



M29W017B

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

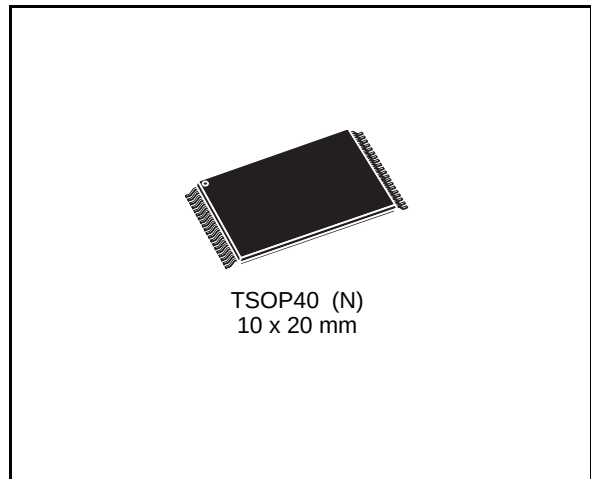
DATA BRIEFING

- 2.7V to 3.6V SUPPLY VOLTAGE for PROGRAM, ERASE and READ OPERATIONS
- FAST ACCESS TIME: 80ns
- FAST PROGRAMMING TIME: 13µs typical
- PROGRAM/ERASE CONTROLLER (P/E.C.)
 - Program Byte-by-Byte
 - Status Register bits and Ready/Busy Output
- MEMORY BLOCK for SECURITY CODE
- 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 1ppm/year
- ELECTRONIC SIGNATURE
 - Manufacturer Code: 20h
 - Device Code, M29W017B: C8h

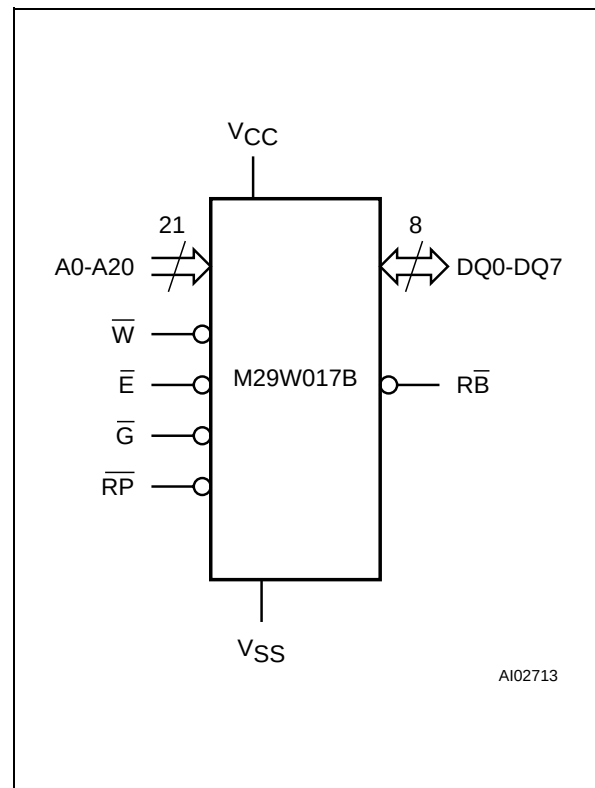
DESCRIPTION

The M29W017B 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 2.7V to 3.6V V_{CC} supply. For Program and Erase operations the necessary high voltages are generated internally. The device can also be programmed in standard programmers.

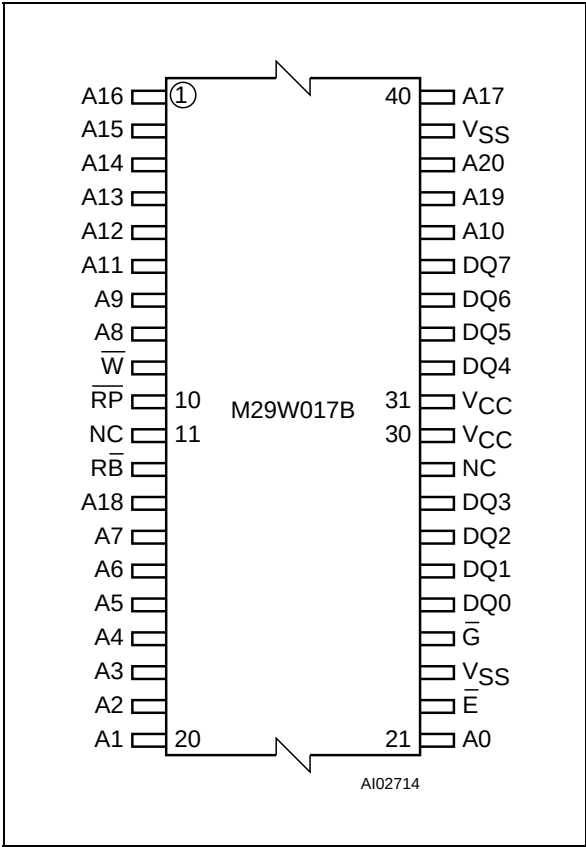
The array matrix organisation allows each block to be erased and reprogrammed without affecting other blocks.



Logic Diagram



TSOP Pin Connections



Warning: NC = Not Connected.

Signal Names

A0-A20	Address Inputs
DQ0-DQ7	Data Input/Outputs, Command Inputs
E	Chip Enable
G	Output Enable
W	Write Enable
RP	Reset / Block Temporary Unprotect
RB	Ready/Busy Output
V _{CC}	Supply Voltage
V _{SS}	Ground

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: M29W017B 90 N 1 T

Operating Voltage	W	2.7V to 3.6V
Speed	80 ⁽¹⁾	80ns
Package	N	TSOP40 10 x 20mm
Temp. Range	1	0 to 70 °C
	5	-20 to 85 °C
	6	-40 to 85 °C
Option	T	Tape & Reel Packing

Note: 1. This speed is obtained with V_{CC} = 3.0V to 3.6V and a load capacitor of 30pF.

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