

# Technical Datasheet

## takeMS TMS1GB272C08x-805xx

### Description

These Memory devices are JEDEC standard unbuffered DIMM modules, based on CMOS DDR2 SDRAM technology.

These devices consist of CMOS DDR2 SDRAMs in FBGA packages on a 240-pin glass epoxy substrate. The memory array is designed with Double Data Rate (DDR2) Synchronous DRAMs for unbuffered applications.

The pipelined, multibanked architecture of DDR2 SDRAMs allows for concurrent operation, thereby providing high, effective bandwidth.

Decoupling capacitors are mounted on the PCB board in parallel for each DDR2 SDRAM, which provides proper voltage supply impedance over the whole frequency range of operations, in accordance with JEDEC specifications.

These modules feature Serial Presence Detect (SPD) based on a serial EEPROM device, using the 2-pin I2C protocol.

#### Features

240-pin Unbuffered DDR2 SDRAM

JEDEC standard 1.8V I/O (SSTL\_18-compatible)

Auto Refresh (CBR) and Self Refresh Mode

Off-Chip Driver (OCD) Impedance Adjustment

On-Die Termination (ODT) supports termination values of 50, 75, and 150 ohms

Serial Presence Detect (SPD) with EEPROM

Module layout is based on JEDEC standard routing guidelines

Impedance controlled 6-layer PCB Technology

JEDEC standard form factor (133.35 mm x 30.0 mm)

DQS edge-aligned with data for READs

DQS center-aligned with data for WRITEs

Operating Temperature 0°C ~ 75°C



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### Technical details

- 1024 MB longdimmm module
- 64Mx8 IC organisation
- x72 module organisation
- 800MHz / PC2 6400
- double sided / 16 ICs (+ECC)
- CAS Latency 4 at max. memclock

For pin configuration please check [www.takems.com/support/index.php](http://www.takems.com/support/index.php)

If you have any questions regarding our products you can contact us via email: [info@takems.com](mailto:info@takems.com)

Order-No.: **TMS1GB264C08x-805xx**



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