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Part Number: [0879780021](#)

Status: **Active**

Description: 1.00mm (.039") Pitch DDR-2 DIMM Socket, Vertical, with Beveled Metal Pins, Very Low Profile Black Latches, 240 Circuits, 1.8V Center Voltage Key, 2.67mm (.105") Tail Length, 0.38µm (15µ") Gold (Au) Plating, Lead-free

Documents:

[3D Model](#)

[Drawing \(PDF\)](#)

[Product Specification PS-87978-001 \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
UL E29179

General

Product Family Memory Module Sockets
Series [87978](#)
Comments Latches in Black Color
Component Type Memory Module
JEDEC Outline N/A
Product Name DDR2 DIMM

Physical

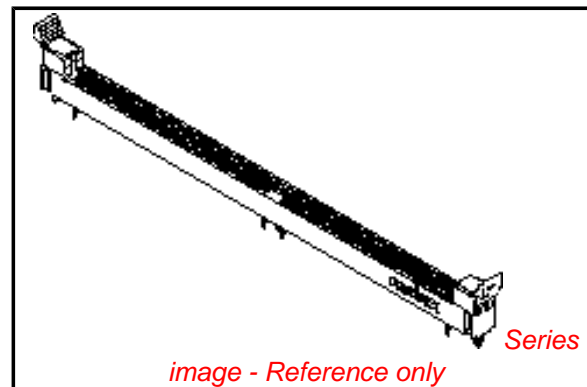
Circuits (Loaded) 240
Color - Resin Black
Durability (mating cycles max) 25
Entry Angle Vertical (Top Entry)
Flammability 94V-0
Keying to Mating Part Yes
Material - Metal Brass, Phosphor Bronze
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin High Temperature Thermoplastic
PC Tail Length (in) 0.105 In
PC Tail Length (mm) 2.67 mm
PCB 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) 15.2
Plating min: Mating (µm) 0.38
Plating min: Termination (µin) 101.6
Plating min: Termination (µm) 2.54
Temperature Range - Operating -10°C to +85°C
Termination Interface: Style Through Hole

Electrical

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

Solder Process Data

Duration at Max. Process Temperature (seconds) 10
Lead-free Process Capability Wave Capable (TH only)
Max. Cycles at Max. Process Temperature 1



EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Contains SVHC: No

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

[87978Series](#)

Mates With

JEDEC standard 1.27mm modules

Process Temperature max. C

265

Material Info

Reference - Drawing Numbers

Product Specification

PS-87978-001, RPS-87978-001

Sales Drawing

SD-87978-001

This document was generated on 05/20/2010

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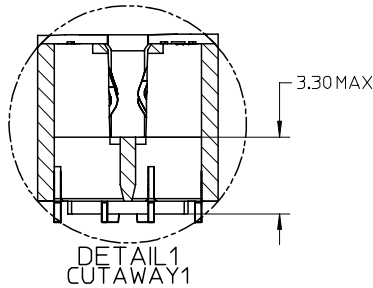
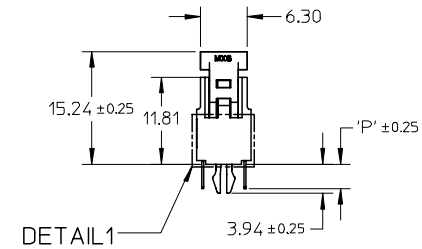
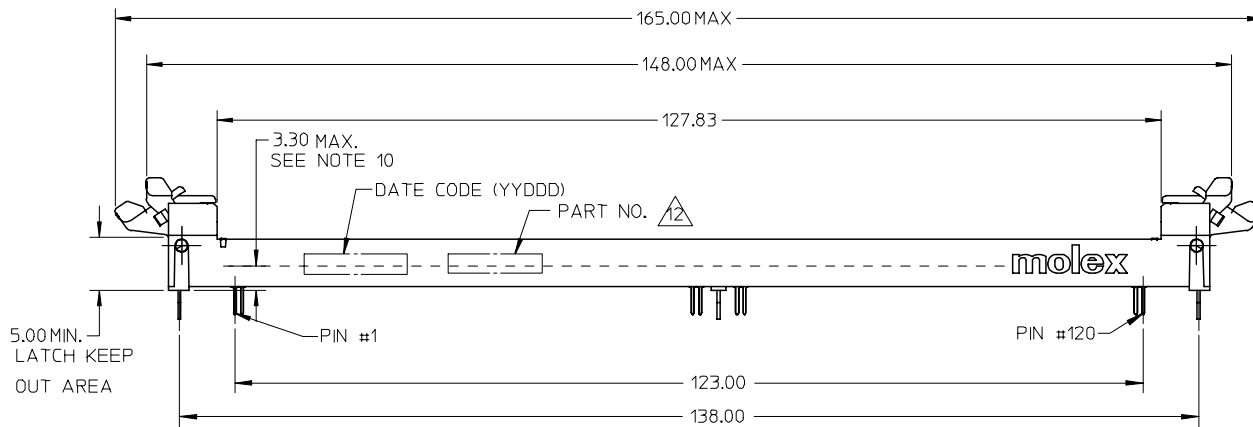
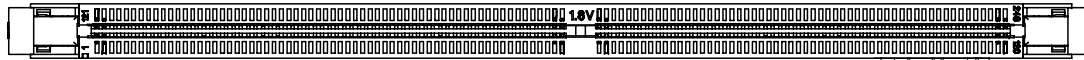
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NOTES:

1. MATERIALS
HOUSING - HIGH TEMP. NYLON GLASS FILLED, UL 94 V-0, BLACK.
EJECTOR - HIGH TEMP. NYLON GLASS FILLED, UL 94 V-0, BLACK.
TERMINAL - COPPER ALLOY
2. PLATING - SEE TABLE IN SHEET 5.
3. CARD SLOT ACCEPTS 1.27±0.10 MM MODULE THICKNESS.
(MEASURED OVER P.C. PADS)
4. RECOMMENDED MODULE LAYOUT SHALL BE AS PER JEDEC MO-237.
5. REFER TO PRODUCT SPEC, PS-87978-013 FOR PERFORMANCE SPECIFICATIONS.
6. PRODUCT SHALL BE PACKED IN TRAY.
7. PRODUCT SHALL HAVE DATE CODE STAMPED ON SIDE OF HOUSING.
8. KEEP OUT AREA IS THE AREA WHERE THE CONNECTOR IS MOUNTED ONTO THE PCB WHICH DOES NOT INCLUDE THE LATCH.
9. REFER TO CRITICAL JEDEC INFORMATION FOR SOCKET OUTLINE PER SO-001.
10. DIMM MODULE SEATING PLANE FROM TOP OF PCB.
11. CONTACT MOLEX FOR AVAILABILITY OF PRODUCT OPTIONS.
12. PART NUMBER SHALL BE MARKED LEGIBLY AS 87978-****



REVISED	EC NO: S2008-0235	2007/09/27
	DRWN:CMTEO	2007/09/27
	CHKD:CCTEH	2007/09/28
	APPR:SHLENI	2007/09/28
B	REV	DESCRIPTION

QUALITY SYMBOLS	▽=0
	▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± ---
2 PLACES	± 0.20 ± ---
1 PLACE	± --- ± ---
ANGULAR ± 5 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY	DATE
CCTEH	2005/01/03
CHECKED BY	DATE
SRRAMESH	2005/08/30
APPROVED BY	DATE
GGLEE	2005/08/30
MATERIAL NO.	
SEE TABLE	
SIZE	A3

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE		
DDR2 DIMM, 1MM PITCH		
240 CKTS, FORK-LOCK VERS		
VLP LATCH		
MOLEX INCORPORATED		SHEET NO. 1 OF 5
DOCUMENT NO. SD-87978-001		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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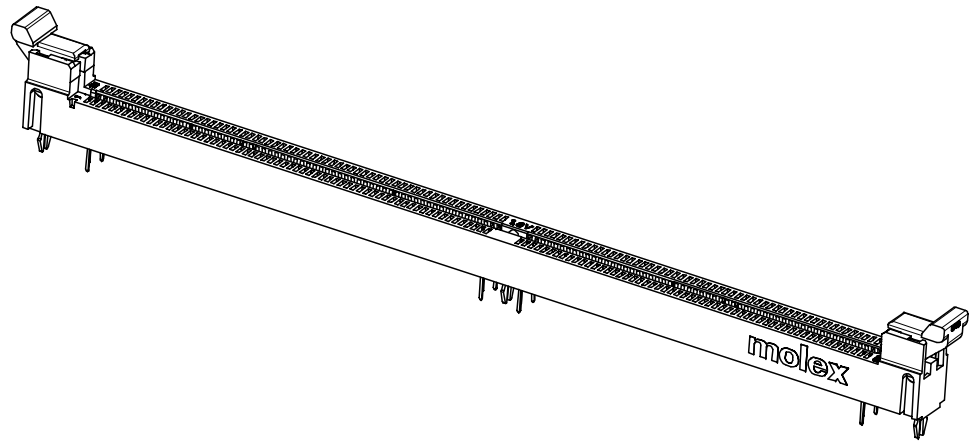
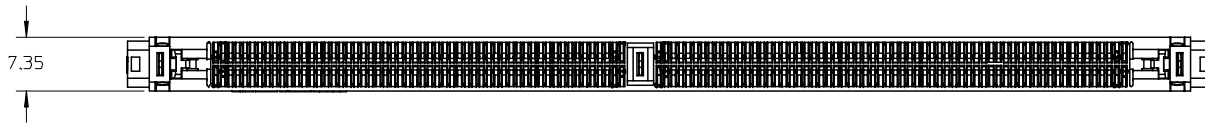
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REVISED EC NO: S2008-0235 DRWN:CMTEO 2007/09/27 CHKD:CCTEH 2007/09/27 APPR:SHLENI 2007/09/28	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY CCTEH	DATE 2005/01/03	TITLE DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH					
		3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	CHECKED BY SRRAMESH	DATE 2005/08/30						
		1 PLACE ± --- ± ---	ANGULAR ± 5 °	APPROVED BY GGLEE	DATE 2005/08/30	MOLEX INCORPORATED					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. SD-87978-001	DOCUMENT NO.	SHEET NO. 2 OF 5							

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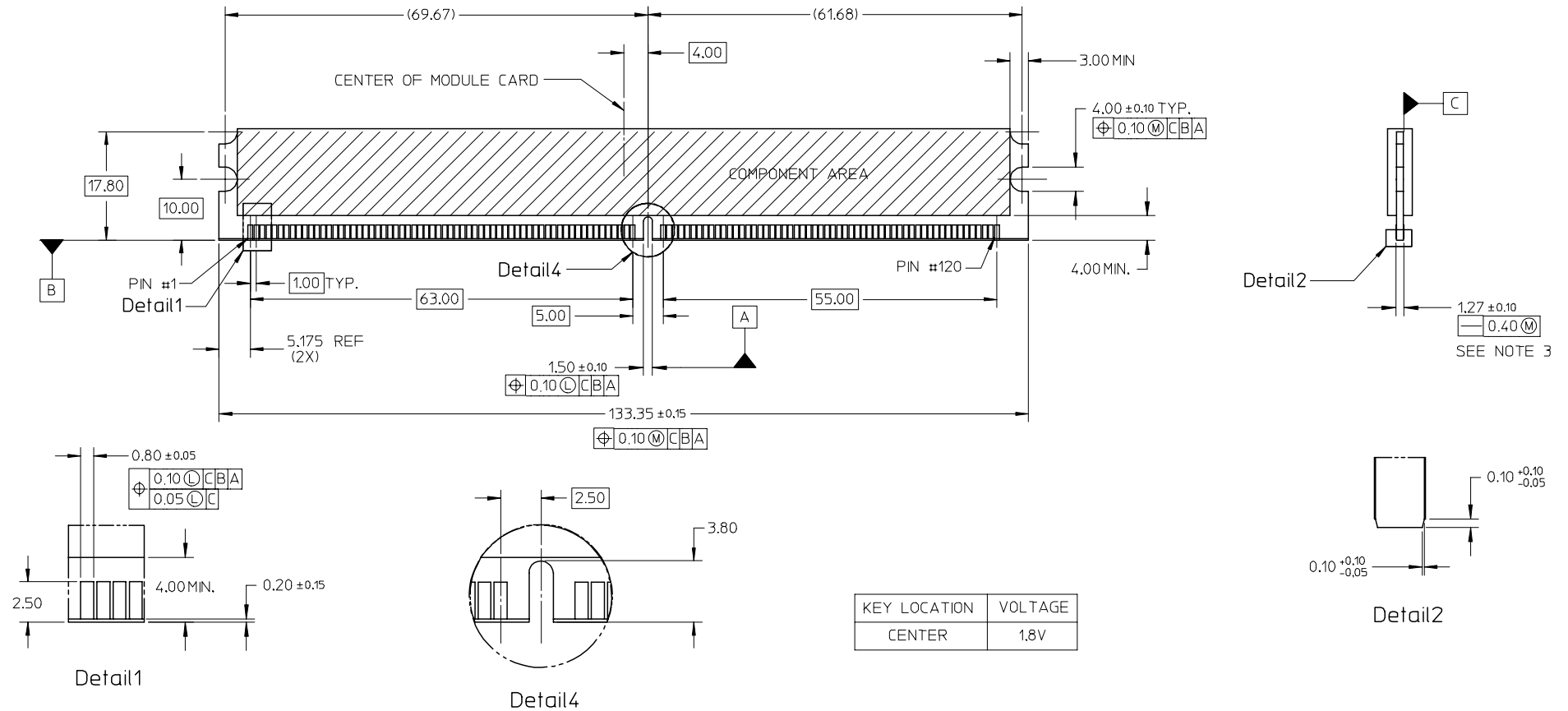
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RECOMMENDED MODULE LAYOUT



KEY LOCATION	VOLTAGE
CENTER	1.8V

NOTES:
1. MODULE CARD USED FOR TESTS ARE WITH 0.10MM CHAMFER.

REV	DESCRIPTION
B	REVISED
	EC NO: S2008-0235
	DRWN:CMTEO 2007/09/27
	CHKD:CCTEH 2007/09/27
	APPR:SHLENI 2007/09/28

QUALITY SYMBOLS
▽=0
∇=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.20	± ---
1 PLACE ± ---	± ---
ANGULAR ± 5 °	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
CCTEH	2005/01/03
CHECKED BY	DATE
SRRAMESH	2005/08/30
APPROVED BY	DATE
GGLEE	2005/08/30
MATERIAL NO.	
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
NTS	METRIC	⊕	∇
TITLE			
DDR2 DIMM, 1MM PITCH			
240 CKTS, FORK-LOCK VERS			
VLP LATCH			
MOLEX INCORPORATED		SHEET NO.	
SD-87978-001		3 OF 5	
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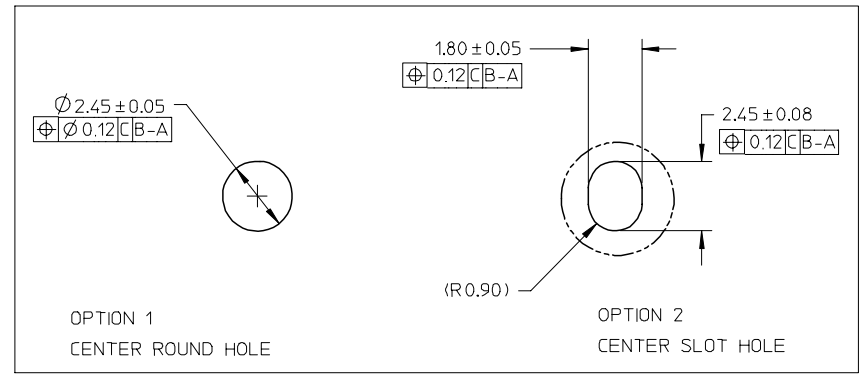
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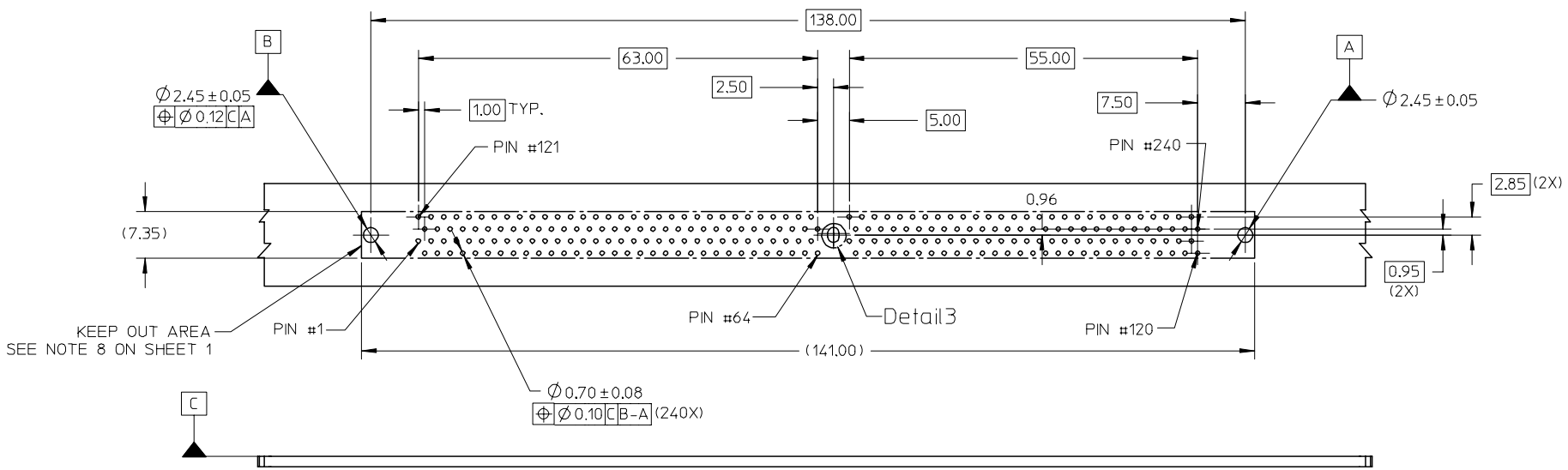
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(SEE RECOMMENDED THICKNESS IN TABLE)
RECOMMENDED PCB LAYOUT
CONNECTOR SIDE

Detail3



REVISED EC NO: S2008-0235 DRWN:CMTEO 2007/09/27 CHKD:CCTEH 2007/09/27 APPR:SHLENI 2007/09/28	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 5 °	DRAWN BY CCTEH	DATE 2005/01/03	TITLE DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH		
							APPROVED BY GGLEE	DATE 2005/08/30	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87978-001	SHEET NO. 4 OF 5	

9 8 7 6 5 4 3 2 1

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PART NO.	KEY POS.	DIM 'P'	RECOMMENDED PCB THICKNESS	PLATING OPTION	LATCH COLOR
87978-0021	CENTER (1.8V)	2.67	1.57	0.38µM / 15 µIN MIN. GOLD ON CONTACT, 2.54µM/ 100µIN MIN. TIN ON SOLDERTAILS, 1.27µM/ 50µIN MIN. NICKEL UNDERPLATE	BLACK
87978-1021	CENTER (1.8V)	3.18	2.36		
87978-0031	CENTER (1.8V)	2.67	1.57	0.03µM / 1 µIN MIN. GOLD ON CONTACT, 2.54µM/ 100µIN MIN. TIN ON SOLDERTAILS, 1.27µM/ 50µIN MIN. NICKEL UNDERPLATE	
87978-1031	CENTER (1.8V)	3.18	2.36		
87978-0051	CENTER (1.8V)	2.67	1.57	0.76µM / 30 µIN MIN. GOLD ON CONTACT, 2.54µM/ 100µIN MIN. TIN ON SOLDERTAILS, 1.27µM/ 50µIN MIN. NICKEL UNDERPLATE	
87978-1051	CENTER (1.8V)	3.18	2.36		

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		4 PLACES ± --- ± ---	DRAWN BY CCTEH	DATE 2005/01/03	TITLE DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH				
		3 PLACES ± --- ± ---	CHECKED BY SRRAMESH	DATE 2005/08/30					
		2 PLACES ± 0.20 ± ---	APPROVED BY GGLEE	DATE 2005/08/30	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87978-001		SHEET NO. 5 OF 5
1 PLACE ± --- ± ---	ANGULAR ± 5 °		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				

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