# KVR1600D3D4R11SK3/24GI

24GB (8GB 1G x 72-Bit x 3 pcs.) PC3-12800
CL11 Registered w/Parity 240-Pin DIMM Kit

## DESCRIPTION

ValueRAM's KVR1600D3D4R11SK3/24G is a kit of three 1G x 72-bit (8GB) DDR3-1600 CL11 SDRAM (Synchronous DRAM), registered w/parity, 2Rx4 ECC, Intel® Compatibility Tested, memory modules, based on thirty-six 512M x 4-bit FBGA components per module. Total kit capacity is 24GB. The SPD's 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 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 bank
- 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
- On-DIMM thermal sensor (Grade B)
- 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), double sided component

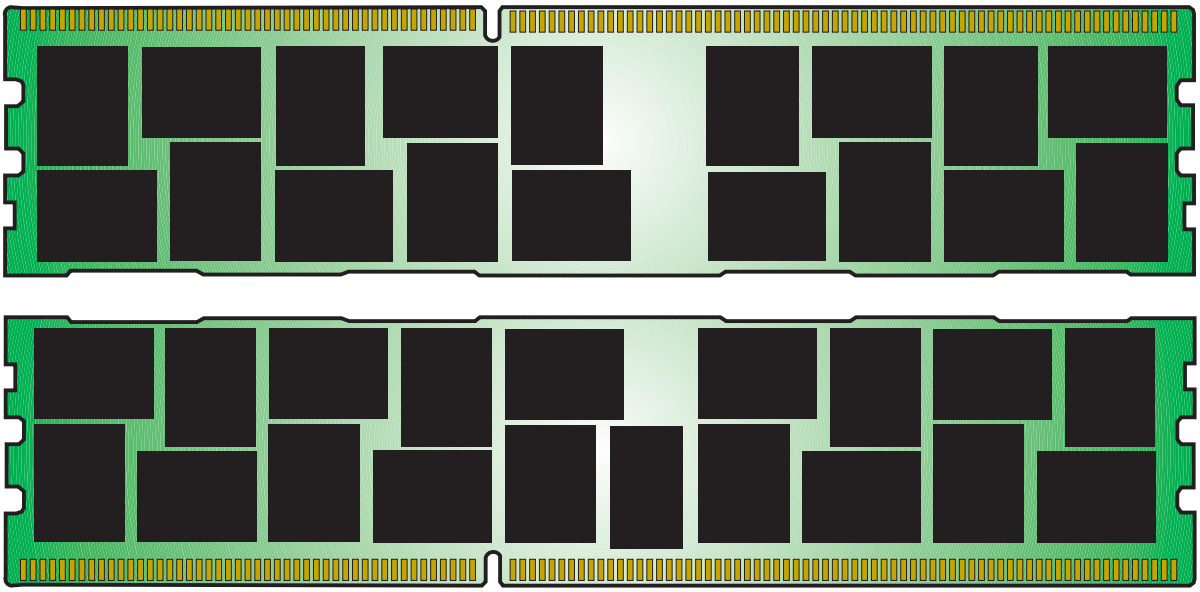
## SPECIFICATIONS

| | |
|---|---|
| CL(IDD) | 11 cycles |
| Row Cycle Time (tRCmin) | 48.125ns (min.) |
| Refresh to Active/Refresh Command Time (tRFCmin) | 160ns (min.) |
| Row Active Time (tRASmin) | 35ns (min.) |
| Power (Operating) | 3.171W* (per module) |
| UL Rating | 94 V - 0 |
| Operating Temperature | 0º C to 85º C |
| Storage Temperature | -55º C to +100º C |

*Power will vary depending on the SDRAM and Register/PLL used.

Continued >>

## MODULE DIMENSIONS:



(Units = millimeters)

