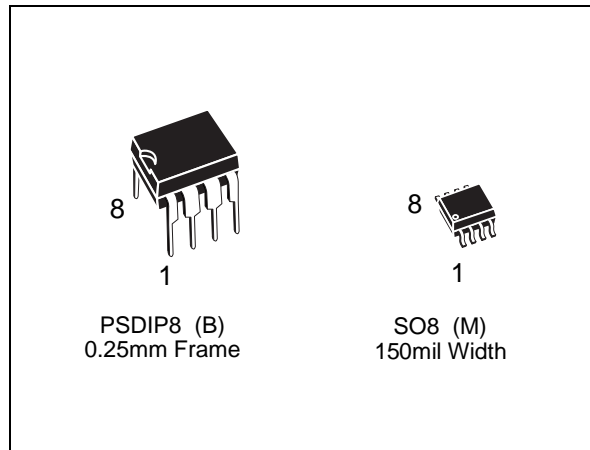


## SERIAL 1K (128 x 8) EEPROM

### DATA BRIEFING

- 1 MILLION ERASE/WRITE CYCLES with 40 YEARS DATA RETENTION
- SINGLE SUPPLY VOLTAGE:
  - 3V to 5.5V for ST24x01 versions
  - 2.5V to 5.5V for ST25x01 versions
  - 1.8V to 5.5V for ST24C01R version only
- HARDWARE WRITE CONTROL VERSIONS: ST24W01 and ST25W01
- TWO WIRE SERIAL INTERFACE, FULLY I<sup>2</sup>C BUS COMPATIBLE
- BYTE and MULTIBYTE WRITE (up to 4 BYTES)
- PAGE WRITE (up to 8 BYTES)
- BYTE, RANDOM and SEQUENTIAL READ MODES
- SELF TIMED PROGRAMMING CYCLE
- AUTOMATIC ADDRESS INCREMENTING
- ENHANCED ESD/LATCH UP PERFORMANCES

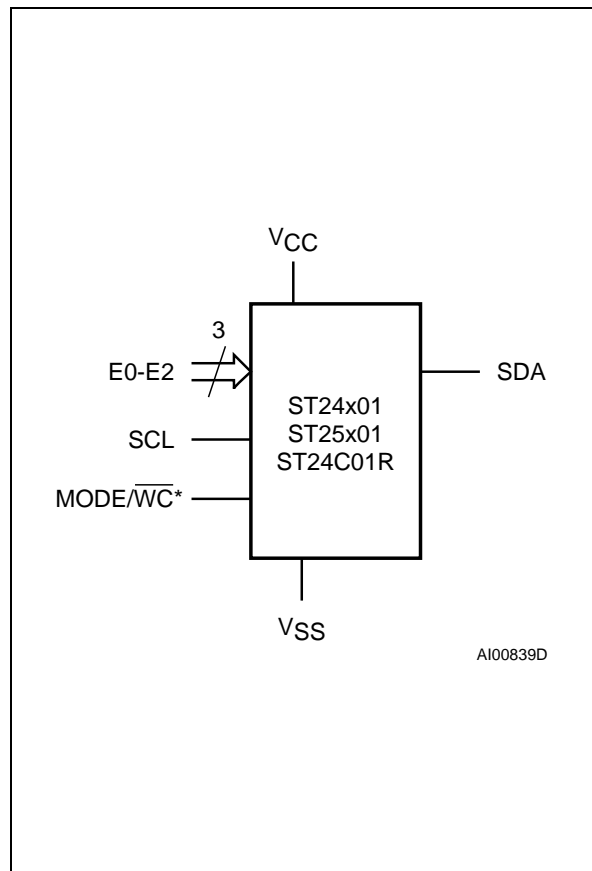


### DESCRIPTION

This specification covers a range of 1K bits I<sup>2</sup>C bus EEPROM products, the ST24/25C01, the ST24C01R and the ST24/25W01. In the text, products are referred to as ST24/25x01, where "x" is: "C" for Standard version and "W" for hardware Write Control version.

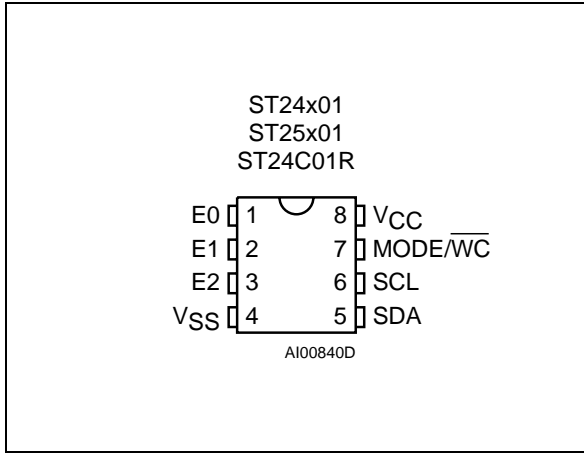
The ST24/25x01 are 1K bit electrically erasable programmable memories (EEPROM), organized as 128 x 8 bits. They are manufactured in SGS-THOMSON's Hi-Endurance Advanced CMOS technology which guarantees an endurance of one million erase/write cycles with a data retention of 40 years. The memories operate with a power supply value as low as 1.8V for the ST24C01R only. Both Plastic Dual-in-Line and Plastic Small Outline packages are available.

### Logic Diagram



**Note:** WC signal is only available for ST24/25W01 products.

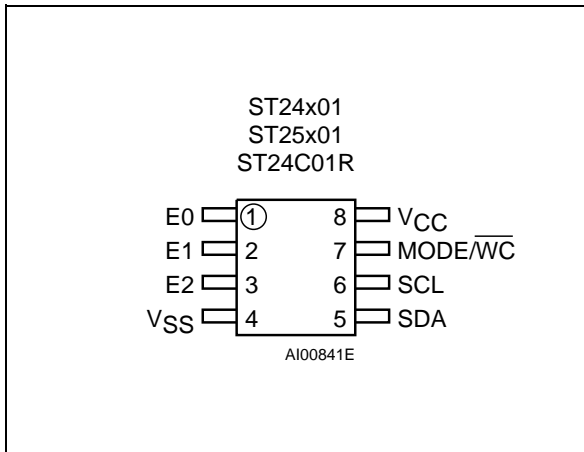
DIP Pin Connections



Signal Names

E0-E2	Chip Enable Inputs
SDA	Serial Data Address Input/Output
SCL	Serial Clock
MODE	Multibyte/Page Write Mode (C version)
WC	Write Control (W version)
Vcc	Supply Voltage
Vss	Ground

SO Pin Connections



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: ST24C01 M 1 TR

Operating Voltage	Range
24C01 3V to 5.5V	Standard
24W01 3V to 5.5V	HW Write Control
25C01 2.5V to 5.5V	Standard
25W01 2.5V to 5.5V	HW Write Control
24C01R 1.8V to 5.5V	Standard

Package
B PSDIP8 0.25mm Frame
M SO8 150mil Width

Temp. Range
1 0 to 70 °C
5 -20 to 85 °C
6 -40 to 85 °C
3 -40 to 125 °C

Option
TR Tape & Reel Packing