



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16501

Generic Copy

Issue Date: 20-July-2010

TITLE: Copper Wire replacing Gold Wire in ChipFet

PROPOSED FIRST SHIP DATE: 20-Oct-2010

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly Areas – Wire Bond

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Swei Huey Wong<SweiHuey.Wong@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Swei Huey Wong<SweiHuey.Wong@onsemi.com>

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Chean Ching Sim<ffxg4t@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 the 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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor is notifying customers of its use of Copper Wire (in place of Gold Wire) for their ChipFet packages. Discrete products built with bipolar transistor technology are represented by this Process Change Notice.

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



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RELIABILITY DATA SUMMARY:

Reliability Test Results:

**ChipFet
NSS40600CF8T1G**

Test:	Conditions:	Interval:	Results
HTRB	TA=150C,80% Rated Voltage	1008 hrs	0/240
Precondition	MSL1@ 260C , 3 X IR at 260 C		0/960
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/240
H3TRB+PC	Ta=85C RH=85%	1008 hrs	0/240
IOL+PC	bias=80% rated V or100V Max Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/240
TC+PC	Ta= -65 C to 150 C, air to air	1000 cyc	0/240
HTSL	Ta=150C	1008 hrs	0/240
HTSLx	Ta=175C	1008 hrs	0/240
DPA	Per AECQ101, Post TC	1000cycs	0/6
DPA	Per AECQ101, Post H3TRB	1008hrs	0/6
RSH	Ta=260C, 10 sec dwell		0/90

ELECTRICAL CHARACTERISTIC SUMMARY:

Datasheet specifications and product electrical performance remain unchanged

Characterization of each qual vehicle device has been performed to the following requirements:

- 1) Three temperature characterization on 30 units from 3 lots
- 2) ESD performance (HBM, MM) on 15 units from 1 lot

ELECTRICAL CHARACTERIZATION RESULTS:

Three temperature characterization and ESD performance meet datasheet specification. Detail of Electrical characterization result is available upon request.

CHANGED PART IDENTIFICATION:

Products assembled with the Copper Wire from the ON Semiconductor facility will have a **Finished Goods** Date Code 1043, date code marking "X", representing Work Week 43, 2010 or newer.



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List of affected General Parts:

DEVICES

NSS35200CF8T1G
NSS12601CF8T1G
NSS20601CF8T1G
NSS40601CF8T1G
NSS40600CF8T1G