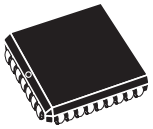
M27W401

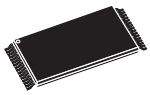
4 Mbit (512Kb x 8) Low Voltage OTP EPROM

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 M27C4001
- LOW POWER CONSUMPTION:
  - 15µA max Standby Current
  - 15mA max Active Current at 5MHz
- PROGRAMMING TIME 100µs/byte (typical)
- HIGH RELIABILITY CMOS TECHNOLOGY
  - 2,000V ESD Protection
  - 200mA Latchup Protection Immunity
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 41h



PLCC32 (K)



TSOP32 (N)
8 x 20mm

DESCRIPTION

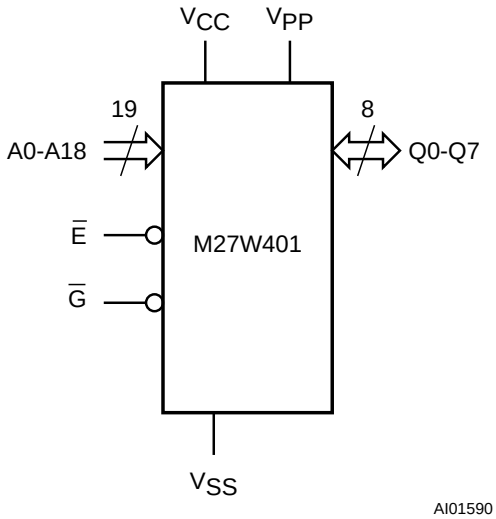
The M27W401 is a low voltage 4 Mbit EPROM offered in the OTP range (one time programmable). It is ideally suited for microprocessor systems requiring large data or program storage and is organised as 524,288 by 8 bits.

The M27W401 operates in the read mode with a supply voltage as low as 2.7V at –40 to 85°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.

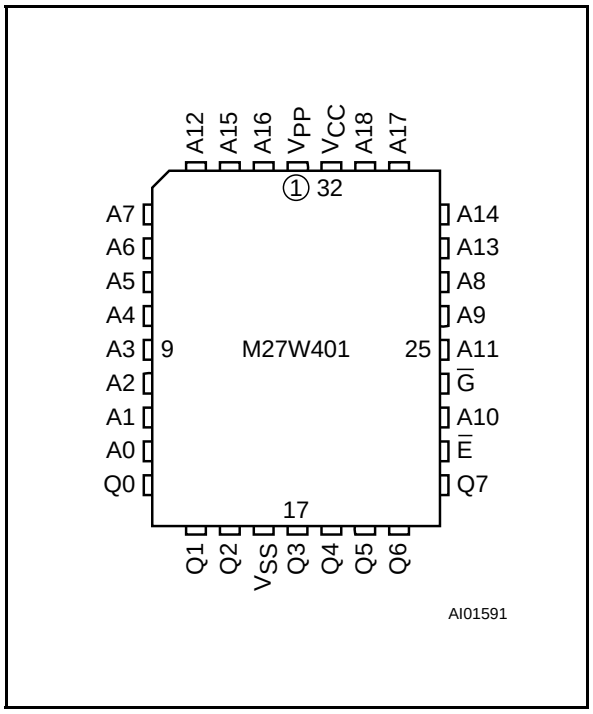
Signal Names

A0-A18	Address Inputs
Q0-Q7	Data Outputs
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
V_{PP}	Program Supply
V_{CC}	Supply Voltage
V_{SS}	Ground

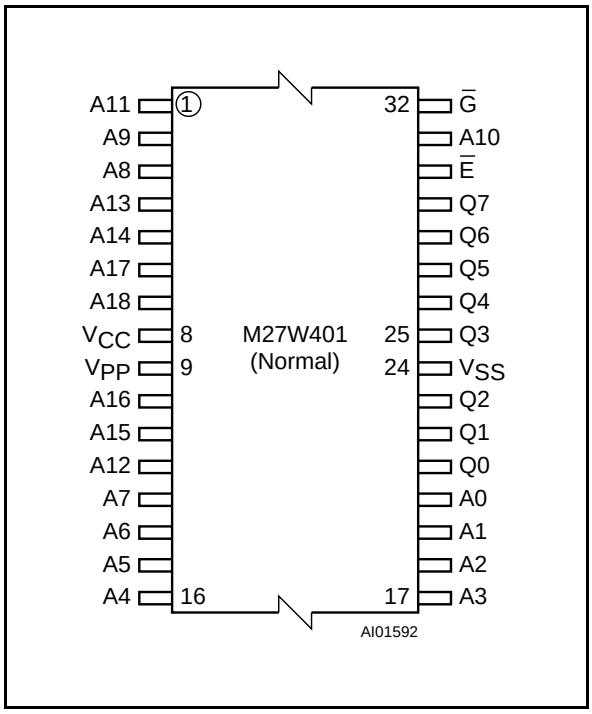
Logic Diagram



LCC Pin Connections



TSOP Pin Connections



ORDERING INFORMATION SCHEME

Example: M27W401 -80 K 6 TR

Speed		Packages		Temperature Range		Option	
-80 (1,2)	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 (3)	
-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_{CC} = 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.