

# NOR Flash Serial-SPI 1.8V 8M-bit 1M x 8 11ns 8-Pin SOIC N Tube

Manufacturer:	Microchip Technology, Inc
Package/Case:	SOP
Product Type:	Memory
RoHS:	RoHS Compliant/Lead free W
Lifecycle:	Active



Images are for reference only

#### **General Description**

SST25WF080B is a member of the Serial Flash 25 Series family and feature a four-wire, SPI-compatible interface that allows for a low pin-count package which occupies less board space and ultimately lowers total system costs. SPI serial flash memory is manufactured with proprietary, high-performance CMOS SuperFlash technology. The split-gate cell design and thick-oxide tunneling injector attain better reliability and manufacturability compared with alternate approaches.

This Serial Flash significantly improve performance and reliability, while lowering power consumption. The device writes (Program or Erase) with a single power supply of 1.65-1.95V. The total energy consumed is a function of the applied voltage, current, and time of application. Since for any given voltage range, the SuperFlash technology uses less current to program and has a shorter erase time, the total energy consumed during any Erase or Program operation is less than alternative flash memory technologies.

## **Key Features**

Single Voltage Read and Write Operations - 1.65-1.95V Serial Peripheral Interface (SPI) Architecture Mode 0 and Mode 3 High Speed Clock Frequency up to 40MHz Dual Input/Output Support Superior Reliability Endurance of 100,000 Cycles with greater than 20 years Data Retention Ultra-Low Power Consumption: - Active Read Current: 4 mA (typical) - Standby Current: 10 µA (typical) - Power-down Mode Standby Current: 4 µA (typical) Flexible Erase Capability - Uniform 4 KByte sectors - Uniform 64 KByte overlay blocks Page Program Mode up to 256 Bytes/Page Fast Erase and Page-Program: - Chip-Erase Time: 500 ms (typical) - Sector-Erase Time: 40 ms (typical) - Block-Erase Time: 80 ms (typical) - Page-Program Time: 0.8 ms/ 256 bytes (typical) End-of-Write Detection with Software polling the BUSY bit in Status Register Hold Pin (HOLD#) to Suspend a serial sequence without deselecting the device Write Protection Pin (WP#) - Enables/Disables the Lock-Down function of the status register Software Write Protection- Write protection through Block-Protection bits in status register Temperature Range: Industrial -40°C to +85°C, Extended -40°C to +125°C Automotive AEC-Q100 Qualified Grade 1 and 3 Packages Available: 8-lead SOIC (150 mils), 8-contact USON (2mm x 3mm), WLCSP All devices are RoHS compliant

# **Recommended For You**

SST39VF1602-70-4I-EKE	SST25VF080B-50-4C-S2AF	AT24C64D-SSHM-T
Microchip Technology, Inc	Microchip Technology, Inc	Microchip Technology, Inc
TSOP48	SOP8	SOP8
AT25256B-SSHL-T	AT24C08C-SSHM-T	AT24C256C-SSHL-T
Microchip Technology, Inc	Microchip Technology, Inc	Microchip Technology, Inc
SOP8	SOP8	SOP8
AT24C32D-SSHM-T	AT24C02C-SSHM-T	AT24C16C-SSHM-B
Microchip Technology, Inc	Microchip Technology, Inc	Microchip Technology, Inc
SOP8	SOP8	SOP-8

#### AT93C56B-SSHM-T

Microchip Technology, Inc SOP8

### SST39SF040-70-4C-WHE

Microchip Technology, Inc TSOP

#### AT25040B-SSHL-B

Microchip Technology, Inc SOP-8

## SST39SF010A-70-4C-NHE

Microchip Technology, Inc PLCC32

### AT25128B-SSPDGV-T

Microchip Technology, Inc SOP8

## SST26VF016-80-5I-S2AE

Microchip Technology, Inc SOP8