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**FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 16605**

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**Issue Date:** 17-Mar-2011

**TITLE:** VHVIC3 2nd Source Platform Qualification to Gresham FAB

**PROPOSED FIRST SHIP DATE:** 17-Jun-2011

**AFFECTED CHANGE CATEGORY(S):** Wafer Fab location

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local ON Semiconductor Sales Office or Scott Brow <[Scott.Brow@onsemi.com](mailto:Scott.Brow@onsemi.com)>

**SAMPLES:** Contact your local ON Semiconductor Sales Office

**ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or Ken Fergus <[ken.fergus@onsemi.com](mailto:ken.fergus@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](mailto:quality@onsemi.com)>.

**DESCRIPTION AND PURPOSE:**

The purpose of this final PCN is to notify customers of the platform qualification of a second source for our VHVIC3 wafer technology at ON Semiconductor's wafer fabrication facilities in Gresham, Oregon.

This qualification is being made to increase the capacity for this technology. This technology is currently produced out of ON Semiconductor's wafer fabrication facilities in Aizu, Japan.

The VHVIC3 process is being duplicated at the Gresham wafer FAB. No die design changes have occurred. No changes to the device performance, data sheets or packaging have been made.



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**RELIABILITY DATA SUMMARY:**

**Reliability Test Results:**

<b>NCP1271D65R2G</b>					
#	Test	Test Conditions	Read Points	Sample Size	Results
1	HTBB	TA=125C, 450V Bias	Test @ 1008hrs	3 lots x 80 units	0/240
2	HVTHB	TA=85C, 60%RH, 450V Bias	Test @ 168hrs	3 lots x 80 units	0/240
3	HTOL	TA=125C, 100V Bias	Test @ 1008hrs	3 lots x 80 units	0/240
4	HTSL	TA=150C	Test @ 1008hrs	3 lots x 80 units	0/240
5	TC-PC	-65C to +150C	Test @ 500 Cycles	3 lots x 80 units	0/240
6	AC-PC	TA=121C, RH=100%, PSI=15	Test @ 96hrs	3 lots x 80 units	0/240
7	UHAST-PC	TA=130C, RH=85%, PSI=18.8 no Bias	Test @ 1008hrs	3 lots x 80 units	0/240
8	HAST-PC	TA=130C, RH=85%, PSI=18.8 Bias	Test @ 1008hrs	3 lots x 80 units	0/240
9	SAT-PC	Post MSL3 260C	Pre and Post PC	3 lot x 5 units	0/15
<b>NCP1396ADR2G</b>					
#	Test	Test Conditions	Read Points	Sample Size	Results
1	HTBB	TA=125C, 600V Bias	Test @ 1008hrs	3 lots x 80 units	0/239*
2	HTOL	TA=125C, 600V Bias	Test @ 1008hrs	3 lots x 80 units	0/240
3	HTSL	TA=150C	Test @ 1008hrs	3 lots x 80 units	0/240
4	TC-PC	-65C to +150C	Test @ 500 Cycles	3 lots x 80 units	0/240
5	AC-PC	TA=121C, RH=100%, PSI=15	Test @ 96hrs	3 lots x 80 units	0/240
6	UHAST-PC	TA=130C, RH=85%, PSI=18.8 no Bias	Test @ 1008hrs	3 lots x 80 units	0/240
7	HAST-PC	TA=130C, RH=85%, PSI=18.8 Bias	Test @ 1008hrs	3 lots x 80 units	0/240
8	SAT-PC	Post MSL3 260C	Pre and Post PC	3 lot x 5 units	0/15
* (1) EOS failure after 504hrs					
<b>NCP1237AD65R2G</b>					
#	Test	Test Conditions	Read Points	Sample Size	Results
1	HTBB	TA=125C, 500V Bias	Test @ 1008hrs	3 lots x 80 units	0/240
3	HTOL	TA=125C, 380V Bias	Test @ 1008hrs	3 lots x 80 units	0/240
4	HTSL	TA=150C	Test @ 1008hrs	3 lots x 80 units	0/240
5	TC-PC	-65C to +150C	Test @ 500 Cycles	3 lots x 80 units	0/240
<b>SCY991900DWR2G</b>					
#	Test	Test Conditions	Read Points	Sample Size	Results
1	HTOL	TA=125C, 600V Bias	Test @ 1008hrs	1 lot x 80 units	0/79*
2	TC-PC	-65C to +150C	Test @ 500 Cycles	1 lot x 80 units	0/80
* (1) EOS failure after 504hrs					
<b>NCP1380BDR2G</b>					
#	Test	Test Conditions	Read Points	Sample Size	Results
1	HTOL	TA=125C, 30V Bias	Test @ 1008hrs	1 lot x 80 units	0/80
2	TC-PC	-65C to +150C	Test @ 500 Cycles	1 lot x 80 units	0/80



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**ELECTRICAL CHARACTERISTIC SUMMARY:**

There is no change in the electrical performance. Datasheet specifications remain unchanged.

**CHANGED PART IDENTIFICATION:**

Affected products with date code WW24-2011 and greater may be sourced from either Gresham or Aizu wafer Fabrication site.



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**List of affected General Parts:**

**PARTS**

NCL30000DR2G	NCP1397BDR2G
NCL30001DR2G	NCP1562ADBR2G
NCL30100SNT1G	NCP1562ADR2G
NCP1218AD65R2G	NCP1562BDBR2G
NCP1219AD100R2G	NCP1562BDR2G
NCP1219AD65R2G	NCP1606ADR2G
NCP1219BD100R2G	NCP1606BDR2G
NCP1219BD65R2G	NCP1607BDR2G
NCP1237AD65R2G	NCP1608BDR2G
NCP1237BD65R2G	NCP1631DR2G
NCP1238AD65R2G	NCP1652ADR2G
NCP1238BD65R2G	NCP1652DR2G
NCP1252ADR2G	NCP1652DWR2G
NCP1252BDR2G	NCP1654BD133R2G
NCP1252CDR2G	NCP1654BD200R2G
NCP1271P100G	NCP1654BD65R2G
NCP1271P65G	NCP5104DR2G
NCP1282BDR2G	NCP5104PG
NCP1288BD65R2G	NCP5106ADR2G
NCP1379DR2G	NCP5106APG
NCP1380ADR2G	NCP5106BDR2G
NCP1380BDR2G	NCP5106BPG
NCP1380CDR2G	NCP5111DR2G
NCP1380DDR2G	NCP5111PG
NCP1392BDR2G	NCP5304DR2G
NCP1393BDR2G	NCP5304PG
NCP1397ADR2G	