M27C64A

64 Kbit (8Kb x 8) UV EPROM and OTP EPROM

**DATA BRIEFING**

- 5V ± 10% SUPPLY VOLTAGE in READ OPERATION
- FAST ACCESS TIME: 100ns
- LOW POWER CONSUMPTION:
  - Active Current 30mA
  - Standby Current 100μA
- PROGRAMMING VOLTAGE: 12.5V ± 0.25V
- HIGH SPEED PROGRAMMING (less than 1 minute)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 9Bh
  - Device Code: 08h

**DESCRIPTION**

The M27C64A is a 64Kbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for microprocessor systems requiring large programs and is organized as 8,192 by 8 bits.

The FDIP28W (window ceramic frit-seal package) has transparent lid which allows the user to expose the chip to ultraviolet light to erase the bit pattern. A new pattern can then be written to the device by following the programming procedure.

For applications where the content is programmed only on time and erasure is not required, the M27C64A is offered in PLCC32 package.

**Signal Names**

<table>
<thead>
<tr>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0-A12</td>
<td>Address Inputs</td>
</tr>
<tr>
<td>Q0-Q7</td>
<td>Data Outputs</td>
</tr>
<tr>
<td>E</td>
<td>Chip Enable</td>
</tr>
<tr>
<td>G</td>
<td>Output Enable</td>
</tr>
<tr>
<td>P</td>
<td>Program</td>
</tr>
<tr>
<td>VPP</td>
<td>Program Supply</td>
</tr>
<tr>
<td>VCC</td>
<td>Supply Voltage</td>
</tr>
<tr>
<td>VSS</td>
<td>Ground</td>
</tr>
</tbody>
</table>

**Figure 1. Logic Diagram**

Complete data available on DATA-on-DISC CD-ROM or at www.st.com
M27C64A

DIP Pin Connections

VPP [1] 28 VCC
A7 [3] 26 NC
A5 [5] 24 A9
A3 [7] 22 G
A2 [8] 21 A10
A0 [10] 19 Q7
Q0 [11] 18 Q6
Q1 [12] 17 Q5
Q2 [13] 16 Q4
Q3 [14] 15 Q3

Warning: NC = Not Connected

LCC Pin Connections

A7 A12 VPP DU VCC P
A8 A9 A11 NC G
A6 A5 A4 A3 A2
A1 A0 NC Q0
M27C64A 25
17 Q1 Q2 DU Q4 Q6

Warning: NC = Not Connected, DU = Don’t Use

Ordering Information Scheme
For a list of available options or for further information on any aspect of this device, please contact the SGS-THOMSON Sales Office nearest to you.

Example: M27C64A -15 C 1 TR

<table>
<thead>
<tr>
<th>Speed</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 100ns</td>
<td>X Additional Burn-in</td>
</tr>
<tr>
<td>15 150ns</td>
<td>TR Tape &amp; Reel Packing</td>
</tr>
<tr>
<td>20 200ns</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Package</th>
<th>Temp. Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>F FDIP28W</td>
<td>1 0 to 70 °C</td>
</tr>
<tr>
<td>C PLCC32</td>
<td>6 –40 to 85 °C</td>
</tr>
</tbody>
</table>