



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16223

Generic Copy

Issue Date: 10-Jul-2014

TITLE: Qualification of TSMC Wafer Fab for Production of NCP372MUAITXG

PROPOSED FIRST SHIP DATE: 15-Oct-2014 or earlier with customer approval

AFFECTED CHANGE CATEGORY(S): ON Semi Fab site/ contractor Fab site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or <Shilpa.Rao@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:

ON Semiconductor is pleased to announce that the NCP372MUAITXG is now qualified for production at the TSMC wafer fab in Taiwan.

Upon expiration or approval of the Final PCN, devices may be supplied from the TSMC wafer fab. The TSMC wafer fab is compliant to ISO9001:2000, ISO/TS16949:2004, and ISO14001:2004. The controller die of the NCP372MUAITXG was previously manufactured at ON Semiconductor's Piestany, Slovakia wafer fab on the 0.8um PS5LV process. Due to the previously-announced closure of the Piestany fab, the controller die has now been re-designed and qualified to run at TSMC on the 0.25um BCD process. Device performance is the same between the two fab sites and continues to fully meet datasheet specifications. No changes to packaging occur as a result of this wafer fab qualification. The NCP372MUAITXG will continue to be assembled and tested in existing, qualified locations.



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RELIABILITY DATA SUMMARY:

Reliability Test Results:

Test	Name	Test Conditions	End Point Req's	Test Results	(rej/ ss)	(rej/ ss)	(rej/ ss)	(rej/ ss)
				Read Point	Result NCP370	Result NCP373 0.4A	Result NCP373 1.3A	Result NCP372
Prep	Sample preparation and initial part testing	various	---	Initial Electrical	done	done	done	done
HTOL	High Temp Op Life	Ta=65°C, Tj=145°C	c = 0, Room	504hrs 1008hrs	0/80 0/80			
HTSL	High Temp Storage Life	Ta=150°C	c = 0, Room	504hrs 1008hrs	0/80 0/80			
ESD	HBM		Results	+/-2000V	Pass			
	MM			+/-200V	Pass			
LU	Latch-up	Class II / 85°C	Results	LU+>100mA LU ->100mA	Pass Pass			
ED	Electrical Distribution	Critical Parameters	-40 / 25 / +85°C	Results CPK>=1.67	Pass	Pass	Pass	Pass

ELECTRICAL CHARACTERISTIC SUMMARY:

The NCP372MUAITXG from TSMC fab has electrical performance comparable to the previous fab. The device continues to successfully meet all datasheet specifications. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

NCP372MUAITXG devices with date codes representing WW 42, 2014 or later will be assembled with die sourced from the TSMC wafer fab, unless earlier customer approval is obtained. If early customer approval is obtained, devices with date codes of WW 31, 2014 or later will be assembled with die from the TSMC wafer fab.

List of affected General Parts:

NCP372MUAITXG