ON Semiconductor®

Final Product/Process Change Notification

Document #:FPCN22623X
Issue Date:24Oct 2019

Title of Change:	Assembly and test manufacturing for NCP170 SOT563 family transfer to Leshan Phoenix Semiconductor, China.
Proposed First Ship date:	31 Jan 2020 or earlier if approved by customer.
Contact Information:	Contact your local ON Semiconductor Sales Office or <Jan.Gryzbon@onsemi.com>
PCN Samples Contact:	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. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Tomas.Vajter@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
Marking of Parts/ Traceability of Change:	The affected products will be identified with date code.
Change Category:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Transfer

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
Leshan Phoenix Semiconductor, China	None
ON Semiconductor Seremban, Malaysia	None

Description and Purpose:

This FPCN announces that NCP170 family in SOT563 will be transferred to ON Semiconductor, Leshan, China.

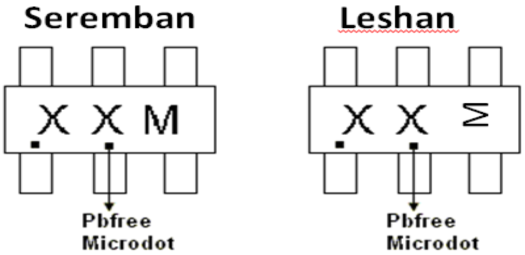
Upon the effectivity of this FPCN, assembly and test of these devices will be transferred to ON Semiconductor, Leshan, China.

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.



Reliability Data Summary:

QV device name: NCP170AXVxxxT2G
RMS : 55565
Package : SOT563

Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 25°C	1008 hrs	0/252
HTSL	J103	Ta= 25°C and +85°C	1008 hrs	0/252
PC (MSL1)	J-Std-020 JA113	MSL 1 @ 260 °C		0/837
SAT		Test pre- and post- PC		Without delamination
PC (MSL1) -TC	JA104	MSL 1 @ 260 °C	500cyc	0/269
BS	AEC-Q100-001	Cpk 1.33, 30 bonds from 5units		Cpk>1.67
BPS	M883 Method 2011	3gm Pull Force	500cyc	Cpk>1.67
BPS	M883 Method 2011	3gm Pull Force Min After TC	500cyc	Cpk>1.67
PC (MSL1) - AC	JA102	4 assy lots Ta = 25°C	96 hrs	0/252
PC(MSL1) - HAST	JA10 JA110	4 assy lots Ta = 25°C, 85°C & 125°C	96 hrs	0/251
RSH	JESD22 B106	Test @ Room & Hot		0/90
ED	ON Datasheet	Cpk > 1.67 Test @ R, H, C		Cpk>1.67

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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	NCP170AXV300T2G
NCP170BXV120T2G	NCP170AXV300T2G
NCP170AXV135T2G	NCP170AXV300T2G
NCP170BXV135T2G	NCP170AXV300T2G
NCP170AXV150T2G	NCP170AXV300T2G
NCP170BXV150T2G	NCP170AXV300T2G
NCP170AXV180T2G	NCP170AXV300T2G
NCP170BXV180T2G	NCP170AXV300T2G
NCP170AXV330T2G	NCP170AXV300T2G
NCP170BXV330T2G	NCP170AXV300T2G
NCP170AXV310T2G	NCP170AXV300T2G
NCP170BXV310T2G	NCP170AXV300T2G
NCP170AXV300T2G	NCP170AXV300T2G
NCP170BXV300T2G	NCP170AXV300T2G
NCP170AXV280T2G	NCP170AXV300T2G
NCP170BXV280T2G	NCP170AXV300T2G
NCP170AXV250T2G	NCP170AXV300T2G
NCP170BXV250T2G	NCP170AXV300T2G
NCP170AXV210T2G	NCP170AXV300T2G
NCP170BXV190T2G	NCP170AXV300T2G
NCP170AXV190T2G	NCP170AXV300T2G