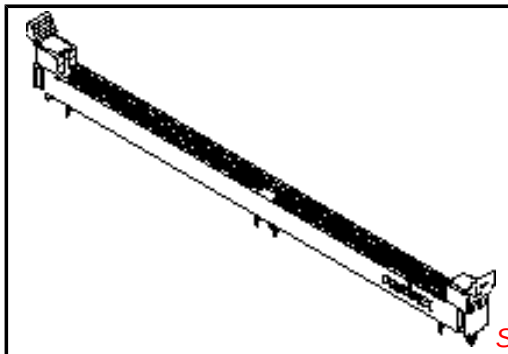
This document was generated on 05/20/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0879781051

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, 3.18mm (.125") Tail Length, 0.76µm (30µ") Gold (Au) Plating, Lead-free



Series image - Reference only

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	<LI> 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)	0.125 In
PC Tail Length (mm)	3.18 mm
PCB Retention	Yes
PCB Thickness Recommended (in)	0.093 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
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	-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

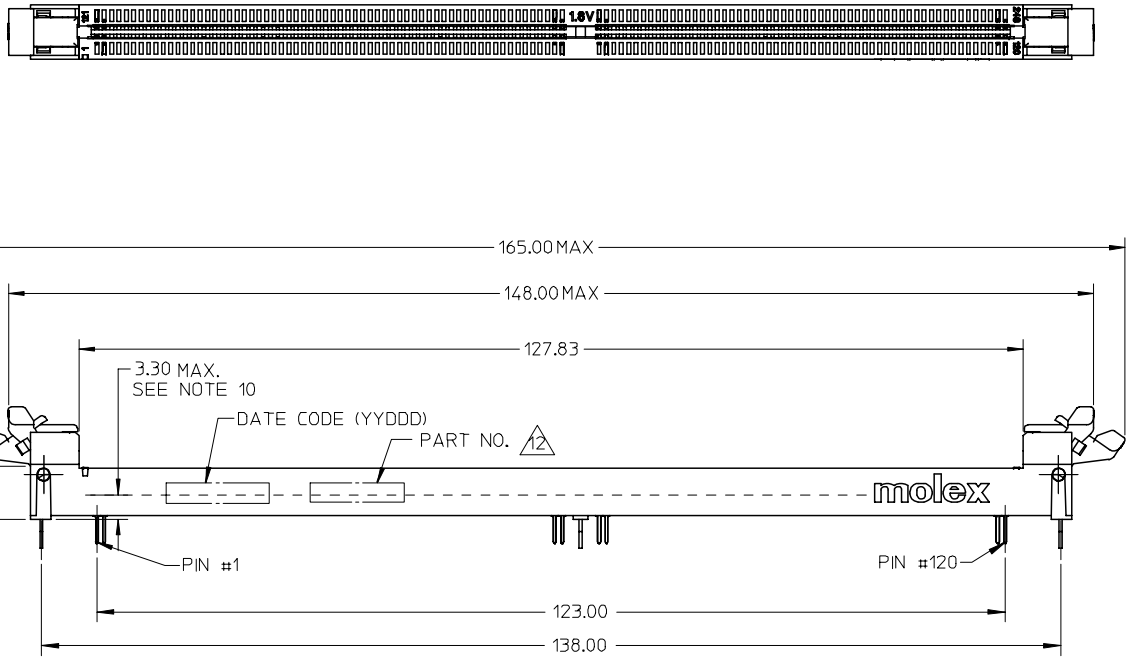
Product Specification	PS-87978-001, RPS-87978-001
Sales Drawing	SD-87978-001

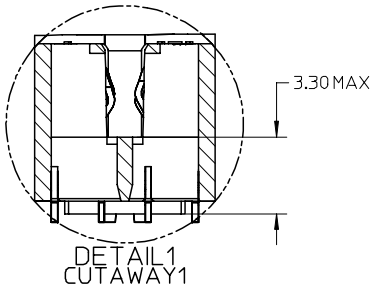
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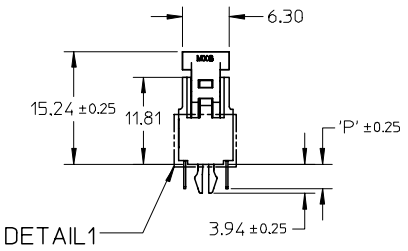
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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

QUALITY SYMBOLS
▼=0
Ⓒ=0

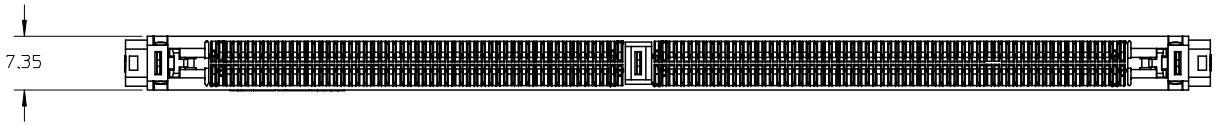
GENERAL TOLERANCES (UNLESS SPECIFIED)

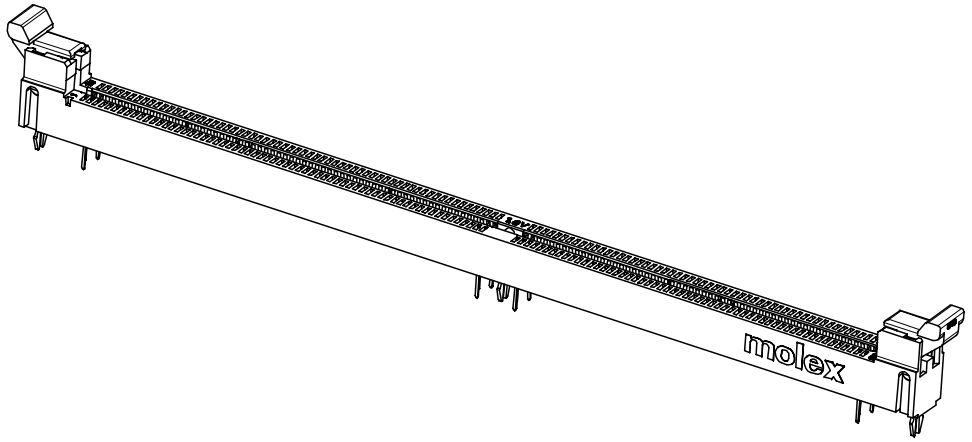
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 5 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM ONLY
SCALE	NTS
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	CCTEH
DATE	2005/01/03
CHECKED BY	SRRAMESH
DATE	2005/08/30
APPROVED BY	GGLEE
DATE	2005/08/30
MATERIAL NO.	SEE TABLE
TITLE	DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH
	MOLEX INCORPORATED
DOCUMENT NO.	SD-87978-001
SHEET NO.	1 OF 5
SIZE	A3

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

QUALITY SYMBOLS
▼=0
▽(C)=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

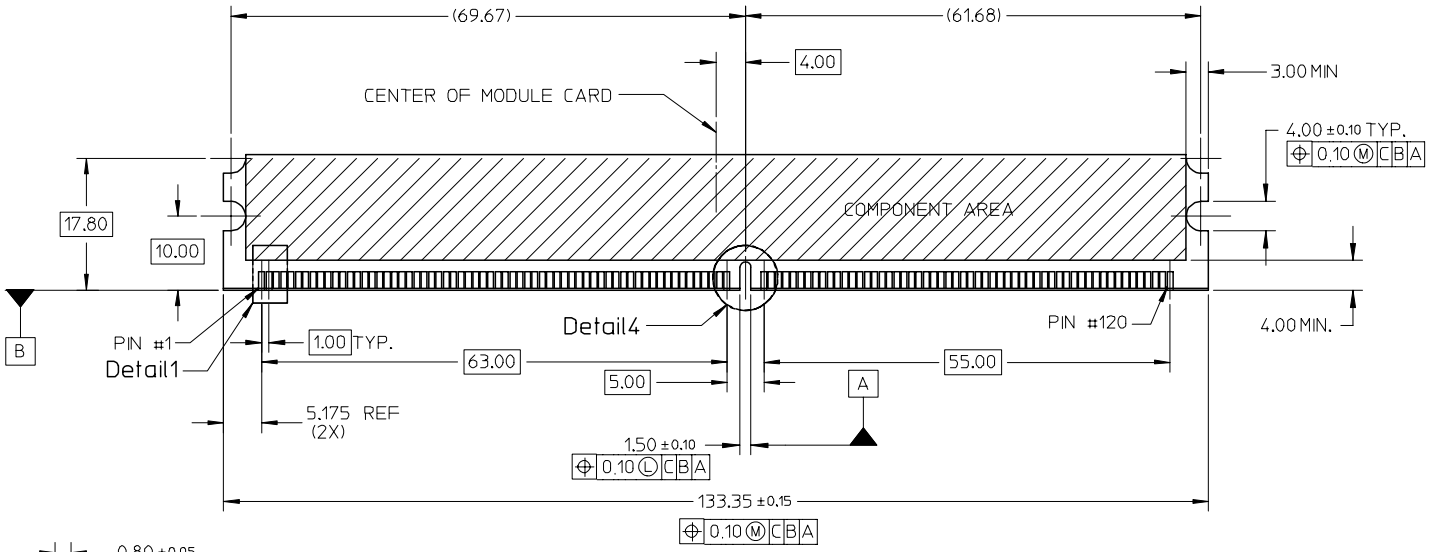
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 5 °		

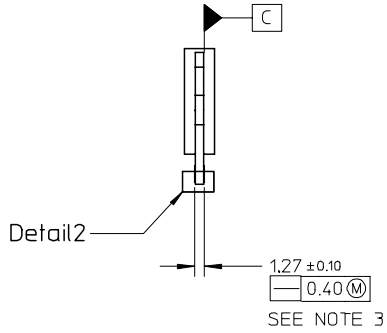
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

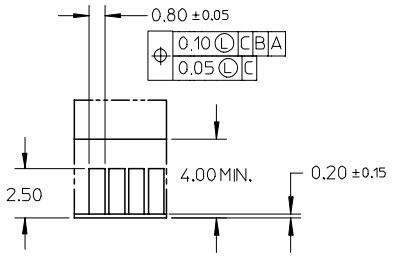
DIMENSION STYLE	MM ONLY
SCALE	NTS
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	CCTEH
DATE	2005/01/03
CHECKED BY	SRRAMESH
DATE	2005/08/30
APPROVED BY	GGLEE
DATE	2005/08/30
MATERIAL NO.	SEE TABLE
TITLE	DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH
	MOLEX INCORPORATED
DOCUMENT NO.	SD-87978-001
SHEET NO.	2 OF 5
SIZE	A3

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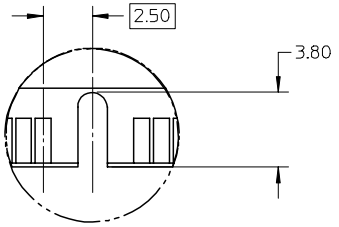
RECOMMENDED MODULE LAYOUT



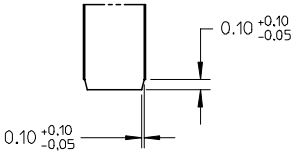




Detail1



Detail4



Detail2

KEY LOCATION	VOLTAGE
CENTER	1.8V

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

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

QUALITY SYMBOLS
▼=0
▽C=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
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

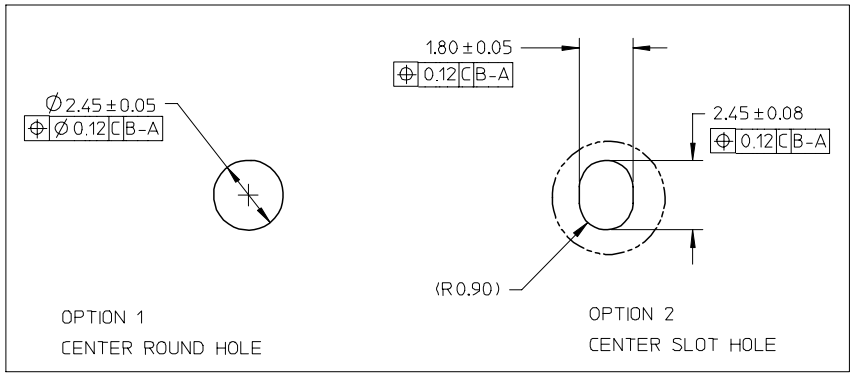
DRAWN BY: CCTEH DATE: 2005/01/03
CHECKED BY: SRRAMESH DATE: 2005/08/30
APPROVED BY: GGLEE DATE: 2005/08/30

TITLE: DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH

MOLEX INCORPORATED

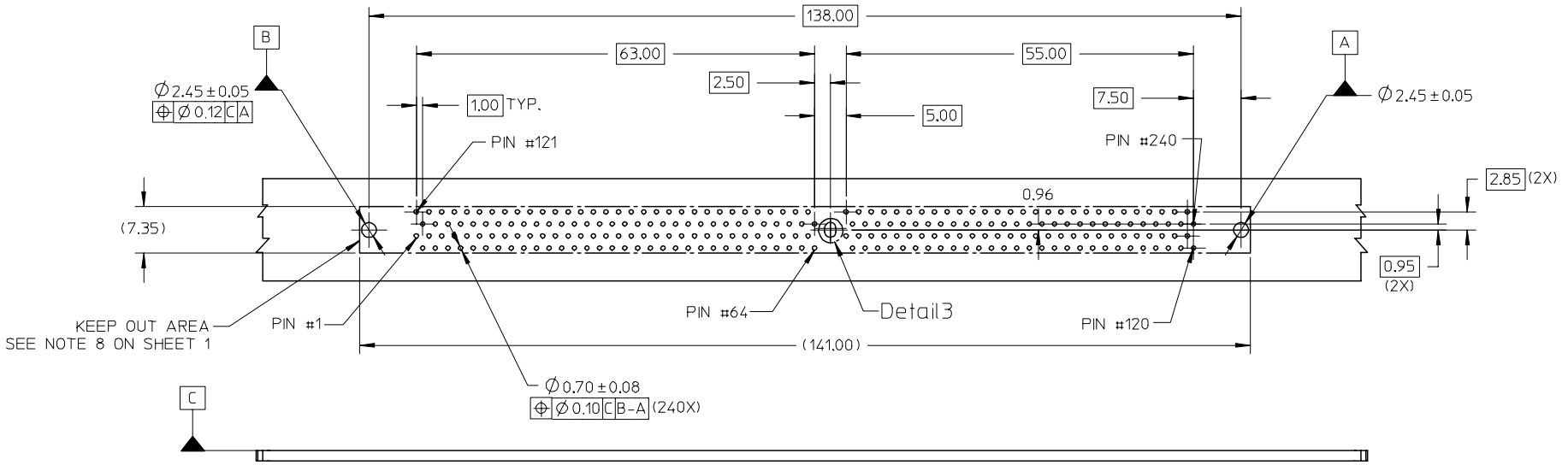
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87978-001
SHEET NO.: 3 OF 5
SIZE: A3

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Detail3

(SEE RECOMMENDED THICKNESS IN TABLE)
RECOMMENDED PCB LAYOUT
CONNECTOR SIDE



REVISED	EC NO:	DESCRIPTION	REV
	S2008-0235		B
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 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY	SCALE: NTS	DESIGN UNITS: METRIC	THIRD ANGLE PROJECTION
DRAWN BY: CCTEH	DATE: 2005/01/03		
CHECKED BY: SRRAMESH	DATE: 2005/08/30		
APPROVED BY: GGLEE	DATE: 2005/08/30		
MATERIAL NO.: SEE TABLE			

TITLE: DDR2 DIMM, 1MM PITCH
240 CKTS, FORK-LOCK VERS
VLP LATCH

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DOCUMENT NO.: SD-87978-001
SHEET NO.: 4 OF 5

SIZE: A3

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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	0.38uM / 15 uIN MIN. GOLD ON CONTACT, 2.54uM/ 100uIN MIN. TIN ON SOLDERTAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	BLACK
87978-1021	CENTER (1.8V)	3.18	2.36		
87978-0031	CENTER (1.8V)	2.67	1.57	0.03uM / 1 uIN MIN. GOLD ON CONTACT, 2.54uM/ 100uIN MIN. TIN ON SOLDERTAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	
87978-1031	CENTER (1.8V)	3.18	2.36		
87978-0051	CENTER (1.8V)	2.67	1.57	0.76uM / 30 uIN MIN. GOLD ON CONTACT, 2.54uM/ 100uIN MIN. TIN ON SOLDERTAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	
87978-1051	CENTER (1.8V)	3.18	2.36		

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

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
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: CCTEH DATE: 2005/01/03
CHECKED BY: SRRAMESH DATE: 2005/08/30
APPROVED BY: GGLEE DATE: 2005/08/30

TITLE: DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH

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MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87978-001
SHEET NO.: 5 OF 5
SIZE: A3

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