

## Product Overview

### CAV24C16: EEPROM Serial 16-Kb I<sup>2</sup>C - Automotive Grade

For complete documentation, see the data sheet.

The CAV24C16 is a EEPROM Serial 16-Kb I<sup>2</sup>C - Automotive Grade device organized internally as 128 pages of 16 bytes each. This device support 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 one CAV24C16 device on the same bus.

#### Features

- Automotive Temperature Grade 1 (-40°C to +125°C)
  - These Devices are PbFree, Halogen Free/BFR Free and are RoHS Compliant
  - 2.5 V to 5.5 V Supply Voltage Range
  - 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.
- Space-Efficient Packaging
- Single power supply from 2.5V to 5.5V. Functional over the entire Temperature range.

#### Applications

- Door module
- Seat control unit
- Wiper module
- Fan control unit
- Park assist 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>standby</sub> Max (μA)	I <sub>act</sub> Max (mA)	T Min (°C)	T Max (°C)	Package Type
CAV24C16C4ATR	0.2251	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	16 kb	2k x 8	I2C	400	900	2.5	5.5	5	2	-40	125	WLCSP-4
CAV24C16C5ATR	0.33	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	16 kb	2k x 8	I2C	400	900	2.5	5.5	5	2	-40	125	WLCSP-5
CAV24C16WE-GT3	0.2453	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	16 kb	2k x 8	I2C	400	900	2.5	5.5	5	2	-40	125	SOIC-8
CAV24C16YE-GT3	0.2453	AEC Qualified PPAP Capable Pb-free Halide free	Active	Serial	16 kb	2k x 8	I2C	400	900	2.5	5.5	5	2	-40	125	TSSOP-8

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