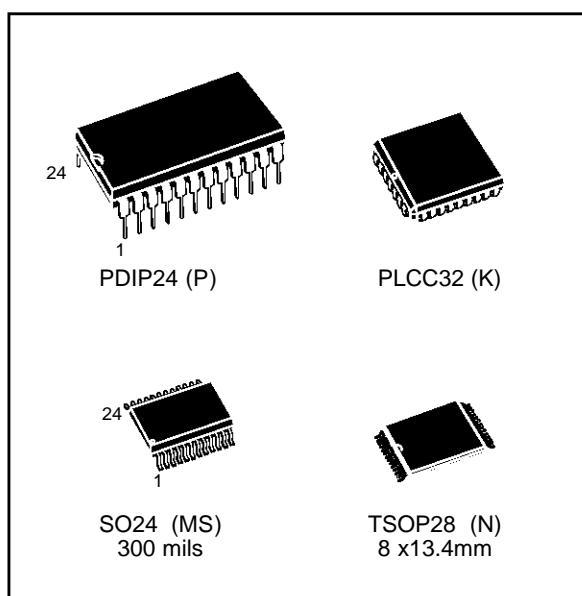


16K (2K x 8) PARALLEL EEPROM with SOFTWARE DATA PROTECTION

DATA BRIEFING

- FAST ACCESS TIME: 90ns
- SINGLE 5V ± 10% SUPPLY VOLTAGE
- LOW POWER CONSUMPTION
- FAST WRITE CYCLE:
 - 64 Bytes Page Write Operation
 - Byte or Page Write Cycle: 3ms Max
- ENHANCED END OF WRITE DETECTION:
 - Data Polling
 - Toggle Bit
- PAGE LOAD TIMER STATUS BIT
- HIGH RELIABILITY SINGLE POLYSILICON, CMOS TECHNOLOGY:
 - Endurance >100,000 Erase/Write Cycles
 - Data Retention >40 Years
- JEDEC APPROVED BYTEWIDE PIN OUT
- SOFTWARE DATA PROTECTION



DESCRIPTION

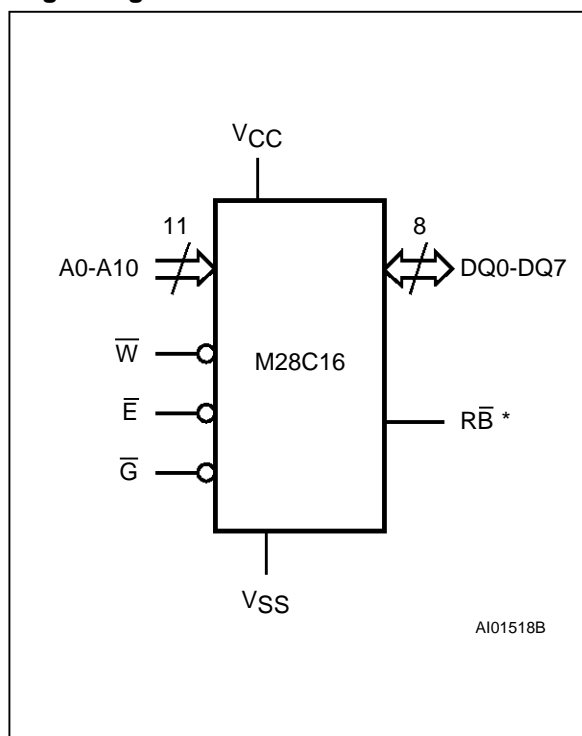
The M28C16 is a 2K x 8 low power Parallel EEPROM fabricated with SGS-THOMSON proprietary single polysilicon CMOS technology. The device offers fast access time with low power dissipation and requires a 5V power supply.

The circuit has been designed to offer a flexible microcontroller interface featuring both hardware and software handshaking with Data Polling and Toggle Bit. The M28C16 supports 64 byte page write operation. A Software Data Protection (SDP) is also possible using the standard JEDEC algorithm.

Signal Names

A0 - A10	Address Input
DQ0 - DQ7	Data Input / Output
\bar{W}	Write Enable
\bar{E}	Chip Enable
\bar{G}	Output Enable
$\bar{R}\bar{B}$	Ready / Busy
V _{CC}	Supply Voltage
V _{SS}	Ground

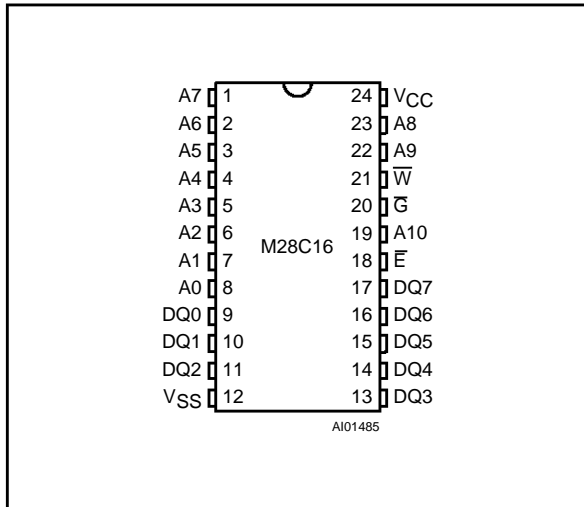
Logic Diagram



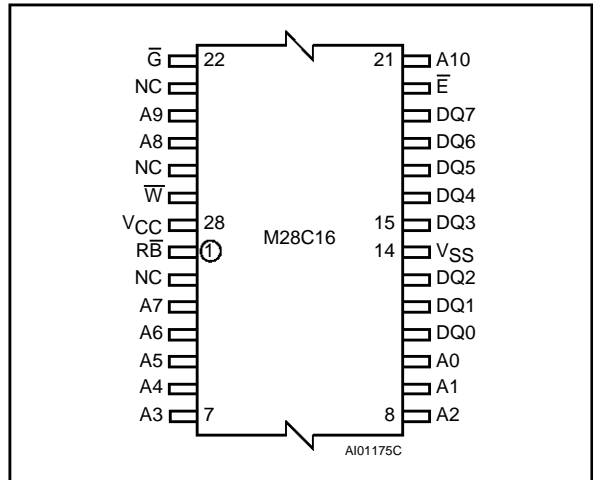
Note: * $\bar{R}\bar{B}$ function is offered only with TSOP28 package.

M28C16

DIP Pin Connections

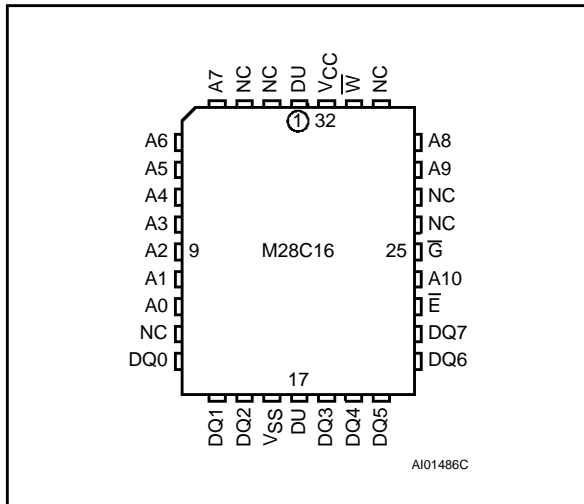


TSOP Pin Connections



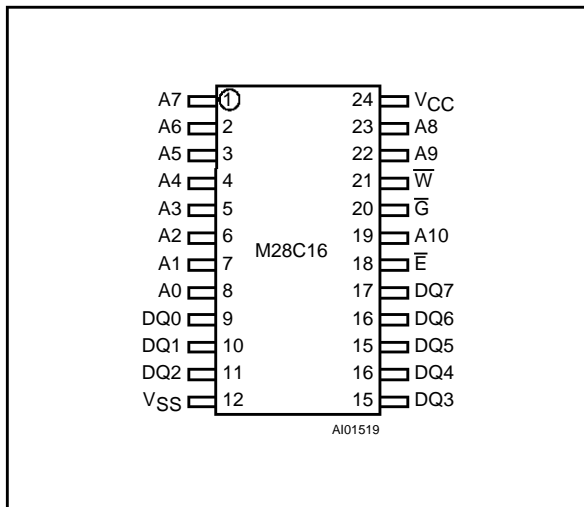
Warning: NC = Not Connected.

LCC Pin Connections



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

SO Pin Connections



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: M28C16 -90 K 1 T

Speed	-90	90ns	-120	120ns	-150	150ns
Package	P ⁽²⁾	PDIP28	K	PLCC32	MS ⁽²⁾	SO28 300mils
Temp. Range	1	0 to 70 °C	6	-40 to 85 °C	N ⁽¹⁾	TSOP28 8 x 13.4mm
Option	T	Tape & Reel Packing				

Notes: 1. The M28C16 in TSOP28 package has a Ready/Busy output on pin 1.
2. Packages available on request only.

Devices are shipped from the factory with the memory content set at all "1's" (FFh).