

# Memory Module Specification

### KHX6400S2LLK2/3G

3GB (2GB 256M x 64-Bit + 1GB 128M x 64-Bit) PC2-6400 CL5 200-Pin SODIMM Kit

#### **DESCRIPTION:**

Kingston's KHX6400S2LLK2/3G is a kit consisting of one 256M x 64-bit 2GB (2048MB) DDR2-800 **plus one** 128M x 64-bit 1GB DDR2-800 1GB (1024MB) CL5 SDRAM (Synchronous DRAM) memory modules. The 2GB module is based on sixteen 128M x 8-bit DDR2 FBGA components and the 1GB module is based on sixteen 64M x 8-Bit FBGA components. Total kit capacity is 3GB (3072MB). Each pair has been tested to run at DDR2 800MHz at low latency timing of 5-5-5-18 at 1.8V. The SPDs are programmed to JEDEC latency timing of 5-5-5-18 at 1.8V. Each 200-pin SODIMM 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, 4, 3 (clock)

Burst Length: 4, 8 (Interleave/nibble sequential)

Programmable Burst type (sequential & interleave)

Timing Reference: 5-5-5-18 at +1.8V

Edge aligned data output, center aligned data input

Auto & Self refresh, 7.8us refresh interval (8K/64ms refresh)

Serial presence detect with EEPROM

PCB: Height 1.180" (30.00mm), double sided component

#### **PERFORMANCE:**

Clock Cycle Time (tCK) CL=5 2.5ns (min.) / 8ns (max.)

Row Cycle Time (tRC) 57.5ns (min.)

Refresh to Active/Refresh Command Time (tRFC) 2GB = 127.5 ns / 1GB = 105 NS

Row Active Time (tRAS) 45ns (min.) / 70,000ns (max.)

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

Power TBD W (operating per module)

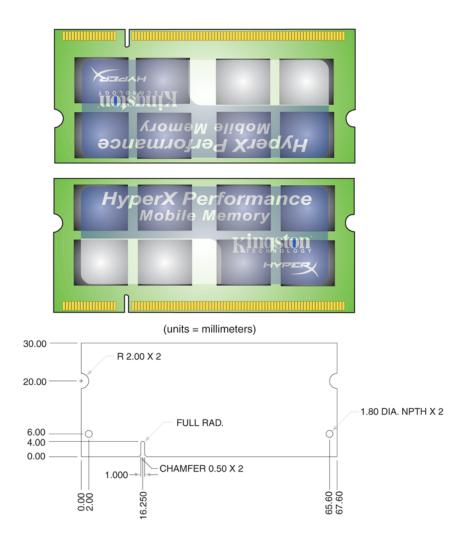
☑ UL Rating 94 V - 0

✓ Operating Temperature 0° C to 55° C

Storage Temperature -55° C to +125° C



#### **MODULE DIMENSIONS:**



## For more information, go to www.kingston.com

All Kingston products are tested to meet our published specifications. Some motherboards or system configurations may not operate at the published HyperX memory speeds and timing settings. Kingston does not recommend that any user attempt to run their computers faster than the published speed. Overclocking or modifying your system timing may result in damage to computer components.