ON Semiconductor

Final Product/Process Change Notification

Document # : FPCN21411X
Issue Date: 3 August 2016

Title of Change:	Qualification of ON Semiconductor SSL factory located in Shenzhen, China for Bump Post-Test Production (Wafer-saw, visual inspection, Tape & Reel) for NCP333FCT2G.
Proposed first ship date:	10 November 2016 *or earlier upon customer approval*
Contact information:	Contact your local ON Semiconductor Sales Office or <Todd.Manes@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Ken.Fergus@onsemi.com>.
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.
Change Part Identification:	Affected parts will be identified by the date code.
Change category:	☐ Wafer Fab Change ☐ Assembly Change ☐ Test Change ☒ Other Wafer-saw, VI, T&R

Change Sub-Category(s):

☒ Manufacturing Site Change/Addition
☐ Manufacturing Process Change
☐ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☒ Other: Wafer-saw, Visual Inspection, T&R

Sites Affected:

☐ All site(s) ☐ not applicable
☒ ON Semiconductor site(s) : SSL, China
☐ External Foundry/Subcon site(s)
Select Site _____

Description and Purpose:

ON Semiconductor is pleased to announce a capacity expansion qualification of its SSL factory located in Shenzhen, China, as an additional source for bump product post-test operations (wafer-saw, visual inspection, Tape & Reel) for the NCP333FCT2G. These operations are currently performed at the ON Semiconductor facility located in Seremban, Malaysia. Upon expiration or approval of this FPCN, these operations may be performed at ON Semiconductor SSL in Shenzhen, China facility or at ON Semiconductor, Seremban, Malaysia facility.

ON Semiconductor SSL in Shenzhen, China is certified to be compliant to ISO-9001 and ISO-14001.

All production operations that occur through the test process will remain unchanged for the NCP333FCT2G. No changes to wafer, fab, bump facility or production test facility are being made. Only the operations that occur after test are affected by this notification.

Note that the post-test process is the same between SSL and Seremban (existing factory), with the exception that:

- SSL performs 100% manual inspection in tape
- SSL supplies T&R using hot-seal cover tape

No changes to the Finished Goods or product packing will be made.

Qualification Data Summary:

QV DEVICE NAME: NCP333FCT2G

Test	Sample Size	Results
Saw		
100% Visual Inspection	3 lots/ 77 units	Pass
Kerf Width Measurement	3 lots/ 77units	Pass
Backside Wall Integrity	3 lots/ 5 units	Pass
Tape and Reel		
Peel test		Pass
Electronic Map vs Skeleton verification	3 wafers	Pass
De-tape and Inspect	1 reel, 100%	Pass

Visual Inspection and pick & place electronic map verification has been performed at the ON Semiconductor SSL site to ensure all rejects will continue to be detected and removed from production.

Electrical Characteristic Summary:
Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
NCP333FCT2G	NCP333FCT2G