



## 512 Kbit (64Kb x8) UV EPROM and OTP EPROM

### DATA BRIEFING

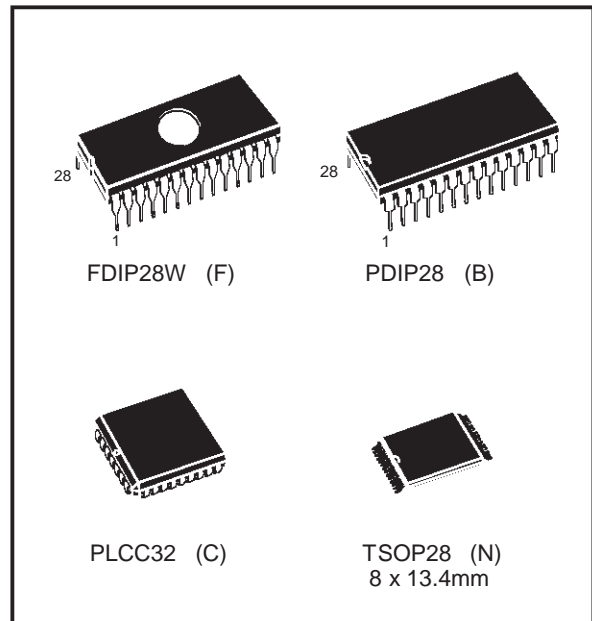
- 5V  $\pm$  10% SUPPLY VOLTAGE in READ OPERATION
- FAST ACCESS TIME: 45ns
- LOW POWER CONSUMPTION:
  - Active Current 30mA
  - Standby Current 100 $\mu$ A
- PROGRAMMING VOLTAGE: 12.75V  $\pm$  0.25V
- PROGRAMMING TIMES of AROUND 6sec. (PRESTO IIB ALGORITHM)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 3Dh

### DESCRIPTION

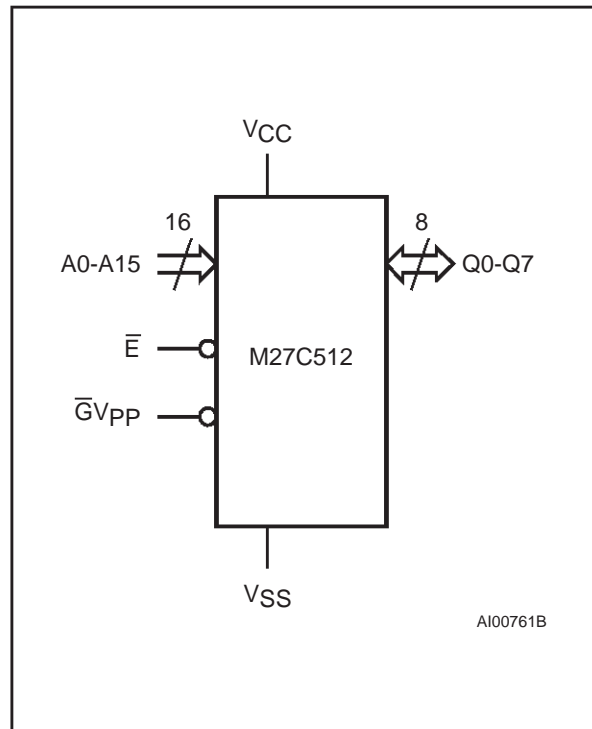
The M27C512 is a 512 Kbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for applications where fast turn-around and pattern experimentation are important requirements and is organized as 65,536 by 8 bits.

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 M27C512 is offered in PDIP28, PLCC32 and TSOP28 (8 x 13.4 mm) packages.

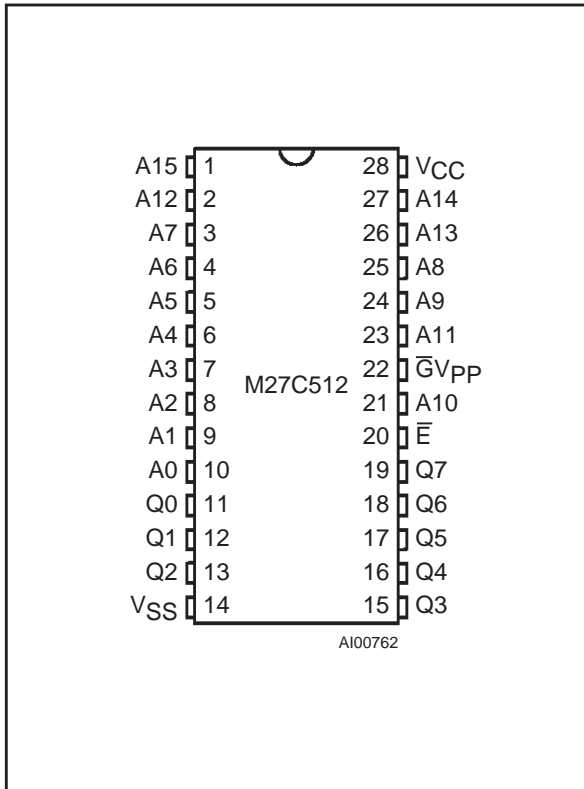


### Logic Diagram

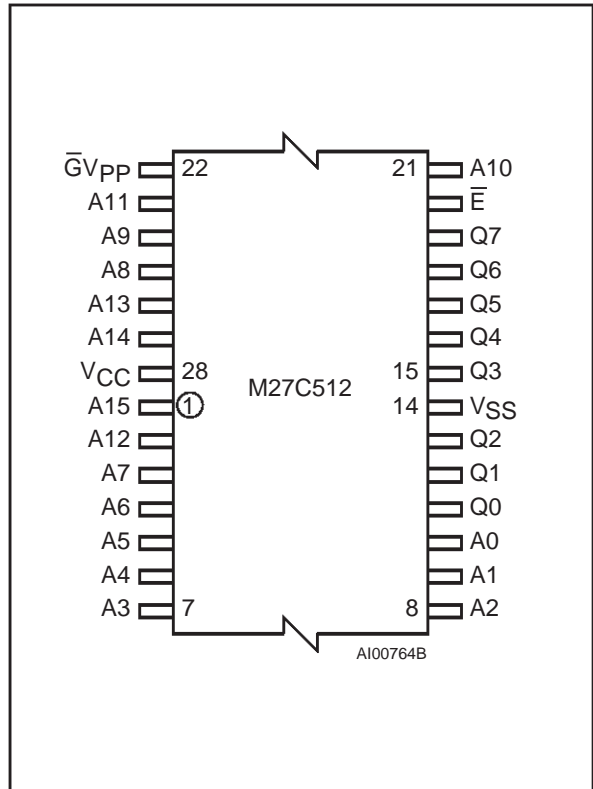


# M27C512

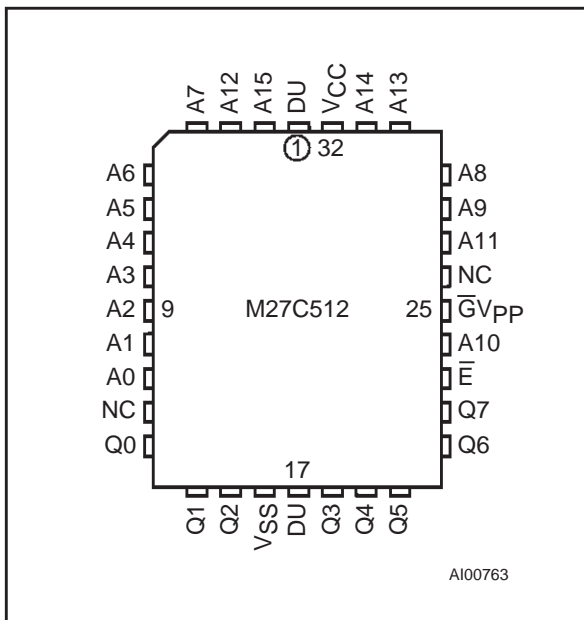
## DIP Pin Connections



## 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: M27C512 -70 X C 1 TR

Speed		V <sub>CC</sub> Tolerance		Package		Temperature Range		Option	
-45 <sup>(1)</sup>	45 ns	X	± 5%	F	FDIP28W	1	0 to 70 °C	X	Additional Burn-in
-60	60 ns	blank	± 10%	B	PDIP28	6	-40 to 85 °C		
-70	70 ns			C	PLCC32	3	-40 to 125 °C	TR	Tape & Reel Packing
-80	80 ns			N	TSOP28 8 x 13.4mm				
-90	90 ns								
-10	100 ns								
-12	120 ns								
-15	150 ns								
-20	200 ns								

**Note:** 1. High Speed, see AC Characteristics section for further information

For a list of available options (Speed, V<sub>CC</sub> Tolerance, Package, etc...) or for further information on any aspect of this device, please contact the STMicroelectronics Sales Office nearest to you.