



1 Mbit (128Kb x 8) Low Voltage UV EPROM and OTP EPROM

DATA BRIEFING

- **LOW VOLTAGE READ OPERATION:**
3V to 3.6V
- **FAST ACCESS TIME:** 90ns
- **LOW POWER CONSUMPTION:**
 - Active Current 15mA at 5MHz
 - Standby Current 20 μ A
- **PROGRAMMING VOLTAGE:** 12.75V \pm 0.25V
- **PROGRAMMING TIME:** 100 μ s/byte (typical)
- **ELECTRONIC SIGNATURE**
 - Manufacturer Code: 20h
 - Device Code: 05h

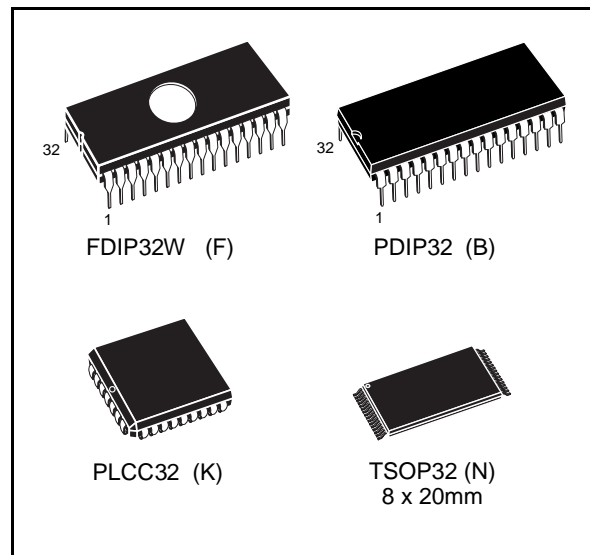
DESCRIPTION

The M27V101 is a low voltage 1 Mbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for microprocessor systems requiring large data or program storage and is organized as 131,072 by 8 bits.

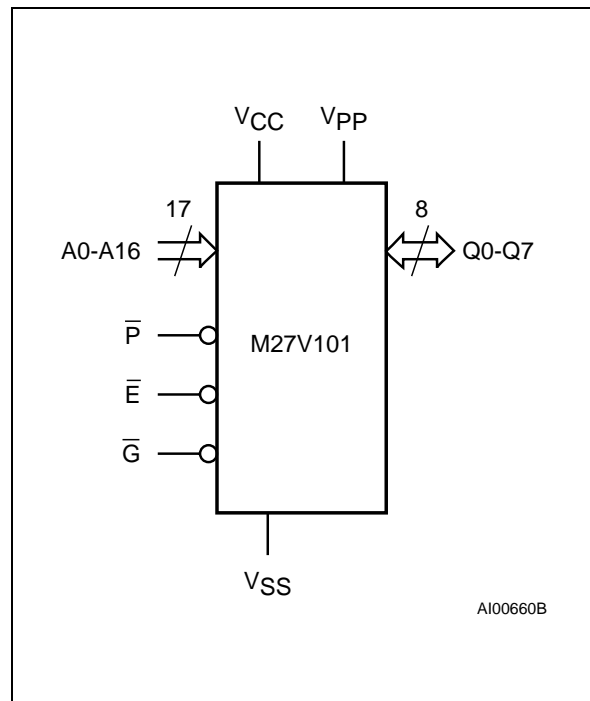
The M27V101 operates in the read mode with a supply voltage as low as 3V. The decrease in operating power allows either a reduction of the size of the battery or an increase in the time between battery recharges.

The FDIP32W (window ceramic frit-seal package) has a transparent lid which allow 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 one time and erasure is not required, the M27V101 is offered in PDIP32, PLCC32 and TSOP32 (8 x 20 mm) packages.

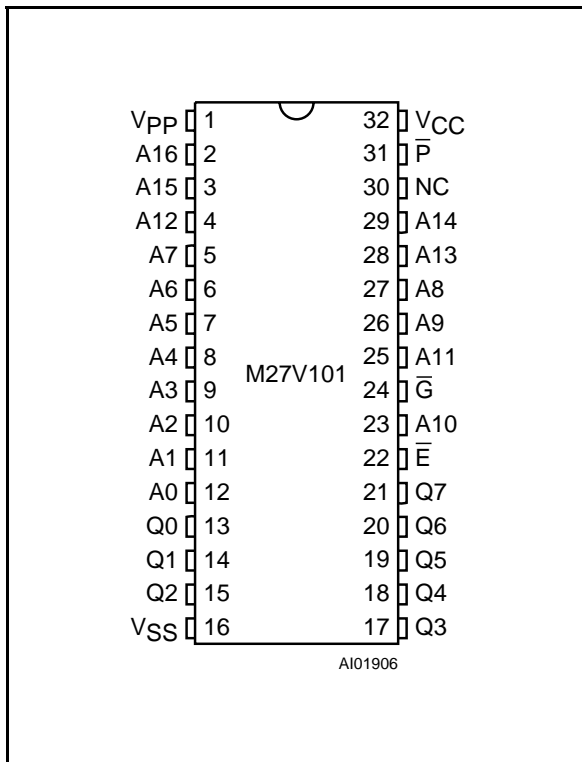


Logic Diagram



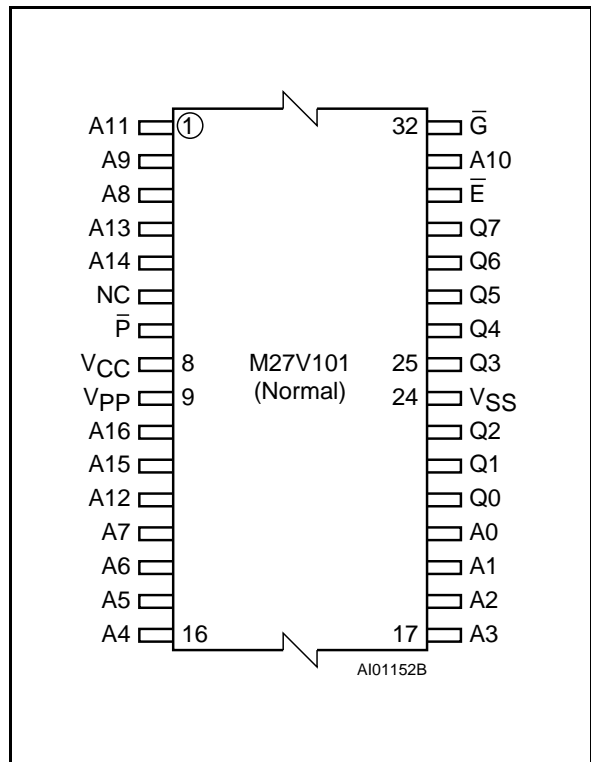
M27V101

DIP Pin Connections



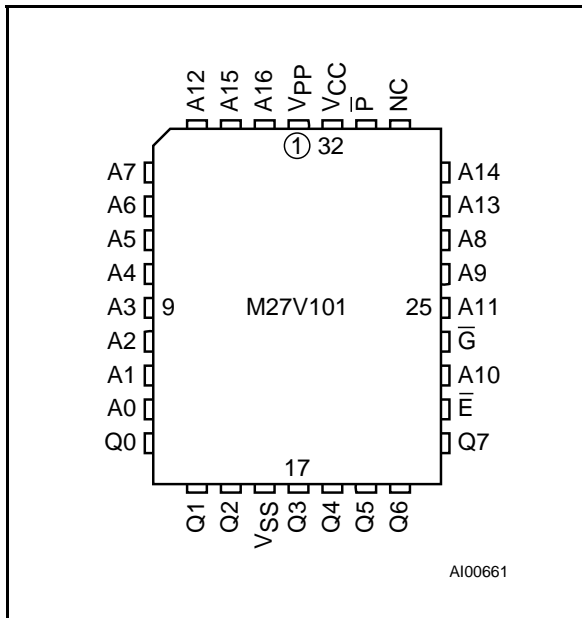
Warning: NC = Not Connected.

TSOP Pin Connections



Warning: NC = Not Connected.

LCC Pin Connections



Warning: NC = Not Connected.

Signal Names

A0-A16	Address Inputs
Q0-Q7	Data Outputs
E	Chip Enable
G	Output Enable
P	Program
V _{PP}	Program Supply
V _{CC}	Supply Voltage
V _{SS}	Ground

ORDERING INFORMATION SCHEME

Example: M27V101 -90 K 1 TR

Speed		Package		Temperature Range		Option	
-90 ⁽¹⁾	90 ns	F	FDIP32W	1	0 to 70 °C	TR	Tape & Reel Packing
-100	100 ns	B	PDIP32	6	-40 to 85 °C		
-120	120 ns	K	PLCC32				
-150	150 ns	N	TSOP32 8 x 20mm				
-200	200 ns						

Note: 1. High Speed, see AC Characteristics section for further information.

For a list of available options (Speed, Package, etc...) or for further information on any aspect of this device, please contact the STMicroelectronics Sales Office nearest to you.