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**INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION**  
Generic Copy

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**13 May 2008**

**SUBJECT: ON Semiconductor Initial Product/Process Change Notification #16114**

**TITLE: Additional Fab Capacity for SO8FL Package**

**PROPOSED FIRST SHIP DATE: 13 Sep 2008**

**AFFECTED CHANGE CATEGORY: ON Semiconductor Wafer Fab Site**

**AFFECTED PRODUCT DIVISION: PowerFET Business Unit**

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local ON Semiconductor Sales Office or Larry DeLuca <[larry.deluca@onsemi.com](mailto:larry.deluca@onsemi.com)>

**NOTIFICATION TYPE:**

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

**DESCRIPTION AND PURPOSE:**

This Initial PCN #16114 is to announce that ON Semiconductor will be adding wafer fabrication capacity on their N-channel Trench MOSFET technology for their SO8FL product types. The facility is located in Gresham, Oregon which is fully certified and qualified for this Silicon platform with other packages. Device quality and reliability will continue to meet ON Semiconductors high standards. Product may begin to ship using Die fabricated in the Gresham factory at the expiration of the Final PCN.

**Initial Product/Process Change Notification #16114****QUALIFICATION PLAN:**

Test: High Temperature Reverse Bias (HTRB)  
Conditions:  $V_{ds} = 80\% V_{ds \text{ rating}}$ ,  $T_a = 150^\circ\text{C}$ , 504-Hrs

Test: High Temperature Gate Bias (HTGB)  
Conditions:  $V_{gs} = 100\% V_{gs}$ ,  $T_a = 150^\circ\text{C}$ , 504-Hrs.

Test: High Temperature Storage Life (HTSL)  
Conditions:  $T_a = 150^\circ\text{C}$ , 504-Hrs.

Test: Intermittent Operating Life (IOL-PC)  
Conditions:  $T_a = +25^\circ\text{C}$ ,  $\Delta T_j = 100^\circ\text{C}$ , 2-min on/off, 7.5K-cycles

Test: Temperature Cycling (TC-PC)  
Conditions:  $T_a = -65^\circ\text{C}/+150^\circ\text{C}$ , Air-to-Air, Dwell  $\geq 10$ -min, 500-cy

Test: Highly Accelerated Stress Test (HAST-PC)  
Conditions:  $T_a = 121^\circ\text{C}$ , RH=100%, P=15psig, 96-Hrs

Test: Autoclave Test (AC-PC)  
Conditions:  $T_a = 121^\circ\text{C}$ , P=15psi, RH=100%, 96-Hrs

Test: Electrical Distribution Data

**Initial Product/Process Change Notification #16114****AFFECTED DEVICE LIST:****PART**

NTMFS4821NT1G  
NTMFS4821NT3G  
NTMFS4823NT1G  
NTMFS4823NT3G  
NTMFS4833NT1G  
NTMFS4833NT3G  
NTMFS4834NT1G  
NTMFS4834NT3G  
NTMFS4835NT1G  
NTMFS4835NT3G  
NTMFS4836NT1G  
NTMFS4836NT3G  
NTMFS4837NHT1G  
NTMFS4837NHT3G  
NTMFS4837NT1G  
NTMFS4837NT3G  
NTMFS4839NHT1G  
NTMFS4839NHT3G  
NTMFS4839NT1G  
NTMFS4839NT3G  
NTMFS4841NHT1G  
NTMFS4841NHT3G  
NTMFS4841NT1G  
NTMFS4841NT3G  
NTMFS4845NT1G  
NTMFS4845NT3G  
NTMFS4846NT1G  
NTMFS4846NT3G  
NTMFS4847NT1G  
NTMFS4847NT3G  
NTMFS4849NT1G  
NTMFS4849NT3G  
NTMFS4851NT1G  
NTMFS4851NT3G