KVR16N11/8

8GB 2Rx8 1G x 64-Bit PC3-12800
CL11 240-Pin DIMM

DESCRIPTION

This document describes ValueRAM's 1G x 64-bit (8GB) DDR3-1600 CL11 SDRAM (Synchronous DRAM) 2Rx8, memory module, based on sixteen 512M x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR3-1600 timing of 11-11-11 at 1.5V. This 240-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

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 0.740” (18.75mm) or 1.180” (30.00mm)

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.

Important Information: The module defined in this data sheet is one of several configurations available under this part number. While all configurations are compatible, the DRAM combination and/or the module height may vary from what is described here.

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MODULE DIMENSIONS









