



## 1 Mbit (128Kb x8, Uniform Block) Single Supply Flash Memory

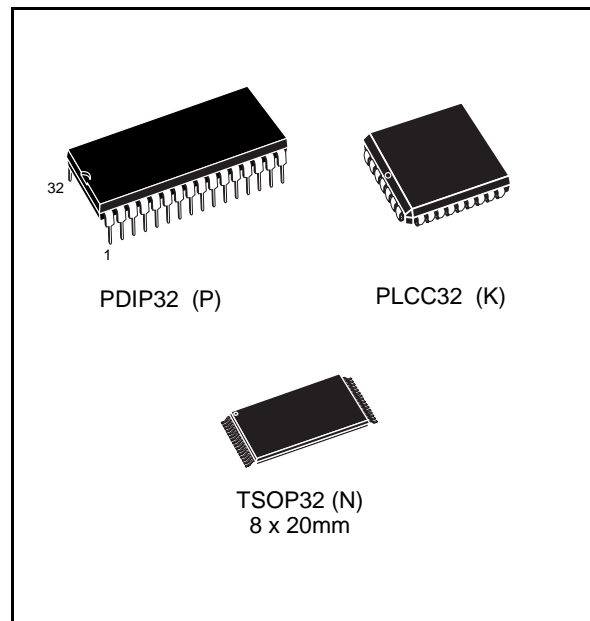
### DATA BRIEFING

- **SUPPLY VOLTAGE**
  - 5V ± 10% Supply Voltage for Program, Erase and Read operations
- **FAST ACCESS TIME: 35ns**
- **FAST PROGRAMMING TIME: 10µs typical**
- **PROGRAM/ERASE CONTROLLER (P/E.C.)**
  - Program Byte-by-Byte
  - Status Register bits
- **MEMORY BLOCKS**
  - 8 Uniform Blocks
- **BLOCK ERASE**
  - Block, Multi-Block and Chip Erase
- **MULTI BLOCK PROTECTION**
- **ERASE SUSPEND and RESUME MODES**
  - Read or Program another Block during Erase Suspend
- **BYPASS MODE**
  - Reduces overall programming time when issuing multiple program command sequences
- **LOW POWER CONSUMPTION**
  - Stand-by and Automatic Stand-by
  - 100,000 program/erase cycles per block
  - 20 Years of Data Retention
  - Defectivity below 1ppm/year
- **ELECTRONIC SIGNATURE**
  - Manufacturer Code: 20h
  - Device Code: 90h

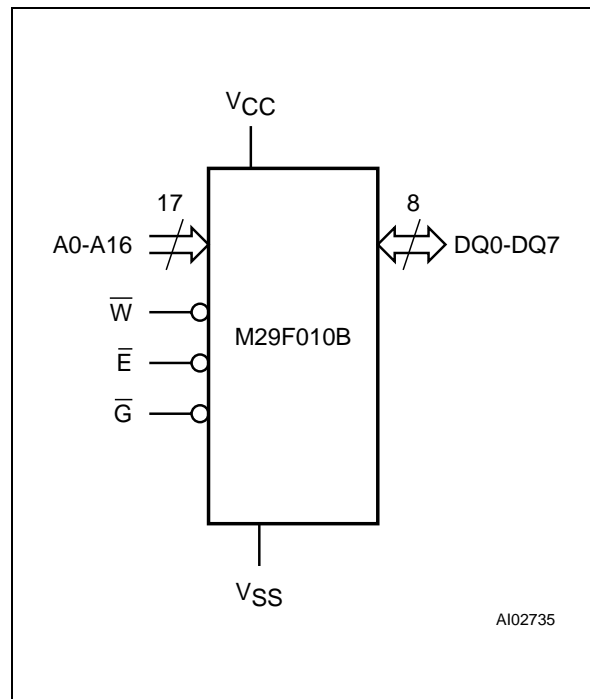
### DESCRIPTION

The M29F010B is a 1 Mbit non-volatile Flash memory that can be erased electrically at the block or chip level and programmed in-system on a Byte-by-Byte basis. The M29F010B is offered in 32-lead PDIP, PLCC and TSOP (8x20mm) packages. When shipped, all bits of the M29F010B are in the '1' state.

The array matrix organisation allows each block to be erased and reprogrammed without affecting other blocks. Each block can be programmed and erased over 100,000 cycles.

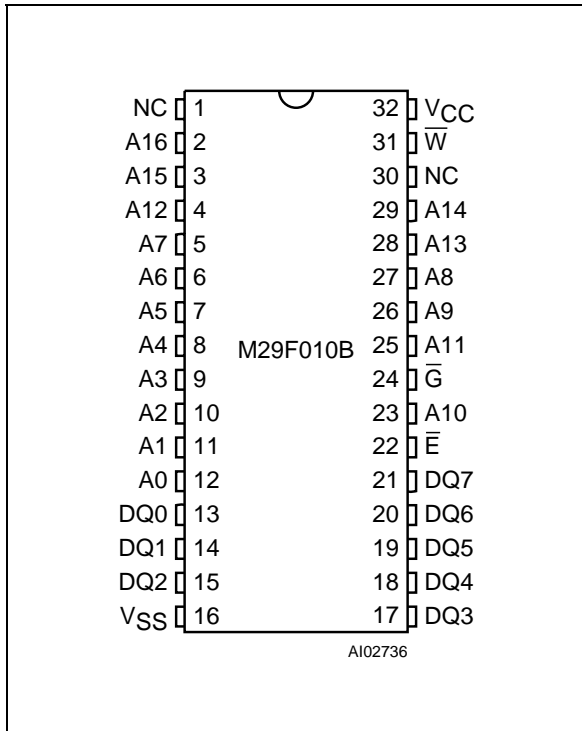


### Logic Diagram

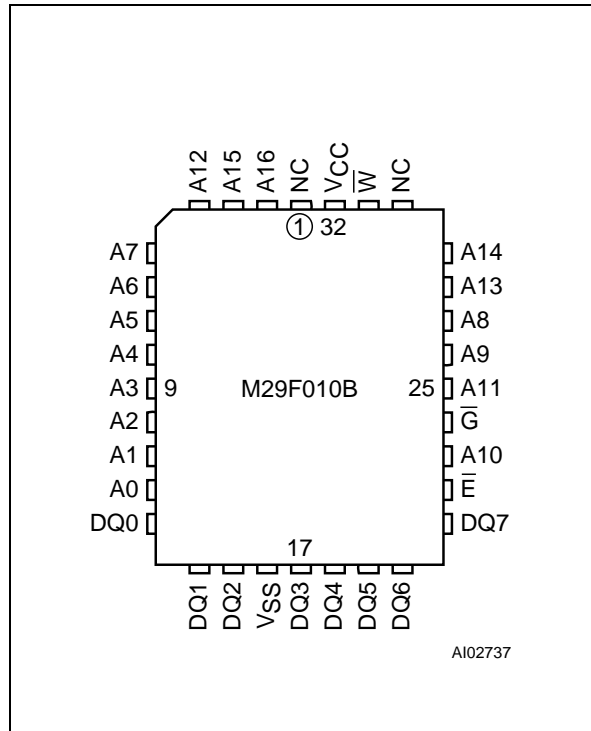


## M29F010B

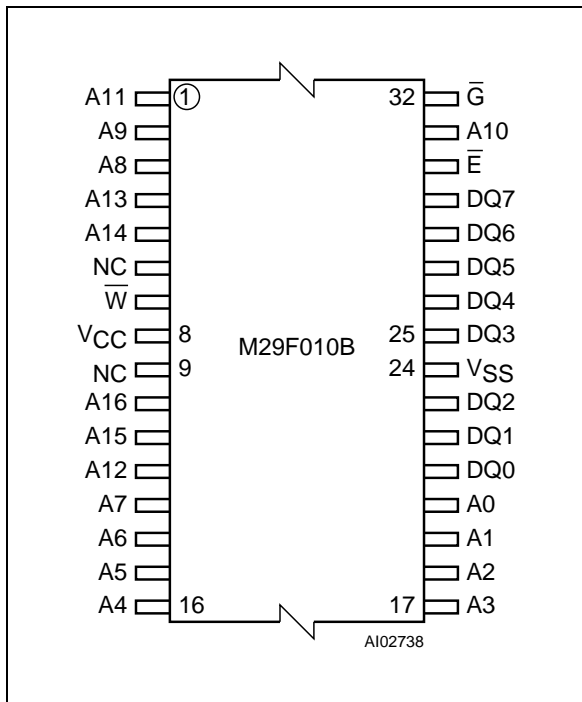
### DIP Pin Connections



### LCC Pin Connections



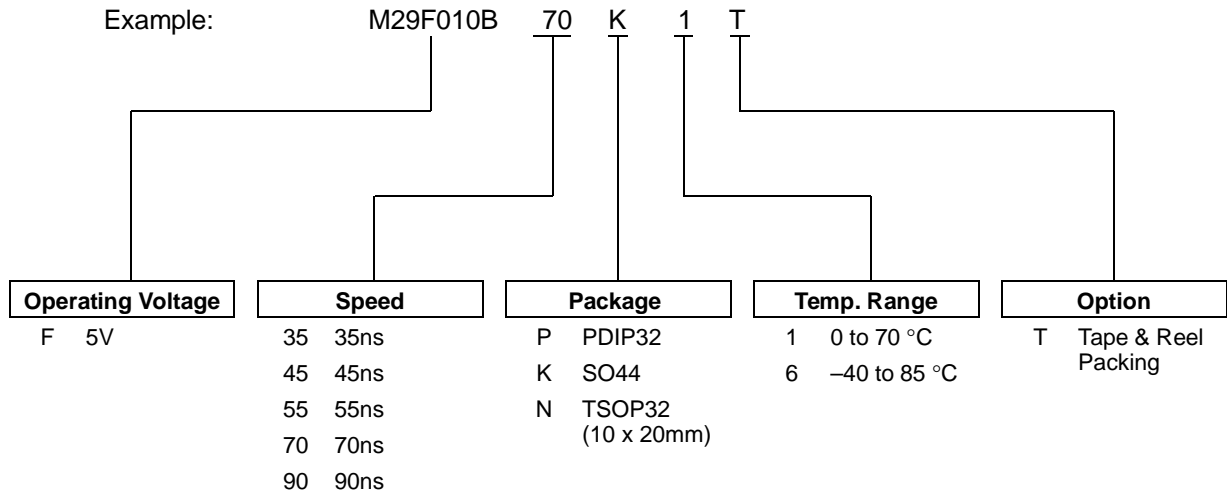
### TSOP Pin Connections



### Signal Names

A0-A16	Address Inputs
DQ0-DQ7	Data Input/Outputs, Command Inputs
$\bar{E}$	Chip Enable
$\bar{G}$	Output Enable
$\bar{W}$	Write Enable
VCC	Supply Voltage
VSS	Ground
NC	Pin Not Connected Internally

## ORDERING INFORMATION SCHEME



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

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.