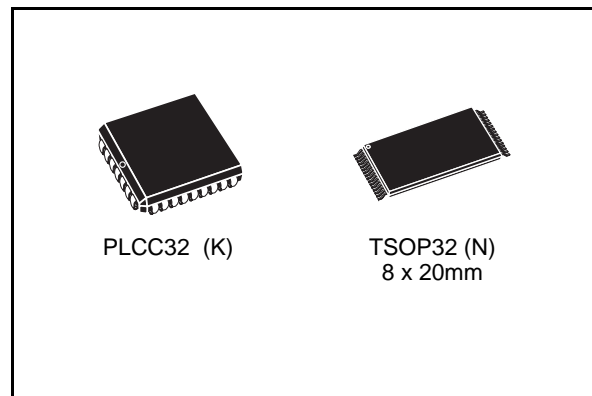




## 1 Mbit (128Kb x 8) Low Voltage OTP EPROM

### DATA BRIEFING

- **LOW VOLTAGE READ OPERATION:**  
2.7V to 3.6V
- **FAST READ ACCESS TIME:**
  - 70ns at  $V_{CC} = 3.0V$  to 3.6V
  - 80ns at  $V_{CC} = 2.7V$  to 3.6V
- **PIN COMPATIBLE** with M27C1001
- **LOW POWER CONSUMPTION:**
  - 15 $\mu$ A max Standby Current
  - 15mA max Active Current at 5MHz
- **PROGRAMMING TIME** 100 $\mu$ s/byte (typical)
- **HIGH RELIABILITY CMOS TECHNOLOGY**
  - 2,000V ESD Protection
  - 200mA Latchup Protection Immunity
- **ELECTRONIC SIGNATURE**
  - Manufacturer Code: 20h
  - Device Code: 05h



### DESCRIPTION

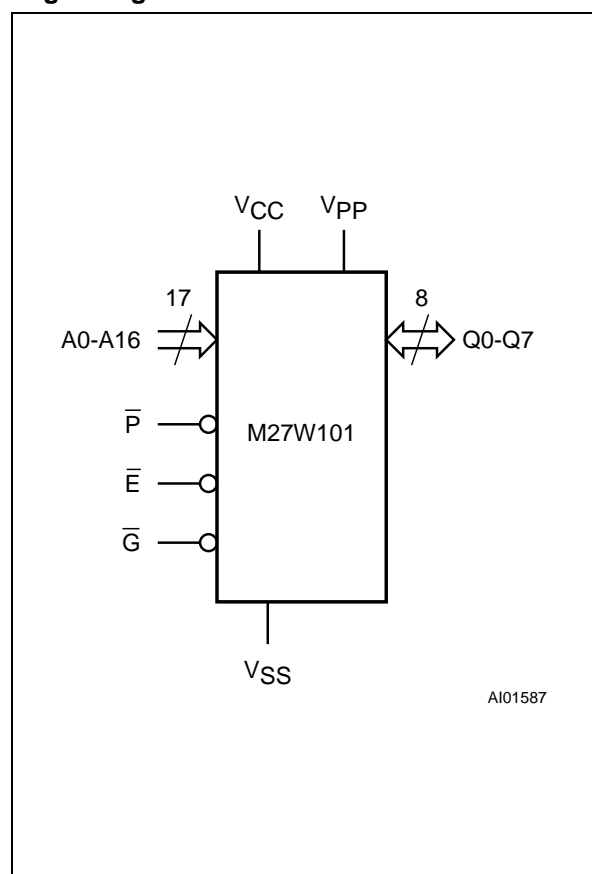
The M27W101 is a low voltage 1 Mbit EPROM offered in the OTP (one time programmable) range. It is ideally suited for microprocessor systems requiring large data or program storage and is organized as 131,072 by 8 bits.

The M27W101 operates in the read mode with a supply voltage as low as 2.7V at  $-40$  to  $85^{\circ}C$  temperature range. The decrease in operating power allows either a reduction of the size of the battery or an increase in the time between battery recharges.

### Signal Names

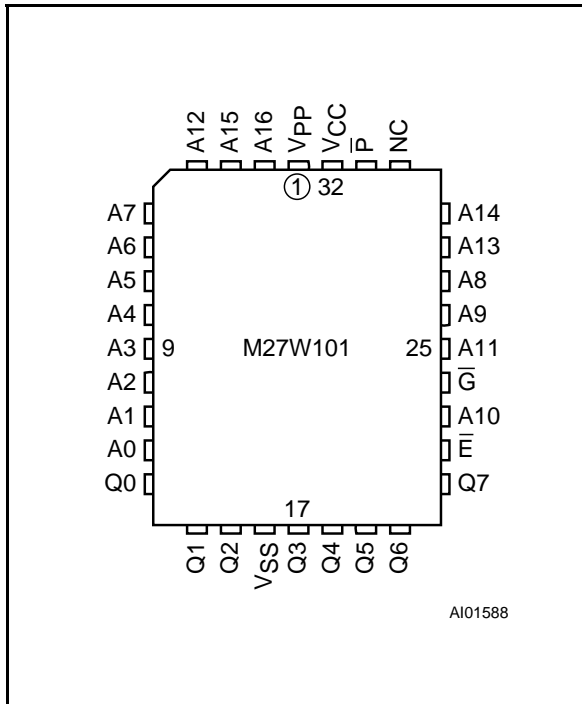
A0-A16	Address Inputs
Q0-Q7	Data Outputs
E	Chip Enable
G	Output Enable
P	Program
$V_{PP}$	Program Supply
$V_{CC}$	Supply Voltage
$V_{SS}$	Ground

### Logic Diagram



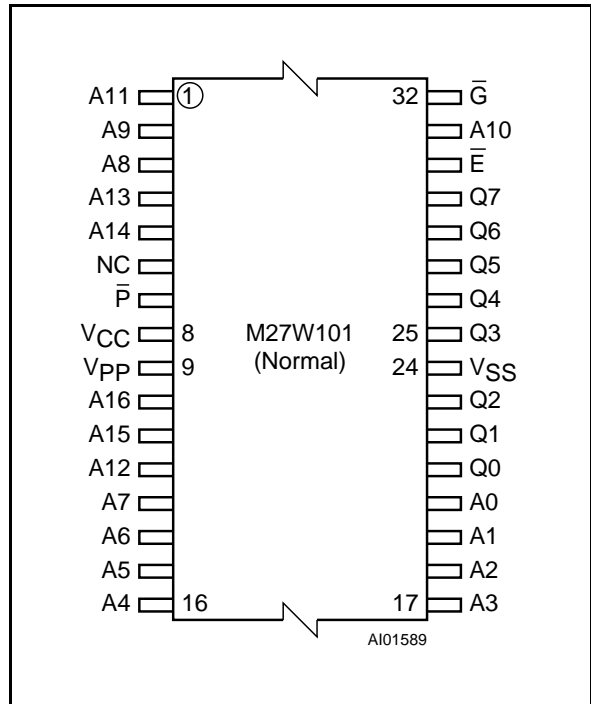
# M27W101

## LCC Pin Connections



Warning: NC = Not Connected.

## TSOP Pin Connections



Warning: NC = Not Connected.

## ORDERING INFORMATION SCHEME

Example: M27W101 -80 K 6 TR

Speed		Package		Temperature Range		Option	
-80 <sup>(1,2)</sup>	80 ns	K	PLCC32	6	-40 to 85 °C	TR	Tape & Reel Packing
-100	100 ns	N	TSOP32 8 x 20mm				

### NOT FOR NEW DESIGN<sup>(3)</sup>

-120	120 ns
-150	150 ns
-200	200 ns

- Notes: 1. High Speed, see AC Characteristics section for further information.  
 2. This speed also guarantees 70ns access time at V<sub>CC</sub> = 3.0V to 3.6V.  
 3. These speeds are replaced by the 100ns.

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.