

Memory Module Specification

KVR1333D3D4R9SK6/24G

24GB (4GB 512M x 72-Bit x 6 pcs.) PC3-10600 CL9 Registered w/Parity 240-Pin DIMM Kit

DESCRIPTION:

ValueRAM's KVR1333D3D4R9SK6/24G is a kit of six 512M x 72-bit 4GB (4096MB) DDR3-1333MHz CL9 SDRAM (Synchronous DRAM) registered w/parity, dual-rank memory modules, based on thirty-six 256M x 4-bit DDR3-1333MHz FBGA components per module. Total kit capacity is 24GB. The SPDs are programmed to JEDEC standard latency 1333MHz timing of 9-9-9 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 $1.5V \pm 0.075V$ Power Supply

 \checkmark VDDQ = 1.5V ± 0.075V

☑ 667MHz fCK for 1333Mb/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) = 7(DDR3-1333)

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 then TCASE 85°C, 3.9us at 85°C < TCASE . 95°C

Asynchronous Reset

PCB: Height 1.18" (30.00mm), double sided component

PERFORMANCE:

CL(IDD) 9 cycles

Row Cycle Time (tRCmin) 49.5ns (min.)

Refresh to Active/Refresh Command Time (tRFCmin) 110ns (min.)

Row Active Time (tRASmin) 36ns (min.)

Power 3.960 W (operating per module)

UL Rating 94 V - 0
Operating Temperature 0° C to 85° C

Storage Temperature

-55° C to +100° C

MODULE DIMENSIONS:

