ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16710

Generic Copy

Issue Date: 01-Sep-2011

TITLE: Copper wire bond for Micro 8 package in Seremban, Malaysia

PROPOSED FIRST SHIP DATE: 05-Dec-2011

AFFECTED CHANGE CATEGORY(S): Assembly Process

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or <alan.garlington@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or <ahmad.taufek@onsemi.com>

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or <tomas.vaijter@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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

A General Announcement (GA#16200) was published on 1-29-09 regarding the ongoing Copper Wire bond conversion program at ON Semiconductor. This is a FPCN to notify customers of its plan to qualify Copper Wire (in place of Gold Wire) on the Micro 8 packages assembled at the Seremban, Malaysia assembly location. Reliability Qualification and full electrical characterization over temperature has now been completed on the designated package qualification vehicles.

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RELIABILITY DATA SUMMARY:

Reliability Test Results:

Qualification Vehicle 1:
Reliability Control No. S08249
LM2951ACDM-5.0R2
Package = Micro 8

		Qual A	Qual B	Qual C	Control
Preconditioning:	MSL = 1 - 260 C				
HAST	Ta = 131C RH = 85% PSIG = 18.8 96 Hours	0/84	0/84	0/84	0/84
HTSL	Ta = 150C 1008 Hours	0/84	0/84	0/84	0/84
TC	Ta = -65C to +150C 500 Cycles	0/84	0/84	0/84	0/84
UHAST	Ta = 131C RH = 85% PSIG = 18.8 96 Hours	0/84	0/84	0/84	0/84
SAT	MSL1 - 260C	0/10	0/10	0/10	0/10

Qualification Vehicle 2:
Reliability Control No. S10572
NCP3335ADMADJR2G
Package = Micro 8

		Qual A	Qual B	Qual C	Control
Preconditioning:	MSL = 1 - 260 C				
HAST	Ta = 131C RH = 85% PSIG = 18.8 96 Hours	0/84	0/84	0/84	0/84
HTSL	Ta = 150 C 1008 Hours	0/84	0/84	0/84	0/84
TC	Ta = -65C to +150C 500 Cycles	0/84	0/84	0/84	0/84
UHAST	Ta = 131C RH = 85% PSIG = 18.8 96 Hours	0/84	0/84	0/84	0/84
SAT	MSL1 - 260C	0/10	0/10	0/10	0/10

ELECTRICAL CHARACTERISTIC SUMMARY:

There is no electrical characterization difference in products assembled with Copper Wire

CHANGED PART IDENTIFICATION:

There will be no physical change with products assembled with Copper Wire in place of Gold Wire. Products listed on this FPCN will have a Marking Date Code representing Work Week 49, 2011 or newer.

List of affected General Parts:

LM258DMR2G
LM2903DMR2G
LM2904ADMR2G
LM2904DMR2G
LM2904VDMR2G
LM293DMR2G
LM358DMR2G
LM393DMR2G
LP2951ACDM-3.0RG
LP2951ACDM-3.3RG
LP2951ACDMR2G
LP2951CDM-3.0R2G
LP2951CDM-3.3R2G
LP2951CDMR2G
MC33064DM-5R2G
MC33161DMR2G
MC33164DM-3R2G
MC33164DM-5R2G
MC33178DMR2G
MC33202DMR2G
MC33762DM-2525RG
MC33762DM-2828RG
MC33762DM-3030RG
MC34064DM-5R2G
MC34161DMR2G
MC34164DM-5R2G
NCP3335ADM150R2G
NCP3335ADM180R2G
NCP3335ADM250R2G
NCP3335ADM280R2G
NCP3335ADM285R2G
NCP3335ADM300R2G
NCP3335ADM330R2G
NCP3335ADM500R2G
NCP3335ADMADJR2G
NCV2903DMR2G
NCV2904DMR2G
NCV33064DM-5R2G
NCV431AIDMR2G
NCV431BVDMR2G
TL431ACDMR2G
TL431AIDMR2G
TL431BCDMR2G
TL431BIDMR2G
TL431BVDMR2G
TL431CDMR2G
TL431IDMR2G