

# Memory Module Specifications

## KVR1066D3Q8R7SK3/12GI

12G (4GB 512M x 72-Bit x 3 pcs.) PC3-8500

CL7 Registered w/Parity 240-Pin DIMM Kit

### DESCRIPTION

ValueRAM's KVR1066D3Q8R7SK3/12GI is a kit of three 512M x 72-bit 4GB (4096MB) DDR3-1066MHz CL7 SDRAM (Synchronous DRAM), Intel® Compatibility Tested, registered w/parity, quad-rank memory modules, based on thirty-six 128M x 8-bit DDR3-1066MHz FBGA components per module. Total kit capacity is 12GB. The SPDs are programmed to JEDEC standard latency 1066MHz timing of 7-7-7 at 1.5V. Each 240-pin DIMM uses gold contact fingers and requires +1.5V. The electrical and mechanical specifications are as follows:

### FEATURES

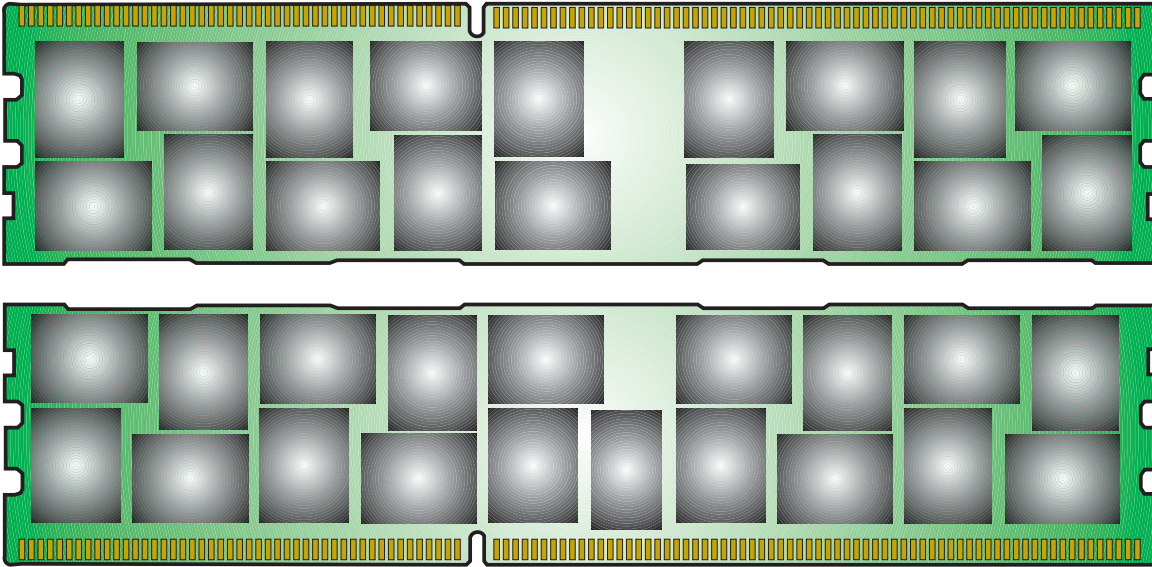
- JEDEC standard 1.5V ± 0.075V Power Supply
- VDDQ = 1.5V ± 0.075V
- 533MHz fCK for 1066Mb/sec/pin
- 8 independent internal bank
- Programmable CAS Latency: 6,7,8,9,10
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- Programmable CAS Write Latency(CWL) = 6(DDR3-1066)
- 8-bit pre-fetch
- 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)	50.63ns (min.)
Refresh to Active/Refresh Command Time (tRFCmin)	110ns (min.)
Row Active Time (tRASmin)	37.5ns (min.)
Power	3.165 W (operating per module)
UL Rating	94 V - 0
Operating Temperature	0° C to 85° C
Storage Temperature	-55° C to +100° C

Continued >>

**MODULE DIMENSIONS:**



(Units = millimeters)

