

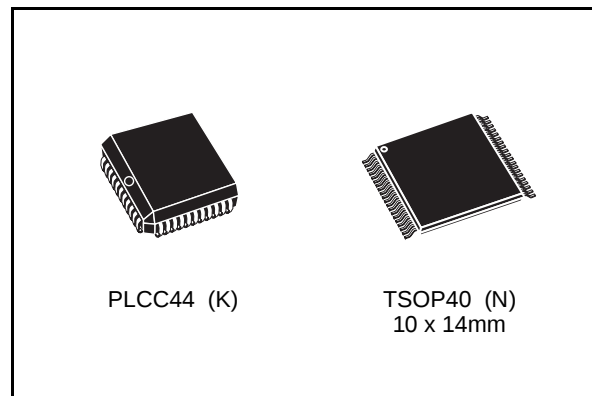


M28F102

1 Mbit (64Kb x16, Bulk Erase) Flash Memory

DATA BRIEFING

- 5V $\pm 10\%$ SUPPLY VOLTAGE
- 12V PROGRAMMING VOLTAGE
- FAST ACCESS TIME: 90ns
- BYTE PROGRAMMING 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
- OTP COMPATIBLE PACKAGES and PINOUT
- INTEGRATED ERASE/PROGRAM-STOP TIMER
- 20 YEARS DATA RETENTION
 - Defectivity below 1ppm/year
- ELECTRONIC SIGNATURE
 - Manufacturer Code: 0020h
 - Device Code: 0050h



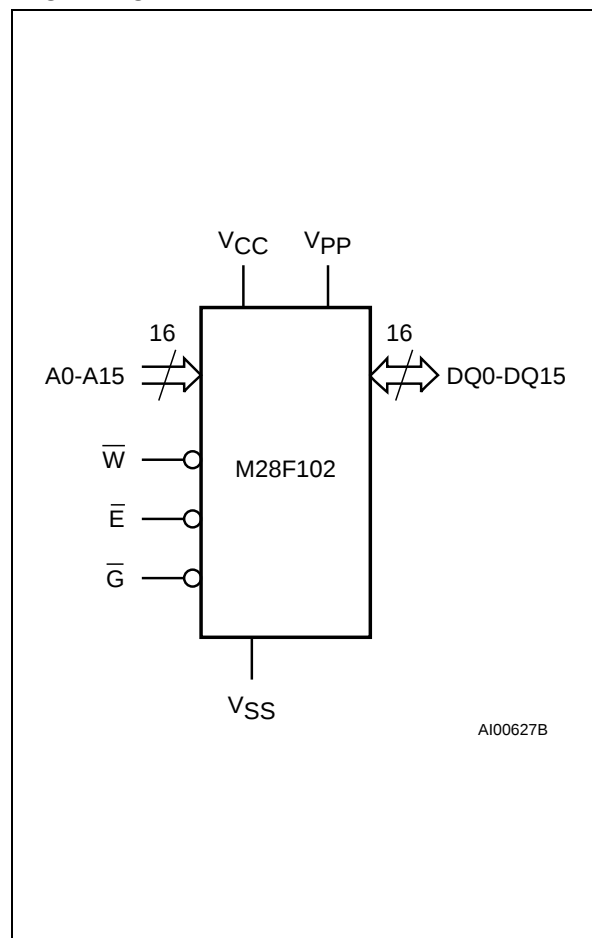
DESCRIPTION

The M28F102 Flash memory is a non-volatile memory that may be erased electrically at the chip level and programmed by word. It is organised as 64 Kwords of 16 bits. It uses a command register architecture to select the operating modes and thus provides a simple microprocessor interface. The device is offered in PLCC44 and TSOP40 (10 x 14mm) packages.

Signal Names

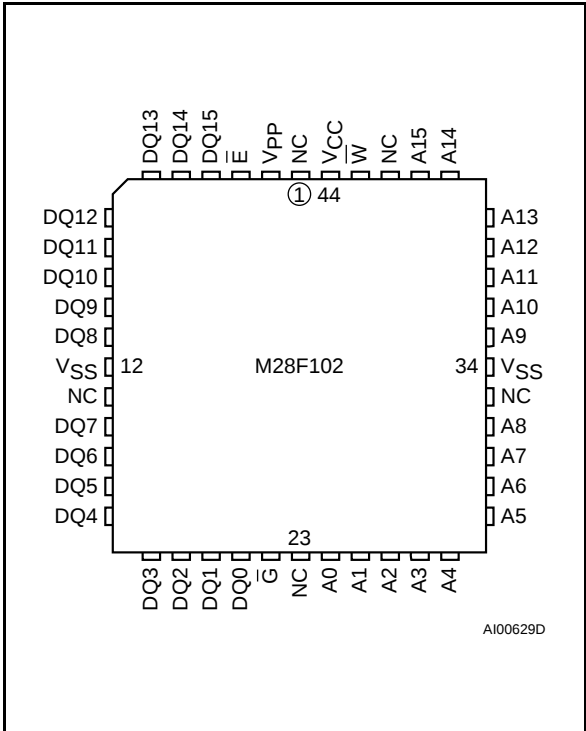
A0-A15	Address Inputs
DQ0-DQ15	Data Inputs / Outputs
$\bar{E}$	Chip Enable
$\bar{G}$	Output Enable
$\bar{W}$	Write Enable
V _{PP}	Program Supply
V _{CC}	Supply Voltage
V _{SS}	Ground

Logic Diagram

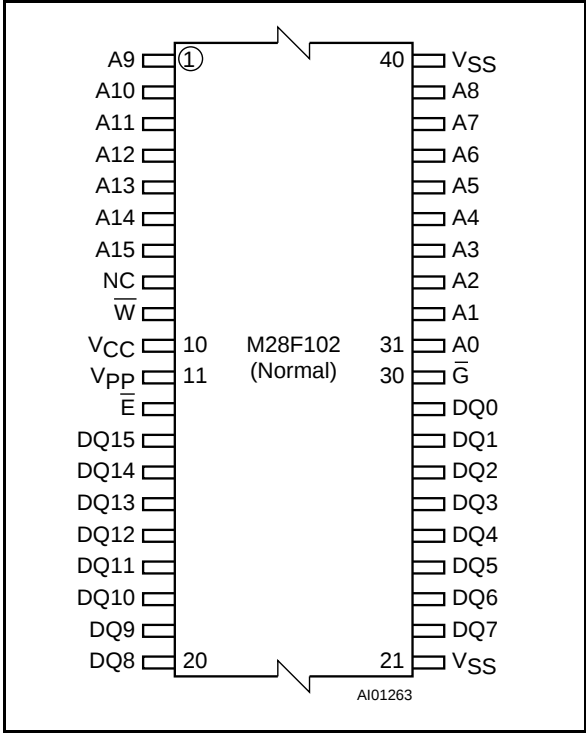


M28F102

LCC Pin Connections



TSOP Pin Connections



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: M28F102 -100 X N 1 TR

Operating Voltage

F 5V

Speed

- 90 90ns
- 100 100ns
- 120 120ns
- 150 150ns

Power Supplies

- blank $V_{CC} \pm 10\%$
- X $V_{CC} \pm 5\%$

Package

- K PLCC44
- N TSOP40
10 x 14mm

Temp. Range

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

Option

- TR Tape & Reel
Packing

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