



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

Generic Copy

02-Nov-2009

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16349

TITLE: Fab Transfer of Trench Technology to ON Semiconductor Aizu, Japan

PROPOSED FIRST SHIP DATE: 02-Feb-2010

AFFECTED CHANGE CATEGORY(S): On Semiconductor Wafer Fab Site

AFFECTED PRODUCT DIVISION(S): SPG

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Angela Tam <Angela.Tam@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Matt Kas <Matt.Kas@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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

This is the Final Process Change Notification to Initial Process Change Notice #16249. The IPCN can be found at www.onsemi.com.

On Semiconductor is pleased to announce that the Trench MOSFET technology has successfully completed the qualification at ON Semiconductor, Aizu, Japan facility.

Upon the expiration of this FPCN, the affected devices can have die sourced from the newly qualified fab (On Semiconductor, Aizu) and the existing qualified wafer foundry. All devices will continue to meet datasheet performance and in compliance to the ON Semiconductor's quality standards.

**Final Product/Process Change Notification #16349****RELIABILITY DATA SUMMARY:****Products assembled with Trench Die from Aizu Wafer Fab:****NTMS4107NR2G, N-Ch, 30Vds, 20Vgs, SO8 Package**

Test: High Temperature Reverse Bias (HTRB)

Conditions: Vds= 24V, Ta=150°C, Duration= 1008Hrs

Results: 0/231

Test: High Temperature Gate Bias (HTGB)

Conditions: Vgs= 20V, Ta=150°C, Duration= 504Hrs

Results: 0/231

Test: Highly Accelerated Stress Test (HAST)

Conditions: Ta=130°C, P= 18.8psi, RH= 85%, Duration= 96Hrs

Results: 0/231

Test: Intermittent Operating Life (IOL-PC)

Conditions: Ta=25°C, delta Tj=100°C, 2-min on/off, 15K-cycles

Results: 0/231

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 500-cy

Results: 0/231

Test: Autoclave Test (AC-PC)

Conditions: Ta=121°C, P=15psi, RH=100%, 96-Hrs

Results: 0/231

Test: Resistance to Solder Heat

Conditions: Ta=260°C, Dwell Time=10-Seconds,

Results: 0/135

NTZD3154NT1G, N-Ch, 20Vds, 6Vgs, SOT563 Package

Test: High Temperature Reverse Bias (HTRB)

Conditions: Vgs= 12V, Ta=150°C, Duration= 1008Hrs, 3-Lots

Results: 0/231

Test: High Temperature Gate Bias (HTGB)

Conditions: Vgs= 6V, Ta=150°C, Duration= 1008Hrs, 3-Lots

Results: 0/231

P-Ch, 30Vds, 8Vgs, ChipFET Package

Test: High Temperature Reverse Bias (HTRB)

Conditions: Vds= 24V, Ta=150°C, Duration= 504Hrs, 3-Lots

Results: 0/231

Test: High Temperature Gate Bias (HTGB)

Conditions: Vgs= 8V, Ta=150°C, Duration= 504Hrs, 3-Lots

Results: 0/231

NTJD4152PT1G, P-Ch, 20Vds, 12Vgs, SC88 Package

Test: High Temperature Gate Bias (HTGB)

Conditions: Vgs= 12V, Ta=150°C, Duration= 1008Hrs, 2-Lots

Results: 0/154

**Final Product/Process Change Notification #16349****ELECTRICAL CHARACTERISTIC SUMMARY:**

There is no significant change in electrical parametric performance. Electrical data is available upon request.

CHANGED PART IDENTIFICATION:

The parts listed under the affected parts list with datecode WW04 2010 or later can have die sourced from On Semiconductor, Aizu or the existing wafer foundry.



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AFFECTED DEVICE LIST

NUS5531MTR2G