



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20473Generic Copy

Issue Date: 15-May-2014**TITLE:** Addition of ASE Shanghai, China as qualified assembly sites for eFuse devices in DFN packages**PROPOSED FIRST SHIP DATE:** 15-Aug-2014 or earlier with customer approval**AFFECTED CHANGE CATEGORY(S):** ON Semiconductor Assembly Site**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or Mike Begonia <mike.begonia@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office**ADDITIONAL RELIABILITY DATA:** AvailableContact your local ON Semiconductor Sales Office or Francis Lualhati <ffxczy@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:**

This is the final notification announcing that ON Semiconductor has qualified its eFuse devices in DFN package (please refer to the list of affected general parts section for complete device list), for assembly at ASE Shanghai factory located in the China. ASE is ISO/TS16949:2009 certified and have already been qualified and utilized by ON Semiconductor.

NIS5132MN3TXG have been identified as qualification vehicle, based on the package dimension, die size and highest voltage. Reliability testing and full electrical characterization over temperatures were performed to ensure device functionality and electrical specifications are met.

Upon expiration or approval of the FPCN, devices listed in this final PCN will have ASE Shanghai as additional assembly site. Customer may receive devices assembled in our in-house Seremban, Malaysia assembly facilities and ASE Shanghai after that. All final testing shall remain at ON Semiconductor's Seremban Facility, Malaysia.

The location of the assembly sites can be identified by the marking of the date code



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RELIABILITY DATA SUMMARY:

Qual Vehicle: NIS5132MN3TXG

Qualification Results and Analysis:

Test:	Conditions:	Interval:	Results
HTRB	TA=125°C, 80% rated voltage	1008 hrs	0/240
HTSL	TA = 150°C	1008 hrs	0/240
TC-PC	Ta= -65 C to 150 C	1000 cyc	0/240
HAST-PC	Ta=130C RH=80%,	96 hrs	0/240
Autoclave-PC	Ta=121C RH=100% ~15 psig	96 hrs	0/240

Conclusion: All reliability requirements have been met.

CHANGED PART IDENTIFICATION:

Marking of the month date codes:

Seremban Malaysia assembled devices: M

ASE Shanghai assembled devices: ☒

List of affected General Parts:

NIS5132MN1TXG
NIS5132MN2TXG
NIS5132MN3TXG
NIS5135MN1TXG
NIS5135MN2TXG
NIS5232MN1TXG