

256K (32K x 8) PARALLEL EEPROM with SOFTWARE DATA PROTECTION

DATA BRIEFING

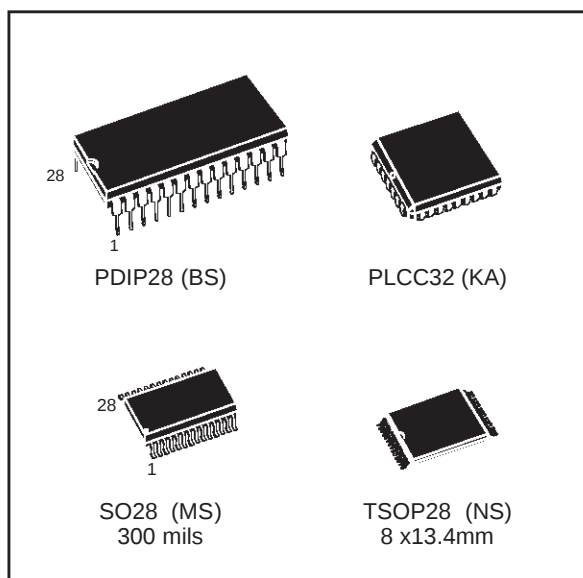
- **FAST ACCESS TIME:**
 - 90ns at 5V
 - 150ns at 3V
- **SINGLE SUPPLY VOLTAGE:**
 - 5V $\pm$ 10% for M28256
 - 2.7V to 3.6V for M28256-xxW
- **LOW POWER CONSUMPTION**
- **FAST WRITE CYCLE:**
 - 64 Bytes Page Write Operation
 - Byte or Page Write Cycle
- **ENHANCED END of WRITE DETECTION:**
 - Data Polling
 - Toggle Bit
- **STATUS REGISTER**
- **HIGH RELIABILITY DOUBLE POLYSILICON, CMOS TECHNOLOGY:**
 - Endurance >100,000 Erase/Write Cycles
 - Data Retention >10 Years
- **JEDEC APPROVED BYTEWIDE PIN OUT**
- **ADDRESS and DATA LATCHED ON-CHIP**
- **SOFTWARE DATA PROTECTION**

DESCRIPTION

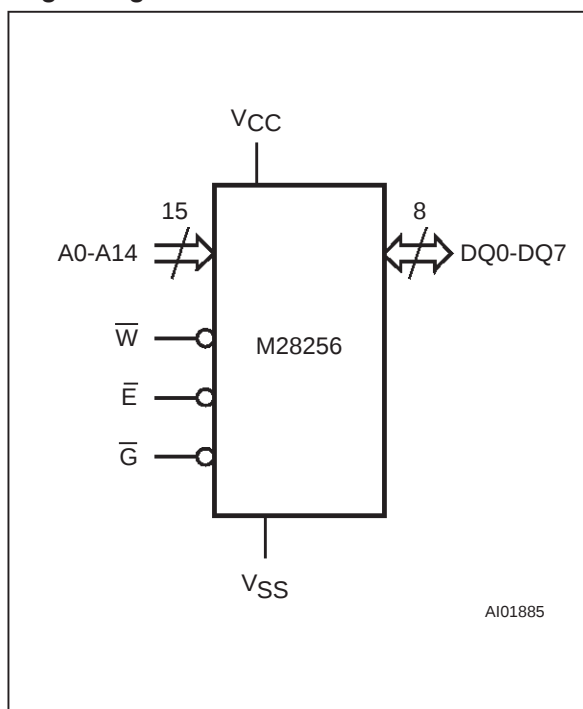
The M28256 and M28256-W are 32K x 8 low power Parallel EEPROM fabricated with SGS-THOMSON proprietary double polysilicon CMOS technology.

Signal Names

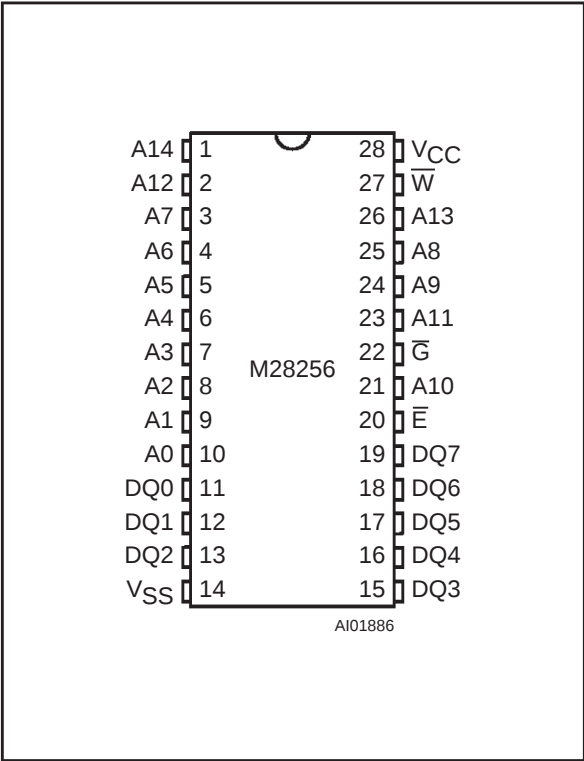
A0-A14	Address Input
DQ0-DQ7	Data Input / Output
$\overline{W}$	Write Enable
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
V _{CC}	Supply Voltage
V _{SS}	Ground



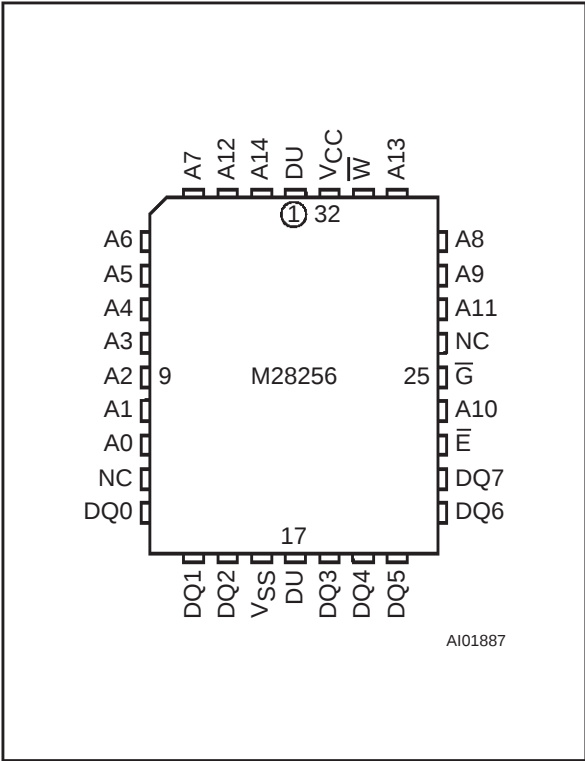
Logic Diagram



DIP Pin Connections

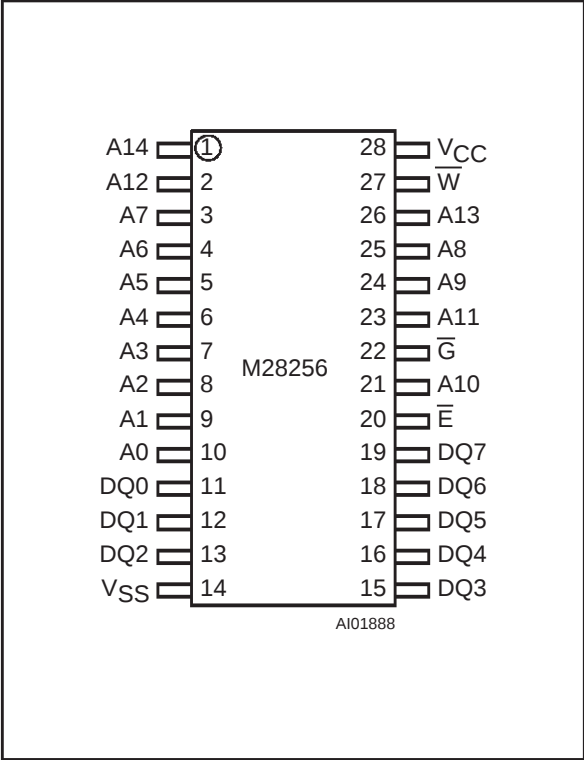


LCC Pin Connections

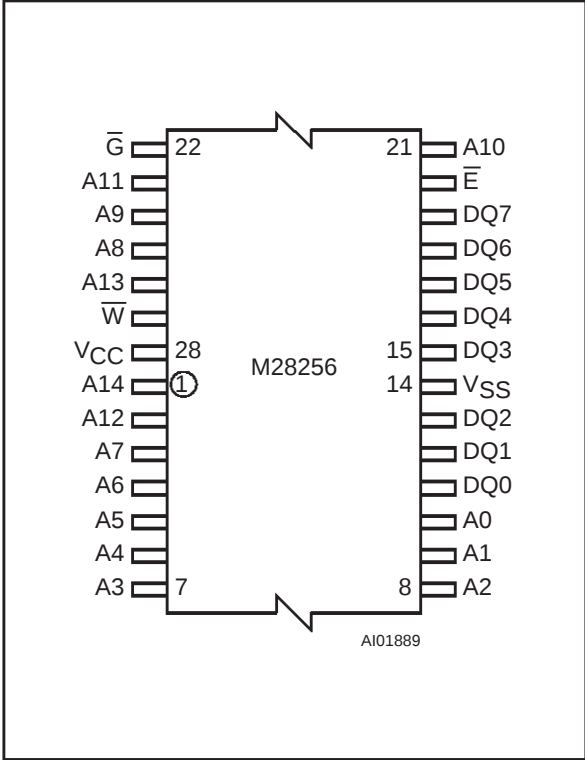


Warning: NC = Not Connected, DU = Don't Use.

SO Pin Connections



TSOP Pin Connections



ORDERING INFORMATION SCHEME

Example: M28256 – 15 W KA 6 T

Speed		Operating Voltage		Package		Temperature Range		Option
90 ⁽¹⁾	90ns	blank	4.5V to 5.5V	BS	PDIP28	1 ⁽³⁾	0 to 70 °C	T Tape & Reel Packing
12 ⁽¹⁾	120ns	W	2.7V to 3.6V	KA	PLCC32	6	–40 to 85 °C	
15	150ns			MS	SO28 300 mils			
20	200ns			NS	TSOP28			
25 ⁽²⁾	250ns				8 x 13.4mm			

Notes: 1. Not available for "W" operating voltage.
 2. Available for "W" operating voltage only.
 3. Temperature Range on request only.

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

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.