ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 16540

Generic Copy

Issue Date: 12-Nov-2010

TITLE: VHVIC 2nd Source Qualification to Gresham FAB

PROPOSED FIRST SHIP DATE: 12-Feb-2011

AFFECTED CHANGE CATEGORY(S): Wafer Fab location

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or <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@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 qualification of a second source for our VHVIC 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 VHVIC 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, 450V Bias	Test @ 1008hrs	3 lots x 80 units	0/239*
2	HTOL	TA=125C, 100V 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

ELECTRICAL CHARACTERISTIC SUMMARY:

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

CHANGED PART IDENTIFICATION:

Affected products with date code WW07-2011 and greater may be sourced from either Gresham or Aizu wafer Fabrication site.

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List of affected General Parts:

PART
NCP1271D65R2G
NCP1271D100R2G
NCP1396ADR2G
NCP1396BDR2G