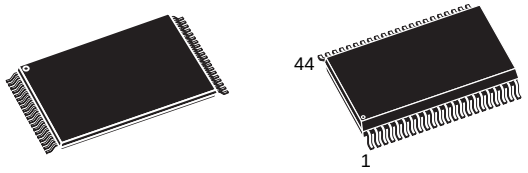
M29F016B

16 Mbit (2Mb x8, Uniform Block) Single Supply Flash Memory

DATA BRIEFING

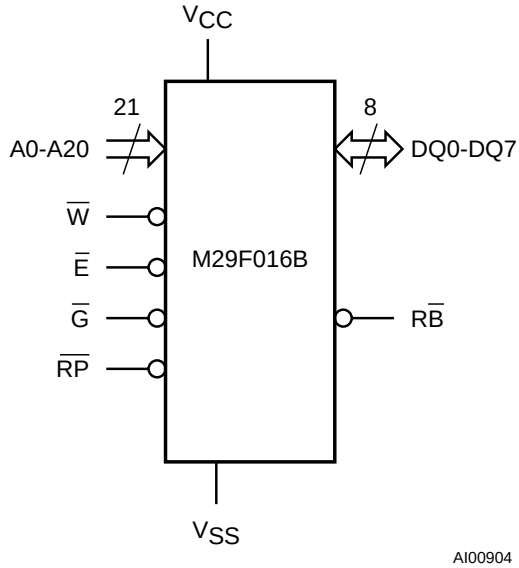
- 5V±10% SUPPLY VOLTAGE for PROGRAM, ERASE and READ OPERATIONS
- FAST ACCESS TIME: 55ns
- FAST PROGRAMMING TIME
  - 10µs by Byte typical
- PROGRAM/ERASE CONTROLLER (P/E.C.)
  - Program Byte-by-Byte
  - Status Register bits and Ready/Busy Output
- CFI COMPLIANT
- MEMORY BLOCKS
  - 32 Uniform Blocks of 64 Kbyte
- BLOCK, MULTI-BLOCK and CHIP ERASE
- MULTI BLOCK PROTECTION/TEMPORARY UNPROTECTION MODES
- BLOCK PROTECTION ACCESS COMMAND
- ERASE SUSPEND and RESUME MODES
  - Read and Program another Block during Erase Suspend
- BYPASS MODE
  - Faster Programming Sequence
- LOW POWER CONSUMPTION
  - Stand-by and Automatic Stand-by
- 100,000 PROGRAM/ERASE CYCLES per BLOCK
- 20 YEARS DATA RETENTION
  - Defectivity below 1 ppm/year
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: ADh



TSOP40 (N)
10 x 20 mm

SO44 (M)

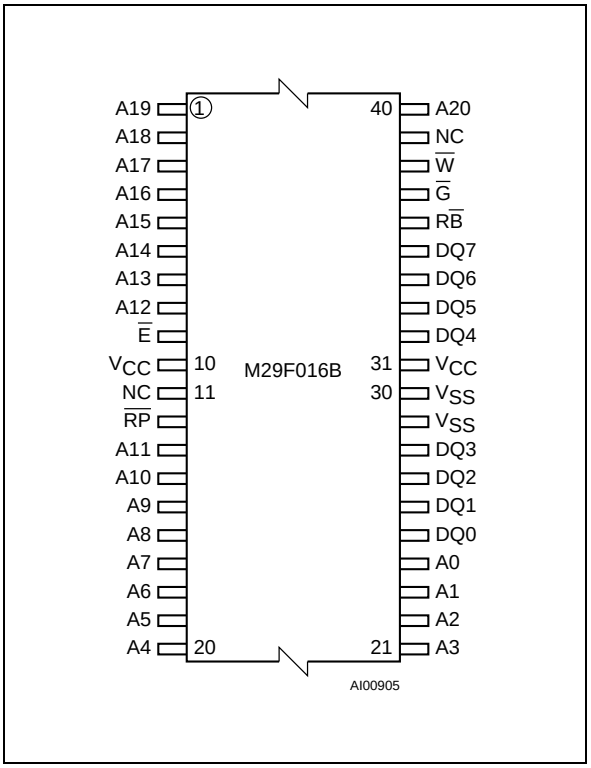
Logic Diagram



DESCRIPTION

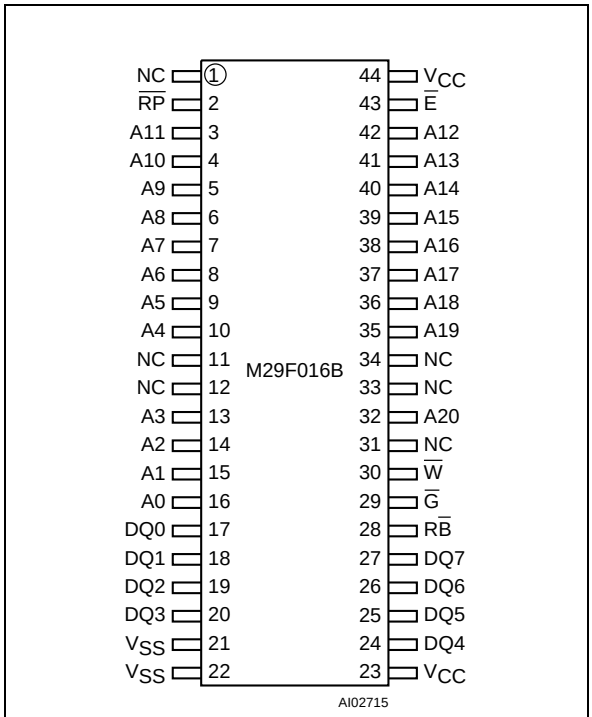
The M29F016B is a non-volatile memory that may be erased electrically at the block or chip level and programmed in-system on a Byte-by-Byte basis using only a single 5V V_{CC} supply. For Program and Erase operations the necessary high voltages are generated internally. The device can also be programmed in standard programmers.

TSOP Pin Connections



Warning: NC = Not Connected.

SO Pin Connections

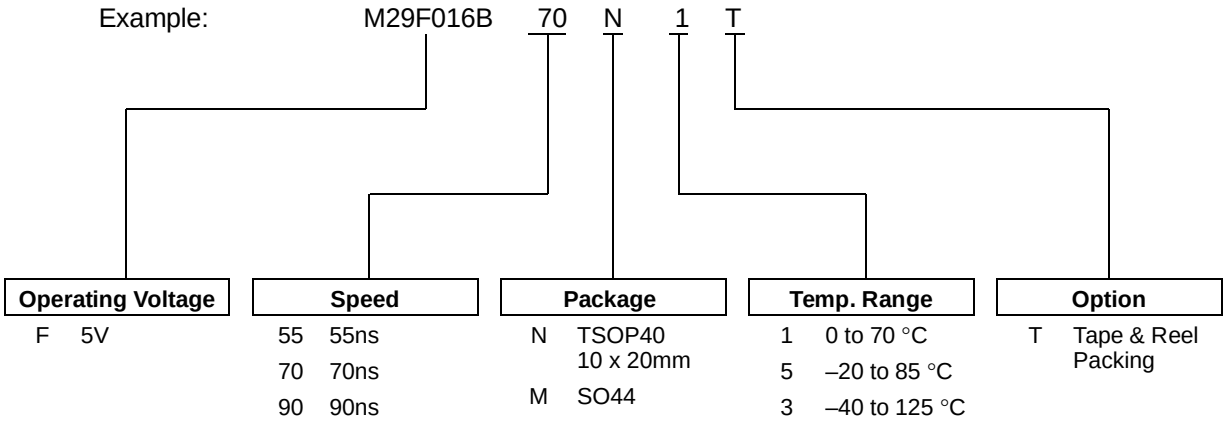


Warning: NC = Not Connected.

Signal Names

A0-A20	Address Inputs
DQ0-DQ7	Data Input/Outputs, Command Inputs
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
$\overline{W}$	Write Enable
$\overline{RP}$	Reset / Block Temporary Unprotect
$R\overline{B}$	Ready/Busy Output
V_{CC}	Supply Voltage
V_{SS}	Ground

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.