

# CAT24AA16

## EEPROM Serial 16-Kb I<sup>2</sup>C

### Product Overview

For complete documentation, see the data sheet.

The CAT24AA16 is a EEPROM Serial 16-Kb I2C device internally organized as 2048x8 bits.

The device features a 16-byte page write buffer and supports 100 kHz, 400 kHz and 1 MHz I2C protocols.



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.

### Features

- Standard and Fast I2C Protocol Compatible
- Supports 1 MHz Clock Frequency
- 1.7 V to 5.5 V Supply Voltage Range
- 16-Byte Page Write Buffer
- Hardware Write Protection for Entire Memory
- Schmitt Triggers and Noise Suppression Filters on I2C Bus Inputs (SCL and SDA)
- Low Power CMOS Technology
- 1,000,000 Program/Erase Cycles
- 100 Year Data Retention
- Industrial Temperature Range

For more features, see the data sheet

### 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 <sub>Min</sub> (°C) | T <sub>Max</sub> (°C) | Package Type |
|------------------|-------------------|---|--------|--------|---------|--------------|----------------------------|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------------|---------------------------|-----------------------|-----------------------|--------------|
| CAT24AA16TDI-GT3 | 0.4443            |   | Active | Serial | 16 kb   | 2k x 8       | I2C                        | 1000                         | -                       | 1.7                     | 5.5                     | 1                             | 1                         | -40                   | 85                    | TSOT-23-5    |