



UPDATE CHANGE NOTIFICATION

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12 May 2009

SUBJECT: ON Semiconductor Update Notification #16265

TITLE: Copper Wire in the SO8 Packages for MOSFET Products

PROPOSED FIRST SHIP DATE: 15 Aug 2009

AFFECTED CHANGE CATEGORY(S): SO8 Assembly

AFFECTED PRODUCT DIVISION(S): PowerFET Business Unit

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office

SAMPLES: N/A

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Jennie Shen < Jennie.Shen@onsemi.com >

NOTIFICATION TYPE:

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 of additional part numbers to the Final Product/Process Change Notification #16142:

IPCN 16091 Copper Wire replacing Gold Wire in the SO8, TSOP6, ChipFET Packages for MOSFET Products issued 31 Jan 2008.

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 our Trench1 MOSFET Die, and co-packaged SO8 products assembled with a Schottky Die will be affected. (Note: The co-packaged SO8 product with a Schottky Die is our FETKY product type.)

Reliability Qualification and full electrical characterization over temperature have been performed showing no difference between the product builds.

**Update Notification #16265****Reliability Data Summary:****SO8 Device: NTMS4177PR2G**

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=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, 3-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

Schottky Die: DR0734 and DR0733

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 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: 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, 6-Lots

Results: 0/480

Test: Highly Accelerated Stress Test (UHAST)

Conditions: Ta=130°C, RH=85%, Duration: 96-Hrs, 3-Lots

Results: 0/240



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AFFECTED DEVICE LIST

NTMS4107NR2G
NTMS4176PR2G
NTMS4177PR2G
NTMS4873NFR2G
NTMSD2P102LR2G
NTMSD2P102R2SG
NTMSD2P102R2
NTMSD3P102R2G
NTMSD3P102R2SG
NTMSD3P102R2
NTMD4184PFR2G
NTMD4884NFR2G