



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

19-Oct-2008

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #16168

TITLE: Initial Notification for Transfer of PS5 Analog Bipolar Integrated Circuits Die Manufacturing From ON Semiconductor Piestany (Slovakia) To ON Semiconductor Oudenaarde (Belgium)

PROPOSED FIRST SHIP DATE: 19-Feb-2009

AFFECTED CHANGE CATEGORY: ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION: Analog Products

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Peter Lanyon <Peter.Lanyon@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

May 14, 2008 - ON Semiconductor (Nasdaq: ONNN), has announced plans to close its two wafer manufacturing facilities located in Piestany, Slovakia, and transfer the production lines to other company-owned facilities. The targeted close date is Q4 2009.

Description of the change:

The transfer and qualification of the PowerSense5 process and the associated integrated circuits from the ON Semiconductor Piestany facility (Slovakia) to the Oudenaarde wafer fabrication site located in Belgium.

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

The Powersense5 process is being replicated at Oudenaarde in order to get the same electrical and reliability performances as the Piestany wafer fab.

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The integrated circuits design and electrical specifications will remain identical. There will be no change made to the datasheets. A full electrical characterization over the temperature range will be 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.

A final notification (FPCN) will be published in 4Q2009, at least 60 days prior to the actual conversion. It will contain the qualification results and effective planned production release dates at Oudenaarde. Samples will become gradually available from October 2009.

QUALIFICATION PLAN:

Qualification of each device type to be transferred is being performed to the following requirements:

Three temperature electrical characterization (3 lots, 30 units each lot)
ESD testing (1 lot by qualification vehicle), Human Body Model, Machine Model, CDM
Latch up testing (1 lot by qualification vehicle)
Reliability tests using the qualification vehicles as below:

NCV7708A
NCV7729D

For Those vehicles, will be performed: 3 Lots HTOL, ELFR, HTSL, PC, HAST, AC, TC, BPS

Planned reliability tests are:

Test	Conditions	Duration
Early Life (ELFR)	Ta=+125°C, Bias	48hrs
High Temp. Operating Life (HTOL)	Ta=+125°C, Bias	1008hrs
Temp. Cycle (TC)*	-65°C to +150°C	1000 cycles
Autoclave (AC) *	+121°C /15psig/100%RH	96hrs
High Temperature Storage Life (HTSL)	+150°C	1008hrs
High Accelerated Stress Test (HAST)	+130°C/85%RH Bias	96hrs
Wire Bond Pull Strength (BPS)*	After TC, 30 bonds/5 units	
Wire Bond Shear Strength (BS)	30 bonds/5 units	

*Note: These tests may be performed with preconditioned parts depending upon the device type used.

CHANGED PART IDENTIFICATION:

There will be no changes to standard device markings. Normal assembly lots traceability codes will identify the wafer fab source.

**Initial Product/Process Change Notification #16168****AFFECTED DEVICE LIST:**

NCP4331DR2G
NCP4331DBR2G
SCY994351BDWR2G
SCY994351DWR2G
NCP4302BDR2G
NCP4302ADR2G
NCP102SNT1G
NCP3120MNTXG
NCP3121MNTXG
NCV7510DWR2G
NCV7703D2G
NCV7703D2R2G
NCV7708ADWG
NCV7708ADWR2G
NCV7729A0
NCV8518APDG
NCV8518APDR2G
NCV8518APWG
NCV8518APWR2G
NCV8518PDG
NCV8518PDR2G
NCV8518PWG
NCV8518PWR2G
NCV8610MNR2G
NCV8612MNR2G
NCV8613MNR2G
NCV8614MNR2G
NCV86601D33R2G
NCV86601D50G
NCV86601D50R2G
NCV86601DT33RKG
NCV86601DT50RKG
NCV86602D33R2G
NCV86602D50R2G
NCV86602DT33RKG
NCV86602DT50RKG
NCV86603D33R2G
NCV86603D50R2G
NCV86603DT33RKG
NCV86603DT50RKG
NCV86604D33R2G
NCV86604D50R2G
NCV86604DT33RKG
NCV86604DT50RKG
NCV8851DBG
NCV8851DBR2G
SCV7680PWG
SCV7680PWR2G