

SERIAL MICROWIRE BUS

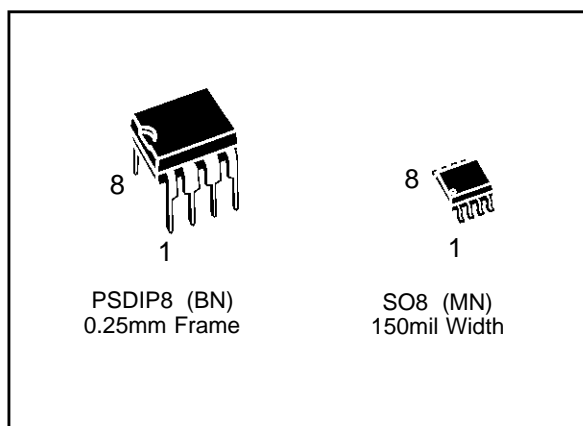
256/1K/2K/4K/8K/16K bit EEPROM

DATA BRIEFING

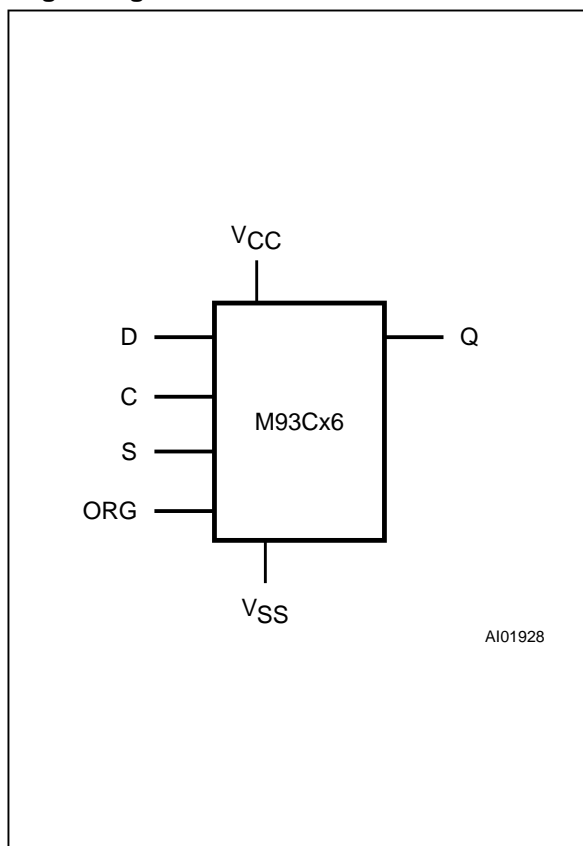
- INDUSTRY STANDARD MICROWIRE BUS
- 1 MILLION ERASE/WRITE CYCLES, with 40 YEAR DATA RETENTION
- DUAL ORGANIZATION: BY WORD (x16) or by BYTE (x8)
- BYTE/WORD and ENTIRE MEMORY PROGRAMMING INSTRUCTIONS
- SELF-TIMED PROGRAMMING CYCLE with AUTO-ERASE
- READY/BUSY SIGNAL DURING PROGRAMMING
- SINGLE SUPPLY VOLTAGE:
 - 4.5V to 5.5V for M93Cx6 version
 - 2.5V to 5.5V for M93Cx6-W version
 - 1.8V to 5.5V for M93Cx6-R version
- SEQUENTIAL READ OPERATION
- 5ms TYPICAL PROGRAMMING TIME
- ENHANCED ESD/LATCH UP PERFORMANCE

DESCRIPTION

This M93C06/C46/C56/C66/C76/C86 specification covers a range of 256/1K/2K/4K/8K/16K bit serial EEPROM products respectively. In this text, products are referred to as M93Cx6. The M93Cx6 is an Electrically Erasable Programmable Memory (EEPROM) fabricated with SGS-THOMSON's High Endurance Single Polysilicon CMOS technology. The M93Cx6 memory is accessed through a serial input (D) and output (Q) using the MICROWIRE bus protocol. The M93Cx6 specified at $5V \pm 10\%$, the M93Cx6-W specified at 2.5V to 5.5V and the M93Cx6-R specified at 1.8V to 5.5V.

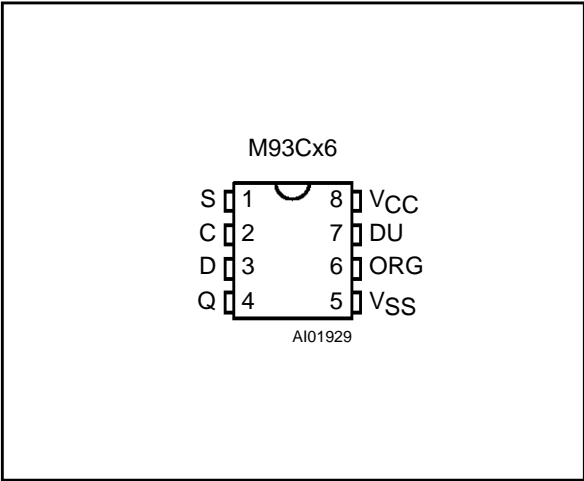


Logic Diagram



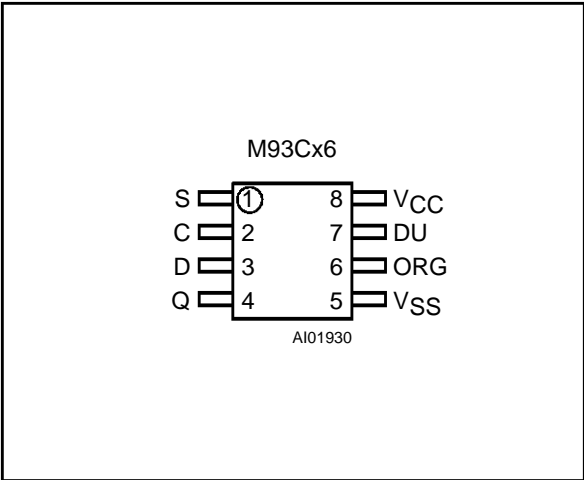
M93C06, M93C46, M93C56, M93C66, M93C76, M93C86

DIP Pin Connections



Warning: DU = Don't Use

SO Pin Connections



Warning: DU = Don't Use

Signal Names

S	Chip Select Input
D	Serial Data Input
Q	Serial Data Output
C	Serial Clock
ORG	Organisation Select
Vcc	Supply Voltage
Vss	Ground

Ordering Information Scheme

For a list of available options refer to the current Memory Shortform catalogue.
For further information on any aspect of this device, please contact the SGS-THOMSON Sales Office nearest to you.

Example: ST93C66 – W MN 6 T

Memory Density	
06	256 bit
46	1K bit
56	2K bit
66	4K bit
76 ⁽¹⁾	8K bit
86	16K bit
Operating Voltage	
blank	4.5V to 5.5V
W	2.5V to 5.5V
R	1.8V to 5.5V
Package	
BN	PSDIP8 0.25mm Frame
MN	SO8 150mil Width
Temp. Range	
1 ⁽²⁾	0 to 70 °C
6	–40 to 85 °C
3 ⁽³⁾	–40 to 125 °C
Option	
T	Tape & Reel Packing

Notes: 1. This is preliminary information on a new product now in development. Details are subject to change without notice.
2. Temperature range on request only.
3. Produced with High Reliability Certified Flow (HRCF), in Vcc range 4.5V to 5.5V at 1MHz only.
Parts are shipped with the memory content set at all "1's" (FFFFh for x16, FFh for x8).