



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

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01-Jul-2009

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16296

TITLE: Copper Wire replacing Gold Wire for the SC70, SC75, SC88, SC89 Packages for MOSFET Products

PROPOSED FIRST SHIP DATE: 30-Sep-2009

AFFECTED CHANGE CATEGORY(S): ON Semiconductor SC70, SC75, SC88, SC89 and SOT23 Assembly Areas – Wire Bond

AFFECTED PRODUCT DIVISION(S):

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Kevin Ream <Kevin.Ream@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Jennie Shen <Jennie.Shen@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:

ON Semiconductor is notifying customers of its use of Copper Wire (in place of Gold Wire) for their SC70, SC75, SC88, SC89, and the remaining SOT23 (in reference to PCN #16257) Packaged Products assembled with MOSFET Die. SC70, SC75, SC88, SC89, and SOT23 Products built with Planar and Trench Silicon MOSFET platforms are represented by this Process Change Notice.

Reliability Qualification and full electrical characterization over temperature has been performed.

**Final Product/Process Change Notification #16296****RELIABILITY DATA SUMMARY:**

Reliability Test Results:

Device Name: NTS2101PT1G

Test: High Temperature Reverse Bias (HTRB)

Conditions: Ta=150°C, Vds= 80% BVdss Rating, Duration : 1008-Hrs, 3-Lots

Results: 0/252

Test: High Temperature Gate Bias (HTGB)

Conditions: Ta=150°C, Vds= 100% Vgs Rating, Duration : 1008-Hrs, 3-Lots

Results: 0/252

Test: High Temperature Storage Life (HTSL)

Conditions: Ta=150°C, Duration : 1008-Hrs, 3-Lots

Results: 0/252

Test: Intermittent Operating Life (IOL-PC)

Conditions: Ta=25°C, delta Tj=100°C, 2-min on/off, 15K- cy, 3-Lots

Results: 0/252

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 1000-cy, 3-Lots

Results: 0/252

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

Device Name: MMBF170LT1G

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 500-cy, 3-Lots

Results: 0/252

Device Name: NTS4409NT1G

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 1000-cy, 3-Lots

Results: 0/252

Device Name: NTA4153NT1G

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 1000-cy, 3-Lots

Results: 0/252



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Device Name: BSS84LT1G

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 1000-cy, 3-Lots

Results: 0/252

ELECTRICAL CHARACTERISTIC SUMMARY:

There is no change in electrical parametric performance. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Products (listed on this FPCN) assembled with the Copper Wire from the ON Semiconductor facility in Leshan, China, will have a Finish Good Date Code representing Work Week 40, 2009 or newer.



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AFFECTED DEVICE LIST

NTJD1155LT1
NTJD1155LT1G
NTJD2152PT1
NTJD2152PT1G
NTJD2152PT2G
NTJD3158CT1G
NTJD3158CT2G
NTJD4001NT1
NTJD4001NT1G
NTJD4001NT1H
NTJD4001NT2G
NTJD4105CT1
NTJD4105CT1G
NTJD4105CT1H
NTJD4105CT2G
NTJD4105CT4G
NTJD4152PT1
NTJD4152PT1G
NTJD4152PT1H
NTJD4158CT1G
NTJD4158CT2G
NTJD4158CT2H
NTJD4401NT1
NTJD4401NT1G
NTJD4401NT2
NTJD4401NT2G
NTJD5121NT1G
NTJD5121NT2G
NTJS3151PT1
NTJS3151PT1G
NTJS3151PT2
NTJS3151PT2G
NTJS3157NT1
NTJS3157NT1G
NTJS3157NT2
NTJS3157NT2G
NTJS3157NT4
NTJS3157NT4G
NTJS4151PT1
NTJS4151PT1G
NTJS4160NT1G
NTJS4405NT1G
NTJS4405NT1H
NTJS4405NT4G
MMBF0201NLT1
MMBF0201NLT1G
MMBF0202PLT1
MMBF0202PLT1G
MGSF2N02ELT1
MGSF2N02ELT1G
MGSF2N02ELT1H
MGSF1N02LT1
MGSF1N02LT1G
MGSF1N03LT1



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MGSF1N03LT1G
MGSF1N03LT3G
BSS84LT1
BSS84LT1G
BSS84LT1H
SBSS84LT1
SBSS84LT1G
NTR4003NT1G
NTR4003NT3G
2N7002WT1
2N7002WT1G
MMBF2201NT1
MMBF2201NT1G
MMBF2202PT1
MMBF2202PT1G
NTE4151PT1
NTE4153NT1
NTJD4158CT1
NTJD4401NT1H
NTJD5121NT1
NTJS4160NT1
NTJS4405NT1
NTS4409NT1
STJD4105CT1G
NTA4001NT1G
NTA4001NT1H
NTA4001NT1
NTA4151PT1G
NTA4151PT1H
NTA4151PT1
NTA4153NT1G
NTA4153NT1H
NTA4153NT1
NTA7002NT1G
NTA7002NT1
NTE4151PT1G
NTE4153NT1G
NTS2101PT1G
NTS2101PT1H
NTS2101PT1
NTS4001NT1G
NTS4001NT1
NTS4101PT1G
NTS4101PT1H
NTS4101PT1
NTS4172NT1G
NTS4173PT1G
NTS4409NT1G
MMBF170LT1G
MMBF170LT1
MMBF170LT3G
MMBF170LT3
MMBFV170LT1G
MMBFV170LT3G
SMBF1026LT1G
SMBF1026LT1