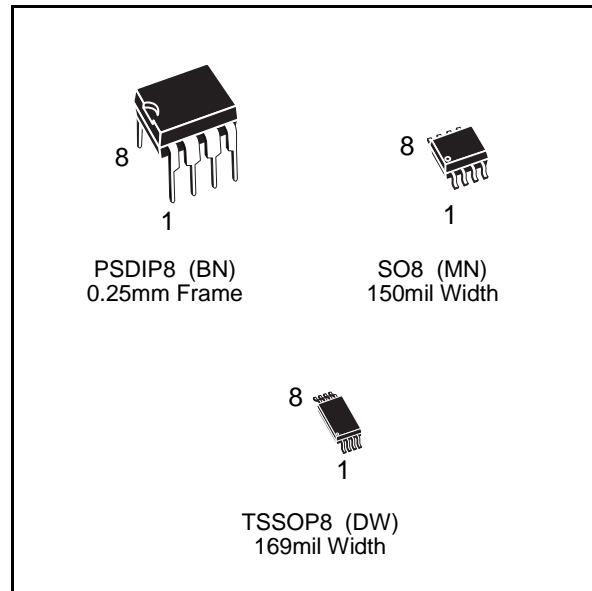


16K/8K/4K/2K/1K SERIAL I²C BUS EEPROM

DATA BRIEFING

- TWO WIRE I²C SERIAL INTERFACE SUPPORTS 400kHz PROTOCOL
- 1 MILLION ERASE/WRITE CYCLES
- 40 YEARS DATA RETENTION
- 2ms TYPICAL PROGRAMMING TIME
- SINGLE SUPPLY VOLTAGE:
 - 4.5V to 5.5V for M24Cxx
 - 2.5V to 5.5V for M24Cxx-W
 - 1.8V to 3.6V for M24Cxx-R
- HARDWARE WRITE CONTROL
- BYTE and PAGE WRITE (up to 16 BYTES)
- BYTE, RANDOM and SEQUENTIAL READ MODES
- SELF TIMED PROGRAMMING CYCLE
- AUTOMATIC ADDRESS INCREMENTING
- ENHANCED ESD/LATCH-UP PERFORMANCES



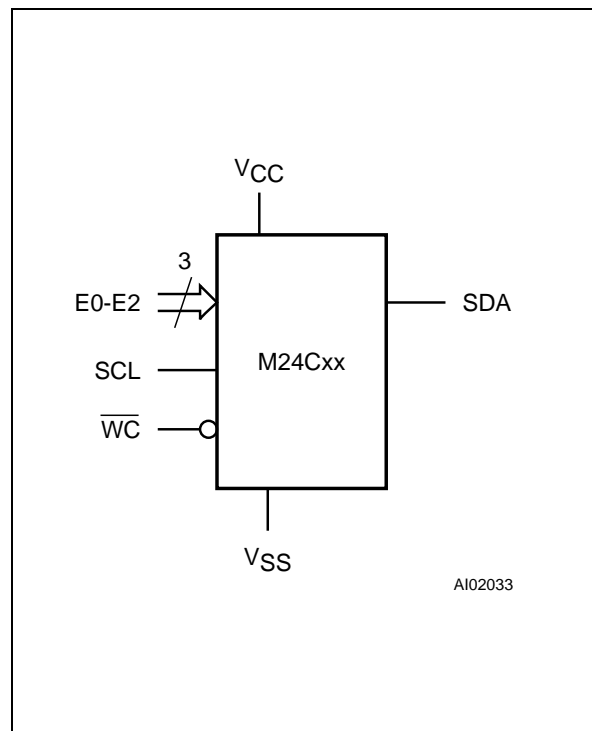
DESCRIPTION

The M24C16/C08/C04/C02/C01 specification covers a range of 16K/8K/4K/2K/1K bit serial I²C EEPROM products respectively. The memory is an electrically erasable programmable memory (EEPROM) fabricated with SGS-THOMSON's High Endurance Single Polysilicon CMOS technology which guarantees an endurance typically well above one million erase/write cycles with a data retention of 40 years.

Signal Names

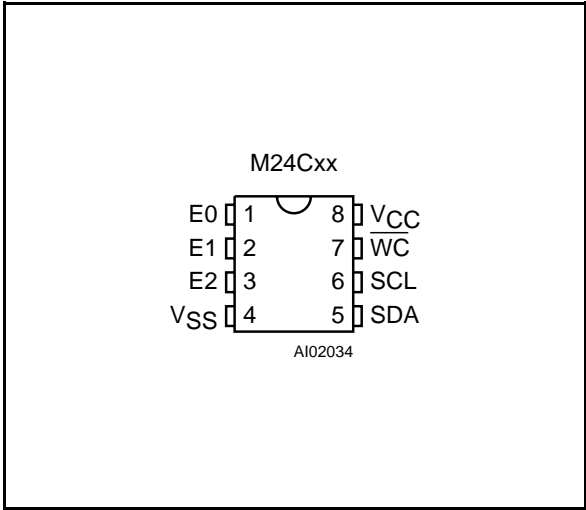
E0-E2	Chip Enable Inputs
SDA	Serial Data Address Input/Output
SCL	Serial Clock
\overline{WC}	Write Control
V _{CC}	Supply Voltage
V _{SS}	Ground

Logic Diagram

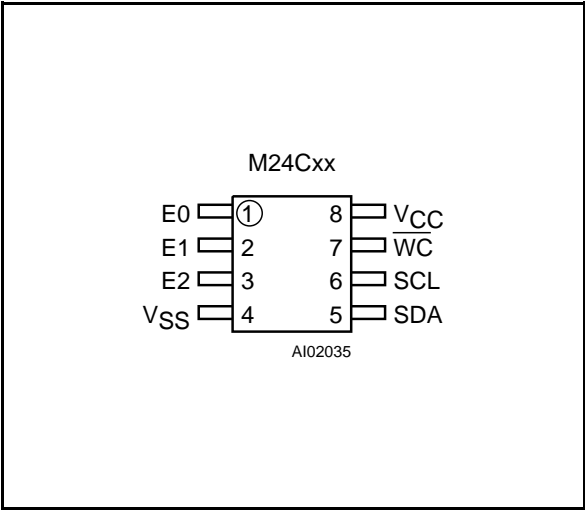


M24C16, M24C08, M24C04, M24C02, M24C01

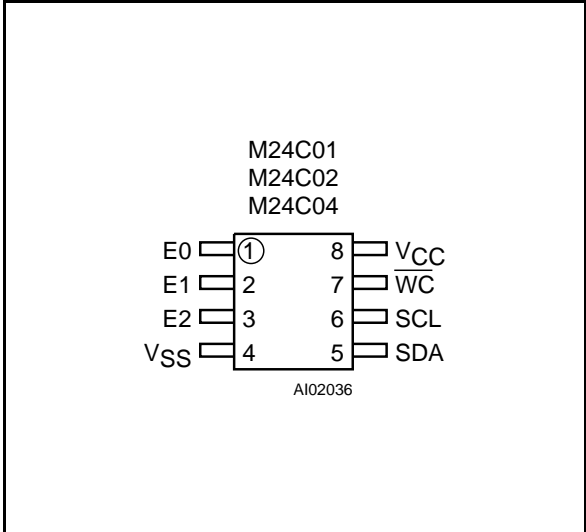
DIP Pin Connections



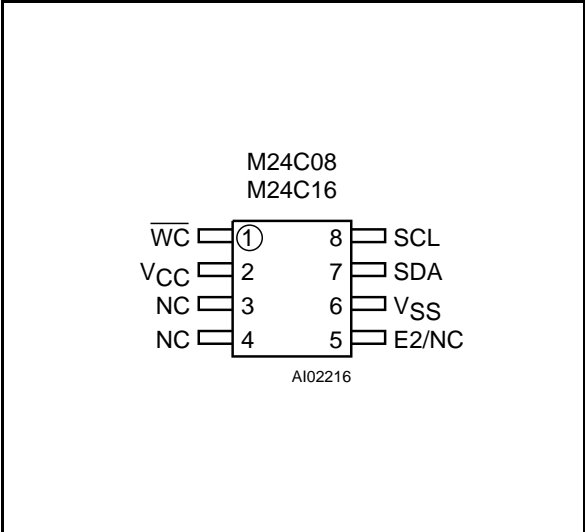
SO Pin Connections



TSSOP Pin Connections

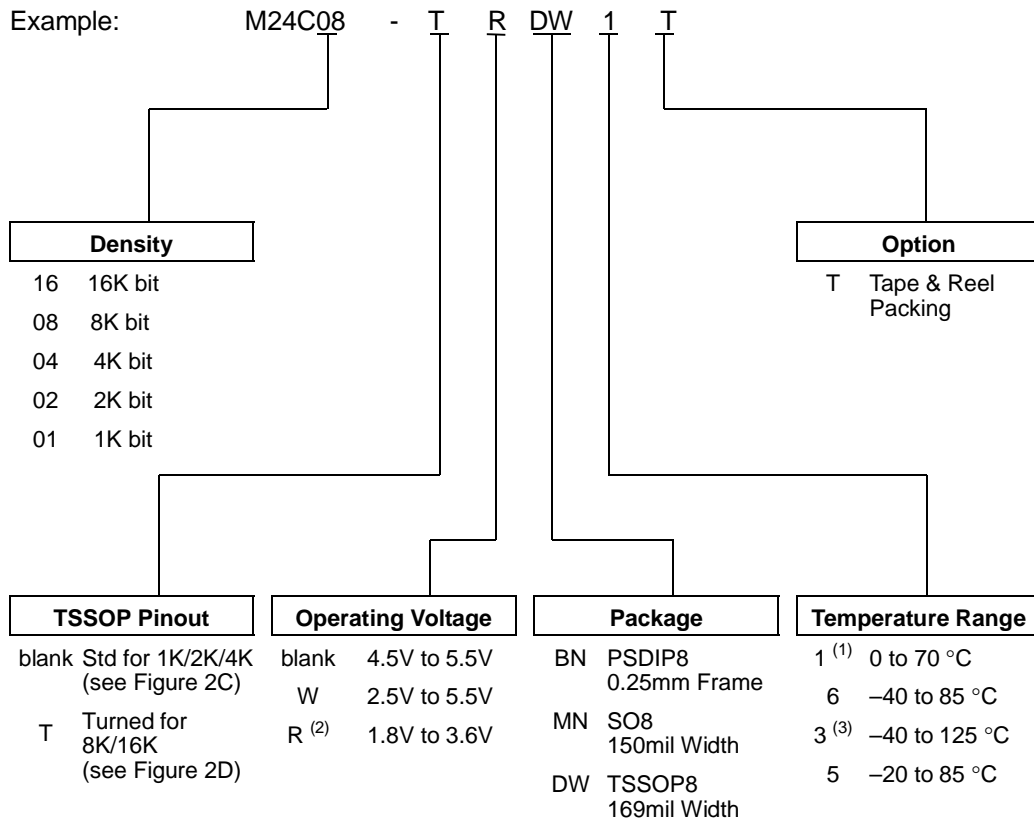


TSSOP Pin Connections



Warning: NC = Not Connected.
Pin 5 is E2 for M24C08 and NC for M25C16.

ORDERING INFORMATION SCHEME



Notes: 1. Temperature range on request only.
2. -R version (1.8V to 3.6V) are only available in temperature ranges 5 or 1.
3. Produced with High Reliability Certified Flow (HRCF), in V_{CC} range 4.5V to 5.5V at 100kHz only.

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

For a list of available options (Operating Voltage, Package, etc...) or for further information on any aspect of this device, please contact the SGS-THOMSON Sales Office nearest to you.