

EEPROM Serial-SPI 2K-bit 256 x 8 2.5V/3.3V/5V Automotive 8-Pin SOIC N Tube



Images are for reference only

Manufacturer: [Microchip Technology, Inc](#)

Package/Case: SOP-8

Product Type: Memory

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

The Microchip AT25020B is a 2 Kb Serial EEPROM utilizing the industry standard Serial Peripheral Interface (SPI) compatible serial bus. The device is organized as one block of 256 x 8-bit and is optimized for use in consumer electronics, industrial, medical, and automotive applications where reliable and dependable nonvolatile memory storage is essential. Software write protection allows the user to protect ¼, ½, or the entire memory array. A hardware write protect pin is also provided, which additionally protects against inadvertent writes to the status register. The EEPROM is available in a variety of space-saving packaging options.

Key Features

256 x 8-bit (2 Kbit)

Supports SPI modes 0 and 3

Up to 20 MHz clock frequency

Self-Timed Erase and Write Cycles (5 ms max.)

Read current: 5mA (Max) at 5 MHz

Write current: 5 mA (Max) at 5 MHz

Standby current: 3.5 uA (Max) at 5 V

Block Write Protection: Protect 1/4, 1/2 or Entire Array

More than 1 million erase/write cycles

Data retention 100 years

Automotive Grade 1: -40°C to 125°C

Automotive Grade 2: -40°C to 105°C

Automotive Grade 3 / Industrial: -40°C to 85°C

Automotive AECQ-100 Qualified1

Factory Programming Available

Available in standard packages including 8-lead SOIC, and advanced packages including 8-lead TSSOP, 8-lead 2x3 DFN, and 8-ball VFBGA

Recommended For You

AT93C46E-PU

Microchip Technology, Inc

DIP8

AT93C46D-PU

Microchip Technology, Inc

DIP8

AT24C64D-SSHMT

Microchip Technology, Inc

SOP8

AT24C128C-MAHMT

Microchip Technology, Inc

UDFN-8

AT93C66B-XHM-T

Microchip Technology, Inc

TSSOP8

AT25256B-SSHL-T

Microchip Technology, Inc

SOP8

AT24C08C-SSHMT

Microchip Technology, Inc

SOP8

AT24C04C-PUM

Microchip Technology, Inc

DIP8

AT24C256C-SSHL-T

Microchip Technology, Inc

SOP8

AT24C02C-XHM-T

Microchip Technology, Inc

TSSOP8

AT24C02C-XHM-B

Microchip Technology, Inc

TSSOP8

AT24C32D-SSHM-T

Microchip Technology, Inc

SOP8

AT24C02C-SSHM-T

Microchip Technology, Inc

SOP8

AT24C16C-SSHM-B

Microchip Technology, Inc

SOP-8

AT93C56B-SSHM-T

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SOP8