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**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20421**

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**Issue Date:** 16-Apr-2014

**TITLE:** CAT24M01, 1Mb I2C Serial EEPROM Die Revision for SOIC 8-pin package.

**PROPOSED FIRST SHIP DATE:** 16-Jul-2014 or earlier upon customers' approval

**AFFECTED CHANGE CATEGORY(S):** ON Semiconductor Fabrication Site

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local ON Semiconductor Sales or Julio Song <[julio.song@onsemi.com](mailto:julio.song@onsemi.com)>

**SAMPLES:**

Contact your local ON Semiconductor Sales Office

**ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or Francis Lualhati <[ffxczy@onsemi.com](mailto:ffxczy@onsemi.com)>

**NOTIFICATION TYPE:**

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <[quality@onsemi.com](mailto:quality@onsemi.com)>.

**DESCRIPTION AND PURPOSE:**

ON Semiconductor is pleased to announce as part of its ongoing effort to improve product availability the CAT24M01, 1Mb I2C Serial EEPROM in SOIC-8 (JEDEC) and SOIC-8 (EIAJ) packages. The replacement die has a different form factor (X/Y) compared to the existing die and is performance, pin and package compatible to the previous product revision.

The replacement die is fabricated in the same 0.18 um CMOS EE process at ON Semiconductor's 8-inch Wafer Fab in Gresham, Oregon, USA.



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**RELIABILITY DATA SUMMARY:**

Package: SOIC8W

CAT24M01XI

Test:	Conditions:	Interval:	Results
EDR	NVM Endurance, cycle time @ 25°C	1M cycles	0/231
EDR/HTDR	NVM Data Retention, Cycling Precon to 100K cycle, and Operational Life: (Test @R/H) TA= 150°C	1008 hrs	0/231
HTOL	TA=150°C:, biased (Test @R/H)	1008 hrs	0/231
AC+PC	Ta=121C RH=100% (Test @R)	96 hrs	0/231
HAST+PC	Ta=130C RH=85%, bias=80% rated V (Test @R/H)	96 hrs	0/231
TC+PC	Ta= -65 C to 150 C (Test @R/H)	500 cyc	0/231

Conclusion: All reliability requirements have been met.

**ELECTRICAL CHARACTERISTIC SUMMARY:**

Device parameters will continue to meet all datasheet specifications. Characterization data is available upon request. Even though device specifications remain unchanged, ON Semiconductor recommends samples be obtained for application specific review.

**CHANGED PART IDENTIFICATION:**

No change to part marking.

**List of Affected General Parts:**

- CAT24M01WI-GT3
- CAT24M01WI-GT3JN
- CAT24M01WI-G
- CAT24M01WE-GT3
- CAT24M01XI-T2
- CAT24M01XI
- CAV24M01WE-GT3