

**KVR133X64C3/512**  
**512MB 64M x 64-Bit PC133**  
**CL3 168-Pin DIMM Module**

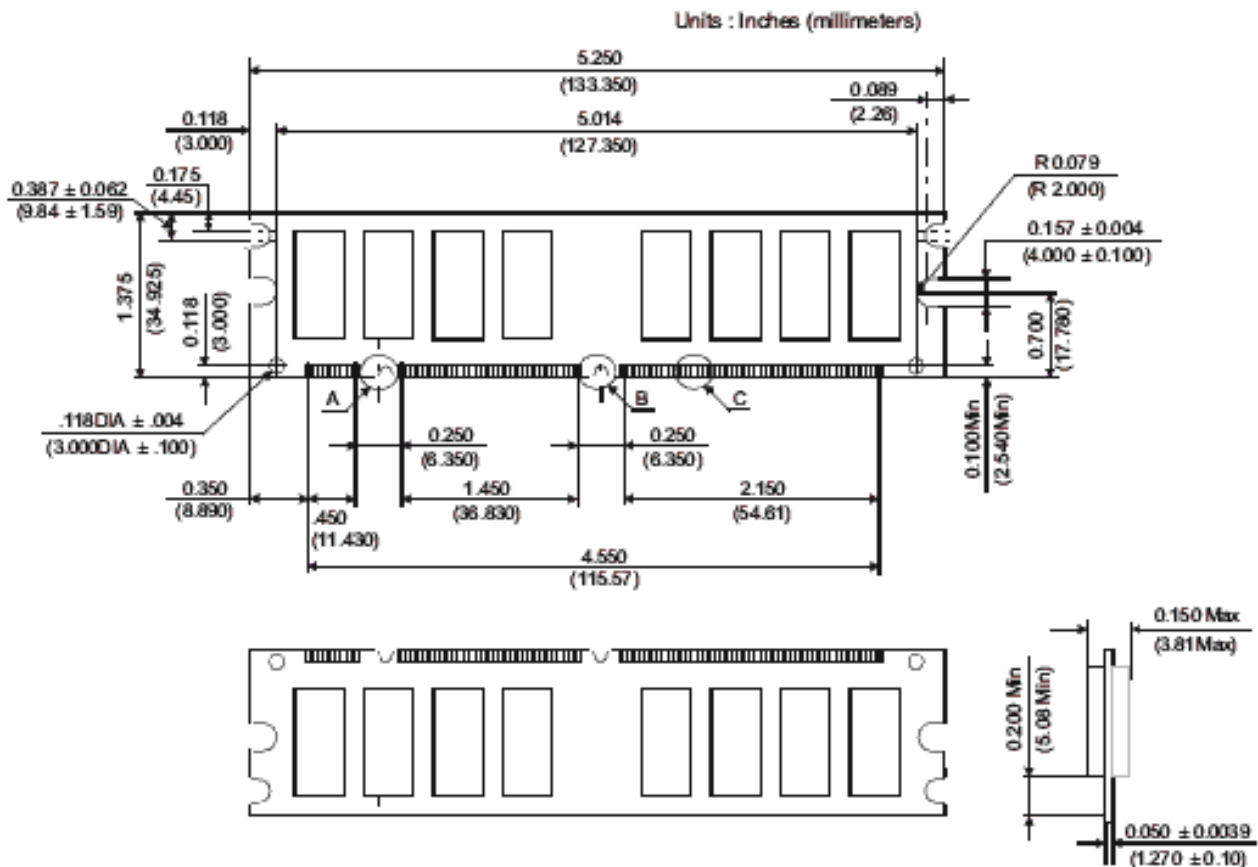
**DESCRIPTION:**

This document describes ValueRAM's 64M x 64-bit (512MB) CL3 SDRAM (Synchronous DRAM) PC133 DIMM module. The components on this module include sixteen 32M x 8-bit (8M x 8-bit x 4 Bank ) PC133 SDRAM in TSOP packages. This 168-pin DIMM uses gold contact fingers and requires +3.3V. The electrical and mechanical specifications are as follows:

**FEATURES:**

- |                          |  |
|--------------------------|--|
| ✓ CLK Cycle Time (tCC)   | min. = 7.5ns (CAS Latency = 3) / max. = 1000ns |
| ✓ Row Cycle Time (tRC)   | 65ns   |
| ✓ CLK to Output (tSAC)   | max. = 5.4ns (CAS Latency = 3)                 |
| ✓ Single Power Supply of | +3.3V (+/- .3V)                                |
| ✓ Power                  | 4.140 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 1.375" (34.92mm).



**Figure 1: KVR133X64C3/512 168-Pin SDRAM Module**