# **ON Semiconductor**



#### FINAL PRODUCT/PROCESS CHANGE NOTIFICATION Generic Copy

# 02 Dec 2009

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16368

TITLE: Piestany to Oudenaarde Wafer Fabrication Transfer for NCV7708B

PROPOSED FIRST SHIP DATE: 02 Mar 2010

AFFECTED CHANGE CATEGORY(S): Manufacturing Transfer (wafer fabrication)

AFFECTED PRODUCT DIVISION: APRG

#### QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Peter Lanyon < Peter.Lanyon@onsemi.com>

#### SAMPLES:

Contact your local ON Semiconductor Sales Office or Peter Lanyon<Peter.Lanyon@onsemi.com>

#### ADDITIONAL RELIABILITY DATA:

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 your local ON Semiconductor Sales Office.

#### **DESCRIPTION AND PURPOSE:**

Transfer of device wafer fabrication operation from ON Semiconductor, Piestany to ON Semiconductor, Oudenaarde. Purpose of the transfer is to consolidate manufacturing operations.

The ON Semiconductor part number will be changed to NCV7708BDWR2G.

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## **RELIABILITY DATA SUMMARY:**

Test	Ref	Test Conditions	End Points	Note	Lot A	Lot B	Lot C	Results
Electrical Test	ON Data Sheet	ON Product Specification	See Below	All Devices				
ELFR	JA108	Ta = 135°C <b>24 hrs</b>	Test @ R H		1600	2000	800	0 / 4400
Dynamic HTOL	JA108	High Temp Operational Life: Tj = 150°C for <b>504 hrs</b>	Test @ R H <b>c=0</b>		168	144	168	
		T168			ok	ok	ok	Pass
		T504			ok	ok	pending	Two Lots <b>Pass</b> Lot C data pending
		T1008 - fyi		FYI only	ok	ok	pending	
		T1440 - fyi		FYI only	ok	pending	pending	
HTSL	J103	High Temp Storage Life: Ta =175°C for <b>500 hrs</b>	Test @ R H <b>c=0</b>		80	80	80	
		T500						0 / 240
		T1000 - fyi		FYI only				0 / 240
		T2000 - fyi		FYI only				0 / 240
PC	JA112 J113	Moisture Pre-conditioning for AC, TC, THB, SAT	Test @ R(H)		All	All	All	MSL3/ 260°C
SAT	12MSB17722C	Scanning Acoustic Tomography			5	5	5	No Delamination.
ТНВ	JA104	Temp Humidity Bias: 85°C/85% RH, bias for <b>1000 hrs</b>	Test @ R H <b>c=0</b>		80	80	80	
		T500						0 / 240
		T1000						0 / 240
AC	JA102	Autoclave: 121°C/100%RH, 15 psig, <b>96 hrs</b>	Test @ R <b>c=0</b>		80	80	80	0 / 240
тс	JA104	Temperature Cycle: -65°C to+150°C; for <b>500 cycl</b> es.	Test @ R H <b>c=0</b>		80	80	80	0 / 240
WBP	M2011	Wire Bond Pull Strength, Condition C. After TC500	<b>3gm</b> Pull Force Min	30 bonds from 5 units	5			Pass
DPA	AEC-Q101	Destructive Physical Analysis Post TC500			5	5	5	Pass
PD	JB100	Per case outline	Cpk >1.33		30	30	30	Pass. Cpk>1.33 In-line data
SD	JESD22- B102	Solderability	>95% coverage		15	15	15	0 / 45
WBP	M2011	Wire Bond Pull Strength, Condition C.	Cpk >1.33		30	30	30	Pass. Cpk>1.33 In-line data
BS	AEC-Q100-001	Bond Shear Test	Cpk >1.33	30 bonds from 5 units	30	30	30	Pass. Cpk>1.33 In-line data
ESD	AEC-Q100-002 AEC-Q100-003 AEC-Q100-011	Human Body Model (HBM) and Machine Model (MM) Charge Device Model (CDM)	Test @ R H	3 units/V level per Model	192			HBM <b>4.0kV</b> MM <b>200V</b> CDM <b>1kV</b>
LU	JESD 78	Dynamic Latch-up	Test @ R H <b>c=0</b>		6			<b>0 / 6</b> (Class II-Level A)
ED	ON Data Sheet	Electrical Distributions	Cpk > 1.67		30	30	30	Cpk > 1.67

Qualification points in **bold**.

### AFFECTED DEVICE LIST

NCV7708ADWR2G