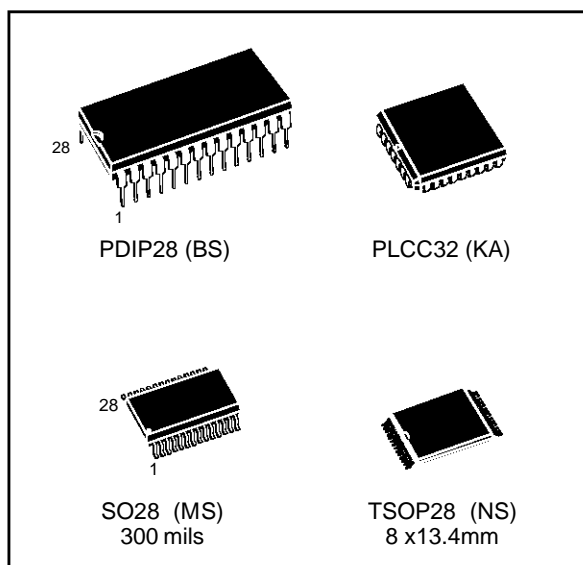


## 64K (8K x 8) PARALLEL EEPROM with SOFTWARE DATA PROTECTION

### DATA BRIEFING

- **FAST ACCESS TIME:**
  - 90ns at 5V
  - 120ns at 3V
- **SINGLE SUPPLY VOLTAGE:**
  - 5V  $\pm$  10% for M28C64
  - 2.7V to 3.6V for M28C64-xxW
- **LOW POWER CONSUMPTION**
- **FAST WRITE CYCLE:**
  - 64 Bytes Page Write Operation
  - Byte or Page Write Cycle: 3ms Max
- **ENHANCED END OF WRITE DETECTION:**
  - Ready/Busy Open Drain Output
  - 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 BYTEWISE PIN OUT**
- **SOFTWARE DATA PROTECTION**



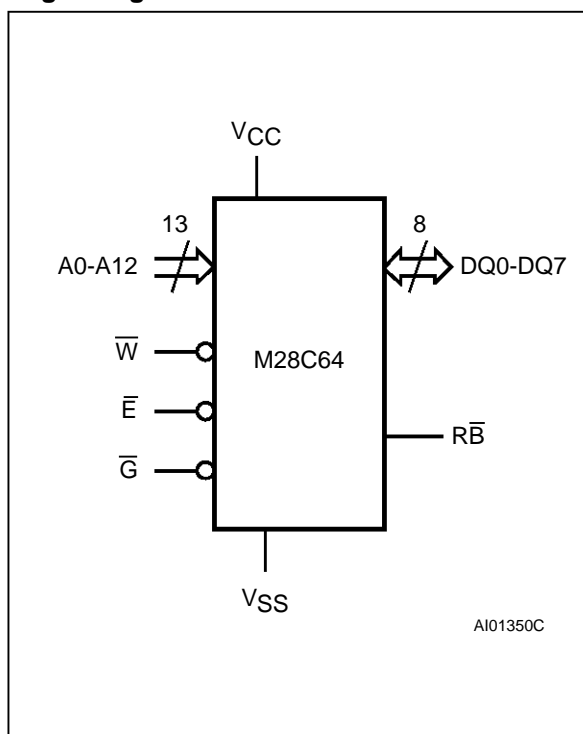
### DESCRIPTION

The M28C64 and M28C64-W are 8K x 8 low power Parallel EEPROM fabricated with SGS-THOMSON proprietary single polysilicon CMOS technology.

### Signal Names

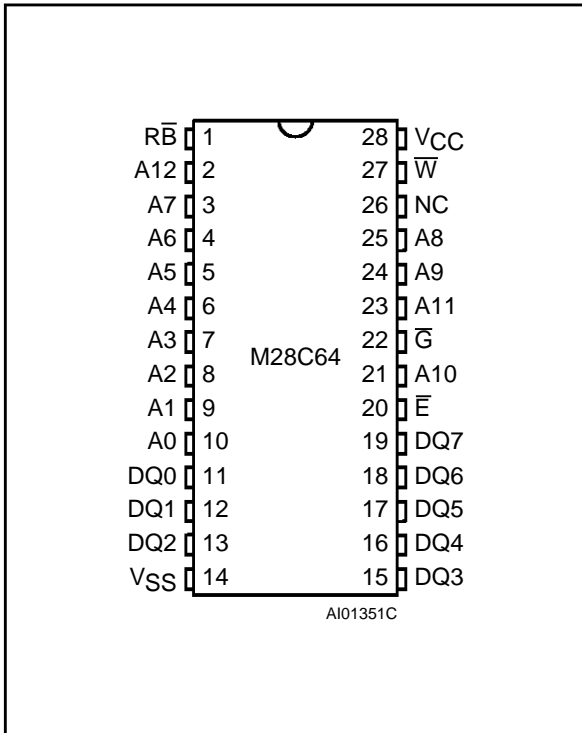
A0 - A12	Address Input
DQ0 - DQ7	Data Input / Output
$\bar{W}$	Write Enable
$\bar{E}$	Chip Enable
$\bar{G}$	Output Enable
$\bar{R}\bar{B}$	Ready / Busy
V <sub>CC</sub>	Supply Voltage
V <sub>SS</sub>	Ground

### Logic Diagram



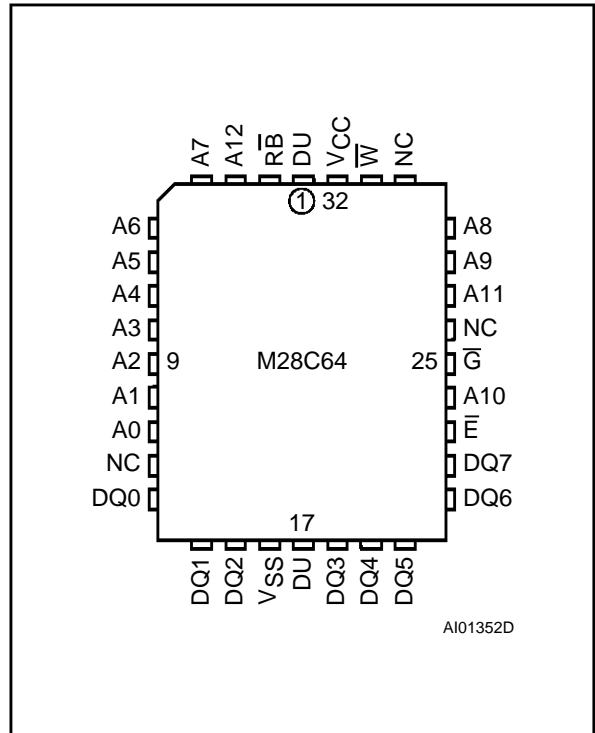
# M28C64

## DIP Pin Connections



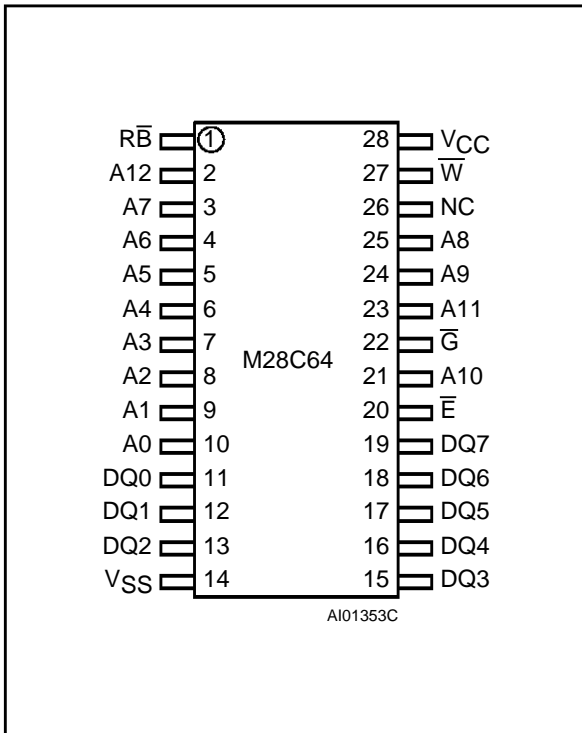
Warning: NC = Not Connected.

## LCC Pin Connections



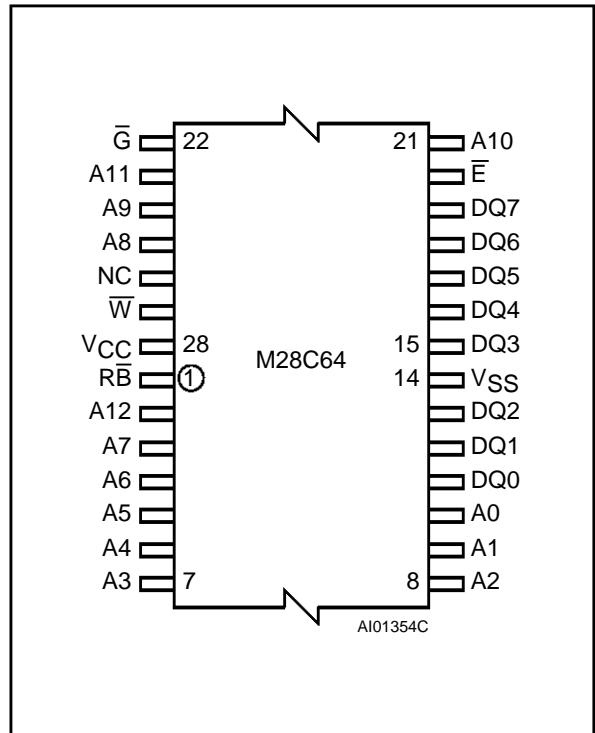
Warning: NC = Not Connected, DU = Don't Use.

## SO Pin Connections



Warning: NC = Not Connected.

## TSOP Pin Connections



Warning: NC = Not Connected.

## ORDERING INFORMATION SCHEME

Example: M28C64 -15 W BS 6 T

Speed		Operating Voltage		Package	Temperature Range		Option
-90 <sup>(1)</sup>	90ns	blank	4.5V to 5.5V	BS PDIP28	1	0 to 70 °C	T Tape & Reel Packing
-12	120ns	W	2.7V to 3.6V	MS SO28 300 mils	6	-40 to 85 °C	
-15	150ns			NS TSOP28 8 x 13.4mm			
-20 <sup>(2)</sup>	200ns			KA PLCC32			
-25 <sup>(2)</sup>	250ns						
-30 <sup>(2)</sup>	300ns						

**Notes:** 1. Available for M28C64 only.  
2. Available for M28C64-xxW 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.