



# M27V512

## 512 Kbit (64Kb x 8) Low Voltage UV EPROM and OTP EPROM

### DATA BRIEFING

- LOW VOLTAGE READ OPERATION:  
3V to 3.6V
- FAST ACCESS TIME: 100ns
- LOW POWER CONSUMPTION:
  - Active Current 10mA at 5MHz
  - Standby Current 10 $\mu$ A
- PROGRAMMING VOLTAGE: 12.75V  $\pm$  0.25V
- PROGRAMMING TIME: 100 $\mu$ s/byte (typical)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 3Dh

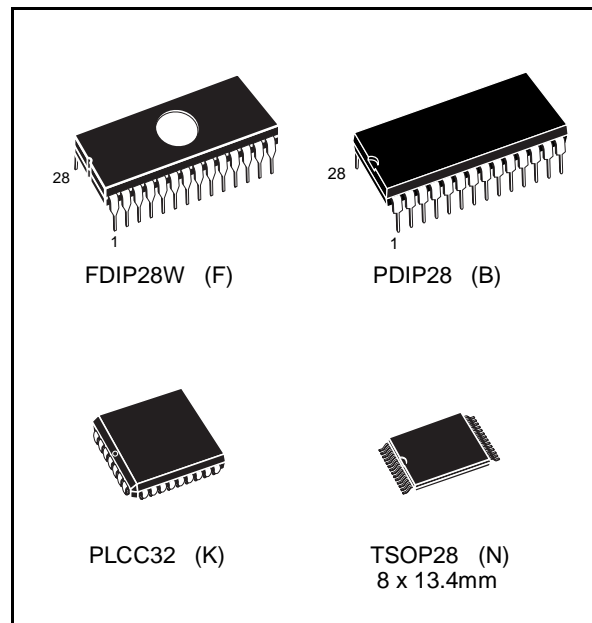
### DESCRIPTION

The M27V512 is a low voltage 512 Kbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for microprocessor systems and is organized as 65,536 by 8 bits.

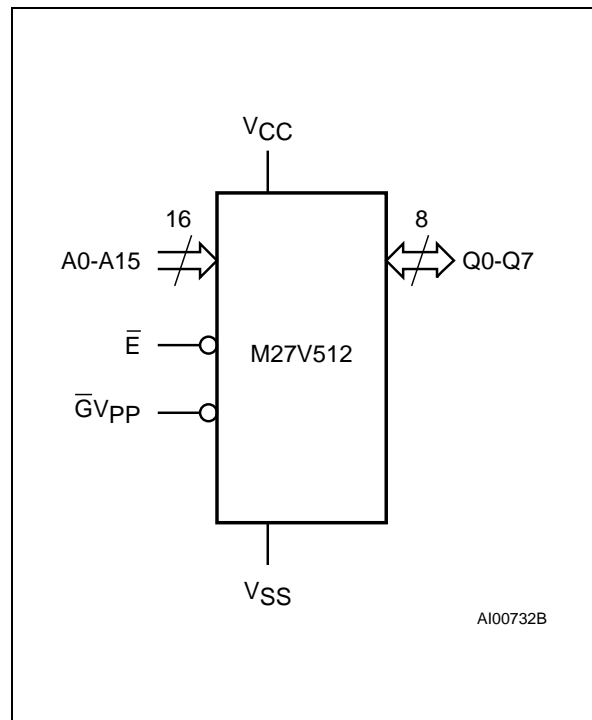
The M27V512 operates in the read mode with a supply voltage as low as 3V. The decrease in operating power allows either a reduction of the size of the battery or an increase in the time between battery recharges.

The FDIP28W (window ceramic frit-seal package) has transparent lid which allows 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 M27V512 is offered in PDIP28, PLCC32 and TSOP28 (8 x 13.4 mm) packages.

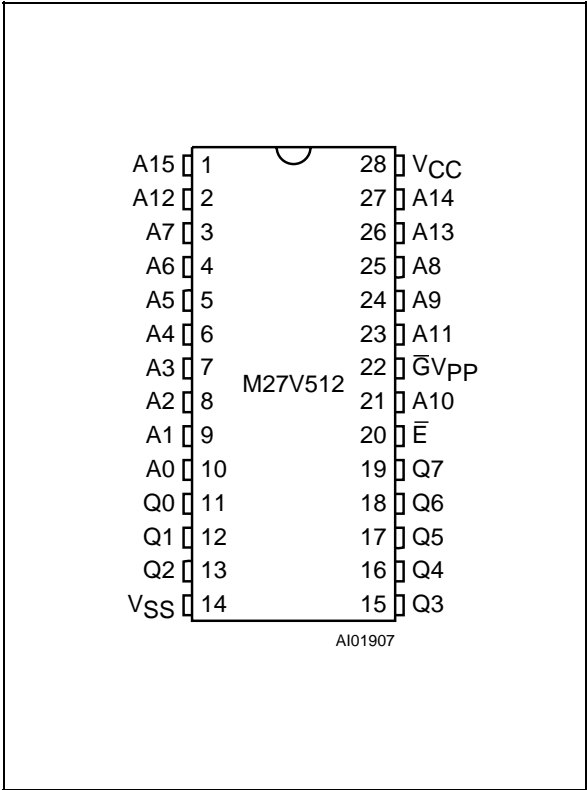


### Logic Diagram

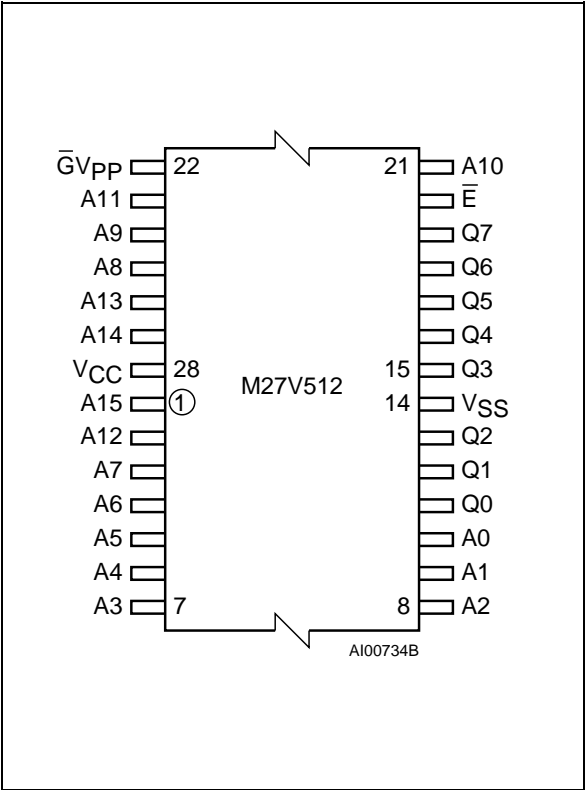


M27V512

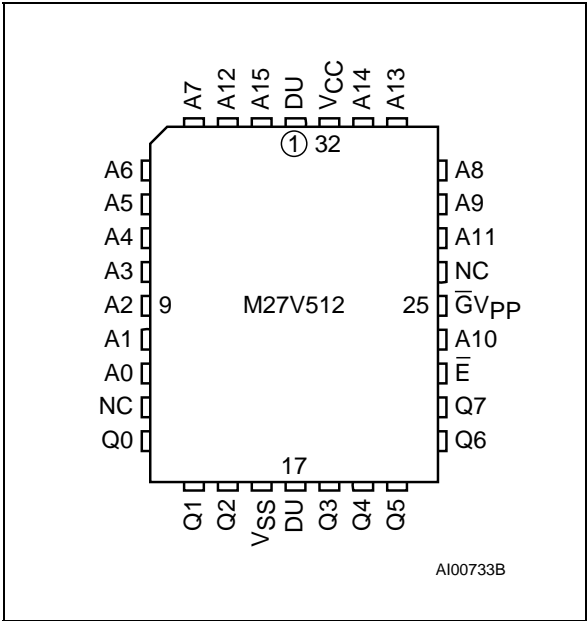
DIP Pin Connections



TSOP Pin Connections



LCC Pin Connections



Warning: NC = Not Connected, DU = Don't Use

Signal Names

A0-A15	Address Inputs
Q0-Q7	Data Outputs
$\bar{E}$	Chip Enable
$\bar{G}V_{PP}$	Output Enable / Program Supply
VCC	Supply Voltage
VSS	Ground

## ORDERING INFORMATION SCHEME

Example: M27V512 -100 K 1 TR

Speed		Package		Temperature Range		Option	
-100 <sup>(1)</sup>	100 ns	F	FDIP28W	1	0 to 70 °C	TR	Tape & Reel Packing
-120	120 ns	B	PDIP28	6	-40 to 85 °C		
-150	150 ns	K	PLCC32				
-200	200 ns	N	TSOP28 8 x 13.4mm				

**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.