



UPDATE CHANGE NOTIFICATION # 16225

Generic Copy

25-Mar-2010

SUBJECT: ON Semiconductor Updated Change Notification #16225

TITLE: Copper Wire in the S08 and Micro 8 Flat Lead Packages for MOSFET Products

PROPOSED FIRST SHIP DATE: 25-Jun-2010

AFFECTED CHANGE CATEGORY(S): ON Semiconductor S08 Flat Lead, Micro8 Assembly Areas – Wire Bond

ADDITIONAL RELIABILITY DATA:

Contact your local ON Semiconductor Sales Office or Donna Scheuch
<d.scheuch@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Brian Goodburn
<brian.goodburn@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

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

NOTIFICATION TYPE: Updated Product Change Notification

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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

Referencing the ON Semiconductor General Announcement #GA16200 and FPCN #16225:
Conversion of Gold wire to Copper wire in ON Semiconductor's Assembly Facilities

ON Semiconductor is notifying customers of its use of Copper Wire (in place of Gold Wire) for additional S08 Flat Lead and Micro8 Flat Lead products assembled with MOSFET Die. MOSFET Product types built in these two packages are represented by this Process Change Notice.

The mold compound, die attach, lead frame, and clip materials used for these Packages will not be changed. Reliability Qualification and full electrical characterization over temperature have been performed.

**UPDATE CHANGE NOTIFICATION #16225****RELIABILITY DATA:**Reliability Test Results: **NTMFS4833NR2G**

Test: High Temperature Reverse Bias (HTRB)
Conditions: Ta=150°C, Vds= 80% BVdss Rating, Duration : 504-Hrs, 3-Lots
Results: 0/252

Test: High Temperature Gate Bias (HTGB)
Conditions: Ta=150°C, Vds= 100% Vgs Rating, Duration : 504-Hrs, 3-Lots
Results: 0/252

Test: High Temperature Storage Life (HTSL)
Conditions: Ta=175°C, Duration : 504-Hrs, 3-Lots
Results: 0/294

Test: High Temperature Storage Life (HTSL)
Conditions: Ta=150°C, Duration : 504-Hrs, 3-Lots
Results: 0/294

Test: Intermittent Operating Life (IOL-PC)
Conditions: Ta=25°C, delta Tj=100°C, 2-min on/off, 7.5K- cy, 3-Lots
Results: 0/252

Test: Temperature Cycling (TC-PC)
Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 500-cy, 3-Lots
Results: 0/273

Test: Autoclave Test (AC-PC)
Conditions: Ta=121°C, P=15psi, RH=100%, Duration: 96-Hrs, 3-Lots
Results: 0/252

Test: Highly Accelerated Stress Test (HAST)
Conditions: Ta=130°C, RH=85%, Duration: 96-Hrs, 3-Lots
Results: 0/252

Reliability Test Results: **NVTFS5811NTAG**

Test: High Temperature Storage Life (HTSL)
Conditions: Ta=150°C, Duration : 504-Hrs, 3-Lots
Results: 0/252

Test: Temperature Cycling (TC-PC)
Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 500-cy, 3-Lots
Results: 0/231

Test: Autoclave Test (AC-PC)
Conditions: Ta=121°C, P=15psi, RH=100%, Duration: 96-Hrs, 3-Lots
Results: 0/252

Test: Highly Accelerated Stress Test (HAST)
Conditions: Ta=130°C, RH=85%, Duration: 96-Hrs, 3-Lots
Results: 0/252



UPDATE CHANGE NOTIFICATION #16225

Reliability Test Results: **NTTFS4932NTAG**

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 1000-cy, 1-Lot

Results: 0/84

Test: High Temperature Storage Life (HTSL)

Conditions: Ta=175°C, Duration : 1008-Hrs, 1-Lot

Results: 0/84

Test: High Temperature Storage Life (HTSL)

Conditions: Ta=150°C, Duration : 1008-Hrs, 1-Lot

Results: 0/84



UPDATE CHANGE NOTIFICATION #16225

List of affected General Parts:

NTMFS4897NFT1G	NTMFS4933NT3G
NTMFS4941NT1G	NTMFS4935NBT1G
NTMFS4935NT1G	NTMFS4935NBT3G
NTMFS4935NT3G	NTMFS4936NT3G
NTMFS4936NT1G	NTMFS4937NT3G
NTMFS4937NT1G	NTMFS4941NT1G
NTMFS4939NT1G	NTMFS4941NT3G
NTMFS4939NT3G	NTMFS4945NT3G
NTMFS4943NT1G	NTMFS4946NT1G
NTMFS4943NT3G	NTMFS4946NT3G
NTMFS4945NT1G	NTTFS4800NTAG
NTMFS4852NT1G	NTTFS4800NTWG
NTMFS4946NT1G	NTTFS4840NTAG
NTTFS4821NTAG	NTTFS4840NTWG
NTTFS4821NTWG	NTTFS4932NTWG
NTTFS4823NTAG	NTTFS4937NTAG
NTTFS4823NTWG	NTTFS4937NTWG
NTTFS4824NTAG	NTTFS4939NTAG
NTTFS4824NTWG	NTTFS4939NTWG
NTTFS4932NTAG	NTTFS4941NTAG
NTTFS4945NTAG	NTTFS4941NTWG
NTMFS4839NT1G	NTTFS4943NTAG
NTMFS4897NFT3G	NTTFS4943NTWG
NTMFS4898NFT1G	NTTFS4945NTWG
NTMFS4898NFT3G	NTTFS4947NTAG
NTMFS4899NFT1G	NTTFS4947NTWG
NTMFS4899NFT3G	NC4901NT3G
NTMFS4933NT1G	