

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION Generic Copy

17-Sept-2008

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16150

TITLE: Additional Wafer Fab Capacity for TMOS7 Product

PROPOSED FIRST SHIP DATE: 01-Jan-2009

AFFECTED CHANGE CATEGORY(S): ON Semi FAB Site

AFFECTED PRODUCT DIVISION(S): PowerFET Business Unit

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION: Contact your local ON Semiconductor Sales Office or Rod Nelson < <u>rod.nelson@onsemi.com</u>>

SAMPLES: Contact your local ON Semiconductor Sales Office or George Riehm < George.Riehm@onsemi.com >

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Donna Scheuch d.scheuch@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 an extension to PCN numbers 12755, 12781, and 12910.

This is an announcement that for the listed products both ON Semiconductor's Wafer Fab facility in Aizu, Japan, and the current Wafer Foundry will be sources for Die. This TMOS7 Silicon platform was originally introduced in 2002 from the Wafer Fab in Aizu. The Aizu Fab facility is fully certified, and has been a continuous source for MOSFET Die for over 20-years.

Device quality and reliability will continue to meet our high standards. The listed products may begin to ship using Die fabricated from the ON Semi-Aizu Wafer Fab facility at the expiration of this PCN.



Final Product/Process Change Notification #16150

RELIABILITY DATA SUMMARY:

Reliability Test Results, NTD20P06LG Product with Aizu Die:

Test: High Temperature Reverse Bias (HTRB) Conditions: Vds= 80% Vds rating, Ta=175'C, 1008-Hrs Results: 0/231

Test: High Temperature Gate Bias (HTGB) Conditions: Vgs= 100% Vgs rating, Ta=175'C, 1008-Hrs. Results: 0/231

Test: High Temperature Reverse Bias (HTRB) Conditions: Vds= 80% Vds rating, Ta=85'C, 1008-Hrs 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, 1000-cy Results: 0/231

Test: Autoclave Test (AC-PC) Conditions: Ta=121'C, RH=100%, P=15psig, 96-Hrs Results: 0/231

Reliability Test Results, NTD20N06G Product with Aizu Die:

Test: High Temperature Reverse Bias (HTRB) Conditions: Vds= 80% Vds rating, Ta=175'C, 1008-Hrs Results: 0/231

Test: High Temperature Gate Bias (HTGB) Conditions: Vgs= 100% Vgs rating, Ta=175'C, 1008-Hrs. Results: 0/231

Test: High Temperature Reverse Bias (HTRB) Conditions: Vds= 80% Vds rating, Ta=85'C, 1008-Hrs 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, 1000-cy Results: 0/231

Test: Autoclave Test (AC-PC) Conditions: Ta=121'C, RH=100%, P=15psig, 96-Hrs Results: 0/231



Final Product/Process Change Notification #16150

ELECTRICAL CHARACTERISTIC SUMMARY:

There is no change in electrical parametric performance. The Data Sheets will be unchanged. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Products having Date Codes of Work Week 01, 2009 and newer may have Die coming from either the ON Semiconductor Wafer facility located in Aizu, Japan, or the subcontractor, Phenitec located in Okayama, Japan.



Final Product/Process Change Notification #16150

AFFECTED DEVICE LIST

BS170G BS170RL1G **BS170RL1** BS170RLRAG BS170RLRA BS170RLRMG BS170RLRM BS170RLRPG BS170ZL1G BS170ZL1 BS170 MMBF170LT1G MMBF170LT1 MMBF170LT3G MMBF170LT3 NTR5602NT1 NTR5602NT3 NTP2955G NTP2955 NTB25P06G NTB25P06T4G NTB25P06T4 NTB25P06 NTB5605PG NTB5605PT4G NTB5605PT4 NTB5605P NTB5605T4G NTD20P06L-001 NTD20P06L-1G NTD20P06LG NTD20P06LT4G NTD20P06LT4 NTD20P06L NTD2955-001 NTD2955-1G NTD2955G NTD2955PT4G NTD2955T4G NTD2955T4 NTD2955 NTDV20P06LT4G NTF2955PT1G NTF2955T1G NTF2955T1 STD20P06LT4 STD20P07LT4G STD2955T4G STD2955T4 STD3055L104T4 STD3155L104T4 STD6789T4 SMBF1026LT1G SMBF1026LT1