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**UPDATE CHANGE NOTIFICATION**

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**29-Aug-2008**

**SUBJECT: ON Semiconductor Update Notification #16146**

**TITLE: Update Notification of FPCN16142: Copper Wire in the SO8 Packages for MOSFET Products**

**PROPOSED FIRST SHIP DATE: 20-Nov-2008**

**AFFECTED CHANGE CATEGORY(S): Assembly**

**AFFECTED PRODUCT DIVISION(S): PowerFET Business Unit**

**ADDITIONAL RELIABILITY DATA:**

SO8 Device: NTMS4807NT2G

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: High Temperature Storage Life (HTSL)

Conditions: Ta=175°C, Duration : 1008-Hrs, 3-Lots

Results: 0/240

Test: High Temperature Storage Life (HTSL)

Conditions: Ta=150°C, 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, 1000-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



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**SAMPLES:** Contact your local ON Semiconductor Sales Office or Rick Ried <[rick.ried@onsemi.com](mailto:rick.ried@onsemi.com)>

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

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

**NOTIFICATION TYPE: Update Notification to PCN #16142**

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:**

An addendum to Final Product/Process Change Notification #16142:

In connection to ON Semiconductor's Initial Product Change Notification number 16091:

ON Semiconductor is notifying customers of its use of Copper Wire (in place of Gold Wire) on their MOSFET Products in the SO8 Package. Products assembled with both High Cell Density and Trench2 MOSFET Die will be affected. (Note: Original Product Change Notice only had High Cell Density MOSFET Die listed.)

The mold compound, die attach, and lead frame materials used for the SO8 Package will not be changed. Reliability Qualification and full electrical characterization over temperature have been performed showing no difference between the product builds.



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**AFFECTED DEVICE LIST**

NTMD4820NR2G  
NTMD4840NR2G  
NTMS4807NR2G  
NTMS4816NR2G  
NTMS4872NR2G