

## KVR24N17S6L/4

4GB 1Rx16 512M x 64-Bit PC4-2400

CL17 VLP 288-Pin DIMM

### DESCRIPTION

This document describes ValueRAM's KVR24N17S6L/4 is a 512M x 64-bit (4GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM), 1Rx16, VLP (very low profile) memory module, based on four 512M x 16-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 at 1.2V. Each 288-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

### FEATURES

- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Single-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- 8 internal banks; 2 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- Terminated control command and address bus
- PCB: Height 0.738" (18.75mm)
- RoHS Compliant and Halogen-Free

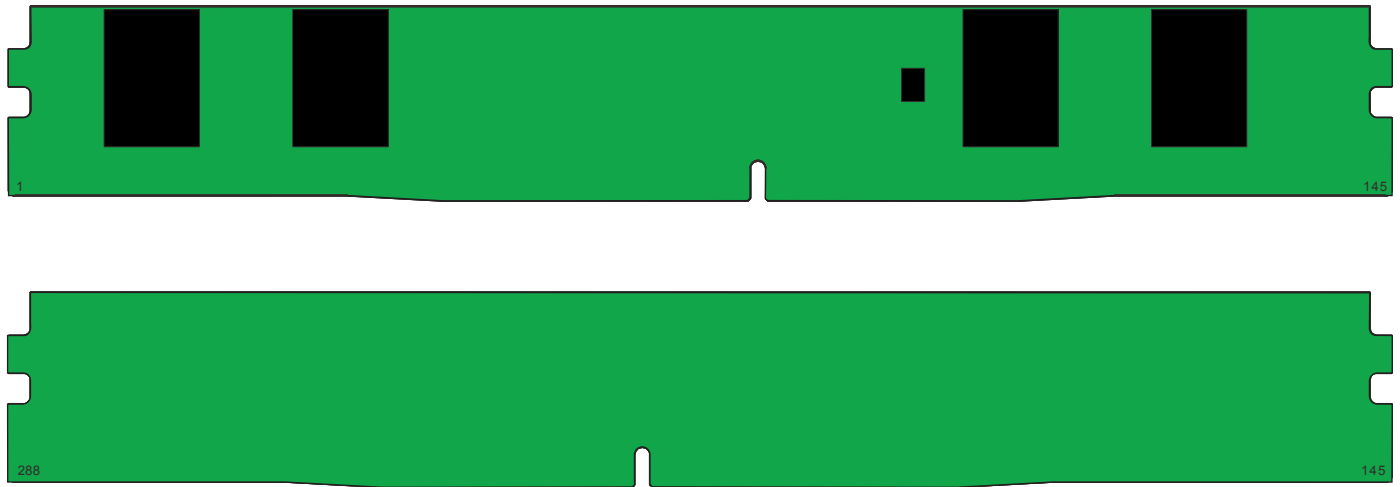
### SPECIFICATIONS

CL(IDD)	17 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

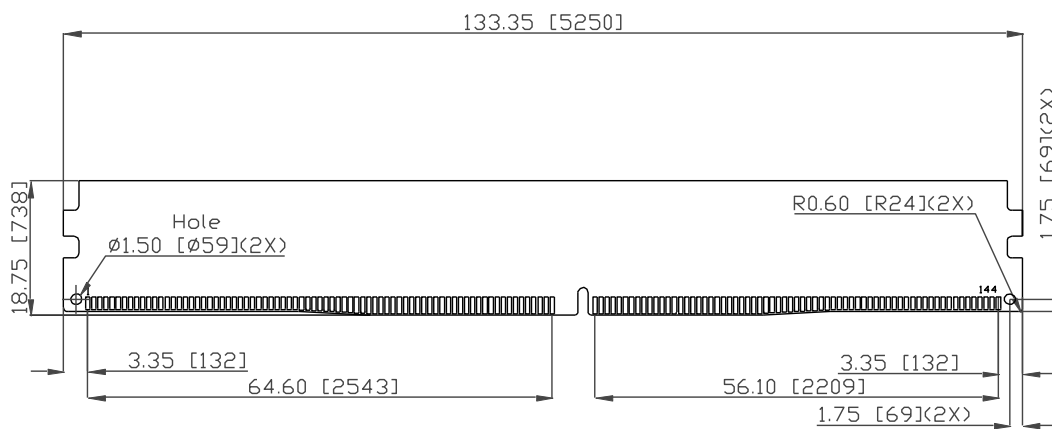
\*Power will vary depending on the SDRAM used.

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### MODULE DIMENSIONS



All measurements are in millimeters.  
(Tolerances on all dimensions are  $\pm 0.12$  unless otherwise specified)



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