

Product Overview

CAT24M01: 1-Mb I²C Serial EEPROM

For complete documentation, see the data sheet



The CAT24M01 is a 1024-kb Serial CMOS EEPROM, 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) 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 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 I²C 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 I²C 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-pin PDIP, SOIC, TSSOP and 8pad 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	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
CAT24M01HU5I-GT3	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I2C	1000	400	1.8	5.5	2	1	-40	85	UDFN-8
CAT24M01WE-GT3	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I2C	400	900	2.5	5.5	5	1	-40	125	SOIC-8
CAT24M01WI-GT3	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I2C	1000	400	1.8	5.5	2	1	-40	80	SOIC-8
CAT24M01XI-T2	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I2C	1000	400	1.8	5.5	2	1	-40	80	SOIC-8
CAT24M01YE-GT3	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I2C	400	900	2.5	5.5	5	1	-40	125	TSSOP-8
CAT24M01YI-GT3	Pb-free Halide free	Active	Serial	1 Mb	128k x 8	I2C	1000	400	1.8	5.5	2	1	-40	85	TSSOP-8

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

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