

## Product Overview

### CAV24C02: EEPROM Serial 2-Kb I<sup>2</sup>C - Automotive Grade

For complete documentation, see the data sheet.

The CAV24C02 is a EEPROM Serial 2-Kb I<sup>2</sup>C - Automotive Grade device organized internally as 16 pages of 16 bytes each. This device supports both the Standard (100 kHz) as well as Fast (400 kHz) I<sup>2</sup>C protocol. Data is written by providing a starting address, then loading 1 to 16 contiguous bytes into a Page Write Buffer, and then writing all data to non-volatile memory in one internal write cycle. Data is read by providing a starting address and then shifting out data serially while automatically incrementing the internal address count. External address pins make it possible to address up to eight CAV24C02 devices on the same bus.

#### Features

- Automotive Temperature Grade 1 (-40°C to +125°C)
  - 2.5 V to 5.5 V Supply Voltage Range
  - These Devices are PbFree, Halogen Free/BFR Free and are RoHS Compliant
  - Supports Standard and Fast I<sup>2</sup>C Protocol
  - 16-Byte Page Write Buffer
  - Hardware Write Protection for Entire Memory
  - CAV Prefix for Automotive and Other Applications Requiring Site and Change Control
  - Schmitt Triggers and Noise Suppression Filters on I<sup>2</sup>C Bus Inputs (SCL and SDA)
  - Low power CMOS Technology
  - 1,000,000 Program/Erase Cycles
- For more features, see the data sheet

#### Benefits

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

#### Applications

- Door module
- Seat control unit
- Immobilizer unit
- Wiper module
- Fan control unit

### Part Electrical Specifications

Product	Compliance	Status	Type	Density	Organization	Data Transmission Standard	f <sub>cycle</sub> Max (kHz)	t <sub>acc</sub> Max ns	V <sub>cc</sub> Min (V)	V <sub>cc</sub> Max (V)	I <sub>standby</sub> Max (μA)	I <sub>act</sub> Max (mA)	T Min (°C)	T Max (°C)	Package Type
CAV24C02WE-GT3	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	2 kb	256 x 8	I <sup>2</sup> C	400	900	2.5	5.5	5	2	-40	125	SOIC-8
CAV24C02YE-GT3	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	2 kb	256 x 8	I <sup>2</sup> C	400	900	2.5	5.5	5	2	-40	125	TSSOP-8

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