MEMORY MODULE
EEPROM 128Kx8-SOP

EEPROM MODULE

3D EE1M08CS1193
1Mbit EEPROM organized as 128Kx8

Features

- Organized as one bank of 128Kx8bit.
- Single +5V±10% power supply.
- Access time 150ns (max).
- Power dissipation:
  - Active 20mW/MHz (typ).
  - Standby 110µW (max).
- On-chip latches: address, data, #CE, #OE, #WE.
- Automatic byte write: 10ms (max).
  - Automatic page write (128 bytes): 10ms (max).
- Data polling and RDY / #Busy.
- Reliable CMOS with MNOS cell technology
- 10^4 erase/write cycles (in page mode).
- 10 years data retention.
- Software data protection.
- Write protection by #RES pin.
- Available Temperature Range:
  - 0°C to +70°C
  - -40°C to +85°C
  - -55°C to +125°C
- Available with screening option for high reliability application
  (Space, etc...).

General description

The 3D EE1M08CS1193 is a 131,072 words of 8-bits.
Electrically Erasable and Programmable CMOS ROM.
It is organized as one bank of 1Mbit.
This module operates at high speed, low power consumption
and high reliability by employing advanced MNOS memory
technology and CMOS process and circuitry technology.
The device is manufactured using 3D PLUS well known MCM-V
patented technology.
It is particularly well suited for use in high reliability, high
performance and high density system applications.
The 3D EE1M08CS1193 is packaged in a 40 pins SOP.
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EERom 128Kx8-SOP

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1Mbit EEPROM organized as 128Kx8

Mechanical Drawing

Test Tools

DC Operating conditions and characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>Vcc</td>
<td>4.5</td>
<td>5.0</td>
<td>5.5</td>
<td>V</td>
</tr>
<tr>
<td>Input logic high voltage</td>
<td>Vih</td>
<td>2.2</td>
<td>-</td>
<td>Vcc+0.3</td>
<td>V</td>
</tr>
<tr>
<td>Input logic low voltage</td>
<td>Vil</td>
<td>-0.3</td>
<td>-</td>
<td>0.8</td>
<td>V</td>
</tr>
<tr>
<td>Output logic high Voltage</td>
<td>Voh</td>
<td>2.4</td>
<td>-</td>
<td>-</td>
<td>V</td>
</tr>
<tr>
<td>Output logic low voltage</td>
<td>Vol</td>
<td>-</td>
<td>-</td>
<td>0.4</td>
<td>V</td>
</tr>
</tbody>
</table>

Absolute maximum ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage on any pin relative to VSS</td>
<td>Vt</td>
<td>-0.5 ~ 7.0</td>
<td>V</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>Tstg</td>
<td>-55 ~ +125</td>
<td>°C</td>
</tr>
<tr>
<td>Junction Temperature</td>
<td>Tj</td>
<td>150</td>
<td>°C</td>
</tr>
<tr>
<td>Thermal Resistance, Junction-to-Case</td>
<td>Rjc</td>
<td>5</td>
<td>°C/W</td>
</tr>
<tr>
<td>Package Power dissipation permitted 1</td>
<td>Pd</td>
<td>2</td>
<td>W</td>
</tr>
</tbody>
</table>

DC Characteristics @ 1MHz

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value (Max.)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby Vcc current (#CE0=Vcc)</td>
<td>Iccs</td>
<td>20</td>
<td>µA</td>
</tr>
<tr>
<td>Standby Vcc current (#CE0=Vih)</td>
<td>Icgs</td>
<td>1</td>
<td>mA</td>
</tr>
<tr>
<td>Operating Vcc current</td>
<td>Icc</td>
<td>15</td>
<td>mA</td>
</tr>
</tbody>
</table>

3D EE1M08CS1193

Temperature Range: 
C = (0°C to + 70°C)
I = (-40°C to + 85°C)
M = (-55°C to + 125°C)
S = Specific

Quality Level:
N = Commercial Grade
B = Industrial Grade
S = Space Grade
C = Custom

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3DFP-0193-REV : 2 - DEC 2008