## DATASHEET

<table>
<thead>
<tr>
<th>Module TYPE</th>
<th>DDR 1GB/512MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMM</td>
<td></td>
</tr>
<tr>
<td>Module speed</td>
<td>PC-3200</td>
</tr>
<tr>
<td>CAS Latency</td>
<td>CL-3</td>
</tr>
<tr>
<td>Pin</td>
<td>184pin</td>
</tr>
<tr>
<td>SDRAM Operating Temp</td>
<td>-40 °C ~ +85 °C</td>
</tr>
</tbody>
</table>
1. **Features**

**Key Parameter**

<table>
<thead>
<tr>
<th>Industry Nomenclature</th>
<th>Speed Grade</th>
<th>Data Rate MT/s</th>
<th>tRCD (ns)</th>
<th>tRP (ns)</th>
<th>tRC (ns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-3200</td>
<td>-</td>
<td>266</td>
<td>333</td>
<td>400</td>
<td>15</td>
</tr>
</tbody>
</table>

- JEDEC Standard 184-pin Dual In-Line Memory Module
- Intend for 400MHz applications
- Inputs and Outputs are SSTL-18 compatible
- VDD=VDDQ= 1.8 Volt ± 0.1
- Differential clock input
- All inputs are sampled at the positive going edge of the system clock
- Bi-Directional data strobe with one clock cycle preamble and one-half clock post-amble
- Address and control signals are fully synchronous to positive clock edge.
- Auto Refresh (CBR) and Self Refresh Modes support.
- Serial Presence Detect with EEPROM
- SDRAM Operation Temperature *(Note 1)*
- Programmable Device Operation:
  - Burst Type: Sequential or Interleave
  - Operation: Burst Read and Write
  - Device CAS# Latency: 6
  - Burst Length: 4, 8
- RoHS Compliant *(Section 15)*

*Note: 1. The refresh rate is required to double when Tc exceeds 85°C.*

- Automatic and controlled precharge commands.
- Auto & self refresh 7.8µs (TA ≤ +70°C)
- 30u"Golden Contactor
2. PACKAGE DIMENSION

Note: All dimensions are typical with tolerance of ±0.127 unless otherwise stated.
Units: Millimeters (inches)

Note: Device position is only for reference.