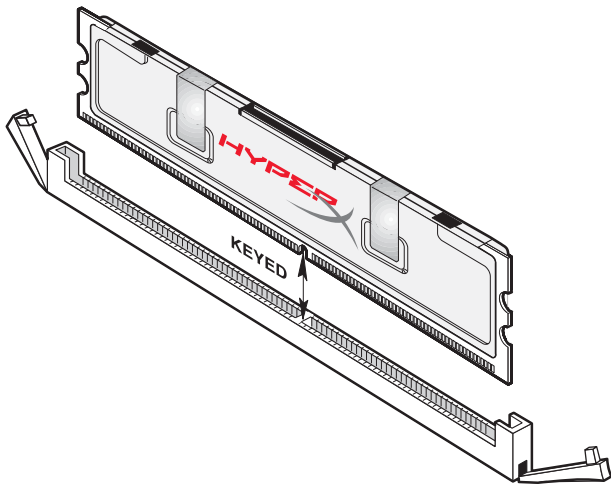


# Memory Module Specifications

## KHX6400D2LL/1G

1GB 128M x 64-Bit PC2-6400

CL4 240-Pin DIMM



### DESCRIPTION

This document describes Kingston's low-latency 128M x 64-bit 1GB (1024MB) DDR2-800 CL4 SDRAM (Synchronous DRAM) memory module, based on sixteen 64M x 8-bit DDR2 FBGA components. This module has been tested to run at DDR2 800MHz at low latency timing of 4-4-4-12 at 2.0V. 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:

### SPECIFICATIONS

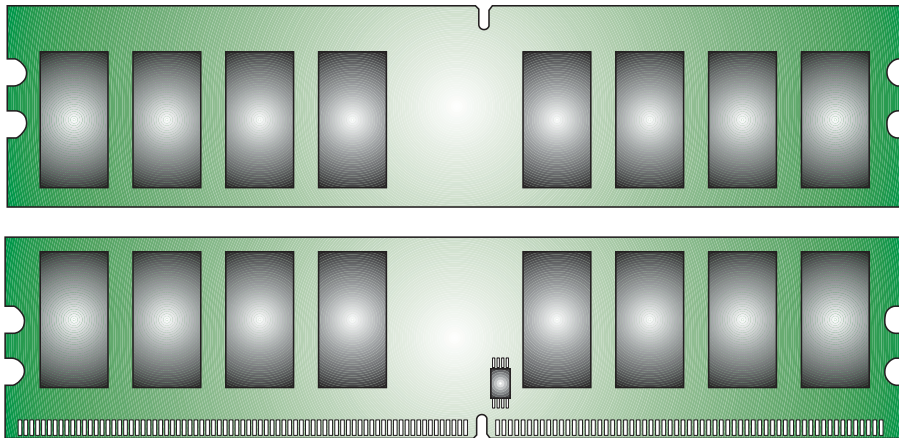
|   |                               |
|---|-------------------------------|
| Clock Cycle Time (tCK) CL=5                   | 3ns (min.) / 8ns (max.)       |
| Row Cycle Time (tRC)                          | 54ns (min.)                   |
| Refresh to Active/Refresh Command Time (tRFC) | 105ns                         |
| Row Active Time (tRAS)                        | 39ns (min.) / 70,000ns (max.) |
| Single Power Supply of                        | +1.8V (+/- .1V)               |
| Power   | 1.922 W (operating)           |
| UL Rating                                     | 94 V - 0                      |
| Operating Temperature                         | 0° C to 55° C                 |
| Storage Temperature                           | -55° C to +125° C             |

### FEATURES

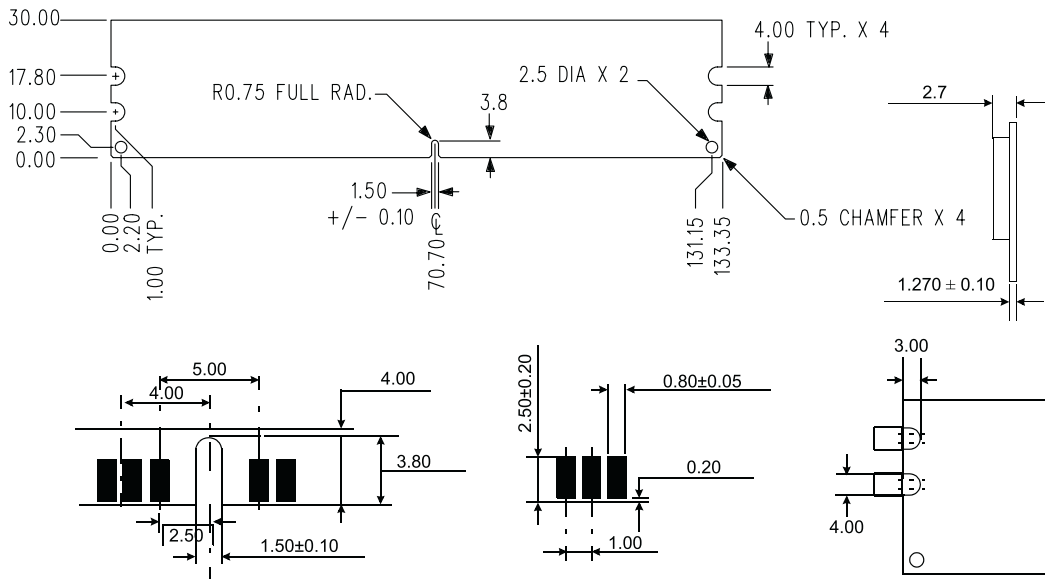
- Power supply : Vdd: 1.8V ± 0.1V, Vddq: 1.8V ± 0.1V
- Double-data-rate architecture; two data transfers per clock cycle
- Bidirectional data strobe(DQS)
- Differential clock inputs(CK and CK)
- DLL aligns DQ and DQS transition with CK transition
- Programmable Read latency 3, 4, 5 (clock)
- Burst Length: 4, 8 (Interleave/nibble sequential)
- Programmable Burst type (sequential & interleave)
- Timing Reference: 667MHz 5-5-5-15 at +1.8V / 800MHz 4-4-4-12 at +2.0V
- 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), double sided component

Continued >>

**MODULE DIMENSIONS:**



Units: millimeters



FOR MORE INFORMATION, GO TO [WWW.KINGSTON.COM](http://WWW.KINGSTON.COM)

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