

# Memory Module Specification

### KVR533D2E4/512 512MB 64M x 72-Bit DDR2-533

## CL4 ECC 240-Pin DIMM

#### **DESCRIPTION:**

This document describes ValueRAM's 64M x 72-bit (512MB) DDR2-533 CL4 SDRAM (Synchronous **DRAM**) ECC memory module. The components on this module include nine 64M x 8-bit (16M x 8-bit x 4 Bank) DDR2-533 SDRAM in FBGA packages. This 240-pin DIMM uses gold contact fingers and requires +1.8V. The electrical and mechanical specifications are as follows:

#### **FEATURES:**

☑ Clock Cycle Time (tCK) CL=4 3.75ns (min.) / 8ns (max.)

Row Cycle Time (tRC) 55ns (min.)

Refresh to Active/Refresh Command Time (tRFC) 105ns

Row Active Time (tRAS) 40ns (min.) / 70,000ns (max.)

Single Power Supply of +1.8V (+/-.1V)

Power (IDD0) 1.620 W (operating)

☑ UL Rating 94 V - 0

**Note:** The module defined in this data sheet is one of several configurations available under this part number. While all configurations are compatible, the DRAM combination and/or the module height may vary from what is described here. However, in no configuration will the module height exceed 1.250" (31.75mm).

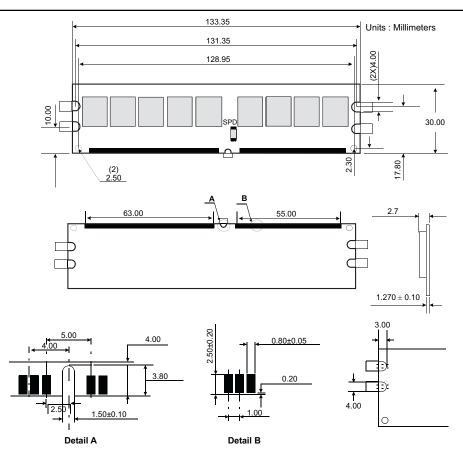


Figure 1: KVR533D2E4/512 240-Pin DIMM