

Memory Module Specification

KHX6400D2/256

256MB 32M x 64-Bit PC2-6400 CL5 240-Pin DIMM

DESCRIPTION:

This document describes Kingston's 32M x 64-bit (256MB) DDR2-800 CL5 SDRAM (Synchronous DRAM) memory module, based on eight 32M x 8-bit DDR2 FBGA components. This module has been tested to run at DDR2 800MHz at low latency timing of 5-5-5-15 at 1.95V. The SPD is programmed to JEDEC standard latency 667Mhz timing of 5-5-5-15 at 1.8V. This 240-pin DIMM uses gold contact fingers and requires +1.8V. The electrical and mechanical specifications are as follows:

FEATURES:

- Power supply: Vdd: $1.8V \pm 0.1V$, Vddq: $1.8V \pm 0.1V$
- Double-data-rate architecture; two data transfers per clock cycle
- ☑ Bidirectional data strobe(DQS)
- ☑ Differential clock inputs(CK and CK)
- ☑ DLL aligns DQ and DQS transition with CK transition
- Programmable Read latency 5 (clock)
- Burst Length: 4, 8 (Interleave/nibble sequential)
- Programmable Burst type (sequential & interleave)
- Timing Reference: 5-5-5-15 at +1.8V / 5-5-5-15 at +1.95V
- Edge aligned data output, center aligned data input
- Auto & Self refresh, 7.8us refresh interval (8K/64ms refresh)
- Serial presence detect with EEPROM
- High Performance Heat Spreader
- PCB: Height 1.180" (30.00mm), single sided component

PERFORMANCE:

$\overline{\mathbf{A}}$	Clock Cycle Time (tCK) CL=:	5 3ns (min.) / 81	ns (max.)
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Row Cycle Time (tRC) 54ns (min.)

Refresh to Active/Refresh Command Time (tRFC) 75ns

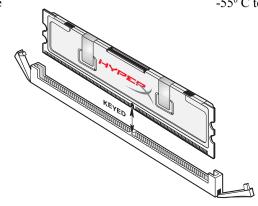
Row Active Time (tRAS) 39ns (min.) / 70,000ns (max.)

Single Power Supply of +1.8V (+/- .1V)

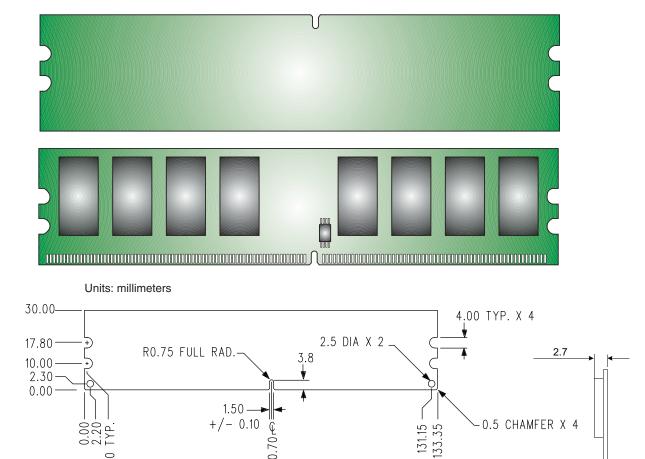
Power 1.585 W (operating)

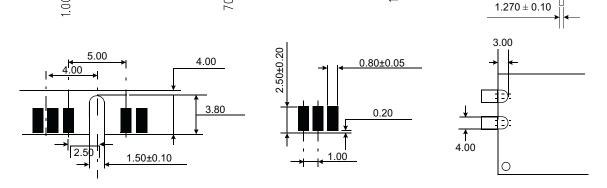
✓ UL Rating
✓ Operating Temperature
94 V - 0
✓ 0° C to 55° C

Storage Temperature -55° C to +125° C



MODULE DIMENSIONS:





For more information, go to www.kingston.com

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