

Product Overview

CAT24C256: EEPROM Serial 256-Kb I²C

For complete documentation, see the data sheet.

The CAT24C256 is a EEPROM Serial 256-Kb I²C, internally organized as 512 pages of 64 bytes each, for a total of 32,768 bytes of 8 bits each. It features a 64-byte page write buffer and supports the Standard (100 kHz), Fast (400 kHz) and Fast-Plus (1 MHz) I²C protocol. Write operations can be inhibited by taking the WP pin High (this protects the entire memory). External address pins make it possible to address up to eight CAT24C256 devices on the same bus. On-Chip ECC (Error Correction Code) makes the device suitable for high reliability applications.

Features

- Supports Standard, Fast and Fast-Plus I²C Protocol
- 1.8 V to 5.5 V Supply Voltage Range
- 64-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
- 8-lead SOIC and TSSOP and 8-pad UDFN packages

For more features, see the data sheet

Applications

- Alarm Systems
- Audio Players
- Automotive Systems
- Cable Modems
- CDRW

Part Electrical Specifications

| Product | Pricing (\$/Unit) | 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 |
|------------------|-------------------|---|--------|--------|---------|--------------|----------------------------|------------------------------|-------------------------|-------------------------|-------------------------|-------------------------------|---------------------------|------------|------------|--------------|
| CAT24C256HU4IGT3 | 0.2533 | Pb-free Halide free non AEC-Q and PPAP | Active | Serial | 256 kb | 32k x 8 | I ² C | 1000 | 400 | 1.8 | 5.5 | 2 | 3 | -40 | 85 | UDFN-8 |
| CAT24C256WI-GT3 | 0.2 | Pb-free Halide free non AEC-Q and PPAP | Active | Serial | 256 kb | 32k x 8 | I ² C | 400 | 900 | 1.8 | 5.5 | 1 | 1 | -40 | 85 | SOIC-8 |
| CAT24C256YI-GT3 | 0.2 | Pb-free Halide free non AEC-Q and PPAP | Active | Serial | 256 kb | 32k x 8 | I ² C | 400 | 900 | 1.8 | 5.5 | 1 | 1 | -40 | 85 | TSSOP-8 |

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

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