 1.8V Voltage Key, 0.76µm (30µ") Gold (Au) Plating, 2.79mm (.110") Tail Length, with Off-White Latches, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87916-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Memory Module Sockets  
 Series [87916](#)  
 Comments <LI>Latches in Off-White Color  
 Component Type Memory Module  
 JEDEC Outline MO-237  
 Product Name DDR2 DIMM

**Physical**

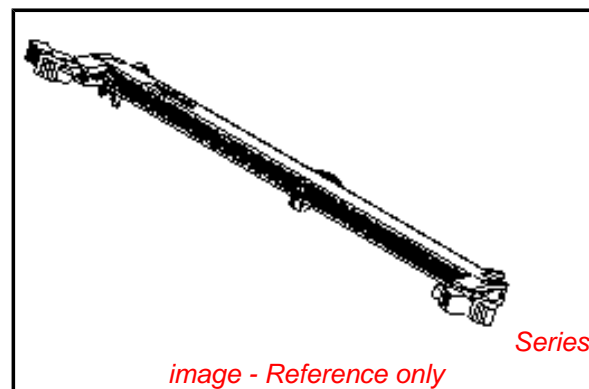
Circuits (Loaded) 240  
 Color - Resin Black, Natural  
 Durability (mating cycles max) 25  
 Entry Angle 22.5° Angle  
 Flammability 94V-0  
 Keying to Mating Part Yes  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 PC Tail Length (in) 0.110 In  
 PC Tail Length (mm) 2.79 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.039 In  
 Pitch - Mating Interface (mm) 1.00 mm  
 Plating min: Mating (µin) 30.4  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 Temperature Range - Operating -55°C to +85°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 0.5A  
 Voltage - Maximum 30V  
 Voltage Key 1.8V

**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



*image - Reference only*

**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**

[87916Series](#)

**Mates With**

JEDEC standard 1.27mm modules

Process Temperature max. C

260

**Material Info**

**Reference - Drawing Numbers**

Product Specification

PS-87916-001, RPS-87916-001

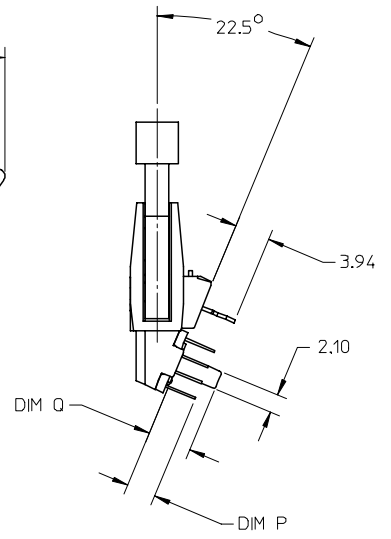
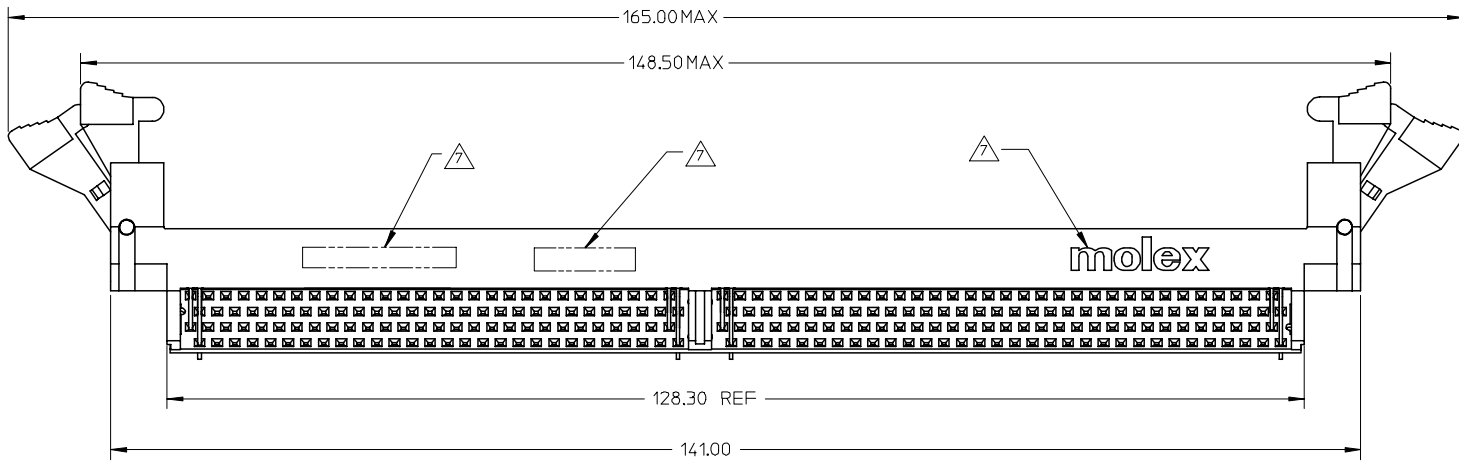
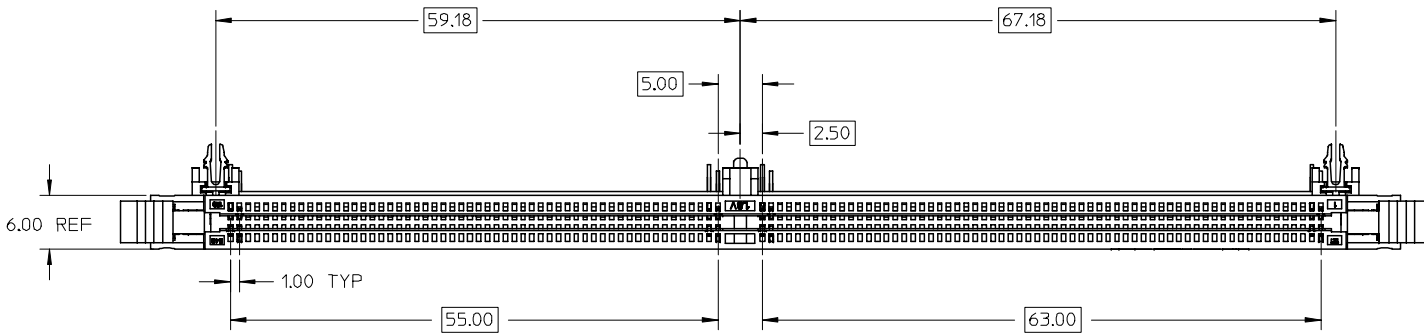
Sales Drawing

SD-87916-001

This document was generated on 04/09/2010

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10 9 8 7 6 5 4 3 2 1



- NOTES :
- MATERIALS : HOUSING, BASEPLATE AND LATCH.  
- HIGH TEMP THERMOPLASTIC, UL94-0.  
TERMINALS & FORKLOCK - COPPER ALLOY.
  - PLATING : CONTACT AREA - SEE TABLE IN SHEET 5.  
SOLDERTAIL - SEE TABLE IN SHEET 5.
  - CARD SLOT ACCEPTS 1.27+/-0.10MM MODULE THICKNESS  
( MEASURED OVER PC PADS ).
  - REFER TO PRODUCT SPECIFICATION , PS-87916-001 FOR  
PERFORMANCE SPECIFICATION.
  - RECOMMENDED MODULE CARD LAYOUT SHALL BE AS PER JEDEC MO-237.
  - PRODUCT SHALL BE PACKED IN TRAY.
- ▲ MOLEX LOGO, DATE CODE & PART NUMBER INDICATED ON HOUSING.

ADDED OPTION EC NO: S2008-0329 2007/10/24 DRWN:CTEH 2007/10/24 CHKD:TYANG01 2007/10/25 APPR:SHLENI	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																	
		<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>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>			mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± ---	± ---	DRAWN BY JTAN		DATE 2004/05/11	TITLE DDR2 DIMM, 1.00MM PITCH 240 CKTS, 22.5 DEG			
			mm	INCH																					
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1 PLACE	± ---	± ---																							
ANGULAR ± 5 °		CHECKED BY MLONG		DATE 2004/06/11	MOLEX INCORPORATED																				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		APPROVED BY GGLEE		DATE 2004/06/11	DOCUMENT NO. SD-87916-001		SHEET NO. 1 OF 5																

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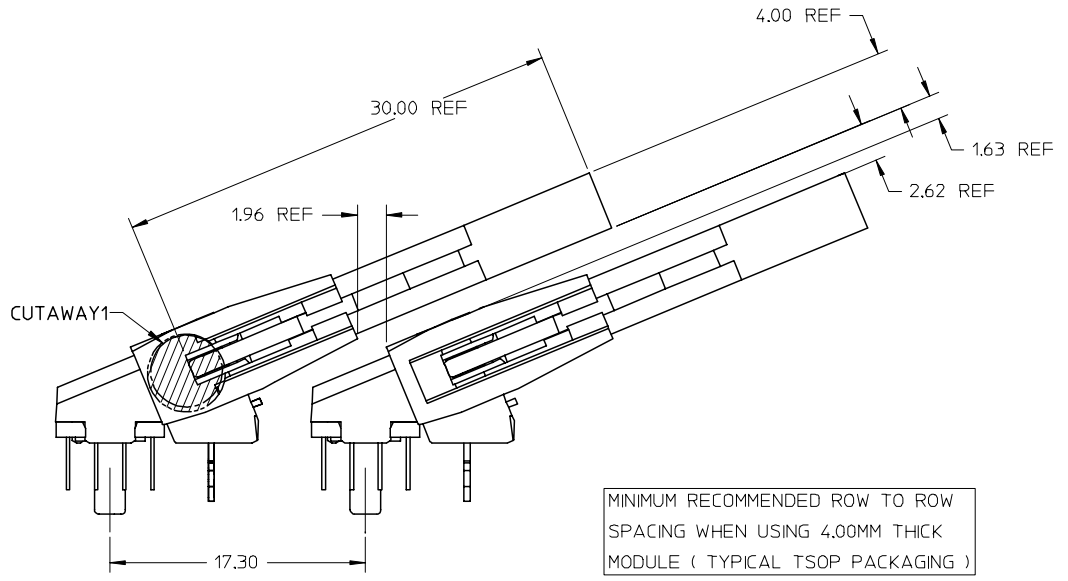
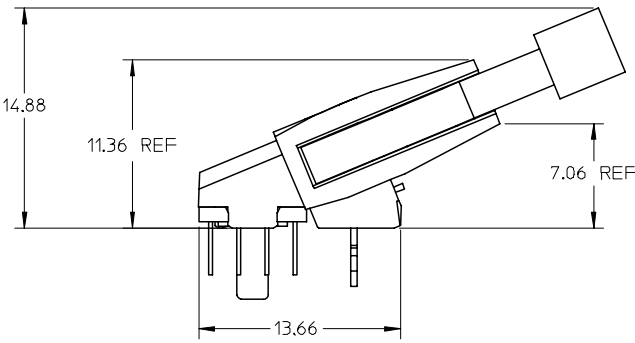
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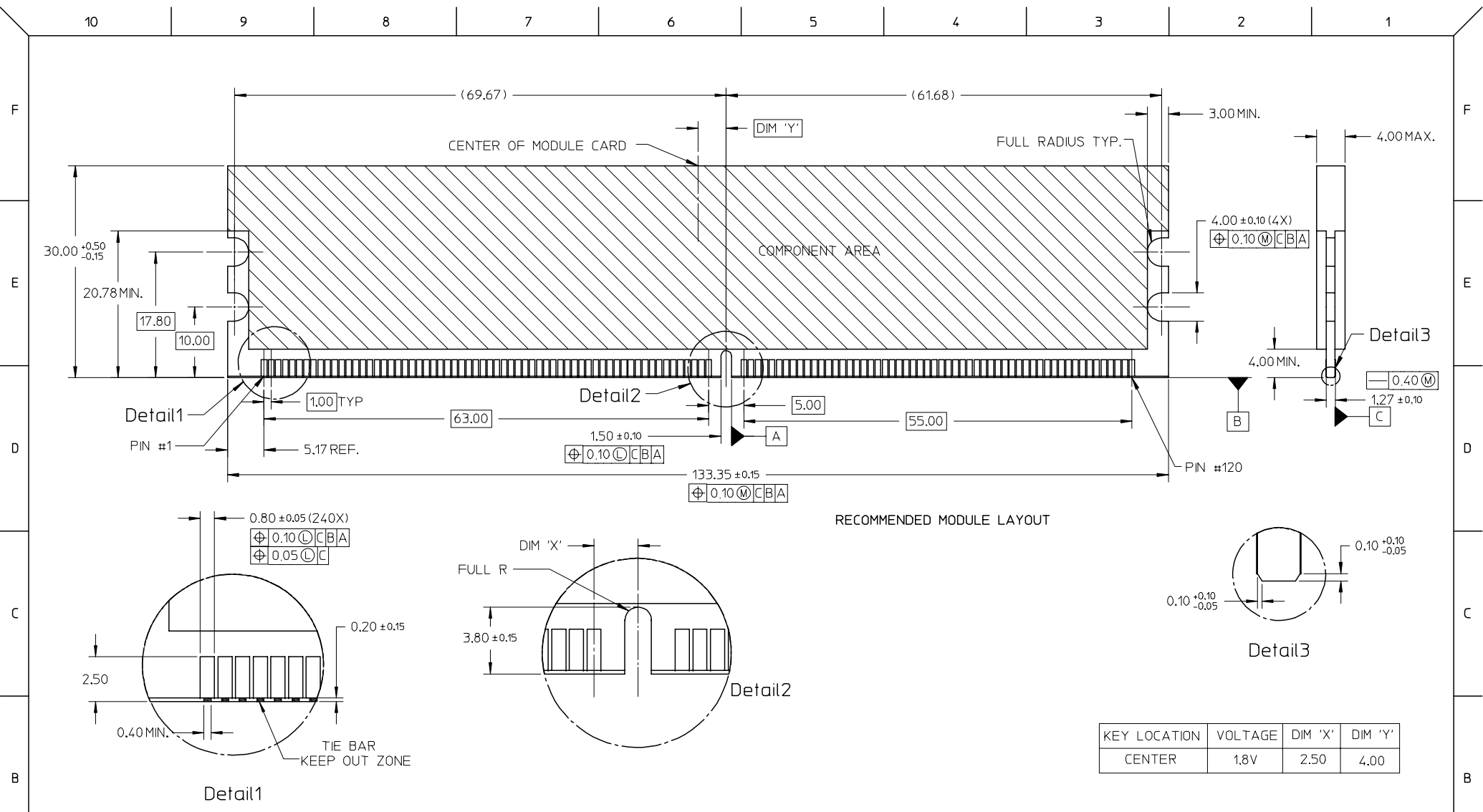
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MINIMUM RECOMMENDED ROW TO ROW SPACING WHEN USING 4.00MM THICK MODULE ( TYPICAL TSOP PACKAGING )

ADDED OPTION EC NO: S2008-0329 DRWN: CTEH CHKD: TYANG01 APPR: SILENI	2007/10/24 2007/10/24 2007/10/25	DESCRIPTION A1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			$\nabla=0$ $\nabla C=0$	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 5 °	MM ONLY	NTS	METRIC	TITLE DDR2 DIMM, 1.00MM PITCH 240 CKTS, 22.5 DEG
							DRAWN BY: JTAN      DATE: 2004/05/11 CHECKED BY:      DATE: APPROVED BY: MLONG      DATE: 2004/06/11 GGLEE      DATE: 2004/06/11	
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. SD-87916-001

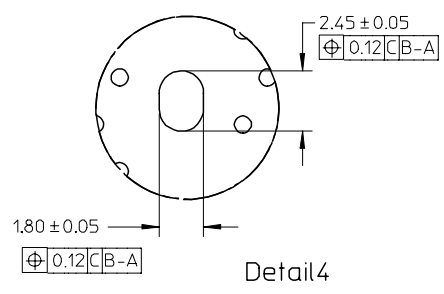
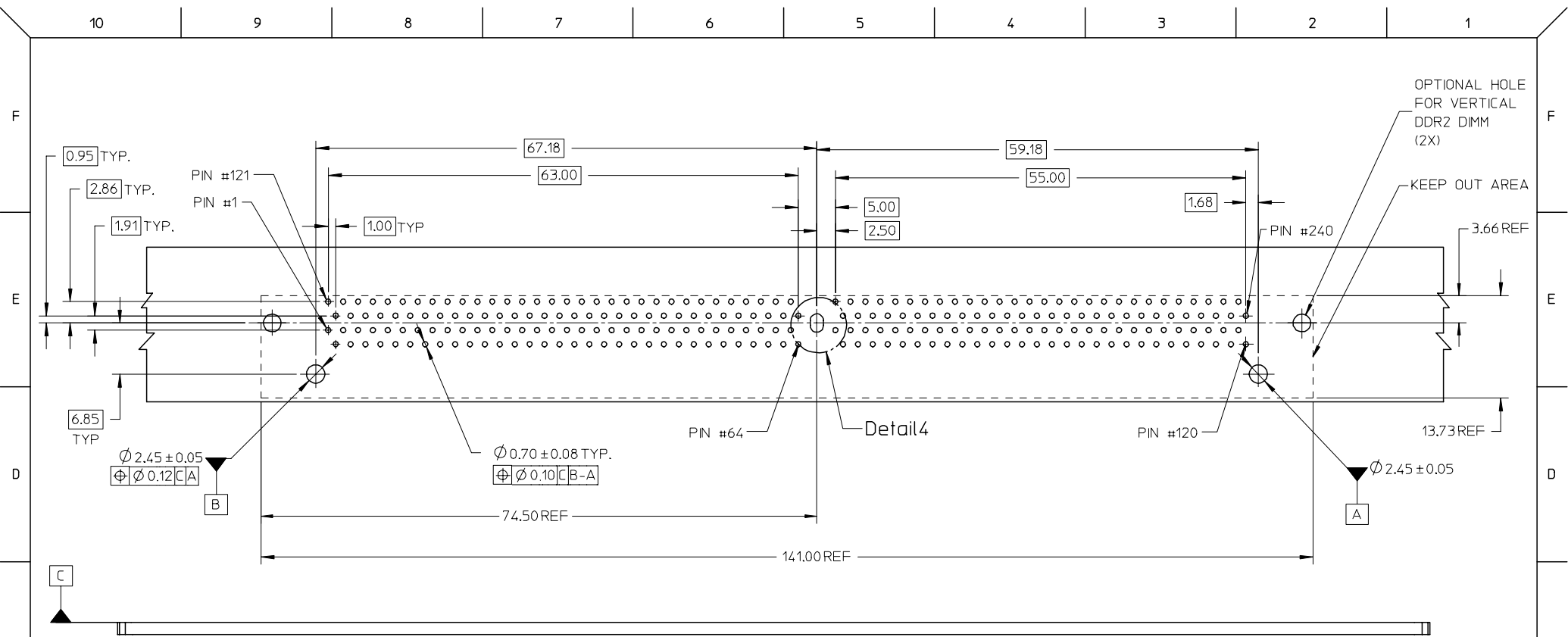
9 8 7 6 5 4 3 2 1



RECOMMENDED MODULE LAYOUT

KEY LOCATION	VOLTAGE	DIM 'X'	DIM 'Y'
CENTER	1.8V	2.50	4.00

<b>ADDED OPTION</b> EC NO: S2008-0329 DRWN: CTEH CHKD: TYANG01 APPR: SHLENI	2007/10/24 2007/10/24 2007/10/25	<b>QUALITY SYMBOLS</b> ▽=0 ◻=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
					DRAWN BY JTAN	DATE 2004/05/11	TITLE DDR2 DIMM, 1.00MM PITCH 240 CKTS, 22.5 DEG					
					CHECKED BY MLONG	DATE 2004/06/11			MOLEX INCORPORATED			
					APPROVED BY GGLEE	DATE 2004/06/11			DOCUMENT NO. SD-87916-001		SHEET NO. 3 OF 5	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		MATERIAL NO.							
A1					SIZE A3				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



ADDED OPTION	2007/10/24
EC NO: S2008-0329	2007/10/24
DRWN: CTEH	2007/10/24
CHKD: TYANG01	2007/10/25
APPR: SILENI	
REV	DESCRIPTION
A1	

QUALITY SYMBOLS	▽=0
	∇=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ± 5 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		NTS	METRIC	
DRAWN BY	DATE	TITLE		
JTAN	2004/05/11	DDR2 DIMM, 1.00MM PITCH		
CHECKED BY	DATE	240 CKTS, 22.5 DEG		
MLONG	2004/06/11			
APPROVED BY	DATE			
GGLEE	2004/06/11			
MATERIAL NO.		DOCUMENT NO.		SHEET NO.
		SD-87916-001		4 OF 5
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
A3				

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SD-87916-001	
4 OF 5	

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PART NO.	VOLTAGE KEY	DIM 'P'	DIM 'O'	RECOMMENDED PCB THICKNESS	CONTACT AREA PLATING	SOLDERTAIL PLATING
87916-0001	1.8V	2.79	3.18	1.57	0.76µM/ 30µ" GOLD OVER 1.27µM/ 50µ" MIN NICKEL	2.54µM/ 100µ" MIN. TIN OVER 1.27µM/ 50µ" MIN NICKEL
87916-0011		3.18	4.83	2.36		
87916-0111		4.00		3.20		

ADDED OPTION EC NO: S2008-0329 DRWN: CTEH CHKD: TYANG01 APPR: SILENI	2007/10/24 2007/10/24 2007/10/25	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
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	2 PLACES		± 0.25	± ---	± ---	MATERIAL NO.	DOCUMENT NO.	SD-87916-001		SHEET NO. 5 OF 5	
1 PLACE	± ---	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE					
ANGULAR ± 5 °											

9 8 7 6 5 4 3 2 1