

Product Overview

CAV25512: EEPROM Serial 512-Kb SPI - Automotive Grade

For complete documentation, see the data sheet.

The CAV25512 is a EEPROM Serial 512-Kb SPI - Automotive Grade device internally organized as 64Kx8 bits. This features a 128-byte page write buffer and supports the Serial Peripheral Interface (SPI) protocol. The device is enabled through a Chip Select (CS) input. In addition, the required bus signals are clock input (SCK), data input (SI) and data output (SO) lines. The HOLD input may be used to pause any serial communication with the CAV25512 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.

Features

- Automotive Temperature Grade 1 (-40°C to +125°C)
- 2.5 V to 5.5 V Supply Voltage Range
- SOIC and TSSOP 8-lead Packages
- 10 MHz SPI Compatible
- SPI Modes (0,0) & (1,1)
- 128-byte Page Write Buffer
- Additional Identification Page with Permanent Write Protection
- Self-timed Write Cycle
- Hardware and Software Protection
- Block Write Protection - Protect ¼, ½ or Entire EEPROM Array

For more features, see the data sheet

Benefits

- Allows the use in safety critical application
- Single power supply from 2.5 V to 5.5 V. Functional over the entire temperature range
- Space-Efficient Packaging

Applications

- Door module
- Seat control unit
- Body computer & energy management unit
- Immobilizer unit
- Wiper module

Part Electrical Specifications

Product	Compliance	Status	Type	Density	Organization	Data Transmission Standard	f _{cycle} Max (kHz)	t _{acc} Max ns	V _{cc} Min (V)	V _{cc} Max (V)	I _{standby} Max (µA)	I _{act} Max (mA)	T Min (°C)	T Max (°C)	Package Type
CAV25512VE-GT3	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	512 kb	64k x 8	SPI	10000	40	2.5	5.5	5	3	-40	125	SOIC-8
CAV25512YE-GT3	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	512 kb	64k x 8	SPI	10000	40	2.5	5.5	5	3	-40	125	TSSOP-8

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

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