FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 16605

Generic Copy

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 >

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 >
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 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:

NCP1271D65R2G

#	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

NCP1396ADR2G

#	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

NCP1237AD65R2G

#	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

SCY991900DWR2G

#	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

NCP1380BDR2G

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

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<u>List of affected Customer Specific Parts</u>:

PARTS

SCY99085ADR2G
SCY99087ADR2G
SCY99087BDR2G
SCY99092DR2G
SCY99096DR2G
SCY99098DR2G
SCY99102BDR2G
SCY991562CDR2G
SCY991606BEDR2G
SCY991900DWR2G