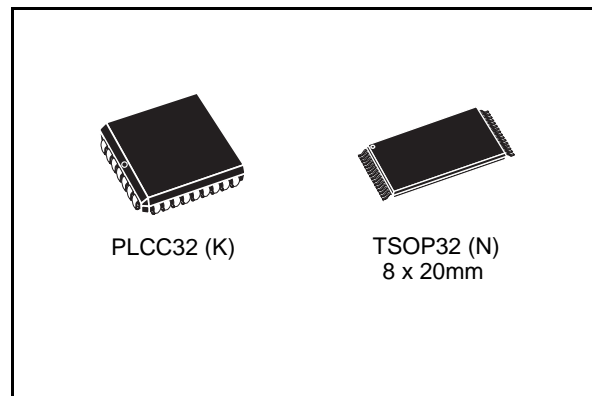


## 8 Mbit (1Mb x 8) Low Voltage OTP EPROM

**DATA BRIEFING**

- **LOW VOLTAGE READ OPERATION:**  
2.7V to 3.6V
- **FAST ACCESS TIME:**
  - 70ns at  $V_{CC} = 3.0V$  to 3.6V
  - 80ns at  $V_{CC} = 2.7V$  to 3.6V
- **LOW POWER CONSUMPTION:**
  - Active Current 15mA
  - Standby Current 20 $\mu$ A
- **PROGRAMMING VOLTAGE:** 12.75V  $\pm$  0.25V
- **PROGRAMMING TIMES** of AROUND 52sec.  
(PRESTO IIB ALGORITHM)
- **ELECTRONIC SIGNATURE**
  - Manufacturer Code: 20h
  - Device Code: 42h


**DESCRIPTION**

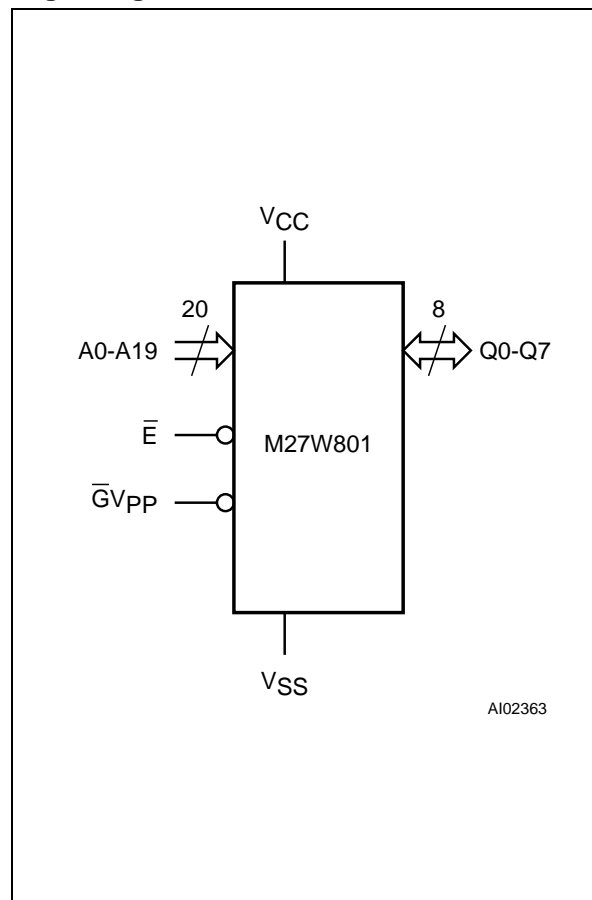
The M27W801 is a low voltage 8 Mbit EPROM offered in the OTP ranges (one time programmable). It is ideally suited for microprocessor systems requiring large data or program storage and is organized as 1,048,576 by 8 bits.

The M27W801 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.

The M27W801 is offered in PLCC32 and TSOP32 (8 x 20 mm) packages.

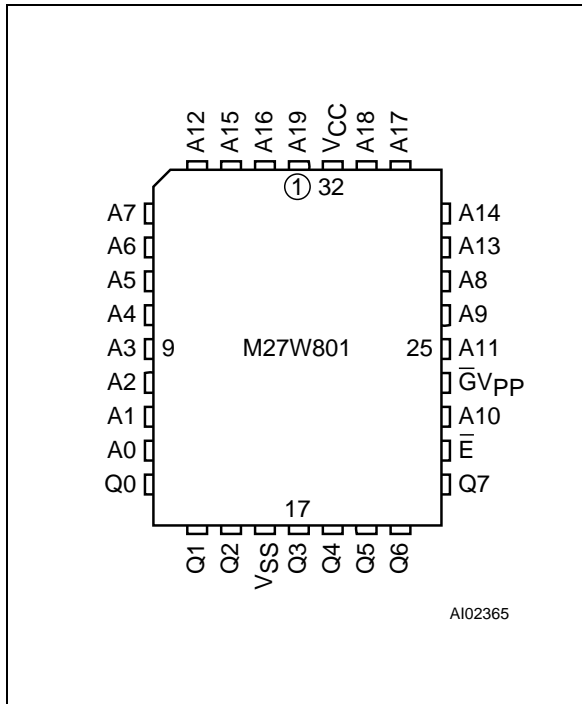
**Signal Names**

A0-A19	Address Inputs
Q0-Q7	Data Outputs
$\bar{E}$	Chip Enable
$\bar{G}V_{PP}$	Output Enable / Program Supply
$V_{CC}$	Supply Voltage
$V_{SS}$	Ground

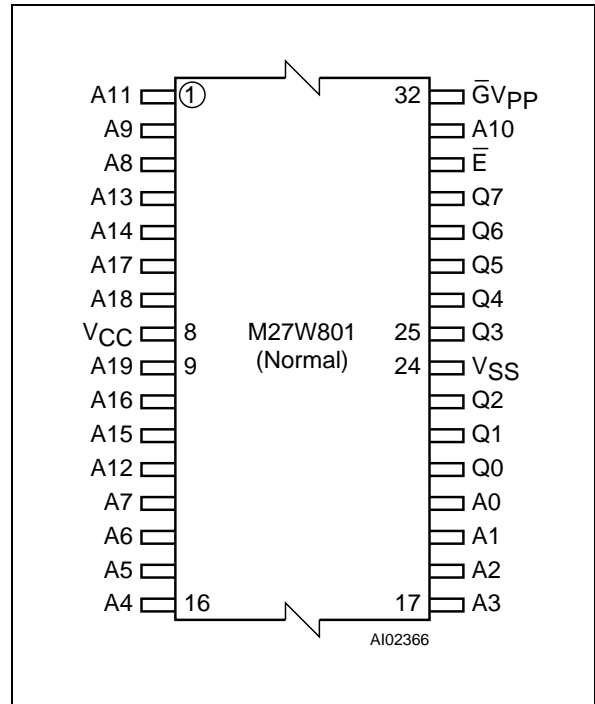
**Logic Diagram**


# M27W801

## PLCC Pin Connections



## TSOP Pin Connections



## ORDERING INFORMATION SCHEME

Example: M27W801 -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 (M27V801).  
 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 SGS-THOMSON Sales Office nearest to you.