# Memory Module Specifications



## KVR1600D3E11SK3/6GI

6GB (2GB 1Rx8 256M x 72-Bit x 3 pcs.) PC3-12800 CL11 ECC 240-Pin DIMM Kit

#### **DESCRIPTION**

ValueRAM's KVR1600D3E11SK3/6GI is a kit of three 256M x 72-bit (2GB) DDR3-1600 CL11 SDRAM (Synchronous DRAM)1Rx8, ECC, Intel® Compatibility Tested, memory modules, based on nine 256M x 8-bit FBGA components per module. Total kit capacity is 6GB. 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 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</li>
- Asynchronous Reset
- PCB: Height 1.180" (30.00mm), single sided component

### **SPECIFICATIONS**

| CL(IDD)   | 11 cycles             |
|---|-----------------------|
| Row Cycle Time (tRCmin)                             | 48.125ns (min.)       |
| Refresh to Active/Refresh<br>Command Time (tRFCmin) | 160ns (min.)          |
| Row Active Time (tRASmin)                           | 35ns (min.)           |
| Maximum Operating Power                             | 2.497 W* (per module) |
| UL Rating   | 94 V - 0              |
| Operating Temperature                               | 0° C to 85° C         |
| Storage Temperature                                 | -55° C to +100° C     |
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<sup>\*</sup>Power will vary depending on the SDRAM used.

Continued >>

## **MODULE DIMENSIONS:**





