

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

**Part Number:** [0877468001](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR-II DIMM Socket, Vertical, Press-fit, 1.8V Center Keys, 4.20mm (.165") Tail Length, Beige Latches, 240 Circuits, 0.38µm(15µ") Selective Gold(Au) Plating, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87746-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	Memory Module Sockets
Series	87746
Comments	<LI>Latches in Off-White Color
Component Type	Socket
JEDEC Outline	MO-237
Product Name	DDR2 DIMM

**Physical**

Circuits (Loaded)	240
Color - Resin	Black, Natural
Durability (mating cycles max)	25
Entry Angle	Vertical (Top Entry)
Keying to Mating Part	Yes
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
PC Tail Length (in)	0.165 In
PC Tail Length (mm)	4.20 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.180 In
PCB Thickness Recommended (mm)	4.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.039 In
Pitch - Mating Interface (mm)	1.00 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
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**

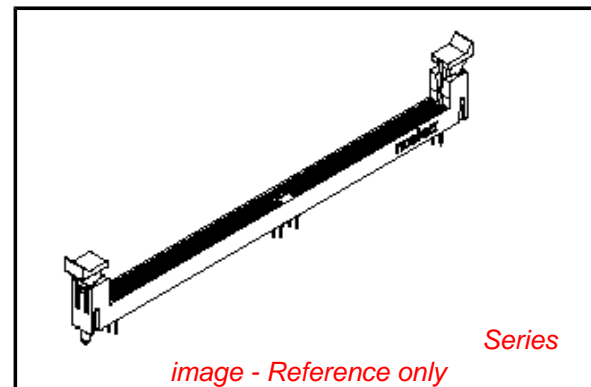
Current - Maximum per Contact	0.5A
Voltage - Maximum	30V
Voltage Key	1.8V, Center

**Material Info**

Old Part Number	87746-0001
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**Reference - Drawing Numbers**

Product Specification	PS-87746-002
Sales Drawing	SD-87746-001



**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**

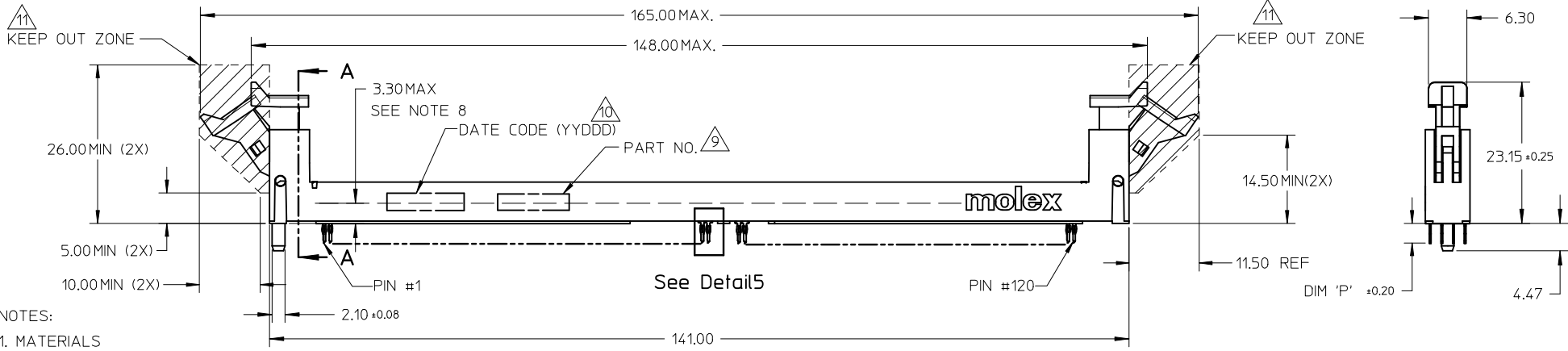
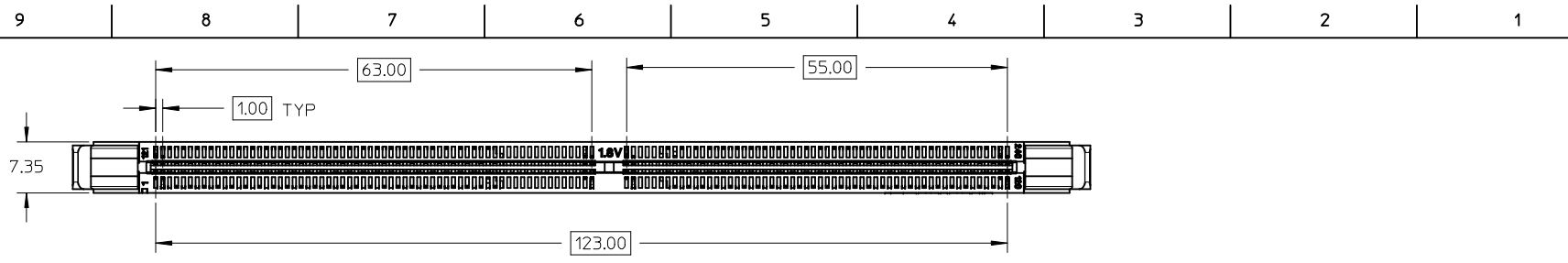
[87746Series](#)

**Mates With**

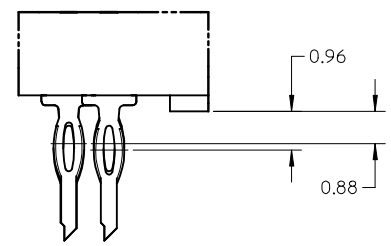
JEDEC standard 1.27mm modules

This document was generated on 04/13/2010

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- NOTES:
- MATERIALS  
HOUSING - HIGH TEMP. NYLON, GLASS-FILLED, UL 94V-0.  
LATCH - HIGH TEMP. NYLON, GLASS-FILLED, UL 94V-0 - NATURAL  
POLYSULFONE, UL 94HB - CLEAR  
(COLOUR OF THE HOUSING AND LATCHES REFER TO TABLE ON SHEET 5 & 6).  
TERMINAL - PHOSPHOR BRONZE
  - FINISHES - CONTACT AREA - SEE TABLE IN SHEET 5.  
TAIL AREA - 15µIN(0.38µM) TO 60µIN(1.52µM) MIN.  
90/10 TIN/LEAD OR TIN OVER 50µIN(1.27µM) MIN. NICKEL.
  - REFER TO PRODUCT SPEC. PS-87746-002 FOR PERFORMANCE SPECIFICATIONS.
  - PRODUCT SHALL BE PACKED IN TRAY.
  - CARD SLOT ACCEPTS 1.27±0.10 MM MODULE THICKNESS. (MEASURED OVER P.C. PADS)
  - RECOMMENDED MODULE LAYOUT SHALL BE AS PER JEDEC MO-237.
  - RECOMMENDED PLATING ON MODULE PADS: 30µIN(0.76µM) MIN. HARD GOLD OVER 79µIN(2µM) MIN. NICKEL.
  - DIMM MODULE SEATING PLANE FROM TOP OF PCB.
  - PART NUMBER SHALL BE MARKED LEGIBLY AS : 87746 XXXX
  - DATE CODE SHALL BE MARKED LEGIBLY AS SHOWN : YYDDD
  - KEEP OUT CROSS HATCHED ARE RESERVED FOR SOCKET EJECTORS AT BOTH ENDS.
  - KEEP OUT ZONE IS HEIGHT LIMITED PER 11.



Detail5

PART NO UPDATED EC NO: S2009-0883 DRWN: TARUMGHAM 2009/05/22 CHKD: CGTAN 2009/05/22 APPR: SHLENI 2009/05/25	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	NTS	METRIC		
			mm	INCH	DRAWN BY	DATE	TITLE	
		4 PLACES	± ---	± ---	CGOH	2002/06/13	DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT	
3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.20	± ---	DSOH	2002/08/07				
1 PLACE	± ---	± ---	APPROVED BY	DATE				
		ANGULAR ± 5 °		SKTOH	2002/08/08	molex MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
				SEE TABLE	SD-87746-001	1 OF 6		
				SIZE A3	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

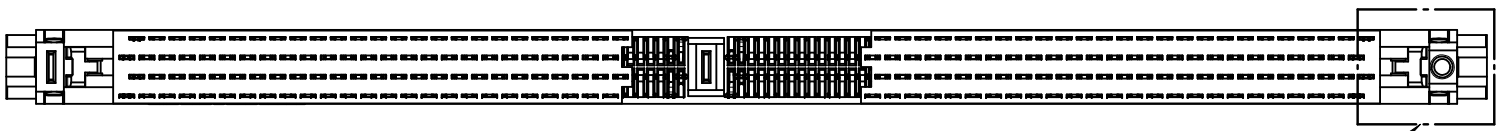
E

D

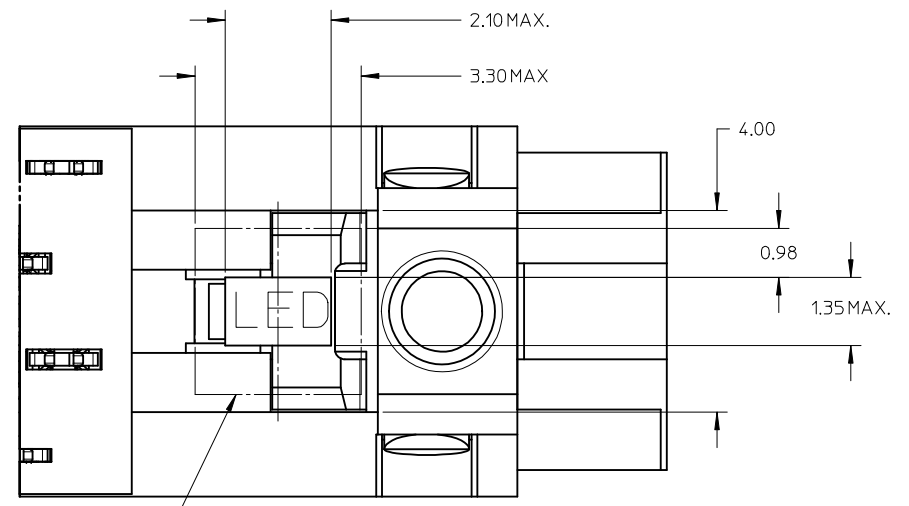
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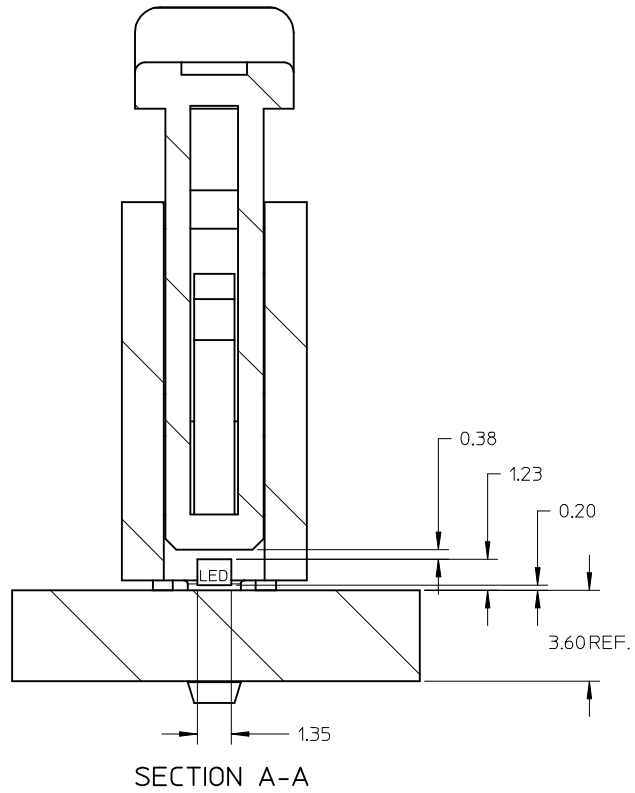


Detail3



Detail3

LED PLACEMENT AREA



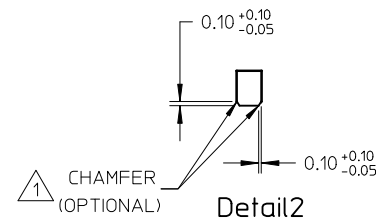
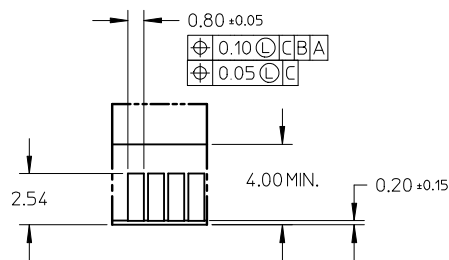
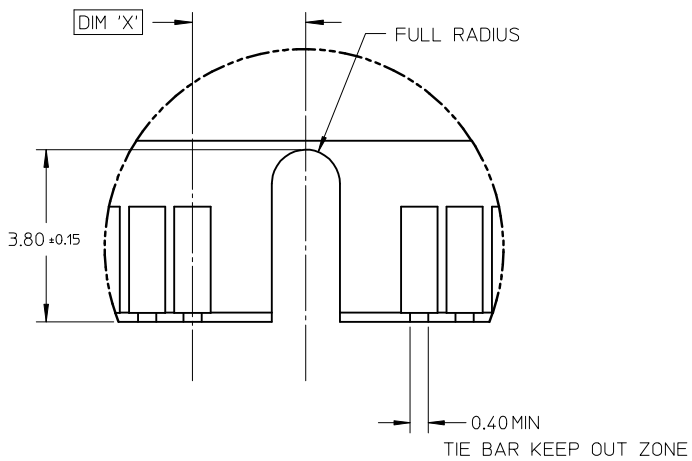
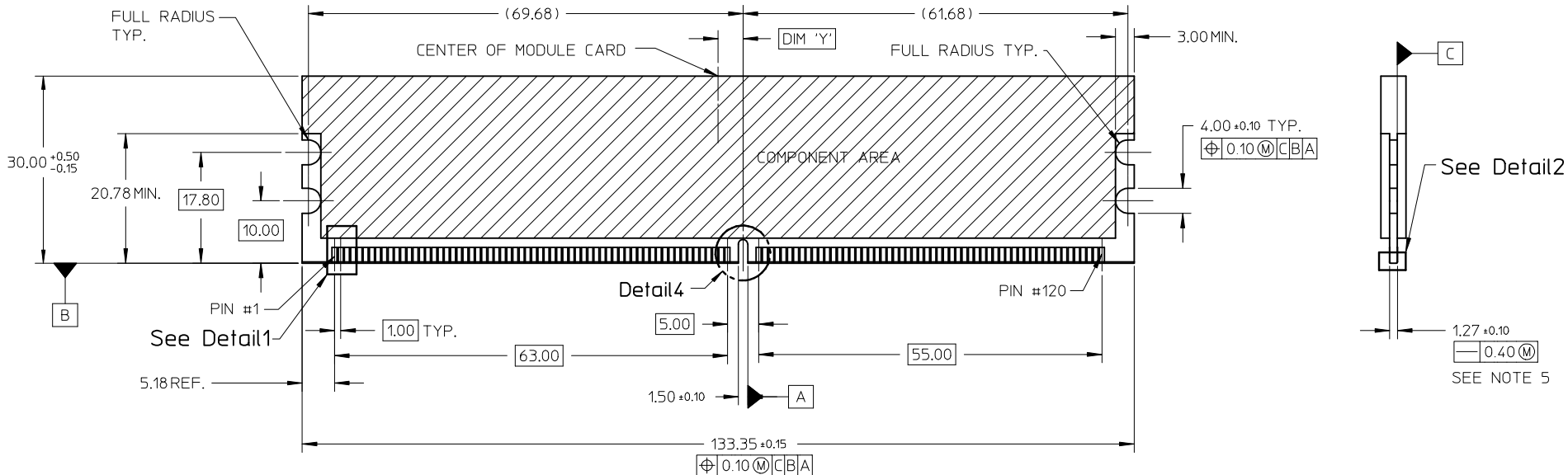
SECTION A-A

PART NO UPDATED EC NO: S2009-0883 DRWN: TARUUGHAM 2009/05/22 CHKD: CGTAN 2009/05/22 APPR: SILENI 2009/05/25	DESCRIPTION D8	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		$\nabla = 0$ $\sphericalangle = 0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 5 °	MM ONLY	NTS	METRIC	
			DRAWN BY: CGOH    DATE: 2002/06/13 CHECKED BY: DSOH    DATE: 2002/08/07 APPROVED BY: SKTOH    DATE: 2002/08/08	TITLE	DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	MOLEX INCORPORATED DOCUMENT NO. SD-87746-001	SHEET NO. 2 OF 6	

9 8 7 6 5 4 3 2 1

10 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

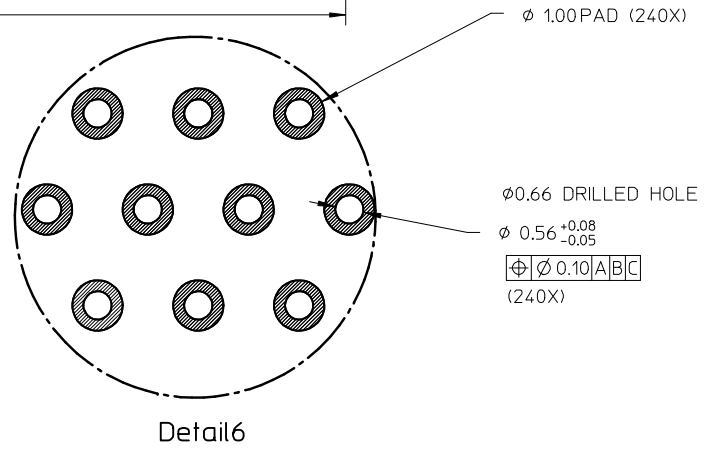
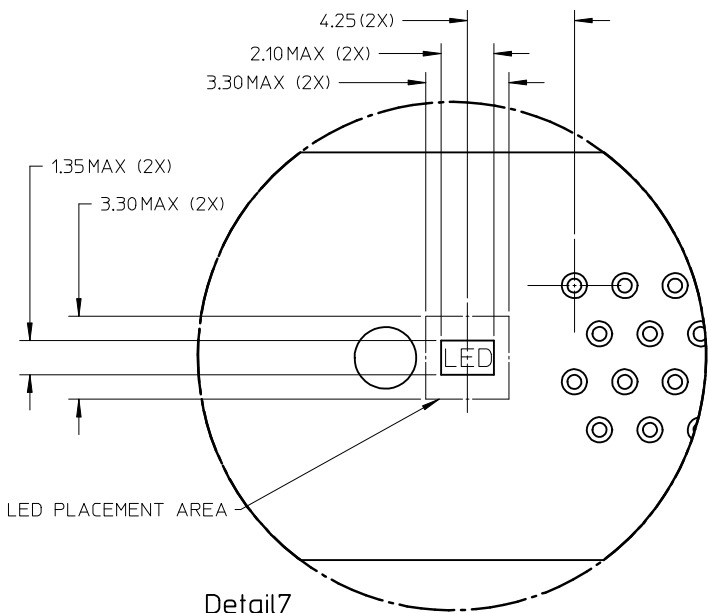
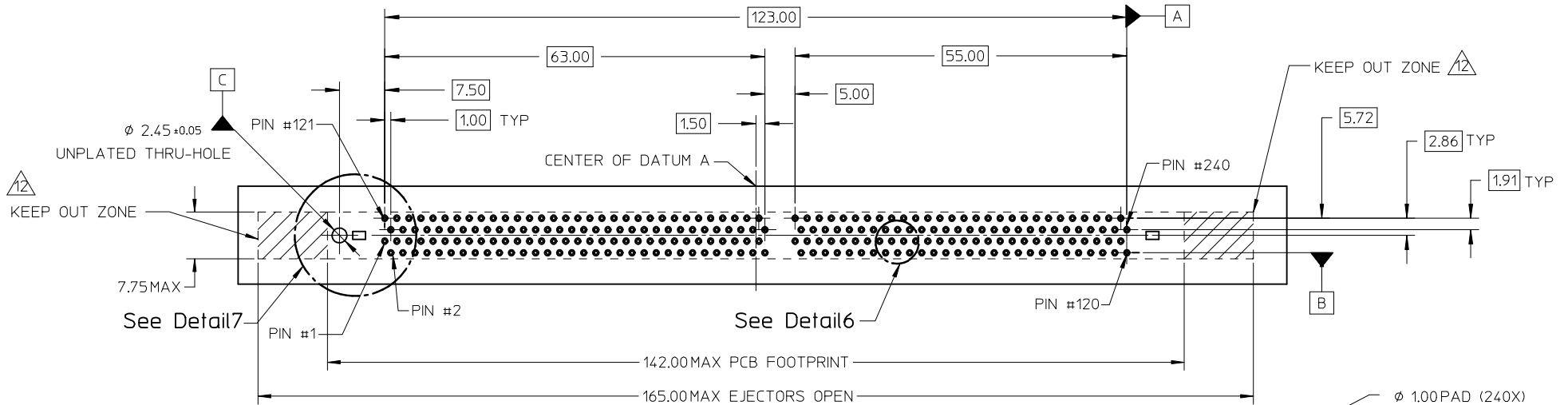
NOTES :  
 1 MODULE CARD USED IN PRODUCT TESTING ARE CHAMFERED.

PART NO UPDATED EC NO: S2009-0883 DRWN: TARUNGHAM 2009/05/22 CHKD: CGTAN 2009/05/22 APPR: SHLENI 2009/05/25	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ◻=0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 5 °	MM ONLY	NTS	METRIC	☉    ◻ PROJECTION
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: CGOH    DATE: 2002/06/13 CHECKED BY: DSOH    DATE: 2002/08/07 APPROVED BY: SKTOH    DATE: 2002/08/08	TITLE	DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT	
	REV		SEE TABLE	MATERIAL NO.	DOCUMENT NO.	MOLEX INCORPORATED SD-87746-001

SIZE A3 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

RECOMMENDED PCB HOLE PATTERN  
SEE TABLE IN SHEET 5 FOR  
RECOMMENDED PCB THICKNESS



<b>PART NO UPDATED</b> EC NO: S2009-0883 DRWN: TARUMGHAM 2009/05/22 CHKD: CGTAN 2009/05/22 APPR: SILENI 2009/05/25	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
	$\nabla=0$ $\nabla C=0$	mm	INCH	DRAWN BY CGOH	DATE 2002/06/13	TITLE DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT				
		4 PLACES	± ---	± ---	CHECKED BY DSOH	DATE 2002/08/07	MATERIAL NO. SEE TABLE			
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2002/08/08	DOCUMENT NO. SD-87746-001			
	2 PLACES	± 0.20	± ---	ANGULAR ± 5 °		SHEET NO. 4 OF 6				
	1 PLACE	± ---	± ---	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				

PART NO.	VOLTAGE KEY POS.	VOLTAGE KEY TEXT	TAIL LENGTH P±0.20	RECOMMENDED PCB THICKNESS	LUBRICATION	PLATING OPTION	LATCH COLOR	PLATING OPTION	HOUSING COLOR
87746-0001	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	NATURAL (OFF WHITE)		
87746-1001			3.30	3.60					
87746-0011	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-1011			3.30	3.60					
87746-0091	CENTER	1.8V	4.20	4.57	YES			TIN/LEAD	BLACK
87746-1091			3.30	3.60					
87746-5001	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-5101			3.30	3.60					
87746-5011	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	CLEAR		
87746-5111			3.30	3.60					
87746-5091	CENTER	1.8V	4.20	4.57	YES				
87746-5191			3.30	3.60					

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	▼=0 □=0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 5 °	MM ONLY	NTS	METRIC	
	DESCRIPTION		DRAWN BY	DATE	TITLE	
			CGOH	2002/06/13	DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT	
			DSOH	2002/08/07		
			APPROVED BY	DATE	MOLEX INCORPORATED	
			SKTOH	2002/08/08		
			MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			SEE TABLE	SD-87746-001	5 OF 6	
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			A3			

PART NO.	VOLTAGE KEY POS.	VOLTAGE KEY TEXT	TAIL LENGTH P±0.20	RECOMMENDED PCB THICKNESS	LUBRICATION	PLATING OPTION	LATCH COLOR	PLATING OPTION	HOUSING COLOR			
87746-8001	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	NATURAL (OFF WHITE)	TIN	BLACK			
87746-9001			3.30	3.60								
87746-8011	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL						
87746-9011			3.30	3.60								
87746-8091	CENTER	1.8V	4.20	4.57	YES	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL						
87746-9091			3.30	3.60								
87746-5201	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL				CLEAR	TIN	BLACK
87746-5301			3.30	3.60								
87746-5211	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL						
87746-5311			3.30	3.60								
87746-5291	CENTER	1.8V	4.20	4.57	YES	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL						
87746-5391			3.30	3.60								
87746-5381			3.30	3.60								

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	▽=0 ◻=0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 5 °	MM ONLY	NTS	METRIC	
	DESCRIPTION	DRAWN BY	DATE	TITLE		
	REV	CGOH	2002/06/13	DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT		
	D8	DSOH	2002/08/07	MOLEX INCORPORATED		
	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
	SKTOH	2002/08/08	SEE TABLE	SD-87746-001	6 OF 6	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
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