



M93C86, M93C76, M93C66 M93C56, M93C46, M93C06

16K/8K/4K/2K/1K/256 (x8/x16) Serial Microwire Bus EEPROM

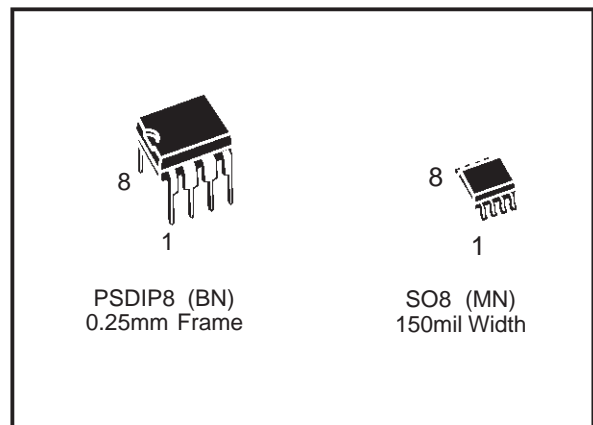
DATA BRIEFING

- INDUSTRY STANDARD MICROWIRE BUS
- 1 MILLION ERASE/WRITE CYCLES, with 40 YEARS 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 3.6V for M93Cx6-R version
- SEQUENTIAL READ OPERATION
- 5ms TYPICAL PROGRAMMING TIME
- ENHANCED ESD/LATCH-UP PERFORMANCES

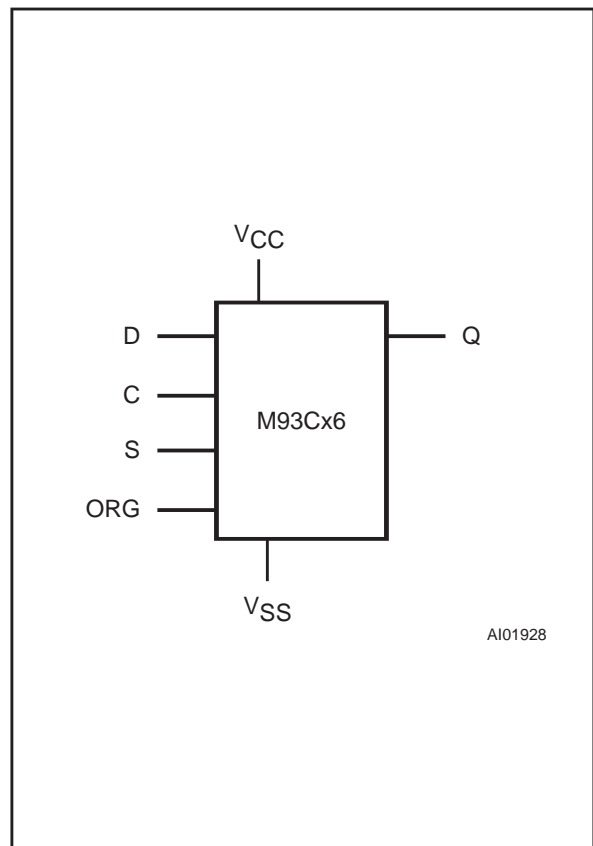
DESCRIPTION

This M93C86/C76/C66/C56/C46/C06 specification covers a range of 16K/8K/4K/2K/1K/256 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 STMicroelectronics'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.

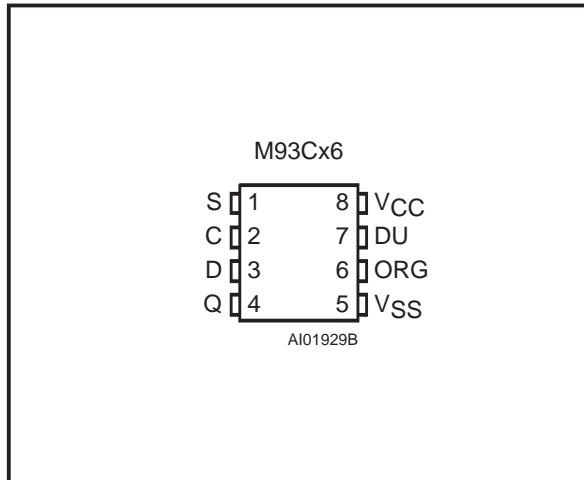
The M93Cx6 specified at $5V \pm 10\%$, the M93Cx6-W specified at 2.5V to 5.5V and the M93Cx6-R specified at 1.8V to 5.5V.



Logic Diagram

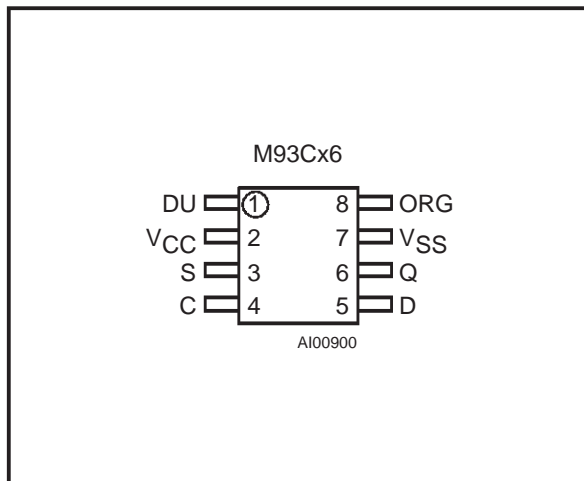


DIP and SO Pin Connections



Warning: DU = Don't Use

SO 90° Turned 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
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 STMicroelectronics Sales Office nearest to you.

Example: ST93C66 – T W MN 6 T

Memory Density	
86	16 Kbit
76 ⁽¹⁾	8 Kbit
66	4 Kbit
56	2 Kbit
46	1 Kbit
06	256 bit
Turned Mode	
T ⁽⁵⁾	90° Turned die
blank	Standard
Operating Voltage	
blank	4.5V to 5.5V
W	2.5V to 5.5V
R ⁽⁴⁾	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 V_{CC} range 4.5V to 5.5V at 1MHz only.
4. -R version (1.8V to 3.6V) are only available in temperature ranges 5 or 1.
5. Turned die option is not available for all devices. Please contact the STMicroelectronics Sales Office nearest to you.

Devices are shipped from the factory with the memory content set at all "1's" (FFFFh for x16, FFh for x8).