ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

05-Sep-2008

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16145

TITLE: Additional Fab Capacity for SO8FL Package

PROPOSED FIRST SHIP DATE: 05-Dec-2008

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

AFFECTED PRODUCT DIVISION(S): PowerFET Business Unit

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Larry DeLuca <larry.deluca@onsemi.com >

SAMPLES: Contact your local ON Semiconductor Sales Office or Rick Ried <rick.ried@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 Product Change Notice is the Final Notice of IPCN #16114.

This Product Change Notice is to announce that ON Semiconductor is adding wafer fabrication capacity on their N-channel Trench MOSFET technology for their SO8FL product types. The ON Semiconductor Wafer Fab facility is located in Gresham, Oregon, which is already fully certified and qualified for this Silicon Trench platform with other packages (ie: Dpak and SO8). Device quality and reliability will continue to meet ON Semiconductors high standards.

Final Product/Process Change Notification #16145

RELIABILITY DATA SUMMARY:

Reliability Test Results:

SO8FL Qualification Device: NTMFS4833NT1G

Test: High Temperature Reverse Bias (HTRB)
Conditions: Ta=150'C, Vds= 80% BVdss Rating, Duration : 1008-Hrs, 3-Lots
Results: 0/240

Test: High Temperature Gate Bias (HTGB)
Conditions: Ta=150'C, Vds= 100% Vgs Rating, Duration : 1008-Hrs, 3-Lots
Results: 0/240

Test: Intermittent Operating Life (IOL-PC)
Conditions: Ta=25'C, delta Tj=100'C, 2-min on/off, 15K- cy, 2-Lots
Results: 0/240

Test: Temperature Cycling (TC-PC)
Conditions: Ta=-65'C/150'C, Air-to-Air, Dwell >=10-min, 500-cy, 3-Lots
Results: 0/240

Test: Autoclave Test (AC-PC)
Conditions: Ta=121'C, P=15psi, RH=100%, Duration: 96-Hrs, 3-Lots
Results: 0/240

Test: Highly Accelerated Stress Test (HAST)
Conditions: Ta=130'C, RH=85%, Duration: 96-Hrs, 3-Lots
Results: 0/240

ELECTRICAL CHARACTERISTIC SUMMARY:
There is no change in electrical parametric performance. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:
Product assembled with the Trench Die fabricated from the Wafer Fab facility in Gresham, Oregon, may have a Finish Good Date Code of '848' indicating a Die change-over during the first week in December, 2008.

Final Product/Process Change Notification #16145

AFFECTED DEVICE LIST

NTMFS4821NT1G
NTMFS4821NT3G
NTMFS4823NT1G
NTMFS4823NT3G
NTMFS4833NT1G
NTMFS4833NT3G
NTMFS4834NT1G
NTMFS4834NT3G
NTMFS4835NT1G
NTMFS4835NT3G
NTMFS4836NT1G
NTMFS4836NT3G
NTMFS4837NHT1G
NTMFS4837NHT3G
NTMFS4837NT1G
NTMFS4837NT3G
NTMFS4839NHT1G
NTMFS4839NHT3G
NTMFS4839NT1G
NTMFS4839NT3G
NTMFS4841NHT1G
NTMFS4841NHT3G
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