



M27V800

8 Mbit (1Mb x8 or 512Kb x16) Low Voltage UV EPROM and OTP EPROM

DATA BRIEFING

- **LOW VOLTAGE READ OPERATION:**
3V to 3.6V
- **FAST ACCESS TIME:** 100ns
- **BYTE-WIDE or WORD-WIDE CONFIGURABLE**
- **8 Mbit MASK ROM REPLACEMENT**
- **LOW POWER CONSUMPTION**
 - Active Current 30mA at 8MHz
 - Standby Current 20 μ A
- **PROGRAMMING VOLTAGE:** 12.5V \pm 0.25V
- **PROGRAMMING TIME:** 100 μ s/byte (typical)
- **ELECTRONIC SIGNATURE**
 - Manufacturer Code: 0020h
 - Device Code: 00B2h

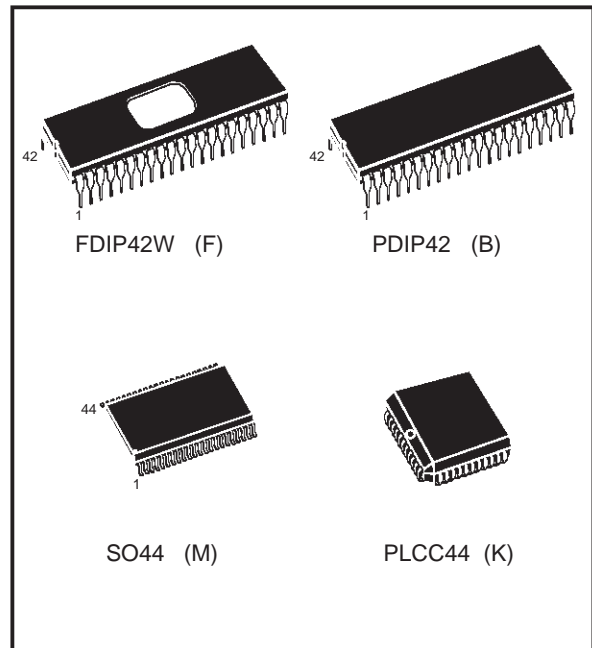
DESCRIPTION

The M27V800 is a low voltage 8 Mbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for microprocessor systems requiring large data or program storage. It is organised as either 1 Mbit words of 8 bit or 512 Kbit words of 16 bit. The pin-out is compatible with a 8 Mbit Mask ROM.

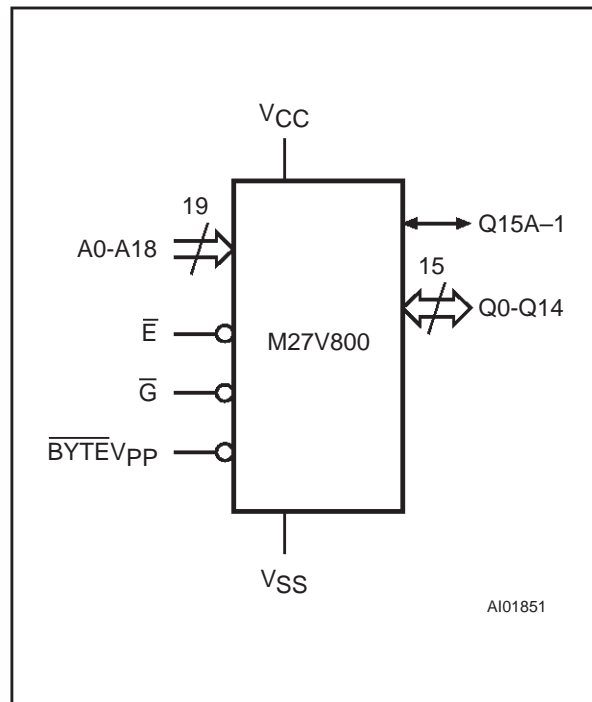
The M27V800 operates in the read mode with a supply voltage as low as 3V. The decrease in operating power allows either a reduction of the size of the battery or an increase in the time between battery recharges.

The FDIP42W (window ceramic frit-seal package) has a transparent lid which allows the user to expose the chip to ultraviolet light to erase the bit pattern. A new pattern can then be written rapidly to the device by following the programming procedure.

For applications where the content is programmed only one time and erasure is not required, the M27V800 is offered in PDIP42, SO44 and PLCC44 package.

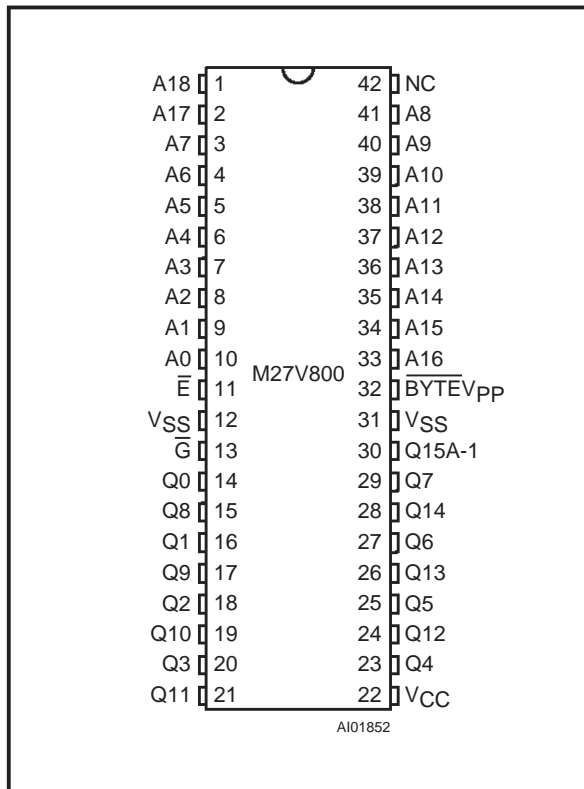


Logic Diagram



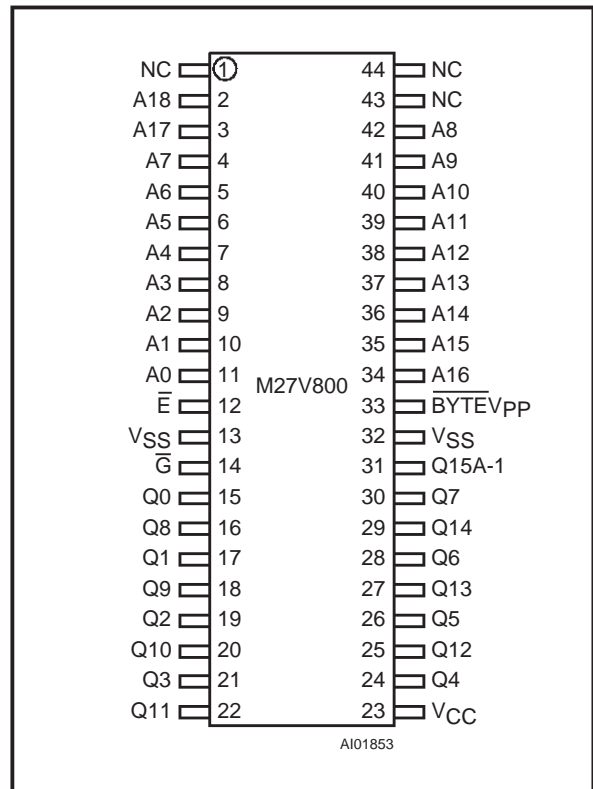
M27V800

DIP Pin Connections



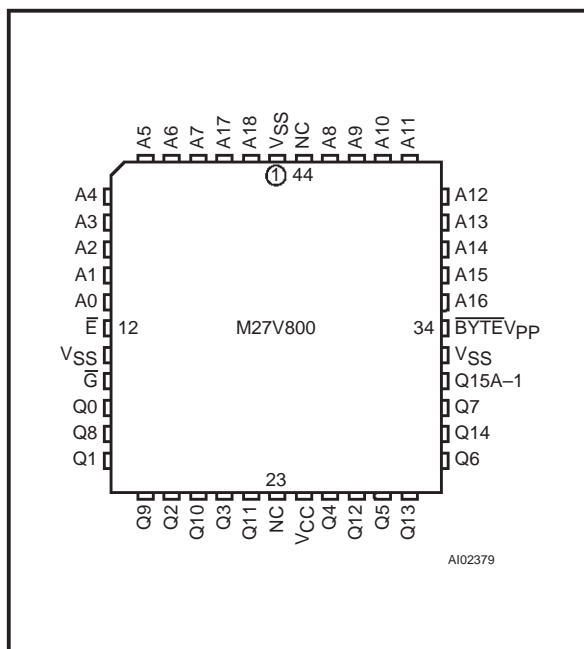
Warning: NC = Not Connected.

SO Pin Connections



Warning: NC = Not Connected.

LCC Pin Connections

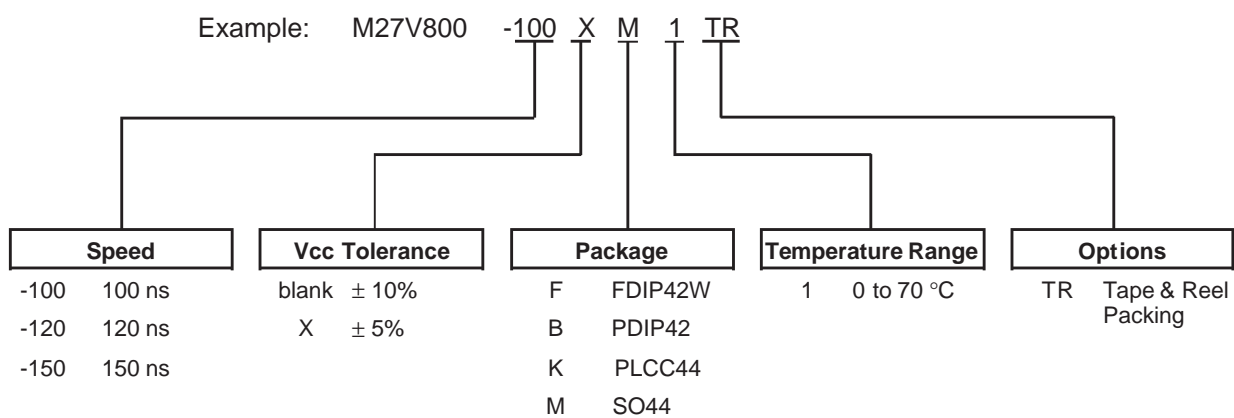


Warning: NC = Not Connected.

Signal Names

A0-A18	Address Inputs
Q0-Q7	Data Outputs
Q8-Q14	Data Outputs
Q15A-1	Data Output / Address Input
\bar{E}	Chip Enable
\bar{G}	Output Enable
\overline{BYTEV}_{PP}	Byte Mode / Program Supply
V _{CC}	Supply Voltage
V _{SS}	Ground

ORDERING INFORMATION SCHEME



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.