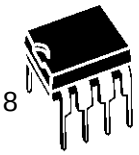
SGS-THOMSON MICROELECTRONICS

ST24E32
ST25E32

SERIAL EXTENDED ADDRESSING COMPATIBLE WITH I²C BUS 32K (4K x 8) EEPROM

DATA BRIEFING

- COMPATIBLE with I²C EXTENDED ADDRESSING
- TWO WIRE SERIAL INTERFACE, SUPPORTS 400kHz PROTOCOL
- 100,000 ERASE/WRITE CYCLES, OVER the FULL SUPPLY VOLTAGE RANGE
- 40 YEARS DATA RETENTION
- SINGLE SUPPLY VOLTAGE
  - 4.5V to 5.5V for ST24E32 version
  - 2.5V to 5.5V for ST25E32 version
- WRITE CONTROL FEATURE
- BYTE and PAGE WRITE (up to 32 BYTES)
- BYTE, RANDOM and SEQUENTIAL READ MODES
- SELF TIMED PROGRAMING CYCLE
- AUTOMATIC ADDRESS INCREMENTING
- ENHANCED ESD/LATCH UP PERFORMANCES



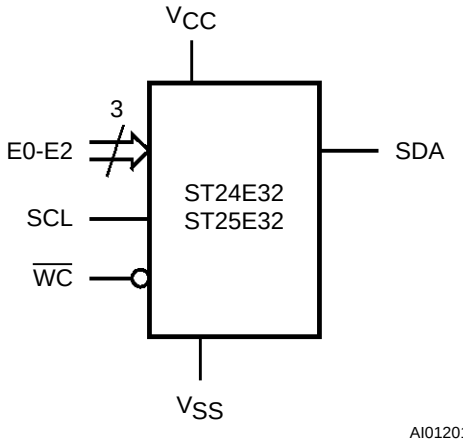
PSDIP8 (B)
0.25mm Frame

SO8 (M)
200mil Width

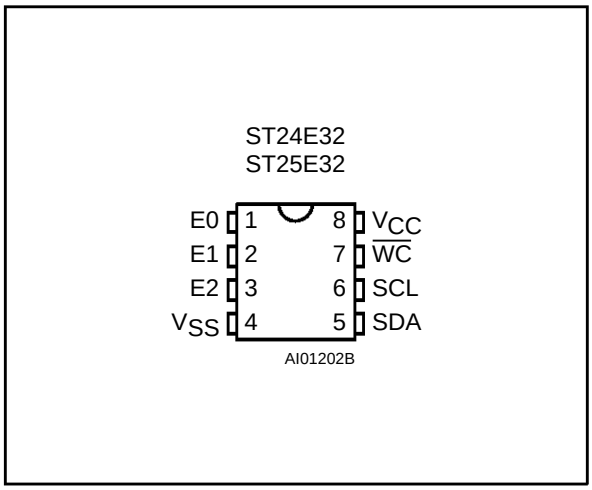
DESCRIPTION

The ST24/25E32 are 32K bit electrically erasable programmable memories (EEPROM), organized as 8 blocks of 512 x 8 bits. The ST25E32 operates with a power supply value as low as 2.5V. Both Plastic Dual-in-Line and Plastic Small Outline packages are available.

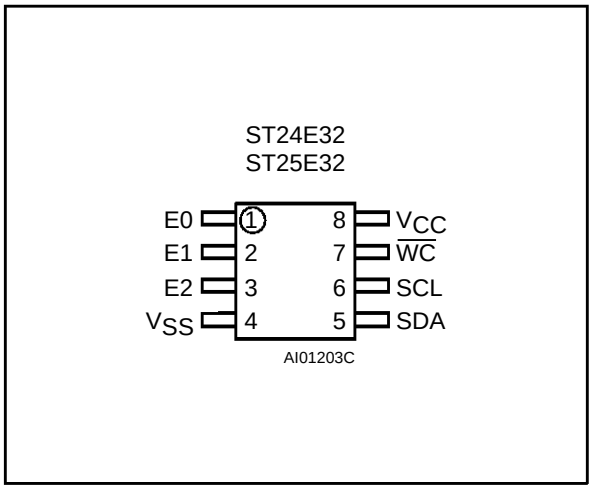
Logic Diagram



DIP Pin Connections



SO Pin Connections



Signal Names

E0 - E2	Chip Enable Inputs
SDA	Serial Data Address Input/Output
SCL	Serial Clock
$\overline{WC}$	Write Control
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.

Example: ST24E32 M 1 TR

Operating Voltage
- 24 4.5V to 5.5V
- 25 2.5V to 5.5V

Range
- E Extended Addressing

Package
- B PSDIP8 0.25mm Frame
- M SO8 200mil Width

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

Option
- TR Tape & Reel Packing