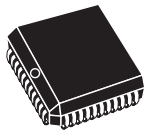
M28F102

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

DATA BRIEFING

- 5V ±10% SUPPLY VOLTAGE
- 12V PROGRAMMING VOLTAGE
- FAST ACCESS TIME: 90ns
- BYTE PROGRAMMING TIME: 10µs typical
- ELECTRICAL CHIP ERASE in 1s RANGE
- LOW POWER CONSUMPTION
  - Stand-by Current: 5µA 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



PLCC44 (K)

TSOP40 (N)
10 x 14mm

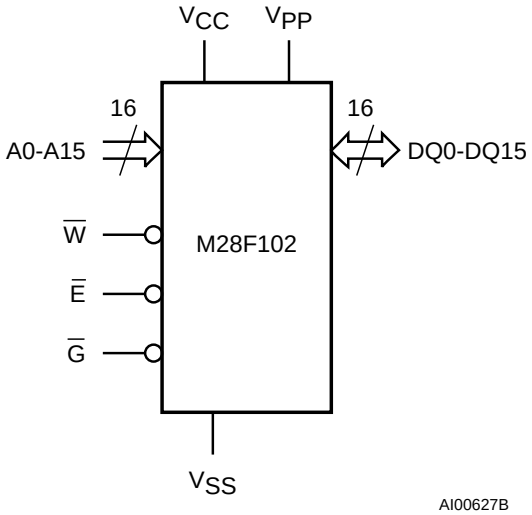
DESCRIPTION

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.

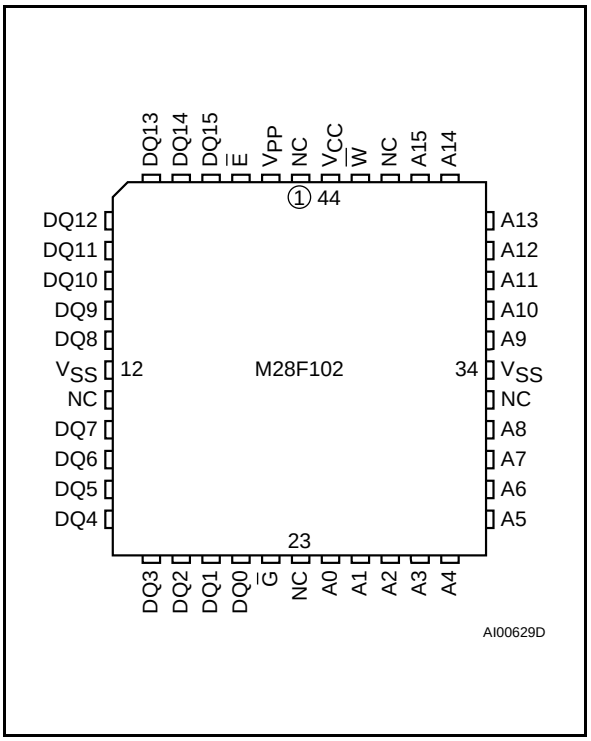
Signal Names

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

Logic Diagram

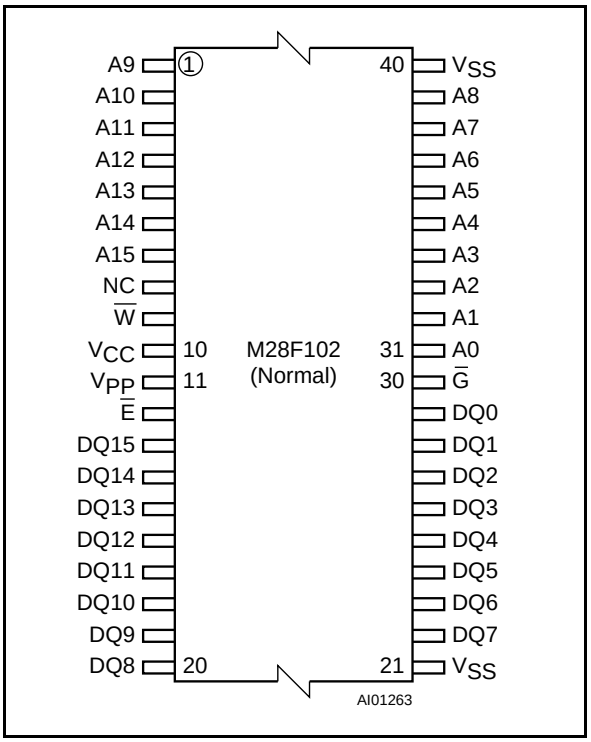


LCC Pin Connections



Warning: NC = Not Connected

TSOP 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: 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).