



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16950

Generic Copy

Issue Date: 21-Dec-2012

TITLE: MAX/ NCP 803, 809, 810 Device Families Qualification at Gresham Wafer Fab

PROPOSED FIRST SHIP DATE: 21-Mar-2013

AFFECTED CHANGE CATEGORY(S): Wafer Fab Location

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Todd.Manes@onsemi.com.

SAMPLES: Contact your local ON Semiconductor Sales Office or Shilpa.Rao@onsemi.com

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Edmond.Gallard@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:

ON Semiconductor is pleased to announce the qualification of the MAX/ NCP 803, 309 & 810 families in ON Semiconductor's Gresham wafer fab facility on the ONC25 technology.

These device families are currently produced at ON Semiconductor's Aizu wafer fab facility located in Aizu, Japan. Due to the announcement of the Aizu fab closure, these device families have been redesigned using the ON Semiconductor ONC25 process and will be produced from ON Semiconductor's Gresham wafer fabrication facility located in Gresham, Oregon. Upon expiration (or approval) of this Final PCN, devices may be supplied by either wafer fab.

The Gresham wafer fab is compliant to ISO9001:2008, ISO/TS16949:2009, and ISO14001:2004. The MAX/ NCP 80x families currently run on the Aizu AC MOS2 process. These families have now been successfully qualified at the Gresham wafer fab on the ONC25 technology. Device performance is the same for Aizu and Gresham-sourced devices.

The MAX/ NCP 80x families will continue to be assembled and tested in existing, qualified locations. No changes to packaging will occur as a result of this fab qualification.



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RELIABILITY DATA SUMMARY:

Reliability Test Results:

The Gresham-sourced MAX/ NCP 80x families have been qualified based on the following test results:

Test	Conditions	Results
ELFR	Ta=+125C; 48hrs	0/80 1 lot
High Temp Op Life	Ta= +125C; 504hrs, 1008hrs	0/80 3 lots
High Temp Storage	Ta=150C; 504hrs, 1008hrs	0/80 3 lots
Preconditioning + Temperature Cycling	MSL1 @ 260C; -65C/ +150C; Air to Air; 500cy, 100Cy	0/80 3 lots
Preconditioning + Highly Accelerated Stress Test	MSL @ 260C, 131C/ 85% RH/ bias 96hrs	0/80 3 lots
Preconditioning + Unbiased Highly Accelerated Stress Test	MSL @ 260C, 131C/ 85% RH/ no bias 96hrs	0/80 3 lots
ESD	HBM MM	2000V Pass 200V Pass
LU	JEDEC JESD78	+/- 200mA Pass

ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical characterization test data has been obtained on Gresham MAX/ NCP 80x material. No significant changes in part performance as compared to the existing Aizu-sourced product were observed. Cpk's of all critical parameters are greater than 1.67. Data may be provided upon request.

CHANGED PART IDENTIFICATION:

Devices with date codes of 2013 work week 11 or later may be sourced from either wafer Gresham or Aizu fab.



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List of affected General Parts:

MAX809HTRG	MAX809SN293D1T1G	MAX803SQ120T1G	MAX810LTRG
MAX809JTRG	MAX809SN293D2T1G	MAX803SQ293T1G	MAX810MTRG
MAX809MTRGH	MAX809SN293D3T1G	MAX803SQ308T1G	MAX810RTRG
MAX809RTRG	MAX809SQ293D1T1G	MAX803SQ438T1G	MAX810SN120T1G
MAX809SN120T1G	MAX809SQ293D2T1G	MAX803SQ463T1G	MAX810SQ120T1G
MAX809SN160T1G	MAX809SQ293D3T1G	MAX803SQ263T1G	MAX810SQ263T1G
MAX809SN232T1G	MAX809SQ293T1G	MAX803SQ293D2T1G	MAX810SQ293T1G
MAX809SN490T1G	MAX809STRGH	MAX803SQ293D1T1G	MAX810SQ438T1G
MAX809SQ120T1G	MAX809STRG	MAX803SQ293D3T1G	MAX810SQ463T1G
MAX809SQ232T1G		MAX803SQ308D2T1G	MAX810STRG
MAX809SQ263T1G		NCP803SN120T1G	MAX810TTRG
MAX809SQ308T1G		NCP803SN160T1G	MAX810SN293D1T1G
MAX809SQ400T1G		NCP803SN232T1G	MAX810SN293D2T1G
MAX809SQ438T1G		NCP803SN293T1G	MAX810SN293D3T1G
MAX809SQ463T1G		NCP803SN293T3G	MAX810SQ293D1T1G
MAX809TTRGH		NCP803SN308T1G	MAX810SQ293D2T1G
MAX809TTRG		NCP803SN400T1G	MAX810SQ293D3T1G
MAX809LTRG		NCP803SN438T1G	
MAX809MTRG		NCP803SN463T1G	
		NCP803SN463D1T1G	
		NCP803SN263T1G	
		NCP803SN293D2T1G	
		NCP803SN293D1T1G	
		NCP803SN293D3T1G	