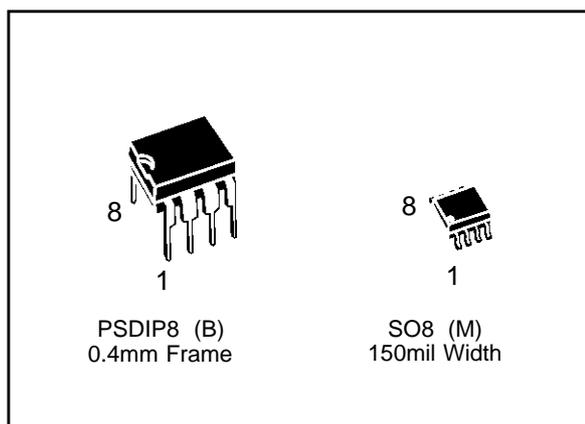


**SERIAL MICROWIRE BUS 4K (256 x 16 or 512 x 8) EEPROM**

**DATA BRIEFING**

- 1 MILLION ERASE/WRITE CYCLES, with 40 YEARS DATA RETENTION
- DUAL ORGANIZATION: 256 x 16 or 512 x 8
- 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 ST93C66 version
  - 3V to 5.5V for ST93C67 version
- SEQUENTIAL READ OPERATION
- 5ms TYPICAL PROGRAMMING TIME

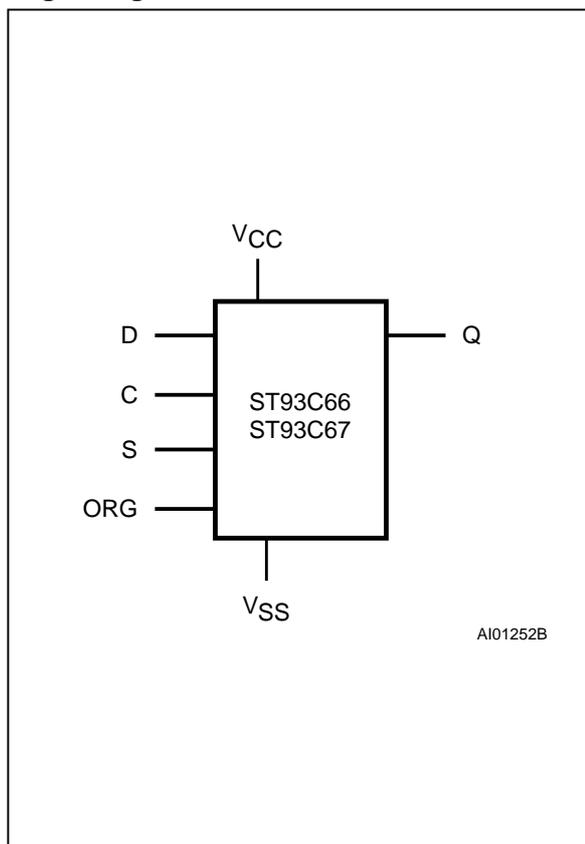


**DESCRIPTION**

This specification covers a range of 4K bit serial EEPROM products, the ST93C66 specified at 5V ± 10% and the ST93C67C specified at 3V to 5.5V. In the text, products are referred to as ST93C66.

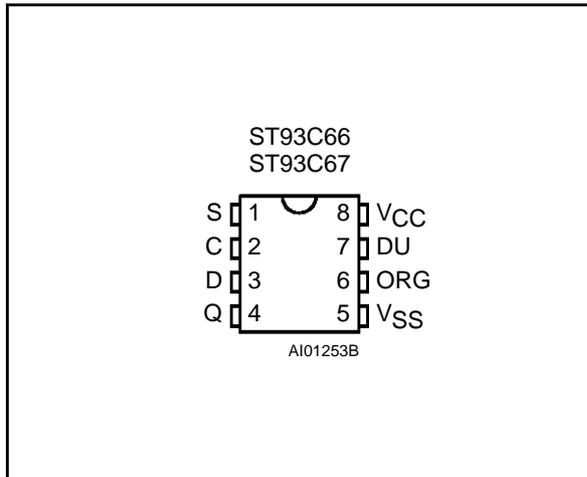
The ST93C66 is a 4K bit Electrically Erasable Programmable Memory (EEPROM) fabricated with SGS-THOMSON's High Endurance Single Polysilicon CMOS technology. The memory is accessed through a serial input (D) and output (Q). The 4K bit memory is divided into either 512 x 8 bit bytes or 256 x 16 bit words. The organization may be selected by a signal applied on the ORG input.

**Logic Diagram**



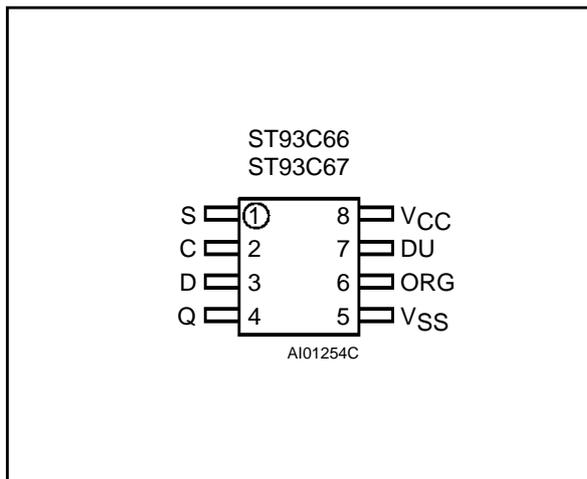
# ST93C66, ST93C67C

## 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 |
| V <sub>CC</sub> | Supply Voltage      |
| V <sub>SS</sub> | 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 M 1 TR

### Operating Voltage

|    |              |
|----|--------------|
| 66 | 4.5V to 5.5V |
| 67 | 3V to 5.5V   |

### Package

|   |                       |
|---|-----------------------|
| B | PSDIP8<br>0.4mm Frame |
| M | SO8<br>150mil Width   |

### Temp. Range

|   |               |
|---|---------------|
| 1 | 0 to 70 °C    |
| 6 | -40 to 85 °C  |
| 3 | -40 to 125 °C |

### Option

|    |                        |
|----|------------------------|
| TR | Tape & Reel<br>Packing |
|----|------------------------|