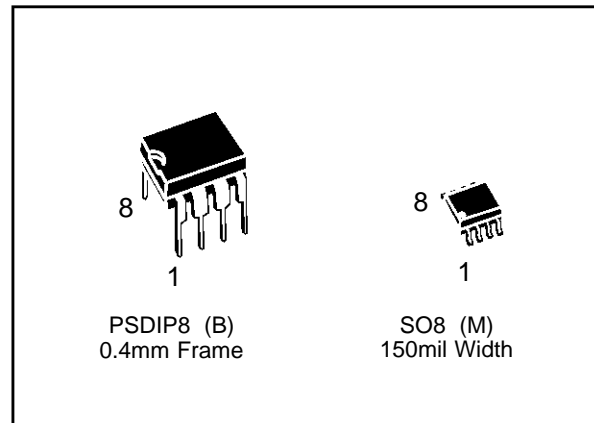


SERIAL MICROWIRE BUS 2K (128 x 16) EEPROM

DATA BRIEFING

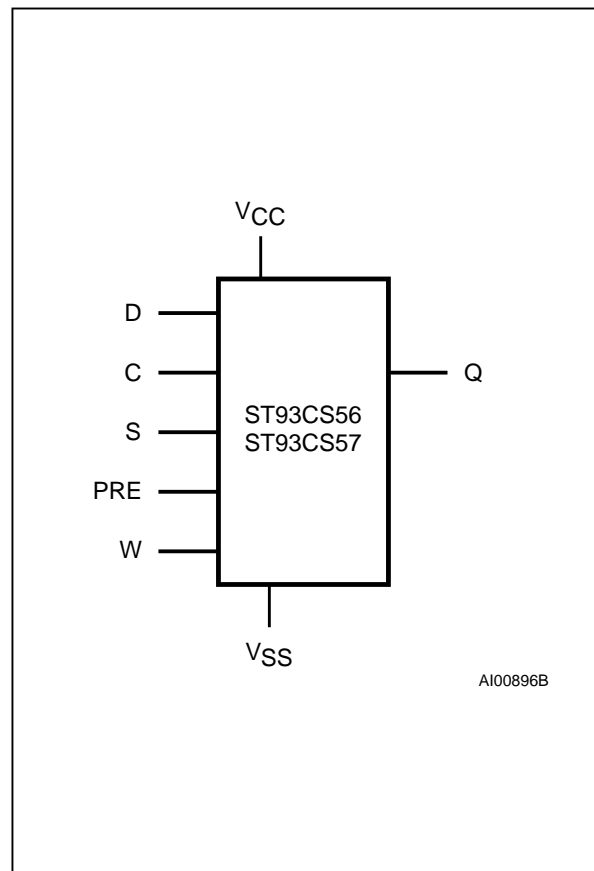
- 1 MILLION ERASE/WRITE CYCLES, with 40 YEARS DATA RETENTION
- SELF-TIMED PROGRAMMING CYCLE with AUTO-ERASE
- READY/BUSY SIGNAL DURING PROGRAMMING
- SINGLE SUPPLY VOLTAGE
 - 3V to 5.5V for the ST93CS56
 - 2.5V to 5.5V for the ST93CS57
- USER DEFINED WRITE PROTECTED AREA
- PAGE WRITE MODE (4 WORDS)
- SEQUENTIAL READ OPERATION
- 5ms TYPICAL PROGRAMMING TIME



DESCRIPTION

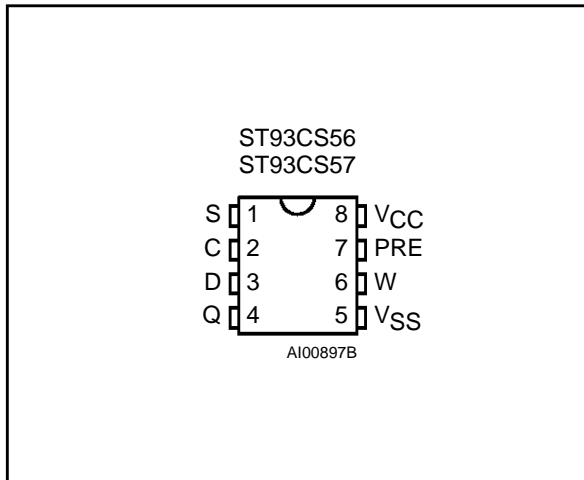
The ST93CS56 and ST93CS57 are 2K bit Electrically Erasable Programmable Memory (EEPROM) fabricated with SGS-THOMSON's High Endurance Single Polysilicon CMOS technology. The memory is accessed through a serial input D and output Q. The 2K bit memory is organized as 128 x 16 bit words. The memory is accessed by a set of instructions which include Read, Write, Page Write, Write All and instructions used to set the memory protection. A Read instruction loads the address of the first word to be read into an internal address pointer.

Logic Diagram



ST93CS56, ST93CS57

DIP Pin Connections



Signal Names

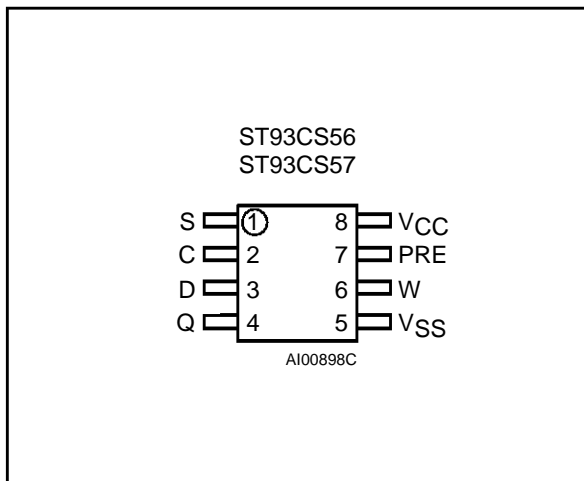
| | |
|-----------------|--------------------|
| S | Chip Select Input |
| D | Serial Data Input |
| Q | Serial Data Output |
| C | Serial Clock |
| PRE | Protect Enable |
| W | Write Enable |
| V _{CC} | Supply Voltage |
| V _{SS} | Ground |

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.

SO Pin Connections



Example: ST93CS56 M 1 013TR

Operating Voltage

| | |
|----|--------------|
| 56 | 3V to 5.5V |
| 57 | 2.5V to 5.5V |

Package

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

Temp. Range

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

Option

013TR Tape & Reel
Packing