



## M27C256B

### 256 Kbit (32Kb x 8) UV EPROM and OTP EPROM

#### DATA BRIEFING

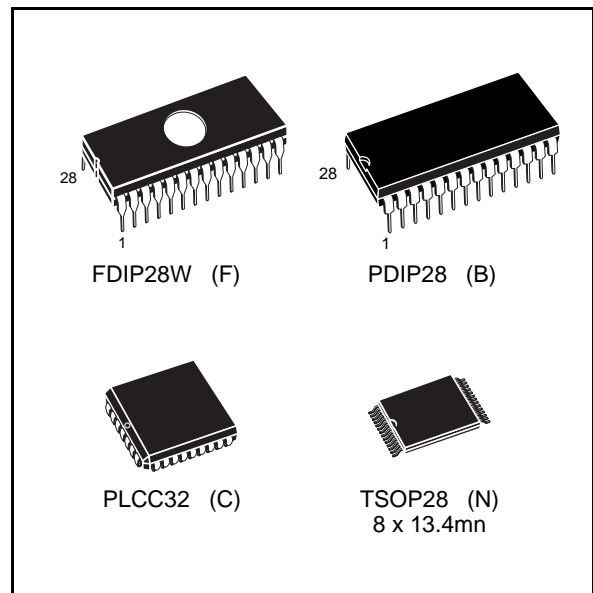
- 5V  $\pm$  10% SUPPLY VOLTAGE in READ OPERATION
- FAST ACCESS TIME: 45ns
- LOW POWER CONSUMPTION:
  - Active Current 30mA at 5MHz
  - Standby Current 100 $\mu$ A
- PROGRAMMING VOLTAGE: 12.75V  $\pm$  0.25V
- PROGRAMMING TIME: 100 $\mu$ s/byte (PRESTO II ALGORITHM)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 8Dh

#### DESCRIPTION

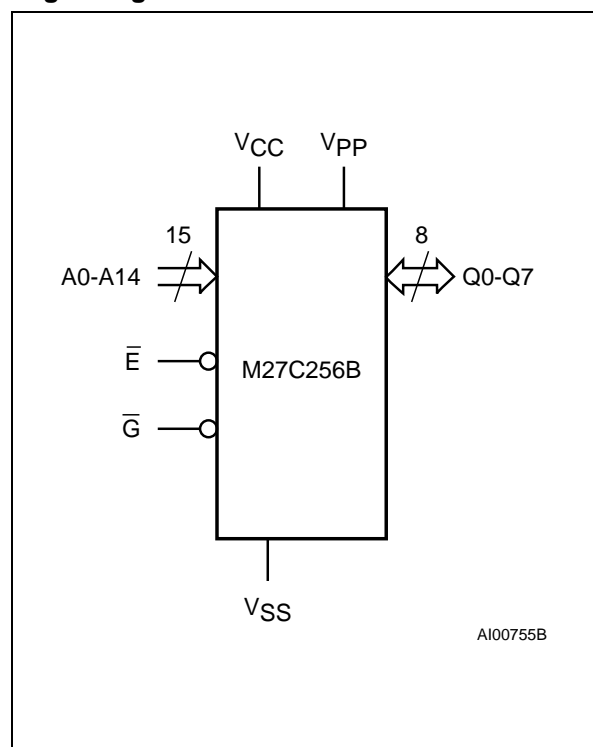
The M27C256B is a 256 Kbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It is ideally suited for micro-processor systems and is organized as 32,768 by 8 bits.

The FDIP28W (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 to the device by following the programming procedure.

For applications where the content is programmed only one time and erasure is not required, the M27C256B is offered in PDIP32, PLCC32 and TSOP28 (8 x 13.4 mm) packages.

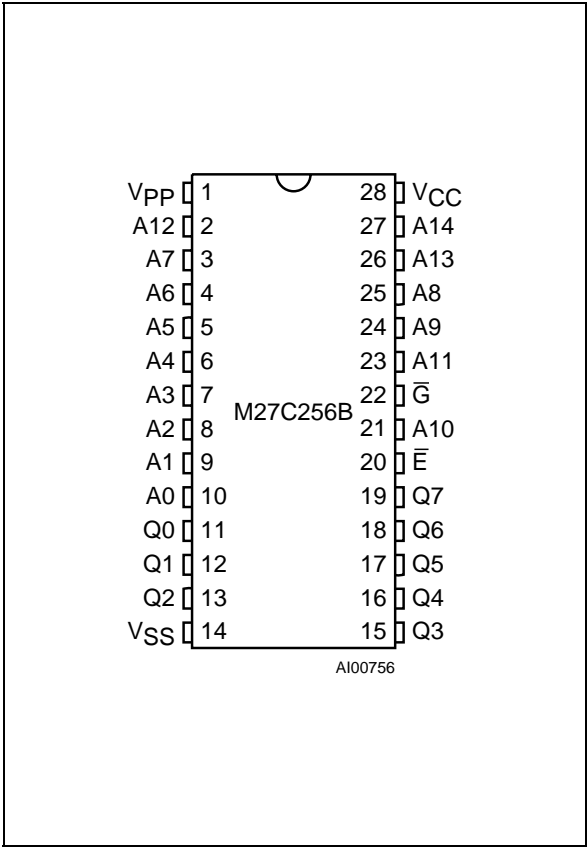


#### Logic Diagram

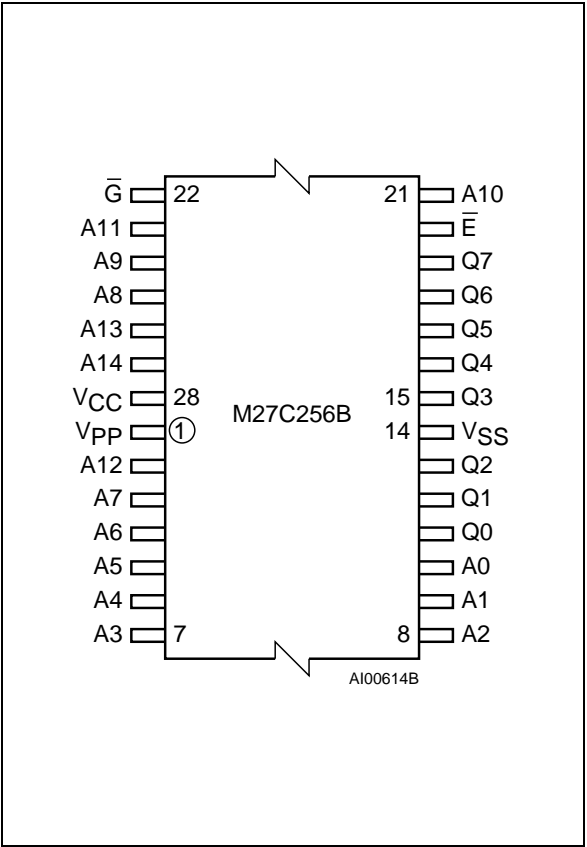


M27C256B

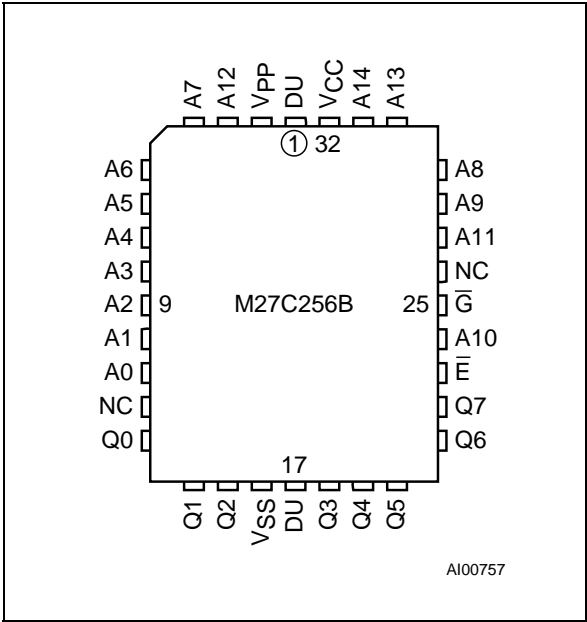
DIP Pin Connections



TSOP Pin Connections



LCC Pin Connections



Signal Names

|          |                |
|----------|----------------|
| A0 - A14 | Address Inputs |
| Q0 - Q7  | Data Outputs   |
| E        | Chip Enable    |
| G        | Output Enable  |
| VPP      | Program Supply |
| VCC      | Supply Voltage |
| VSS      | Ground         |

Warning: NC = Not Connected, DU = Don't Use.

## ORDERING INFORMATION SCHEME

Example: M27C256B -70 X C 1 TR

| Speed              |        | V <sub>CC</sub> Tolerance |       | Package |                      | Temperature Range |               | Option |                     |
|--------------------|--------|---------------------------|-------|---------|----------------------|-------------------|---------------|--------|---------------------|
| -45 <sup>(1)</sup> | 45 ns  | X                         | ± 5%  | F       | FDIP28W              | 1                 | 0 to 70 °C    | X      | Additional Burn-in  |
| -60                | 60 ns  | blank                     | ± 10% | B       | PDIP28               | 6                 | -40 to 85 °C  |        |                     |
| -70                | 70 ns  |                           |       | C       | PLCC32               | 7                 | -40 to 105 °C | TR     | Tape & Reel Packing |
| -80                | 80 ns  |                           |       | N       | TSOP28<br>8 x 13.4mm | 3                 | -40 to 125 °C |        |                     |
| -90                | 90 ns  |                           |       |         |                      |                   |               |        |                     |
| -10                | 100 ns |                           |       |         |                      |                   |               |        |                     |
| -12                | 120 ns |                           |       |         |                      |                   |               |        |                     |
| -15                | 150 ns |                           |       |         |                      |                   |               |        |                     |
| -20                | 200 ns |                           |       |         |                      |                   |               |        |                     |

**Note:** 1. High Speed, see AC Characteristics section for further information.

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.