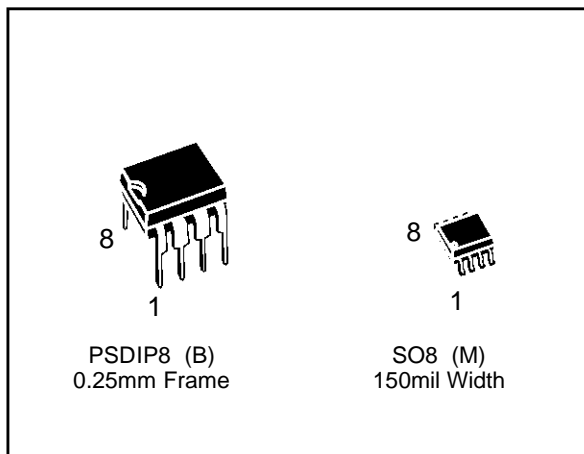




DUAL MODE SERIAL 1K (128x8) EEPROM

DATA BRIEFING

- 1 MILLION ERASE/WRITE CYCLES
- 40 YEARS DATA RETENTION
- 3.6V to 5.5V SINGLE SUPPLY VOLTAGE
- HARDWARE WRITE CONTROL (ST24LW21 and ST24FW21)
- TTL SCHMITT-TRIGGER on VCLK INPUT
- 100k / 400k Hz COMPATIBILITY with the I²C BUS BIT TRANSFER RANGE
- TWO WIRE SERIAL INTERFACE I²C BUS COMPATIBLE
- I²C PAGE WRITE (up to 8 Bytes)
- I²C BYTE, RANDOM and SEQUENTIAL READ MODES
- SELF TIMED PROGRAMMING CYCLE
- AUTOMATIC ADDRESS INCREMENTING
- ENHANCED ESD/LATCH UP PERFORMANCES
- ERROR RECOVERY MECHANISM (ST24FC21 and ST24FW21) VESA 2 COMPATIBLE



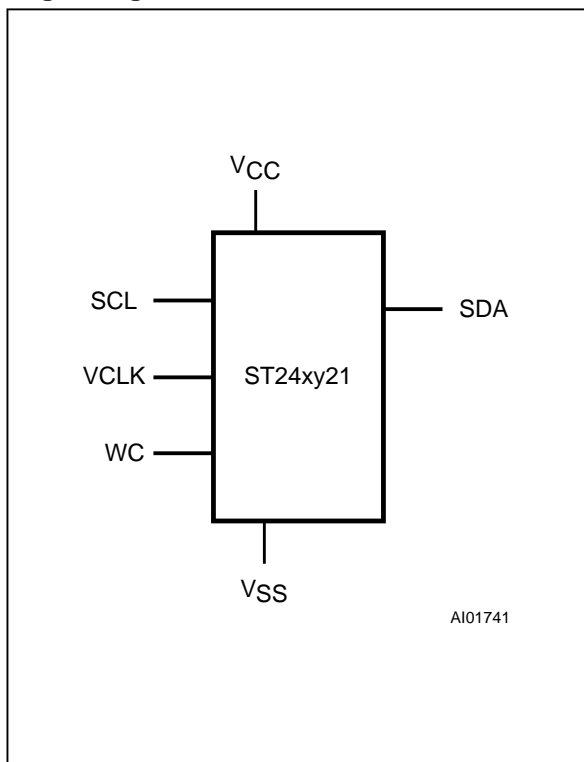
DESCRIPTION

The ST24LC21B, ST24LW21, ST24FC21 and ST24FW21 are 1K bit electrically erasable programmable memory (EEPROM), organized in 128x8 bits. In the text, products are referred as ST24xy21, where "x" is either "L" for VESA 1 or "F" for VESA 2 compatible memories and where "y" indicates the Write Control pin connection: "C" means WC on pin 7 and "W" means WC on pin 3.

Signal Names

SDA	Serial Data Address Input/Output
SCL	Serial Clock (I ² C mode)
V _{CC}	Supply Voltage
V _{SS}	Ground
VCLK	Clock Transmit only mode
WC	Write Control

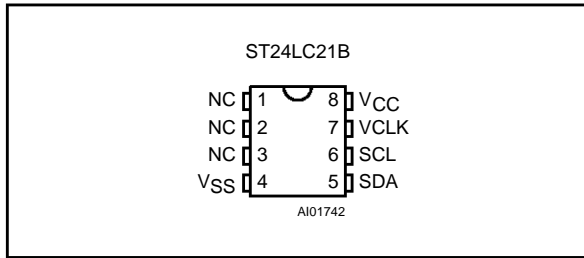
Logic Diagram



Note: WC signal is only available for ST24LW21 and ST24FW21 products.

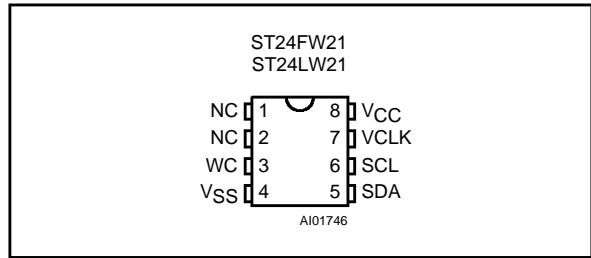
ST24LC21B, ST24LW21, ST24FC21, ST24FW21

DIP Pin Connections



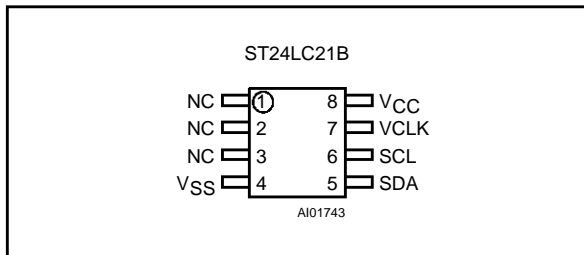
Warning: NC = Not Connected

DIP Pin Connections



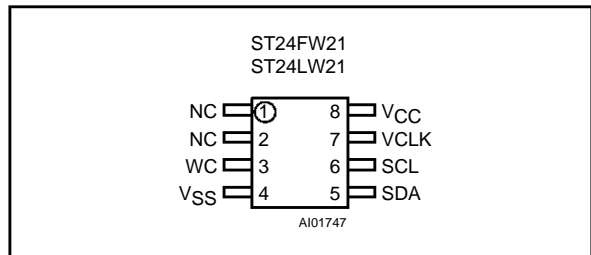
Warning: NC = Not Connected

SO Pin Connections



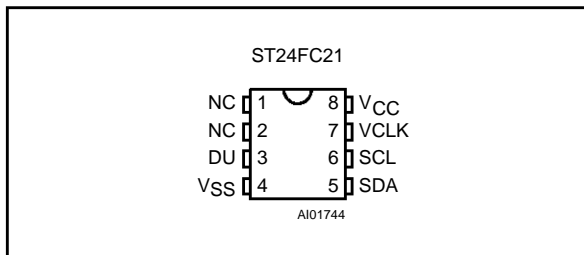
Warning: NC = Not Connected

SO Pin Connections



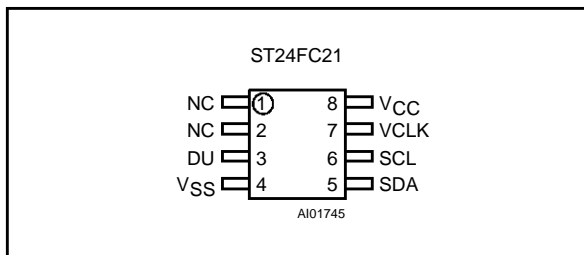
Warning: NC = Not Connected

DIP Pin Connections



Warning: NC = Not Connected. DU = Don't Use, must be left open or connected to V_{CC} or V_{SS}.

SO Pin Connections



Warning: NC = Not Connected. DU = Don't Use, must be left open or connected to V_{CC} or V_{SS}.

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: ST24LC21B M 1 TR

Family Range	ST24LC21B VESA 1 WC on pin 7	M	1	TR
	ST24LW21 VESA 1 WC on pin 3			
	ST24FC21 VESA 2 WC on pin 7			
	ST24FW21 VESA 2 WC on pin 3			
Package	B PSDIP8 0.25mm Frame			
	M SO8 150mil Width			
Temp. Range	1 0 to 70 °C			
	6 -40 to 85 °C			
Option	TR Tape & Reel Packing			