

Unbuffered Small Outline Memory Module Data Sheet

MW02GN8026SA8

2 GBytes, DDR2, PC2-6400 (800 MHz) CL6 200 Pin SO-DIMM

Description:

MW02GN8026SA8 is a 2 Gigabyte Memory Module, organized as 256Mx64 bits DDR2-SDRAM. Each module is composed by sixteen 128Mx8 DDR2-SDRAMs ICs in FBGA package and one serial EEPROM for SPD (Serial Presence Detect), mounted on a JEDEC-Standard 200-pin SO-DIMM (Small Outline Dual-In-Line Memory Module) with golden contacts.

Features:

- 200-pin SO-DIMM outline, unbuffered
- Double Data Rate architecture; two data transfers per clock cycle
- On-Die Termination Control
- Uses 128Mx8 DDR2-SDRAMs
- Differential clock inputs
- Programmable burst length: 4 or 8
- Clock Cycle Time:
(t_{CK}) = 2.50 ns (min.) / 8 ns (max.) @ CL=6
- EEPROM Serial Presence Detection (SPD)
- Bi-directional, differential data strobe (DQS and /DQS)
- Four internal device banks for concurrent operation
- Auto Refresh to Active (t_{RFC}): 127.5ns (min)
- Auto precharge
- Auto-refresh and Self-refresh modes
- Row address A₀-A₁₃
- Column address A₀-A₉
- Bank address: BA₀-BA₂
- SSTL_18 Interface
- VDD = VDDQ = 1.8 V ± 0.1 V

Specification:

Symbol	AC Characteristic		Min.	Max.	Unit
t_{CK}	CLK Cycle Time	MW01G8026SA8 CL=6	2500	8000	ps
t_{RC}	Row Cycle Time (Operation)		60	-	ns
t_{RAS}	Row Active Time		45	70,000	ns
t_{RFC}	Auto Refresh to Active / Auto Refresh Command Time		127.5	-	ns

Ratings:

	Rating	Unit	Condition
Power Dissipation, Operating (Bank Active, Precharge) @VDD, VDDQ = 1.8V	1.872	W	Ta=25°C
Operating temperature ¹	0 ~ 85	°C	-
Storage temperature	-55 ~ 100	°C	-

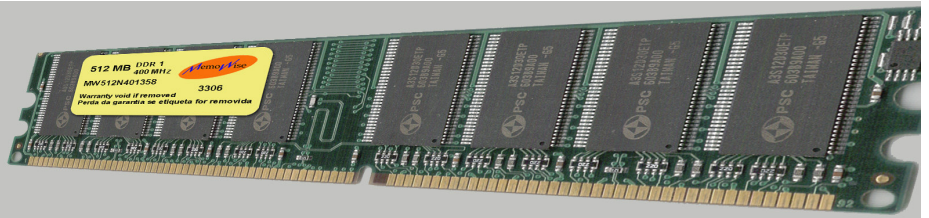
Note:

1. It refers to the operating case temperature of DRAM ICs

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Dimensions

All dimensions are in millimeters (Inches); tolerance is ± 0.1 (0.0039") unless otherwise indicated

