**Memory Module Specifications**

**KHX8500D2K2/4G**

4GB (2GB 256M x 64-Bit x 2 pcs.)

PC2-8500 CL5 240-Pin DIMM Kit

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**DESCRIPTION**

Kingston’s KHX8500D2K2/4G is a kit of two 256M x 64-bit 2GB (2048MB) DDR2-1066 CL5 SDRAM (Synchronous DRAM) memory modules, based on sixteen 128M x 8-bit DDR2 FBGA components per module. Total kit capacity is 4GB (4096MB). Each module pair has been tested to run at DDR2-1066MHz at a latency timing of 5-5-5-15 at 2.2V. The SPD is programmed to JEDEC standard latency 800Mhz timing of 5-5-5-18 at 1.8V. Each 240-pin DIMM uses gold contact fingers and requires +1.8V. The electrical and mechanical specifications are as follows:

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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clock Cycle Time (tCK) CL=5</td>
<td>2.5ns (min.) / 8ns (max.)</td>
</tr>
<tr>
<td>Row Cycle Time (tRC)</td>
<td>51.5ns (min.)</td>
</tr>
<tr>
<td>Refresh to Active/Refresh</td>
<td>127.5ns</td>
</tr>
<tr>
<td>Command Time (tRFC)</td>
<td></td>
</tr>
<tr>
<td>Row Active Time (tRAS)</td>
<td>39ns (min.) / 70,000ns (max.)</td>
</tr>
<tr>
<td>Single Power Supply of</td>
<td>+1.8V (+/- .1V)</td>
</tr>
<tr>
<td>Power</td>
<td>1.584 W (operating per module)</td>
</tr>
<tr>
<td>UL Rating</td>
<td>94 V - 0</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0° C to 55° C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55° C to +125° C</td>
</tr>
</tbody>
</table>

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**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 5 (clock)
- Burst Length: 4, 8 (Interleave/nibble sequential)
- Programmable Burst type (sequential & interleave)
- Timing Reference: 5-5-5-18 at +1.8V / 5-5-5-15 at +2.2V
- 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

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Continued >>
MODULE DIMENSIONS:

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