



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16658EGeneric Copy

Issue Date: 26-Aug-2014**TITLE:** Sourcing MOSFET Die from United Microelectronics Corporation**PROPOSED FIRST SHIP DATE:** 29-Nov-2014**AFFECTED CHANGE CATEGORY(S):** ON Semiconductor Wafer Fab Site**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or
Jason Jeong<Jason.Jeong@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office or
Brian Goodburn<brian.goodburn@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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor is already utilizing United Microelectronics Corp (UMC) for their High Cell Density (HD3e) and Trench (T2) MOSFET technology silicon platforms.

A fraction of the Trench (T1) MOSFET portfolio started to use UMC Wafer Fab July 2012 per FPCN16658, FPCN16658A, FPCN16658B, FPCN16658C and FPCN16658D. With additional qualification and electrical characterization of this silicon platform, more T1 products will be built with Die sourced from the UMC. Wafer shipments of this group of products will begin in December 2013.

Reliability Qualification and full electrical characterization over temperature have been performed, and available upon request.

**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16658E****RELIABILITY DATA SUMMARY:****Reliability Test Results:**

Test	Specification	Conditions	# Lots	Samples/lot	Total Samples
HTRB	JESD22 A108	Ta=175°C, 80% max rated Vdss 1008 hrs	3	80 pc	0/240
HTGB	JESD22 A108	Ta=175°C, 100% of max rated Vgss, 1008 hrs	3	80 pc	0/240
TC	JESD22 A104	-55°C to +150°C; for 1000 cycles	3	80 pc	0/240
AC	JESD22 A102	121°C/100% RH, 15 psi for 96 hrs	3	80 pc	0/240
HAST	JESD22 A110	131°C/85% RH, 80% of max rated Bvdss, 96hrs	3	80 pc	0/240
UHAST	JESD22 A118	131°C/85% RH, 80% of max rated Bvdss, 96hrs	3	80 pc	0/240
IOL	MIL-STD-750 (M 1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min 15000 cyc	3	80 pc	0/240

ELECTRICAL CHARACTERISTIC SUMMARY:

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

CHANGED PART IDENTIFICATION:

There will be no physical change to the Devices assembled with Die from the United Microelectronics Corp (UMC) wafer fabrication facility. There will be Wafer Lot traceability from the manufacturing Lot to determine the Die origin.

List of affected Parts:

NVD5117PLT4G