Memory Module Specifications



HX316C9SRK2/16

16GB (8GB 1G x 64-Bit x 2 pcs.)
DDR3-1600 CL9 240-Pin DIMM Kit



DESCRIPTION

HyperX HX316C9SRK2/16 is a kit of two 1G x 64-bit (8GB) DDR3-1600 CL9 SDRAM (Synchronous DRAM) 2Rx8, memory module, based on sixteen 512M x 8-bit FBGA components per module. Each module kit supports Intel® XMP (Extreme Memory Profiles). Total kit capacity is 16GB. Each module has been tested to run at DDR3-1600 at a low latency timing of 9-9-9 at 1.5V. 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. The JEDEC standard electrical and mechanical specifications are as follows:

XMP TIMING PARAMETERS

• JEDEC: DDR3-1600 CL11-11-11 @1.5V

• XMP Profile #1: DDR3-1600 CL9-9-9 @1.5V

SPECIFICATIONS

| CL(IDD) | 11 cycles |
|---|-------------------|
| Row Cycle Time (tRCmin) | 48.125ns(min.) |
| Refresh to Active/Refresh Command Time (tRFCmin) | 260ns(min.) |
| Row Active Time (tRASmin) | 35ns(min.) |
| Maximum Operating Power | TBD W* |
| UL Rating | 94 V - 0 |
| Operating Temperature | 0° C to +85° C |
| Storage Temperature | -55° C to +100° C |
| | |

^{*}Power will vary depending on the SDRAM used.

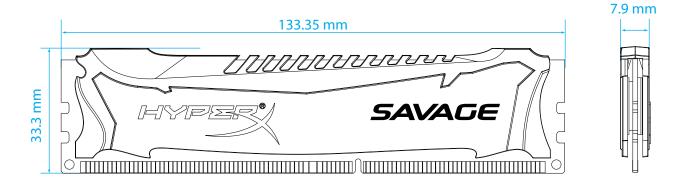
FEATURES

- 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
- Height 1.311" (33.30mm), w/heatsink, double sided component

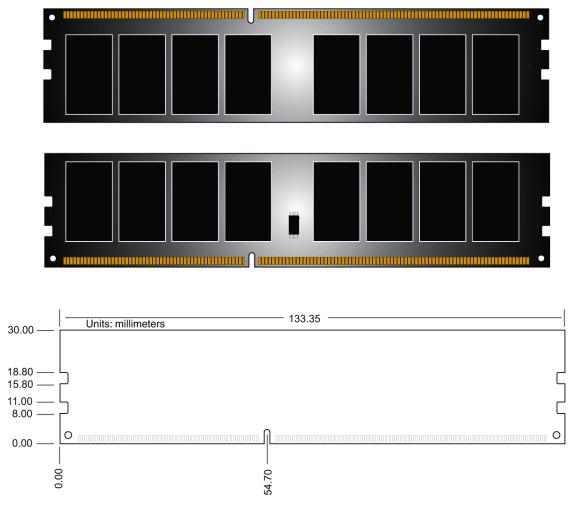
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continued HyperX

MODULE WITH HEAT SPREADER



MODULE DIMENSIONS



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