

## CAV24C04

# EEPROM Serial 4-Kb I<sup>2</sup>C - Automotive Grade

## Product Overview

For complete documentation, see the data sheet.

The CAV24C04 is a EEPROM Serial 4-Kb I<sup>2</sup>C - Automotive Grade device organized internally as 32 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 four CAV24C04 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	Pricing (\$/Unit)	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>stand by</sub> Max (μA)	I <sub>act</sub> Max (mA)	T <sub>Min</sub> (°C)	T <sub>Max</sub> (°C)	Package Type
CAV24C04C4A TR	0.2667		Active	Serial	4 kb	512 x 8	I2C	400	900	2.5	5.5	5	2	-40	125	WLCSP-4
CAV24C04C5A TR	0.2933		Active	Serial	4 kb	512 x 8	I2C	400	900	2.5	5.5	5	2	-40	125	WLCSP-5
CAV24C04WE-GT3	0.2208		Active	Serial	4 kb	512 x 8	I2C	400	900	2.5	5.5	5	2	-40	125	SOIC-8
CAV24C04YE-GT3	0.2107		Active	Serial	4 kb	512 x 8	I2C	400	900	2.5	5.5	5	2	-40	125	TSSOP-8