

# 25LC256T-E/SN

# EEPROM Serial-SPI 256K-bit 32K x 8 3.3V/5V Automotive 8-Pin SOIC N T/R

Manufacturer:	Microchip Technology, Inc
Package/Case:	SOP8
Product Type:	Memory
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

## **General Description**

The Microchip 25LC256 is a 256 Kb Serial EEPROM utilizing the industry standard Serial Peripheral Interface (SPI) compatible serial bus. The device is organized as one block of  $32,768 \times 8$ -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  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 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**

32,768 x 8-bit (256 Kbit)	
Supports SPI modes 0 and 3	
Up to 10 MHz clock frequency	
Self-Timed Erase and Write Cycles (5 ms max.)	
Read current: 6mA (Max) at 10 MHz	
Write current: 5 mA (Max) at 5.5 V	
Standby current: 5 $\mu$ A (Max) at 5.5 V	
Block Write Protection: Protect 1/4, 1/2 or Entire Array	
More than 1 million erase/write cycles	
Data retention > 200 years	
Industrial (I): -40°C to 85°C	
Extended (E): $-40^{\circ}$ C to $+125^{\circ}$ C	
Automotive AECQ-100 Qualified1	
Factory Programming Available	

Available in standard packages including 8-lead PDIP, SOIC, SOIJ, and TSSOP, as well as 5x6mm DFN

## **Recommended For You**

#### SST25VF080B-50-4C-S2AF

Microchip Technology, Inc SOP8

AT25040B-SSHL-B Microchip Technology, Inc SOP-8

AT27C256R-70JU Microchip Technology, Inc PLCC32

25AA1024T-I/MF Microchip Technology, Inc DFN-8

#### AT25256B-SSHL-T

Microchip Technology, Inc SOP8

AT25128B-SSPDGV-T Microchip Technology, Inc SOP8

25AA1024-I/SM Microchip Technology, Inc SOP8

AT25512N-SH-T Microchip Technology, Inc SOP8 AT24C256C-SSHL-T

Microchip Technology, Inc SOP8

23K256-I/SN Microchip Technology, Inc SOP8

AT25320B-SSHL-T Microchip Technology, Inc SOP8

25LC1024-I/SM Microchip Technology, Inc SOP8

### 25AA256T-I/SN

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## 25LC640A-I/SN

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## AT25640B-SSHL-T

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