# 1. Description

**The SP001GBLRU800O02 is a 64M x 8bits Double Data Rate SDRAM high-density for DDR2-800. The SP001GBLRU800O02 consists of 16pcs CMOS 64Mx8 bits Double Data Rate SDRAMs in 60 ball FBGA packages, and a 2048 bits serial EEPROM on a 240-pin printed circuit board. The SP001GBLRU800O02 is a Dual In-Line Memory Module and is intended for mounting into 240-pin edge connector sockets. Synchronous design allows precise cycle control with the use of system clock. Data I/O transactions are possible on both edges of DQS. Range of operation frequencies, programmable latencies allow the same device to be useful for a variety of high bandwidth, high performance memory system applications.**

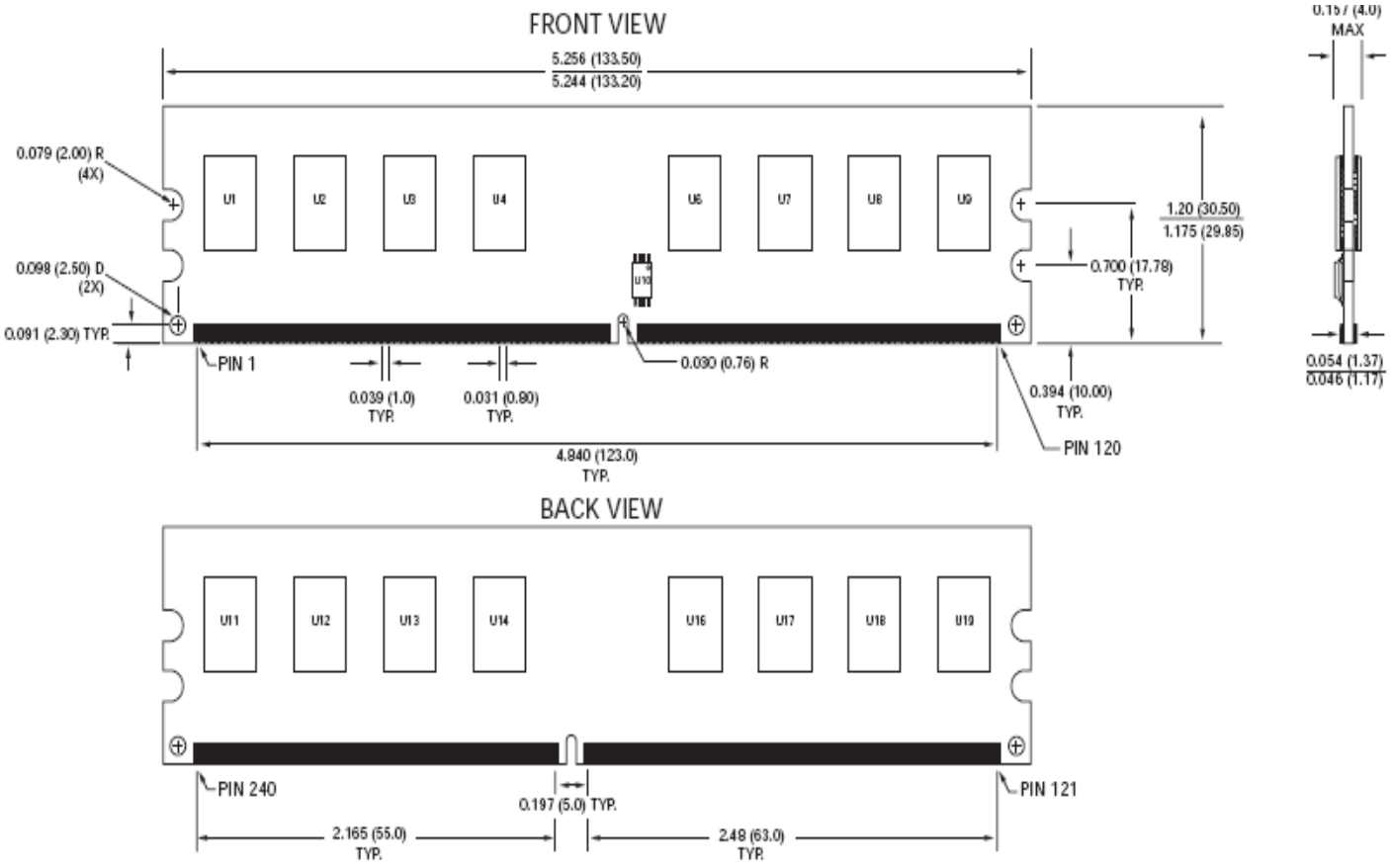
# 2. Features

- **Fast data transfer rates: PC2-6400**
- **240-pin, unbuffered dual in-line memory module**
- **VDD = VDDQ = +1.8V, VDDSPD = +1.7V to +3.6V**
- **JEDEC standard 1.8V I/O (SSTL_18-compatible)**
- **Differential data strobe (DQS, DQS#) option**
- **Four-bit prefetch architecture**
- **DLL to align DQ and DQS transitions with CK**
- **Multiple internal device banks for concurrent operation**
- **Programmable CAS# latency (CL)**
- **Posted CAS# additive latency (AL)**
- **WRITE latency = READ latency - 1 tCK**
- **Programmable burst lengths: 4 or 8**
- **Adjustable data-output drive strength**
- **64ms, 8,192-cycle refresh**
- **On-die termination (ODT)**
- **60ball FBGA Leaded & Pb-Free (RoHS compliant) package**

# 3. Module Specification

| Item | Specification |
|---|---|
| Capacity | 1024MByte |
| Physical Bank(s) | 2 |
| Module Organization | 128M x 64bit |
| Module Type | Unbuffered Non ECC |
| Speed Grade | PC2-6400/CL=5,tRCD=5,tRP=5 (DDR2 800) |
| Voltage Interface | SSTL_18 |
| Power Supply Voltage | 1.8V±0.1V |
| Burst Lengths | 4 or 8 |
| DRAM Organization | 64M x 8bit DDR2 SDRAM |
| PCB Layer | 6Layers |
| Contact Tab | 240 pin GOLD Flash Plating |
| Serial PD | Support |

# 4. Simplified Mechanical Drawing with Keying Positions




***Notes*** **：** 1. All dimensions are in millimeters (inches); MAX/MIN or typical (TYP) where noted.