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

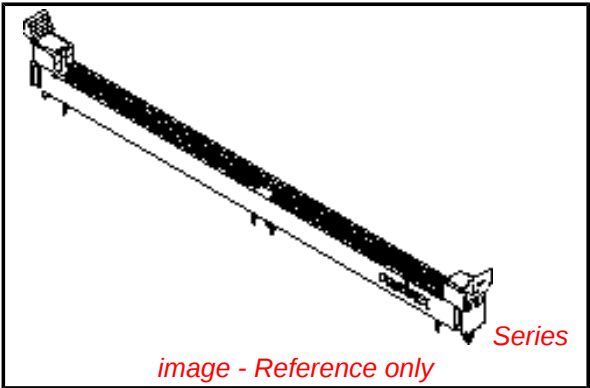
Circuits (Loaded) 240
Color - Resin Black
Durability (mating cycles max) 25
Entry Angle Vertical (Top Entry)
Flammability 94V-0
Keying to Mating Part Yes
Material - Metal Brass, Phosphor Bronze
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin High Temperature Thermoplastic
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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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.

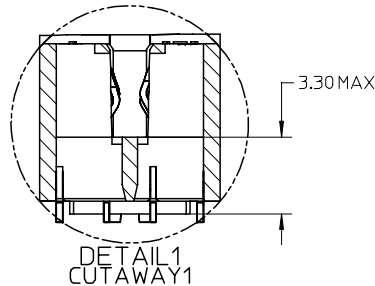
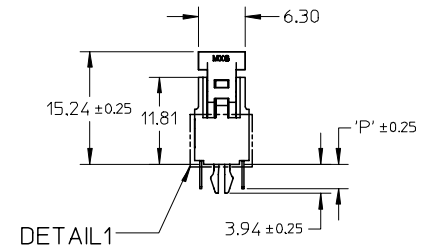
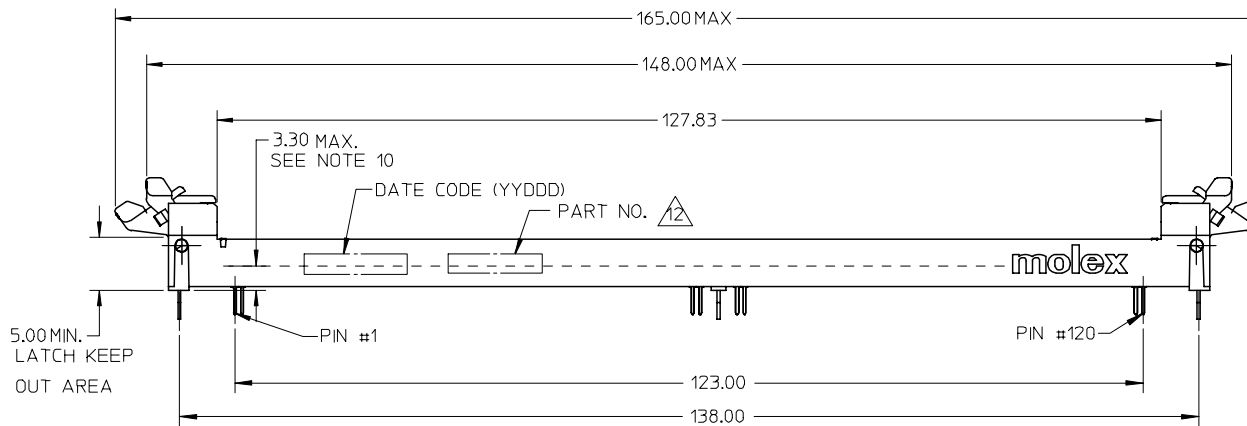
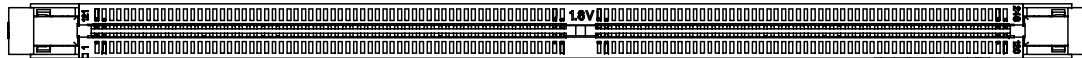
8. KEEP OUT AREA IS THE AREA WHERE THE CONNECTOR IS MOUNTED ONTO THE PCB WHICH DOES NOT INCLUDE THE LATCH.

9. REFER TO CRITICAL JEDEC INFORMATION FOR SOCKET OUTLINE PER SO-001.

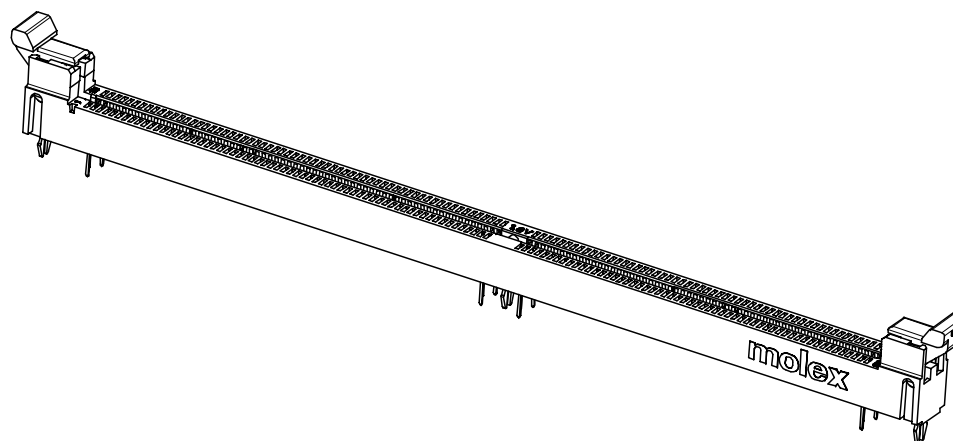
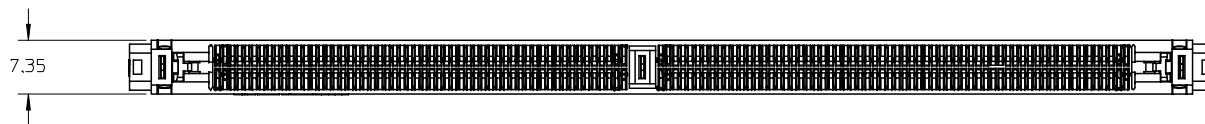
10. DIMM MODULE SEATING PLANE FROM TOP OF PCB.

11. CONTACT MOLEX FOR AVAILABILITY OF PRODUCT OPTIONS.

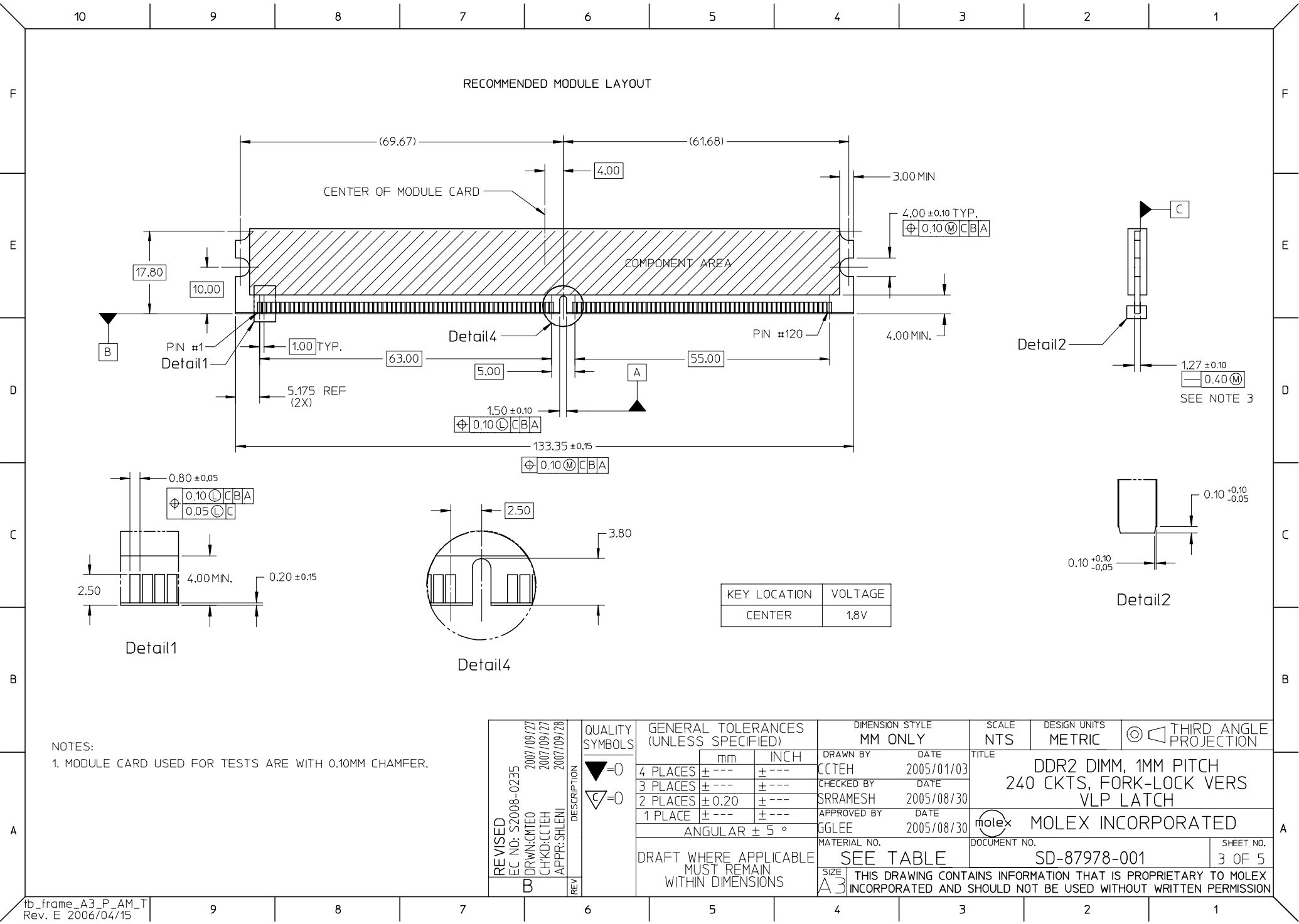
12. PART NUMBER SHALL BE MARKED LEGIBLY AS 87978-****



REVISED		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	
EC NO:	DATE	DRWN:	CHKD:	APPR:	REV	mm	INCH	DRAWN BY	DATE	TITLE			
S2008-0235	2007/09/27	CCTEH	CCTEH	SHLENI		4 PLACES ± ---	± ---	CCTEH	2005/01/03	DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH MOLEX INCORPORATED			
	2007/09/27					3 PLACES ± ---	± ---	CHECKED BY	DATE				
						2 PLACES ± 0.20	± ---	SRRAMESH	2005/08/30				
						1 PLACE ± ---	± ---	APPROVED BY	DATE				
						ANGULAR ± 5 °		GGLEE	2005/08/30	MOLEX INCORPORATED			
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
								SEE TABLE		SD-87978-001		1 OF 5	
								SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



REVISED EC NO: S2008-0235 DRWN:CMTEO CHKD:CCTEH APPR:SHLENI	2007/09/27 2007/09/27 2007/09/28	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					mm	INCH	DRAWN BY CCTEH	DATE 2005/01/03	TITLE DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH			
				4 PLACES	± ---	± ---	CHECKED BY SRRAMESH	DATE 2005/08/30				
				3 PLACES	± ---	± ---	APPROVED BY GGLEE	DATE 2005/08/30	MOLEX INCORPORATED			
				2 PLACES	± 0.20	± ---	MATERIAL NO.					
				1 PLACE	± ---	± ---	SEE TABLE		SD-87978-001		2 OF 5	
				ANGULAR ± 5 °			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			SIZE A3					



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

REVISED EC NO: S2008-0235 2007/09/27 DRWN:CMTE0 CHKD:CTEH 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			
				mm	INCH	DRAWN BY CTEH	DATE 2005/01/03	TITLE DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH				
			4 PLACES	± ---	± ---	CHECKED BY SRRAMESH	DATE 2005/08/30					
			3 PLACES	± ---	± ---	APPROVED BY GGLEE	DATE 2005/08/30					
			2 PLACES	± 0.20	± ---	MOLEX MOLEX INCORPORATED						
			1 PLACE	± ---	± ---							
			ANGULAR ± 5 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87978-001				3 OF 5				
		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

F

E

D

C

B

A

F

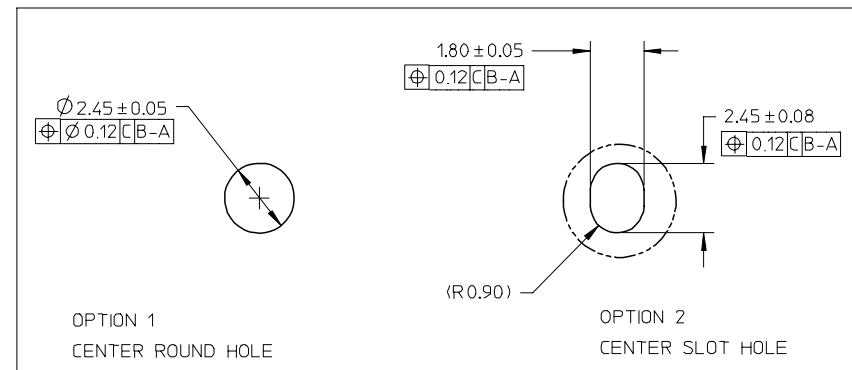
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C

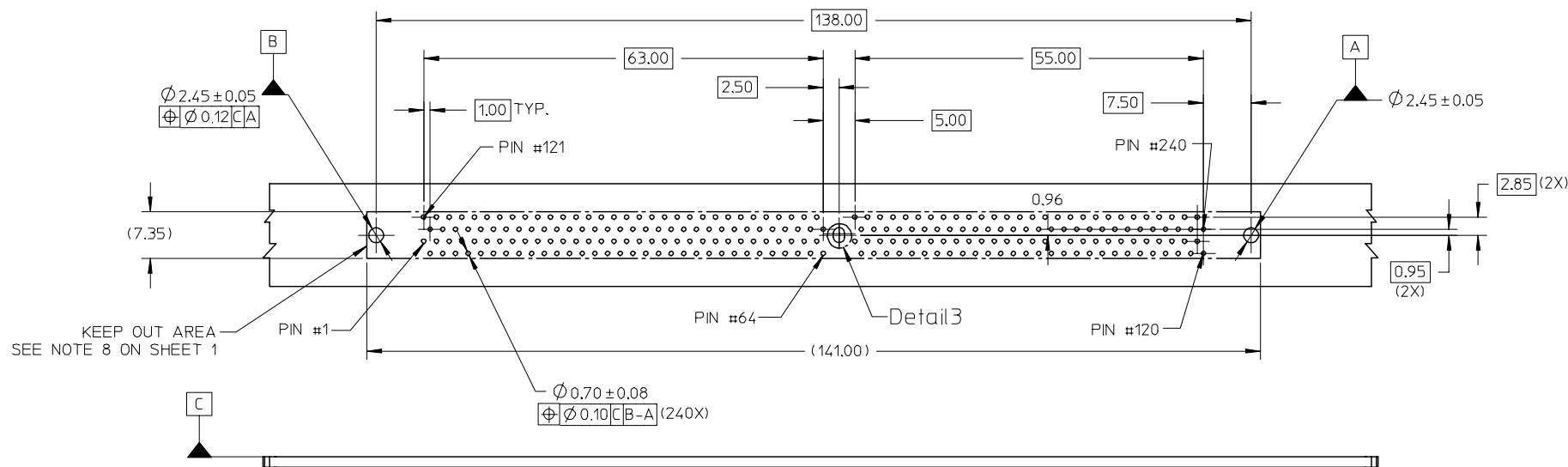
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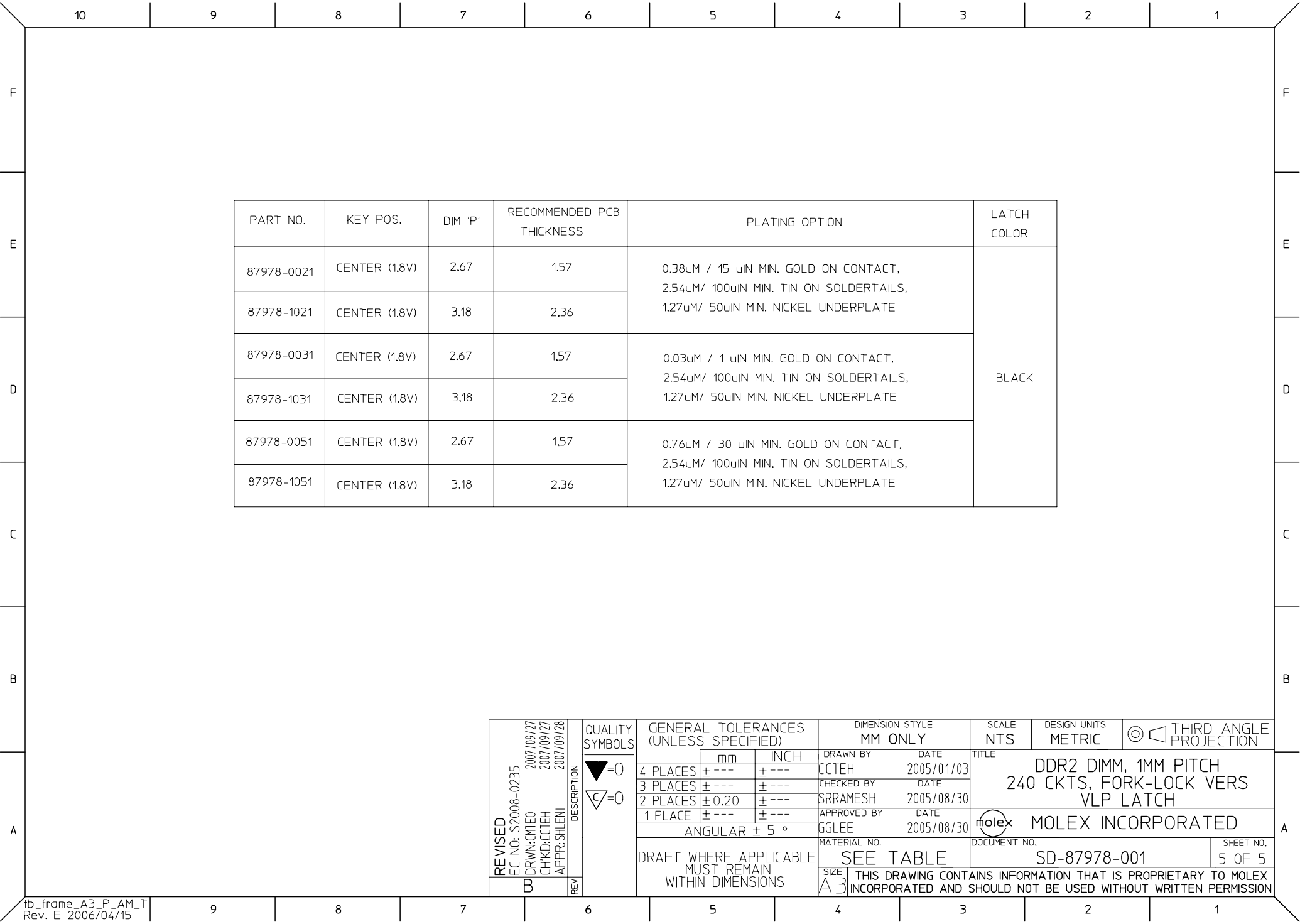


(SEE RECOMMENDED THICKNESS IN TABLE)
RECOMMENDED PCB LAYOUT
CONNECTOR SIDE

Detail 3



REVISED		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO: S2008-0235		DRAWN: CTEH		mm		MM ONLY		NTS		METRIC			
2007/09/27		2007/09/27		INCH		DRAWN BY		DATE		TITLE			
2007/09/27		2007/09/27		4 PLACES ± ---		CTEH		2005/01/03		DDR2 DIMM, 1MM PITCH			
2007/09/27		2007/09/27		3 PLACES ± ---		CHECKED BY		DATE		240 CKTS, FORK-LOCK VERS			
2007/09/27		2007/09/27		2 PLACES ± 0.20		SRRAMESH		2005/08/30		VLP LATCH			
2007/09/27		2007/09/27		1 PLACE ± ---		APPROVED BY		DATE		MOLEX INCORPORATED			
2007/09/27		2007/09/27		ANGULAR ± 5 °		GGLLEE		2005/08/30		SD-87978-001			
2007/09/27		2007/09/27		DRAFT WHERE APPLICABLE		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
2007/09/27		2007/09/27		MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87978-001		4 OF 5			
2007/09/27		2007/09/27				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
2007/09/27		2007/09/27				A3							



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 SOLDER TAILS, 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 SOLDER TAILS, 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 SOLDER TAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	
87978-1051	CENTER (1.8V)	3.18	2.36		

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			4 PLACES 3 PLACES 2 PLACES 1 PLACE	mm	INCH	DRAWN BY CCTEH	DATE 2005/01/03	TITLE DDR2 DIMM, 1MM PITCH 240 CKTS, FORK-LOCK VERS VLP LATCH			
				± ---	± ---	CHECKED BY SRRAMESH	DATE 2005/08/30				
				± 0.20	± ---	APPROVED BY GGLEE	DATE 2005/08/30	MOLEX INCORPORATED			
				± ---	± ---	MATERIAL NO.	DOCUMENT NO.				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-87978-001						