

## Product Overview

### CAT24M01: EEPROM Serial 1-Mb I<sup>2</sup>C

For complete documentation, see the data sheet.



The CAT24M01 is a EEPROM Serial 1-Mb I<sup>2</sup>C, internally organized as 131,072 words of 8 bits each. It features a 256-byte page write buffer and supports the Standard (100 kHz), Fast (400 kHz) and Fast-Plus (1 MHz) I<sup>2</sup>C 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 four CAT24M01 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 I<sup>2</sup>C Protocol
  - 1.8 V to 5.5 V Supply Voltage Range
  - 256-Byte Page Write Buffer
  - Hardware Write Protection for Entire Memory
  - 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
  - 100 Year Data Retention
  - Industrial and Extended Temperature Range
  - 8-lead SOIC and TSSOP and 8-pad UDFN packages
- For more features, see the data sheet

#### Benefits

- Simple interface protocol / industry standard; 1MHz clock enables faster operation.
- Single power supply from 1.8V to 5.5V: allows multiple applications / various VCC values using the same device.

### 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	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
CAT24M01HU5I-GT3	1.1866	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I <sup>2</sup> C	1000	400	1.8	5.5	2	1	-40	85	UDFN-8
CAT24M01WI-GT3	0.84	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I <sup>2</sup> C	1000	400	1.8	5.5	2	1	-40	80	SOIC-8
CAT24M01XI-T2	1.1733	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I <sup>2</sup> C	1000	400	1.8	5.5	2	1	-40	80	SOIC-8
CAT24M01YI-GT3	0.8666	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I <sup>2</sup> C	1000	400	1.8	5.5	2	1	-40	85	TSSOP-8

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