Initial Product/Process Change Notification

Document # : IPCN22623X
Issue Date: 21 February 2019

Title of Change:	Qualification of assembly and test manufacturing for NCP170 SOT563 family in Leshan, China
Proposed First Ship date:	26 June 2019 or earlier upon customer approval
Contact Information:	Contact your local ON Semiconductor Sales Office or <jan.gryzbon@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office or <PCN.Samples@onsemi.com> Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change.
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>
Change Part Identification:	Package labeling will indicate 'Assembled in China' and affected product will include the Leshan location identifier of 'M' (rotated 270 degrees) marked on the package body.
Change Category:	☐ Wafer Fab Change ☑ Assembly Change ☑ Test Change ☐ Other ____________

Change Sub-Category(s):

☐ Manufacturing Site Addition
☑ Manufacturing Site Transfer
☐ Manufacturing Process Change
☑ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: ____________________

Sites Affected:	ON Semiconductor Sites: ON Leshan, China	External Foundry/Subcon Sites: None

Description and Purpose:

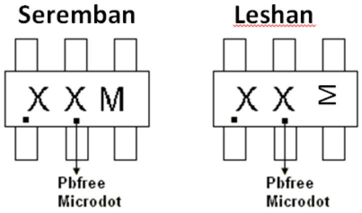
This Initial Notification announces that ON Leshan, China factory as additional production site for NCP170 family, which are currently manufactured in ON semiconductor Seremban, Malaysia factory.

Upon the effectivity of the pending FPCN, assembly and test of these devices will be transferred to ON Semiconductor, Leshan, China. This change will apply for voltage options which are released after this change.

	Before Change Description	After Change Description
Mold Compound	EME-G700LS	Hysol GR640HV-L1 M7A
Assembly Site	Seremban	Leshan
Test Site	Seremban	Leshan

	From	To
Product marking change	M = Month Code, rotate=0°	M = Month Code, rotate=270°

Product assembled in Leshan, China will include the trace character of 'M' (rotated 270 degrees) in the trace. There are no other changes to the product marking as a result of this notification.



Qualification Plan:

QV device name: NCP170AXVxxxT2G
RMS# 55565
Package: SOT563

Test	Specification	Condition	Interval
HTOL	JA108	Ta= 25°C	1008 hrs
HTSL	J103	Ta= 25°C and +85°C	1008 hrs
PC (MSL1)	J-Std-020 JA113	MSL 1 @ 260 °C	
SAT		Test pre- and post- PC	
PC (MSL1) -TC	JA104	MSL 1 @ 260 °C	
BS	AEC-Q100-001	Cpk 1.33, 30 bonds from 5units	
BPS	M883 Method 2011	3gm Pull Force	500cyc
BPS	M883 Method 2011	3gm Pull Force Min After TC	500cyc
PC (MSL1) - AC	JA102	4 assy lots Ta = 25°C	96 hrs
PC(MSL1) - HAST	JA10 JA110	4 assy lots Ta = 25°C, 85°C & 125°C	96 hrs
RSH	JESD22 B106	Test @ Room & Hot	
ED	ON DataSheet	Cpk > 1.67 Test @ R, H, C	

Estimated date for qualification completion: 9 May 2019

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal.**

Part Number	Qualification Vehicle
NCP170AXV120T2G	NCP170AXVYYYT2G
NCP170BXV120T2G	NCP170AXVYYYT2G
NCP170AXV135T2G	NCP170AXVYYYT2G
NCP170BXV135T2G	NCP170AXVYYYT2G
NCP170AXV150T2G	NCP170AXVYYYT2G
NCP170BXV150T2G	NCP170AXVYYYT2G
NCP170AXV180T2G	NCP170AXVYYYT2G
NCP170BXV180T2G	NCP170AXVYYYT2G
NCP170AXV190T2G	NCP170AXVYYYT2G
NCP170BXV190T2G	NCP170AXVYYYT2G
NCP170AXV210T2G	NCP170AXVYYYT2G
NCP170BXV250T2G	NCP170AXVYYYT2G
NCP170AXV250T2G	NCP170AXVYYYT2G
NCP170BXV280T2G	NCP170AXVYYYT2G
NCP170AXV280T2G	NCP170AXVYYYT2G
NCP170BXV300T2G	NCP170AXVYYYT2G
NCP170AXV300T2G	NCP170AXVYYYT2G
NCP170BXV310T2G	NCP170AXVYYYT2G
NCP170AXV310T2G	NCP170AXVYYYT2G
NCP170BXV330T2G	NCP170AXVYYYT2G
NCP170AXV330T2G	NCP170AXVYYYT2G