

Product Overview

CAT25256: EEPROM Serial 256-Kb SPI

For complete documentation, see the data sheet.

The CAT25256 is a EEPROM Serial 256-Kb SPI device internally organized as 32kx8 bits. This features a 64-byte page write buffer and supports the Serial Peripheral Interface (SPI) protocol. The device is enabled through a Chip Select (\overline{CS}) input. In addition, the required bus signals are clock input (SCK), data input (SI) and data output (SO) lines. The \overline{HOLD} input may be used to pause any serial communication with the CAT25256 device. The device features software and hardware write protection, including partial as well as full array protection.

On-Chip ECC (Error Correction Code) makes the device suitable for high reliability applications.

Available for New Product (Rev. E).

Features

- 20 MHz (5 V) SPI Compatible
- 1.8 V to 5.5 V Supply Voltage Range
- SPI Modes (0,0) & (1,1)
- 64-byte Page Write Buffer
- Additional Identification Page with Permanent Write Protection (New Product)
- Self-timed Write Cycle
- Hardware and Software Protection
- 100 Year Data Retention
- 1,000,000 Program/Erase Cycles
- Low Power CMOS Technology

For more features, see the data sheet

Applications

- Automotive Systems
- Communications Systems
- Computer Systems
- Consumer Systems
- Industrial Systems

Part Electrical Specifications

Product	Compliance	Status	Type	Density	Organization	Data Transmission Standard	$f_{\text{cycle Max}}$ (kHz)	$t_{\text{ACC Max}}$ ns	$V_{\text{CC Min}}$ (V)	$V_{\text{CC Max}}$ (V)	$I_{\text{standby Max}}$ (μA)	$I_{\text{act Max}}$ (mA)	T Min ($^{\circ}\text{C}$)	T Max ($^{\circ}\text{C}$)	Package Type
CAT25256HU4I-GT3	<u>Pb-free</u> Halide free	Active	Serial	256 kb	32k x 8	SPI	10000	40	1.8	5.5	3	2	-40	125	UDFN-8
CAT25256VE-GT3	<u>Pb-free</u> Halide free	Active	Serial	256 kb	32k x 8	SPI	10000	40	1.8	5.5	5	2	-40	125	SOIC-8
CAT25256VI-GT3	<u>Pb-free</u> Halide free	Active	Serial	256 kb	32k x 8	SPI	10000	40	1.8	5.5	2	2	-40	85	SOIC-8
CAT25256XE-T2	<u>Pb-free</u> Halide free	Active	Serial	256 kb	32k x 8	SPI	10000	40	1.8	5.5	3	2	-40	125	SOIC-8
CAT25256XI-T2	<u>Pb-free</u> Halide free	Active	Serial	256 kb	32k x 8	SPI	10000	40	1.8	5.5	2	2	-40	85	SOIC-8
CAT25256YI-GT3	<u>Pb-free</u> Halide free	Active	Serial	256 kb	32k x 8	SPI	10000	40	1.8	5.5	2	2	-40	85	TSSOP-8

For more information please contact your local sales support at www.onsemi.com.

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