

M29W010B

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

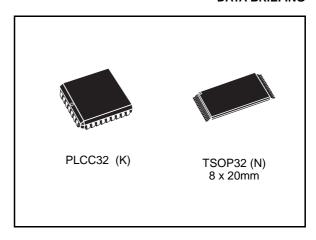
DATA BRIEFING

- SUPPLY VOLTAGE
 - 2.7V to 3.6V Supply Voltage for Program, Erase and Read operations
- FAST ACCESS TIME: 45ns
- 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: 23h

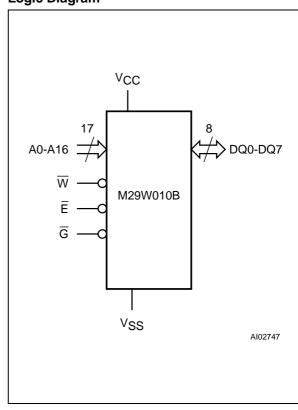
DESCRIPTION

The M29W010B 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 M29W010 is offered in 32-lead PLCC and TSOP (8x20mm) packages. When shipped, all bits of the M29W010 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.

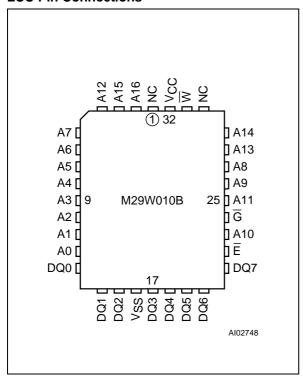


Logic Diagram

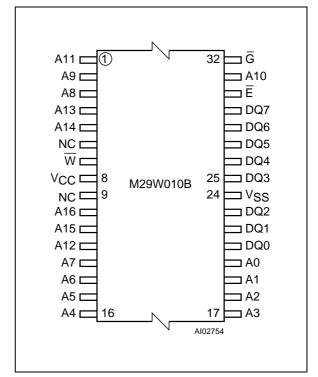


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LCC Pin Connections



TSOP Pin Connections

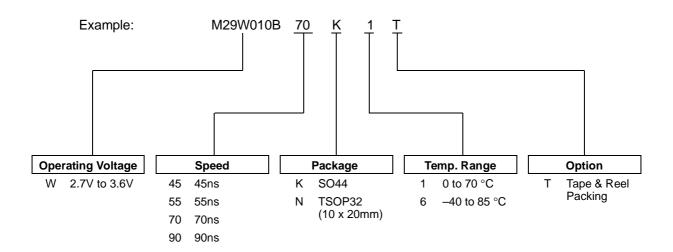


Signal Names

| A0-A16 | Address Inputs |
|-----------------|------------------------------------|
| DQ0-DQ7 | Data Input/Outputs, Command Inputs |
| Ē | Chip Enable |
| G | Output Enable |
| W | Write Enable |
| V _{CC} | Supply Voltage |
| V _{SS} | Ground |
| NC | Pin Not Connected Internally |

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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.

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