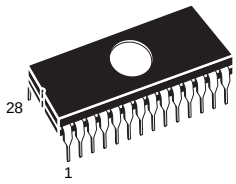
SGS-THOMSON MICROELECTRONICS

M87C257

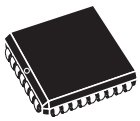
ADDRESS LATCHED 256 Kbit (32Kb x 8) UV EPROM and OTP EPROM

DATA BRIEFING

- 5V ± 10% SUPPLY VOLTAGE in READ OPERATION
- INTEGRATED ADDRESS LATCH
- FAST ACCESS TIME: 45ns
- LOW POWER "CMOS" CONSUMPTION:
  - Active Current 30mA
  - Standby Current 100µA
- PROGRAMMING VOLTAGE: 12.75V ± 0.25V
- PROGRAMMING TIMES of AROUND 3sec. (PRESTO II ALGORITHM)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 80h



FDIP28W (F)



PLCC32 (C)

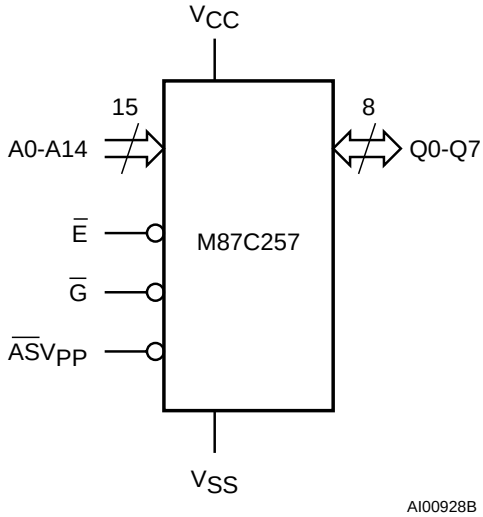
DESCRIPTION

The M87C257 is a 256 Kbit EPROM offered in the two ranges UV (ultra violet erase) and OTP (one time programmable). It incorporates latches for all address inputs to minimize chip count, reduce cost, and simplify the design of multiplexed bus systems and is organised 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 M87C257 is offered in PLCC32 package.

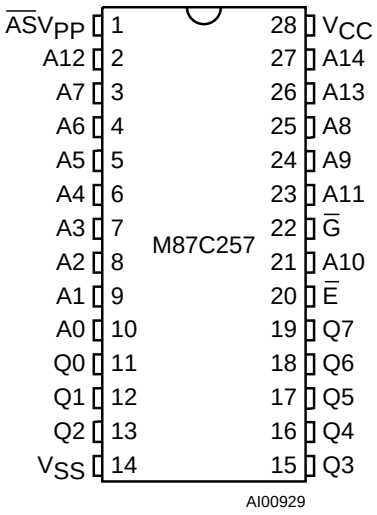
Logic Diagram



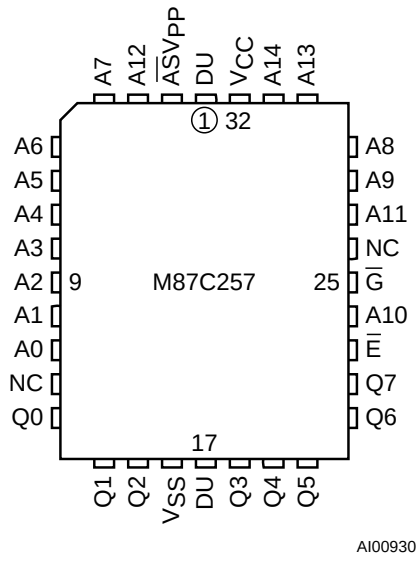
Signal Names

A0-A14	Address Inputs
Q0-Q7	Data Outputs
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
$\overline{ASV}_{PP}$	Address Strobe / Program Supply
V_{CC}	Supply Voltage
V_{SS}	Ground

DIP Pin Connections



LCC Pin Connections



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

Ordering Information Scheme

For a list of available options refer to the current Memory Shortform catalogue.
For further information on any aspect of this device, please contact the SGS-THOMSON Sales Office nearest to you.

Example: M87C257 -70 X C 1 X

Speed

-45	45ns
-60	60ns
-70	70ns
-80	80ns
-90	90ns
-10	100ns
-12	120ns
-15	150ns
-20	200ns

V_{CC} Tolerance

X	± 5V
blank	± 10V

Package

F	FDIP28W
C	PLCC32

Temp. Range

1	0 to 70 °C
6	–40 to 85 °C
7	–40 to 105 °C
3	–40 to 125 °C

Option

X	Additional Burn-in
TR	Tape & Reel Packing