

16 Mbit (x8/x16) UV EPROM and OTP EPROM

DATA BRIEFING

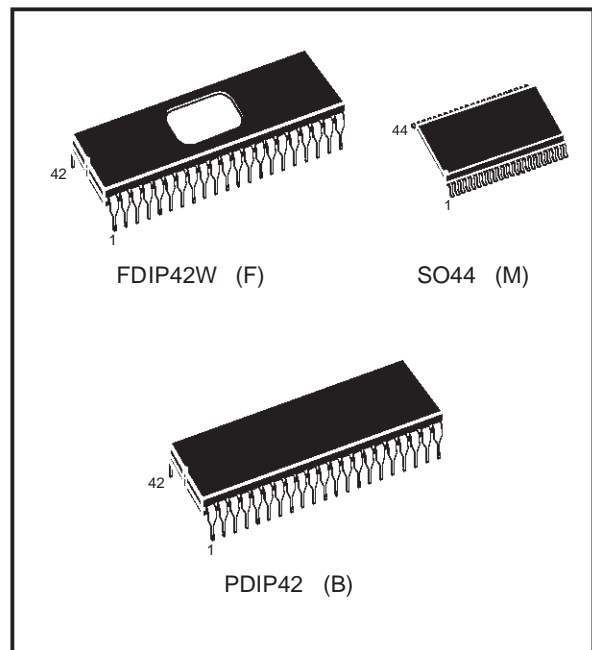
- 5V ± 10% SUPPLY VOLTAGE in READ OPERATION
- FAST ACCESS TIME: 70ns
- BYTE-WIDE or WORD-WIDE CONFIGURABLE
- 16 Mbit MASK ROM REPLACEMENT
- LOW POWER CONSUMPTION
 - Active Current 70mA at 8MHz
 - Standby Current 100µA
- PROGRAMMING VOLTAGE: 12.5V ± 0.25V
- PROGRAMMING TIME of AROUND 50sec. (PRESTO III ALGORITHM)
- ELECTRONIC SIGNATURE
 - Manufacturer Code: 0020h
 - Device Code: 00B1h

DESCRIPTION

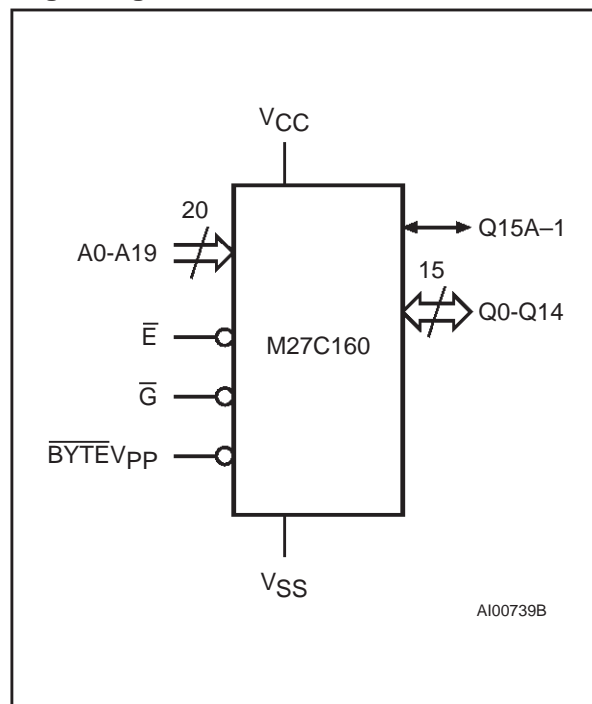
The M27C160 is a 16 Mbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for micro-processor systems requiring large data or program storage and is organised as either 2 Mbit words of 8 bit or 1 Mbit words of 16 bit. The pin-out is compatible with a 16Mb Mask ROM.

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 M27C160 is offered in PDIP42 and SO44.

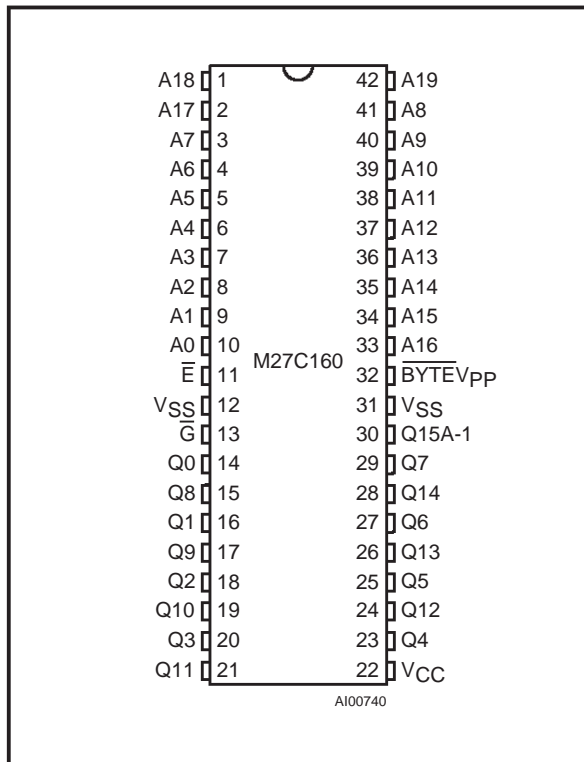


Logic Diagram

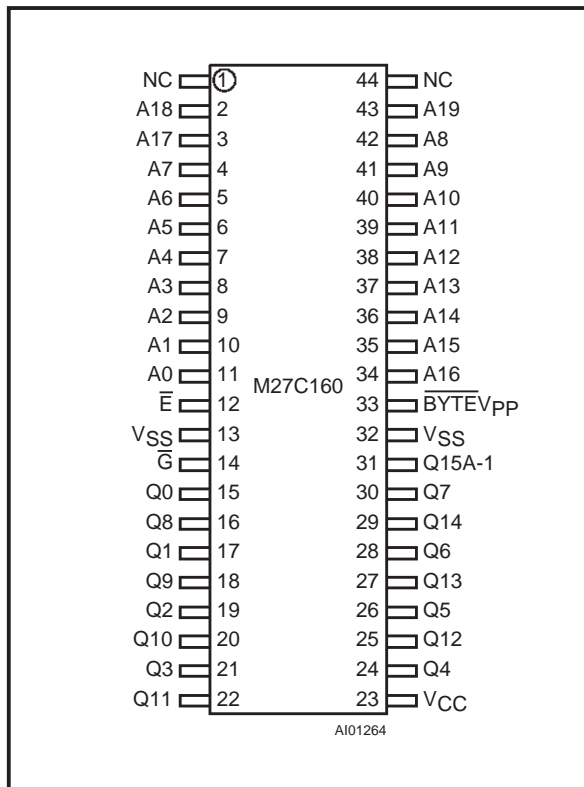


M27C160

DIP Pin Connections



SO Pin Connections



Warning: NC = Not Connected.

Signal Names

A0-A19	Address Inputs
Q0-Q7	Data Outputs
Q8-Q14	Data Outputs
Q15A-1	Data Output / Address Input
\bar{E}	Chip Enable
\bar{G}	Output Enable
$\overline{\text{BYTEV}}_{\text{PP}}$	Byte Mode / Program Supply
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 SGS-THOMSON Sales Office nearest to you.

Example: M27C160 -70 X M 1 TR

Speed

- 70 70ns
- 90 90ns
- 100 100ns
- 120 120ns

V_{CC} Tolerance

- blank ± 10%
- X ± 5%

Package

- F FDIP42W
- M SO44
- B PDIP42

Temp. Range

- 1 0 to 70 °C
- 6 -40 to 85 °C

Option

- TR Tape & Reel Packing