

**KVR400D2S4R3/512**  
**512MB 64M x 72-Bit DDR2-400**  
**CL3 Registered 240-Pin ECC DIMM**

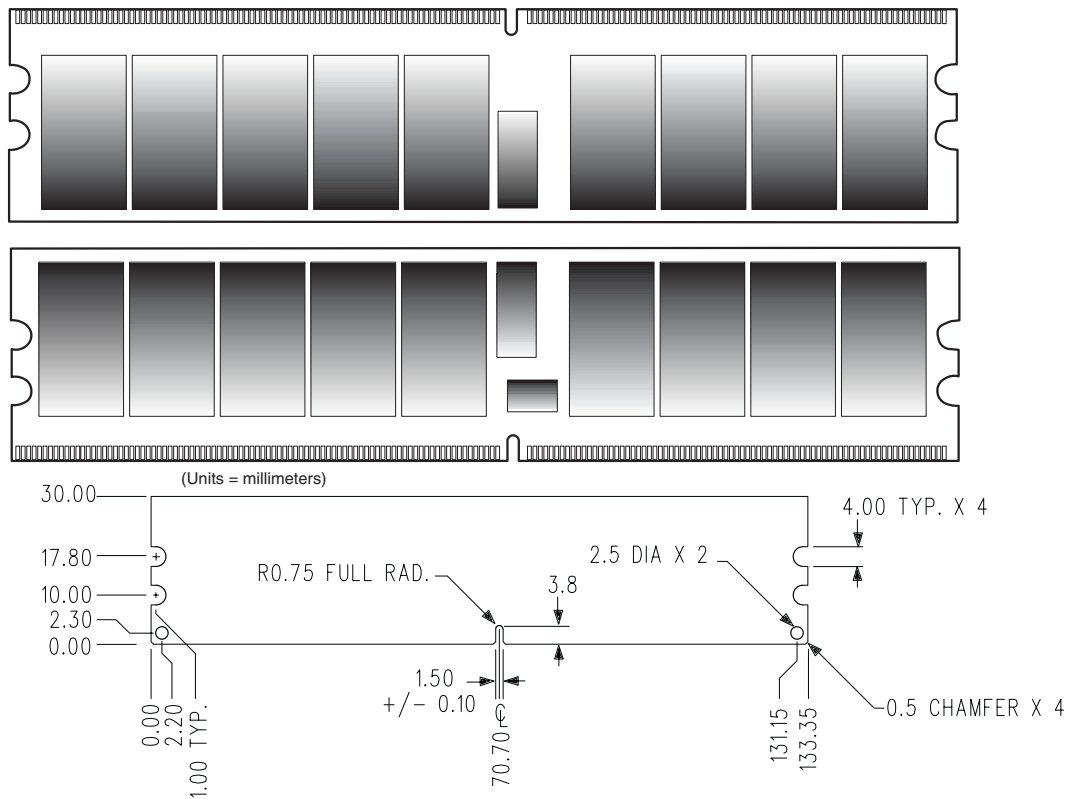
**DESCRIPTION:**

This document describes ValueRAM's 64M x 72-bit (512MB) DDR2-400 CL3 SDRAM (Synchronous **DRAM**) "single rank" registered ECC memory module. The components on this module include eighteen 64M x 4-bit (16M x 4-bit x 4 Bank) DDR2-400 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=3                   | 5ns (min.) / 8ns (max.)       |
| ✓ Row Cycle Time (tRC)                          | 55ns (min.)                   |
| ✓ Refresh to Active/Refresh Command Time (tRFC) | 75ns                          |
| ✓ Row Active Time (tRAS)                        | 40ns (min.) / 70,000ns (max.) |
| ✓ Single Power Supply of                        | +1.8V (+/- .1V)               |
| ✓ Power   | 4.050 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: KVR400D2S4R3/512 240-Pin DIMM**