勝 特 力 材 料 886-3-5753170
胜特力电子(上海) 86-21-54151736
胜特力电子(深圳) 86-755-83298787
Http://www.100y.com.tw

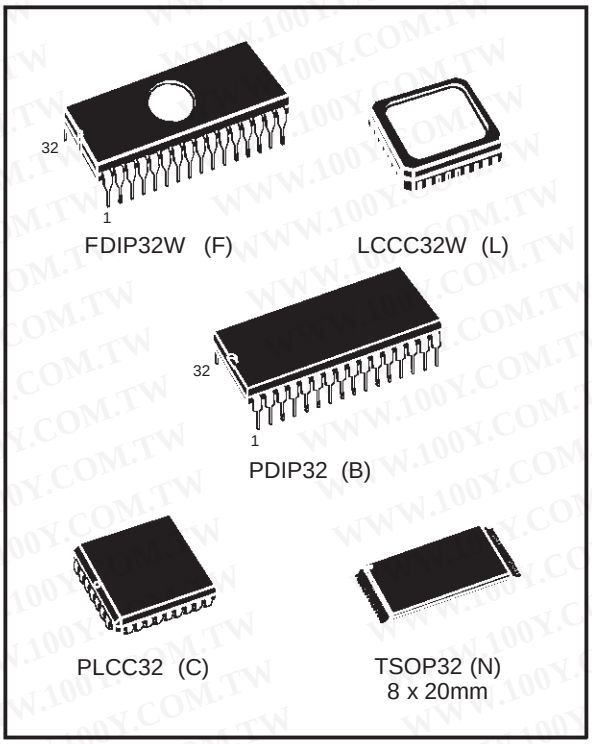
SGS-THOMSON MICROELECTRONICS

M27C4001

4 Mbit (512Kb x 8) UV EPROM and OTP EPROM

DATA BRIEFING

- 5V ± 10% SUPPLY VOLTAGE in READ OPERATION
- FAST ACCESS TIME: 35ns
- LOW POWER CONSUMPTION:
  - Active Current 30mA at 5MHz
  - Standby Current 100µA
- PROGRAMMING VOLTAGE: 12.75V ± 0.25V
- PROGRAMMING TIMES of AROUND 48sec. (PRESTO II ALGORITHM)
- ELECTRONIC SIGNATURE
  - Manufacturer Code: 20h
  - Device Code: 41h



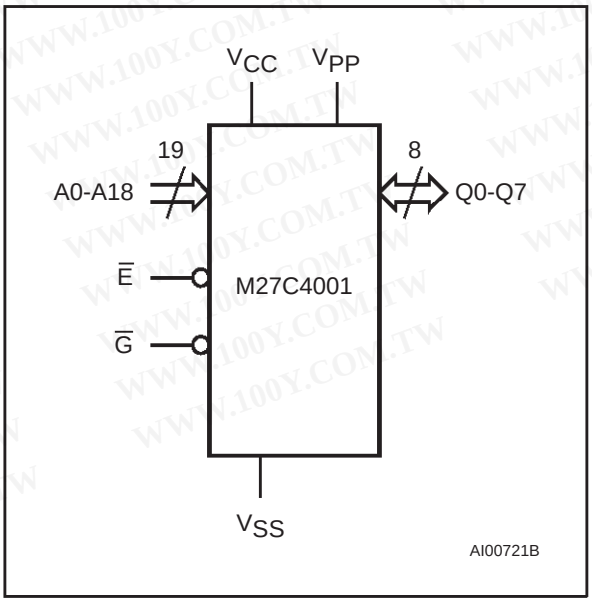
DESCRIPTION

The M27C4001 is a 4 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 programs and is organised as 524,288 by 8 bits.

The FDIP32W (window ceramic frit-seal package) and LCCC32W (leadless chip carrier package) have a transparent lids which allow 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 M27C4001 is offered in PDIP32, PLCC32 and TSOP32 (8 x 20mm) packages.

Logic Diagram



Complete data available on *DATA-on-DISC CD-ROM* or at *www.st.com*

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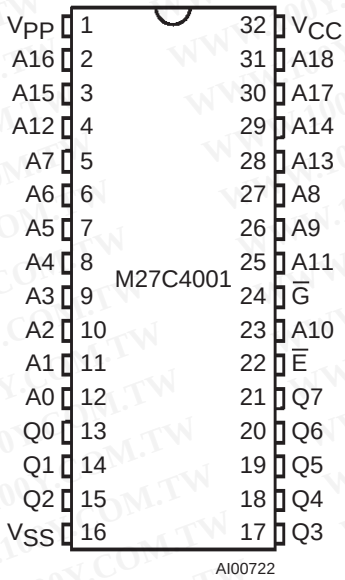
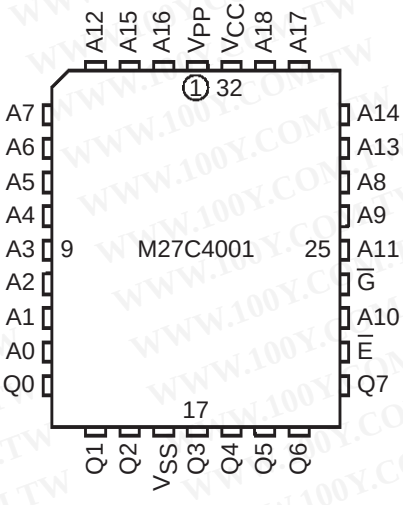
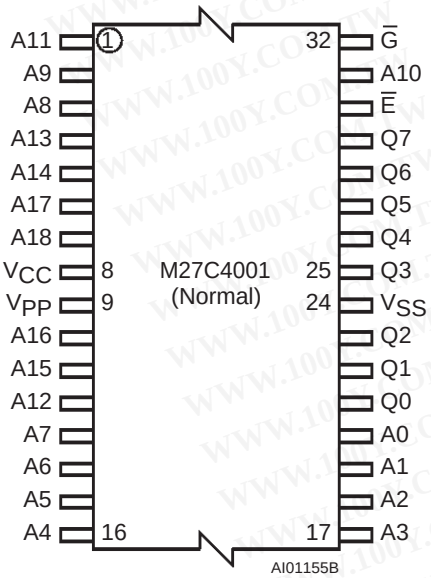
DIP Pin Connections



LCC Pin Connections



TSOP Pin Connections



Signal Names

A0-A18	Address Inputs
Q0-Q7	Data Outputs
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
V_{PP}	Program Supply
V_{CC}	Supply Voltage
V_{SS}	Ground

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ORDERING INFORMATION SCHEME

Example: M27C4001 -35 X C 1 TR

Speed		V_{CC} Tolerance		Package		Temperature Range		Option	
-35 (1)	35 ns	blank	± 10%	F	FDIP32W	1	0 to 70 °C	X	Additional Burn-in
-45 (1)	45 ns	X	± 5%	L	LCCC32W	6	–40 to 85 °C	TR	Tape & Reel Packing
-55 (1)	55 ns			B	PDIP32				
-70	70 ns			C	PLCC32				
-80	80 ns			N	TSOP32 8 x 20mm				
-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 SGS-THOMSON Sales Office nearest to you.