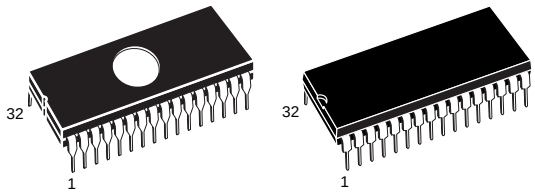
M27V401

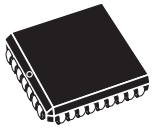
4 Mbit (512Kb x 8) Low Voltage UV EPROM and OTP EPROM

DATA BRIEFING

- LOW VOLTAGE READ OPERATION: 3V to 3.6V
- FAST ACCESS TIME: 120ns
- LOW POWER CONSUMPTION:
  - Active Current 15mA at 5MHz
  - Standby Current 20µA
- PROGRAMMING VOLTAGE: 12.75V ± 0.25V
- PROGRAMMING TIME: 100µs/byte (typical)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 41h



FDIP32W (F) PDIP32 (B)



PLCC32 (K) TSOP32 (N)
8 x 20mm

DESCRIPTION

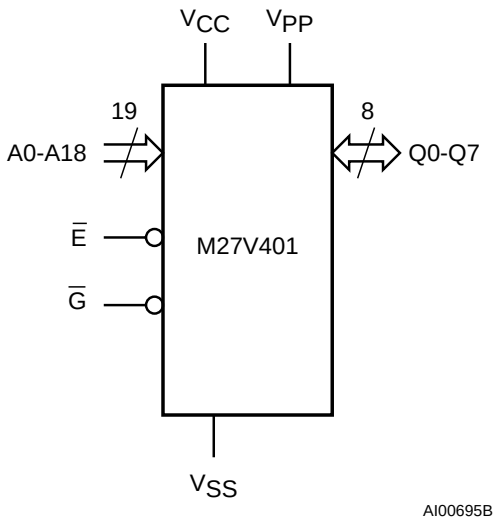
The M27V401 is a low voltage 4 Mbit EPROM offered in the two range UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for microprocessor systems requiring large data or program storage and is organised as 524,288 by 8 bits.

The M27V401 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.

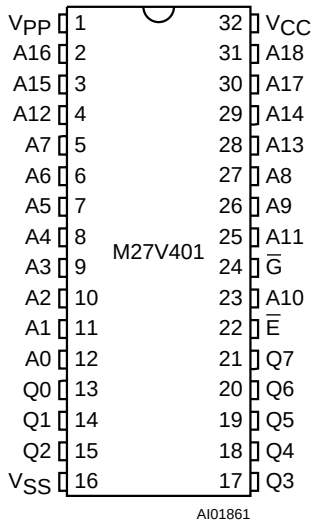
The FDIP32W (window ceramic frit-seal package) has a transparent lid which allow the user to expose the chip to ultraviolet light to erase the bit pattern. A new pattern can then be written to the device by following the programming procedure.

For applications where the content is programmed only one time and erasure is not required, the M27V201 is offered in PDIP32, PLCC32 and TSOP32 (8 x 20 mm) packages.

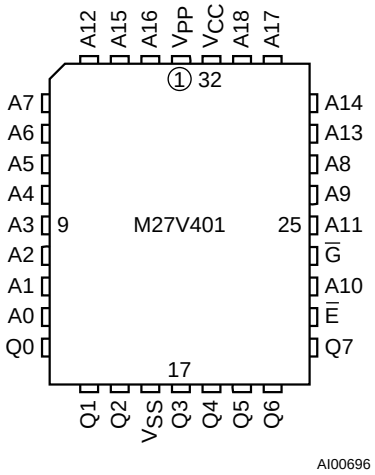
Logic Diagram



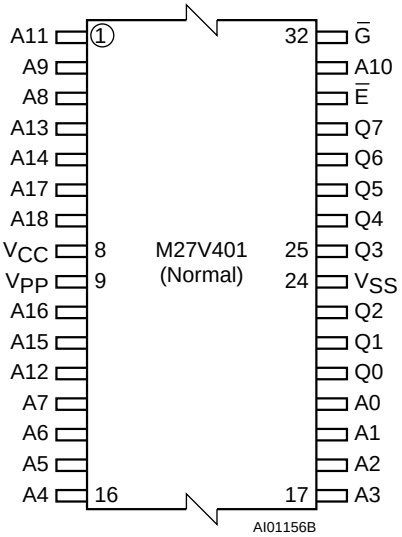
DIP Pin Connections



LCC Pin Connections



TSOP Pin Connections



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

ORDERING INFORMATION SCHEME

Example: M27V401 -120 K 6 TR

Speed		Package		Temperature Range		Option	
-120	120ns	F	FDIP32W	1	0 to 70 °C	TR	Tape & Reel Packing
-150	150ns	B	PDIP32	6	–40 to 85 °C		
-180	180ns	K	PLCC32				
-200	200ns	N	TSOP32 8 x 20mm				

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.