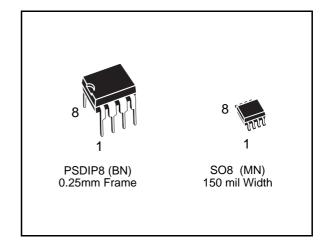


M95640, M95320 M95160, M95080

64K/32K/16K/8K SERIAL SPI EEPROM with POSITIVE CLOCK STROBE

DATA BRIEFING

- 100,000 ERASE/WRITE CYCLES
- 40 YEARS DATA RETENTION
- SINGLE SUPPLY VOLTAGE
 - 4.5V to 5.5V for M95xxx
 - 2.5V to 5.5V for M95xxx-W
 - 1.8V to 3.6V for M95xxx-R
- SPI BUS COMPATIBLE SERIAL INTERFACE
- 5 MHz CLOCK RATE MAX
- STATUS REGISTER
- HARDWARE PROTECTION of the STATUS REGISTER
- 32 BYTE PAGE MODE
- SIZEABLE READ ONLY EEPROM AREA
- SELF-TIMED PROGRAMMING CYCLE
- E.S.D.PROTECTION GREATER than 4000V
- SUPPORTS POSITIVE CLOCK SPI MODES



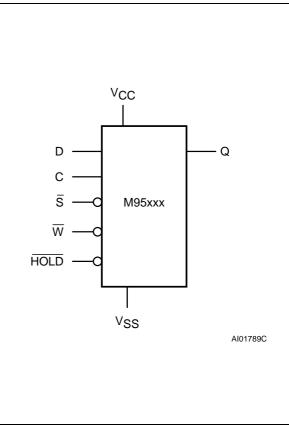
Logic Diagram

DESCRIPTION

The M95xxx is a family of electrically erasable programmable memories (EEPROM) fabricated with SGS-THOMSON's High Endurance Double Polysilicon CMOS technology. Each memory is accessed by a simple SPI bus compatible serial interface. The bus signals are a serial clock input (C), a serial data input (D) and a serial data output (Q).

The device connected to the bus is selected when the chip select input (\overline{S}) goes low. Communications with the chip can be interrupted with a hold input (HOLD).

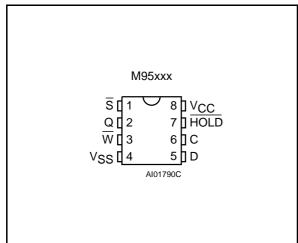
Data is clocked in during the low to high transition of clock C, data is clocked out during the high to low transition of clock C.



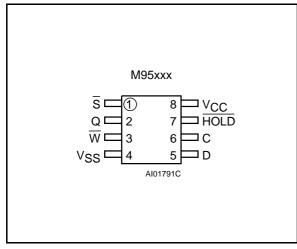
B95640/803

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

DIP Pin Connections



SO Pin Connections

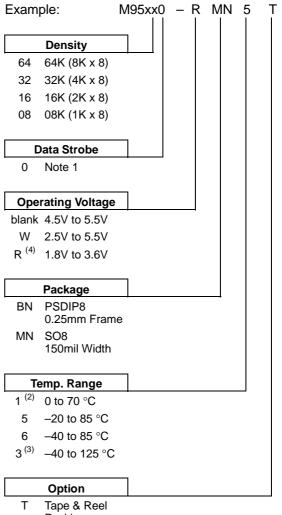


Signal Names

| С | Serial Clock |
|-----------------|--------------------|
| D | Serial Data Input |
| Q | Serial Data Output |
| S | Chip Select |
| W | Write Protect |
| HOLD | Hold |
| V _{CC} | Supply Voltage |
| V _{SS} | Ground |

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.



Packing

Notes: 1. Data In is strobed on rising edge of the clock (C) and Data Out is synchronized from the falling edge of the clock.

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

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

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