

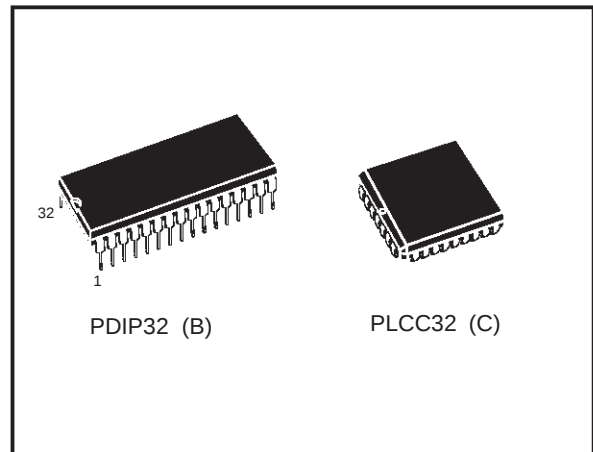


M28F512

512 Kbit (64Kb x8, Bulk) Flash Memory

DATA BRIEFING

- 5V $\pm$ 10% SUPPLY VOLTAGE
- 12V PROGRAMMING VOLTAGE
- FAST ACCESS TIME: 90ns
- BYTE PROGRAMING TIME: 10 μ s typical
- ELECTRICAL CHIP ERASE in 1s RANGE
- LOW POWER CONSUMPTION
 - Stand-by Current: 5 μ A typical
- 10,000 ERASE/PROGRAM CYCLES
- INTEGRATED ERASE/PROGRAM-STOP TIMER
- 20 YEARS DATA RETENTION
 - Defectivity below 1ppm/year
- ELECTRONIC SIGNATURE
 - Manufacturer Code: 20h
 - Device Code: 02h



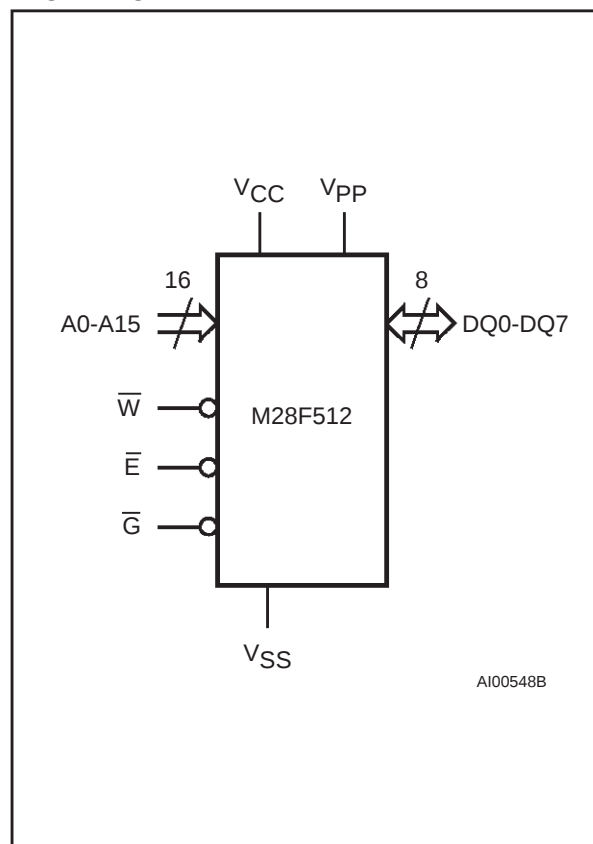
DESCRIPTION

The M28F512 Flash memory is a non-volatile memory that may be erased electrically at the chip level and programmed by byte. It is organised as 64 Kbytes of 8 bits. It uses a command register architecture to select the operating modes and thus provides a simple microprocessor interface. The device is offered in PDIP32 and PLCC32 packages.

Signal Names

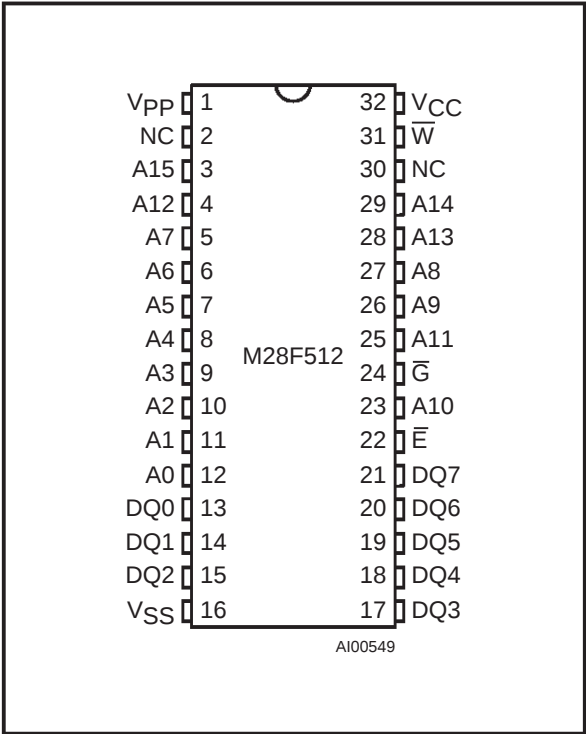
A0-A15	Address Inputs
DQ0-DQ7	Data Inputs / Outputs
$\bar{E}$	Chip Enable
$\bar{G}$	Output Enable
$\bar{W}$	Write Enable
V _{PP}	Program Supply
V _{CC}	Supply Voltage
V _{SS}	Ground

Logic Diagram



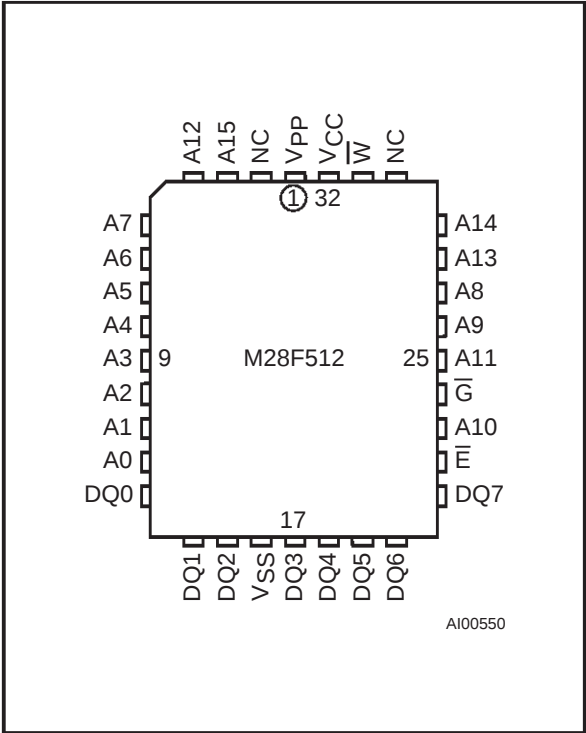
M28F512

DIP Pin Connections



Warning: NC = Not Connected.

LCC Pin Connections



Warning: NC = Not Connected.

Ordering Information Scheme

For a list of available options or for further information on any aspect of this device, please contact the STMicroelectronics Sales Office nearest to you.

Example: M28F512 -12 X B 1 TR

Operating Voltage

F 5V

Speed

- 90 90ns
- 10 100ns
- 12 120ns
- 15 150ns
- 20 200ns

Power Supplies

- blank VCC ± 10%
- X VCC ± 5%

Package

- B PDIP32
- C PLCC32

Temp. Range

- 1 0 to 70 °C
- 6 -40 to 85 °C
- 3 -40 to 125 °C

Option

- TR Tape & Reel Packing

Note: Device are shipped from the factory with the memory content erased (to FFh)