



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16550Generic Copy

Issue Date: 07-Dec-2010

TITLE: Final Notification for Transfer of PS5LV Analog Integrated Circuits Die Manufacturing from ON Semiconductor Piestany (Slovakia) to the I2T100 Process at ON Semiconductor Oudenaarde (Belgium)

PROPOSED FIRST SHIP DATE: 15-Mar-2011

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Wafer Fab Site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Jan Polfliet < Jan.Polfliet@onsemi.com >

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Peter Turlo < Peter.Turlo@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:

The transfer and qualification of die manufactured on the Power Sense 5 LV process from the ON Semiconductor Piestany facility (Slovakia) to the I2T100 process at ON Semiconductor Oudenaarde facility (Belgium)

The Oudenaarde site is certified according to ISO/TS16949 standards.

A full electrical characterization over the temperature range has been performed for each product to check the device functionality and electrical specifications.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards.

ON Semiconductor recommends that customers evaluate sample units in each associated application circuit to ensure there are no unexpected electrical incompatibilities.


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RELIABILITY DATA SUMMARY:

Test	Test Conditions	Lots/SS	Results Fail/Total	Comments/ Test Results
PC	Preconditioning: (Test @ R/H) SMD only; Moisture Load and Reflow	all	0 / all	For AC, TC, HAST(MSL= 3 @ 260°C)
HAST	Highly Acc. Stress Test: (Test @ R/H) 130°C/85%RH,18.8psi, bias, 96hrs	3 / 77	0 / 231	Pass.
AC	Autoclave: (Test @ R) 121°C/100% RH, 15 psi for 96 hrs	3 / 80	0 / 240	Pass.
TC	Temperature Cycle: (Test @ H) -65°C to+150°C; for 500cyc	3 / 80	0 / 240	Pass.
HTSL	High Temperature Storage Life (Test @ R/H) Ta=175°C for 500 hrs.	1 / 80	0 / 80	Pass.
HTOL	High Temperature Operational Life: (Test @ R/H) Tj=150°C for 504hrs.	3 / 80	0 / 240	Pass.
WBS	Wire Bond Shear Test: Cpk >1.33	30bonds	0 / 30	Cpk>1.33
WBP	Wire Bond Pull: >2.5gr. Condition C. 0 fails or Cpk>1.33.	30bonds	0 / 30	Pass.
SD	Solderability, 8hr steam age, 245°C PbSn solder, >95% coverage	1 / 15	0 / 15	Pass
PD	Physical Dimension	3 / 10	0 / 30	Cpk>1.33
HBM	Electrostatic Discharge, Human Body Model (Test @ R/H)	1 / spec	>>>	HBM - Pass 4.0kV.
MM	Electrostatic Discharge, Machine Model (Test @ R/H)			MM - Pass 200V
CDM	Electrostatic Discharge, Charge Device Model: (Test @ R/H)	1 / spec	>>>	CDM - Pass 1kV All pins
LU	Latch-up: (Test @ R/H)	1 / 6	0 / 6	Pass. Class II, Level A, Trig I +/-100mA
ED	Electrical Distribution: (Test @ C/ R/ H)	4 / 30	>>>	Pass. Cpk > 1.67

CHANGED PART IDENTIFICATION:

A letter "B" will be added to the package marking to identify parts from the new wafer fab.



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List of affected General Parts:

NCV7513FTG
NCV7513FTR2G
NCV7517FTG
NCV7517FTR2G

Replacement Parts:

NCV7513BFTR2G
NCV7513BFTR2G
NCV7517BFTR2G
NCV7517BFTR2G