**KHX1600C9D3K2/8GX**
8GB (4GB 512M x 64-Bit x 2 pcs.)
DDR3-1600 CL9 240-Pin DIMM Kit

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>CL(idd)</td>
<td>11 cycles</td>
</tr>
<tr>
<td>Row Cycle Time (tRCmin)</td>
<td>48.125ns (min.)</td>
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<tr>
<td>Refresh to Active/Refresh Command Time (tRFCmin)</td>
<td>260ns (min.)</td>
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<tr>
<td>Row Active Time (tRASmin)</td>
<td>35ns (min.)</td>
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<tr>
<td>Maximum Operating Power</td>
<td>TBD W* (per module)</td>
</tr>
<tr>
<td>UL Rating</td>
<td>94 V - 0</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0°C C to +85°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55°C C to +100°C</td>
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</table>

*Power will vary depending on the SDRAM used.

### FEATURES

- JEDEC standard 1.5V (1.425V ~ 1.575V) Power Supply
- VDDQ = 1.5V (1.425V ~ 1.575V)
- 800MHz fCK for 1600Mb/sec/pin
- 8 independent internal banks
- Programmable CAS latency: 11, 10, 9, 8, 7, 6
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- 8-bit pre-fetch
- Burst Length: 8 (interleave without any limit, sequential with starting address "000" only), 4 with tCCD = 4 which does not allow seamless read or write (either on the fly using A12 or MRS)
- Bi-directional Differential Data Strobe
- Internal (self) calibration: Internal self calibration through ZQ pin (RZQ: 240 ohm ± 1%)
- On Die Termination using ODT pin
- Average Refresh Period 7.8us at lower than TCASE 85°C, 3.9us at 85°C < TCASE < 95°C
- Asynchronous Reset
- PCB: Height 1.180” (30.00mm), single sided component

**DESCRIPTION**

Kingston's KHX1600C9D3K2/8GX is a kit of two 512M x 64-bit (4GB) DDR3-1600 CL9 SDRAM (Synchronous DRAM) 1Rx8 memory modules, based on eight 512M x 8-bit DDR3 FBGA components per module. Each module kit supports Intel® XMP (Extreme Memory Profiles). Total kit capacity is 8GB. Each module kit has been tested to run at DDR3-1600 at a low latency timing of 9-9-9-27 at 1.65V. The SPDs are programmed to JEDEC standard latency DDR3-1600 timing of 11-11-11 at 1.5V. Each 240-pin DIMM uses gold contact fingers and requires +1.5V. The JEDEC standard electrical and mechanical specifications are as follows:
MODULE DIMENSIONS

FOR MORE INFORMATION, GO TO WWW.KINGSTON.COM/HYPERX

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