# KVR1066D3Q8R7S/4GI

4GB 512M x 72-Bit PC3-8500
CL7 Registered w/Parity 240-Pin DIMM

## DESCRIPTION

This document describes ValueRAM's 512M x 72-bit 4GB (4096MB) DDR3-1066MHz CL7 SDRAM (Synchronous DRAM), Intel® Compatibility Tested, registered w/parity, quad-rank memory module, based on thirty-six 128M x 8-bit DDR3-1066MHz FBGA components. The SPD is programmed to JEDEC standard latency 1066MHz timing of 7-7-7 at 1.5V. This 240-pin DIMM uses gold contact fingers and requires +1.5V. The electrical and mechanical specifications are as follows:

## FEATURES

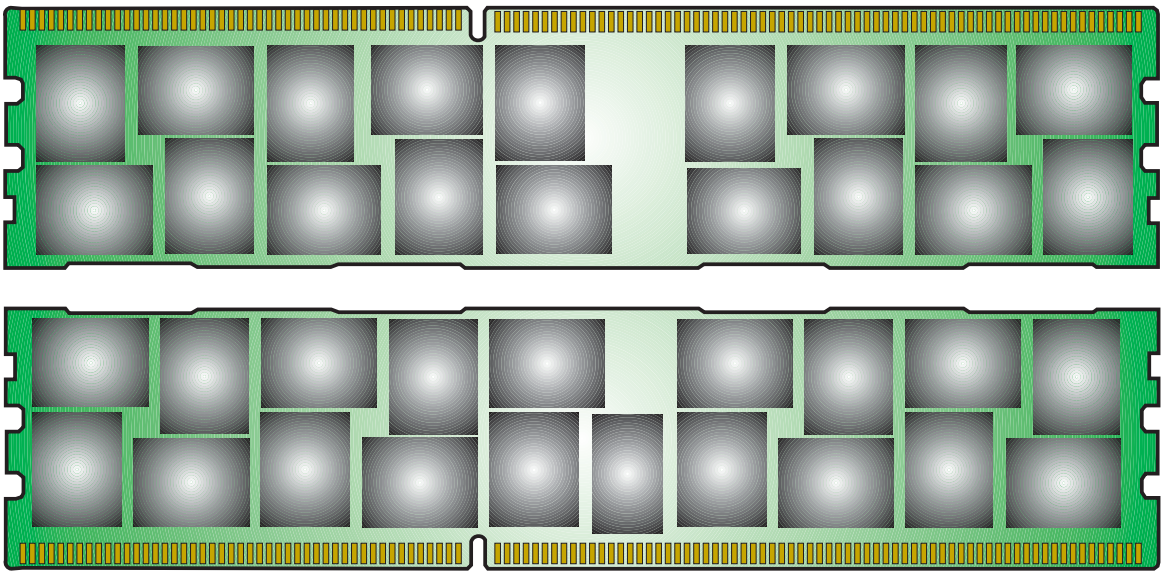
- JEDEC standard 1.5V ± 0.075V Power Supply
- VDDQ = 1.5V ± 0.075V
- 533MHz fCK for 1066Mb/sec/pin
- 8 independent internal bank
- Programmable CAS Latency: 6,7,8,9,10
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- Programmable CAS Write Latency(CWL) = 6(DDR3-1066)
- 8-bit pre-fetch
- 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) | 7 cycles |
| Row Cycle Time (tRCmin) | 50.625ns (min.) |
| Refresh to Active/Refresh Command Time (tRFCmin) | 110ns (min.) |
| Row Active Time (tRASmin) | 37.5ns (min.) |
| Power | TBD W (operating) |
| UL Rating | 94 V - 0 |
| Operating Temperature | 0° C to 85° C |
| Storage Temperature | -55° C to +100° C |

Continued >>

**MODULE DIMENSIONS:**



(Units = millimeters)

