

**KVR400DR3A/1G**  
**1GB 128M x 72-Bit DDR400**  
**CL3 Registered 184-Pin ECC DIMM**

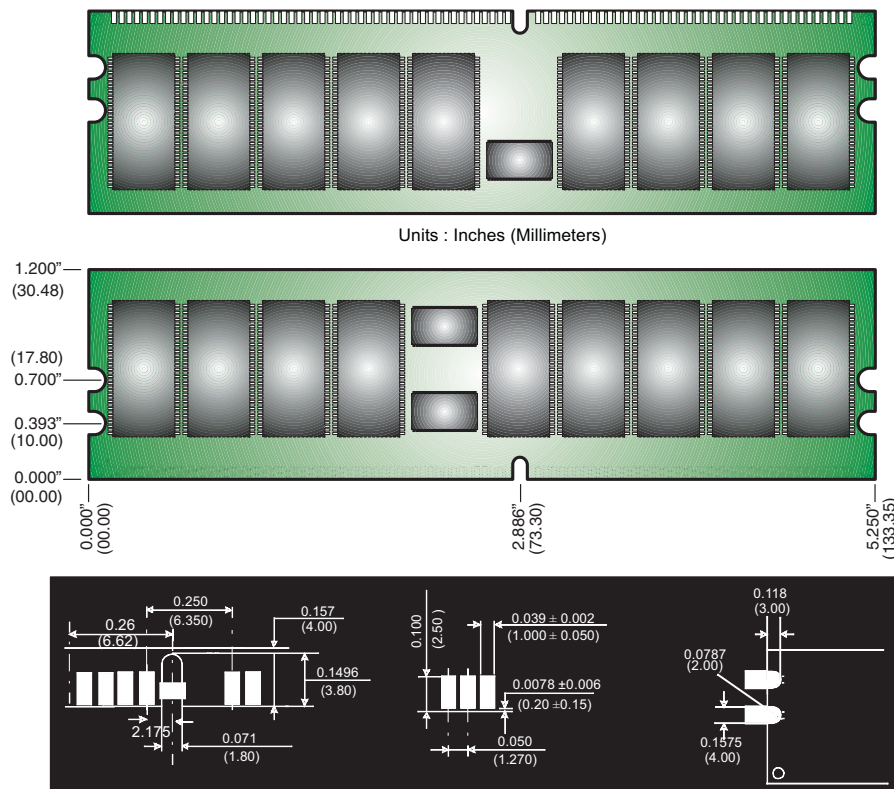
**DESCRIPTION:**

This document describes ValueRAM's 128M x 72-bit 1GB (1024MB) DDR400 CL3 SDRAM (Synchronous DRAM) "dual rank" Registered ECC memory module. The components on this module include eighteen 64M x 8-bit (16M x 8-Bit x 4 Bank) DDR400 SDRAM in TSOP packages. This 184-pin DIMM uses gold contact fingers and requires +2.6V. The electrical and mechanical specifications are as follows:

**FEATURES:**

- |                                 |                               |
|---------------------------------|-------------------------------|
| ✓ Clock Cycle Time (tCK)        | 5ns (min.) / 10ns (max.)      |
| ✓ Row Cycle Time (tRC)          | 55ns (min.)                   |
| ✓ Refresh Row Cycle Time (tRFC) | 70ns (min.)                   |
| ✓ Row Active Time (tRAS)        | 40ns (min.) / 70,000ns (max.) |
| ✓ Single Power Supply of        | +2.6V (+/- .1V)               |
| ✓ Power (IDD0)                  | 6.120 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 1.200" (30.48mm).



**Figure 1: KVR400D8R3A/1G 184-Pin DIMM**