



Title of Change:	Assembly and test manufacturing for NCV8170 SOT563 family transfer to Leshan Phoenix Semiconductor, China.
Proposed Changed Material First Ship Date:	10 Jan 2021 or earlier if approved by customer
Current Material Last Order Date:	30 Jun 2020 <i>Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.</i>
Current Material Last Delivery Date:	09 Jan 2021 <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local ON Semiconductor Sales Office or < Jan.Gryzbon@onsemi.com >
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office to place sample order or < PCN.samples@onsemi.com >. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Sample Availability Date:	28 Feb 2020
PPAP Availability Date:	10 Jan 2020
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 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com .

Change Category

Category	Type of Change
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Change of product marking

Description and Purpose:

This FPCN announces that NCV8170 family in SOT563 will be transferred to Leshan Phoenix Semiconductor, China.

Upon the effectivity of the pending FPCN, assembly and test of these devices will be transferred to Leshan Phoenix Semiconductor, 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	ON Semiconductor Seremban, Malaysia	Leshan Phoenix Semiconductor, China
Test Site	ON Semiconductor Seremban, Malaysia	Leshan Phoenix Semiconductor, China



	From	To		
Product marking change	M = Month Code, rotate=0°	M = Month Code, rotate=270°		
<p>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.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Seremban</p> <p>Pbfree Microdot</p> </div> <div style="text-align: center;"> <p>Leshan</p> <p>Pbfree Microdot</p> </div> </div>				
Reason / Motivation for Change:	Source/Supply/Capacity Changes			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	<p>The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded.</p> <p>No anticipated impacts.</p>			
Sites Affected:				
ON Semiconductor Sites		External Foundry/Subcon Sites		
Leshan Phoenix Semiconductor, China		None		
ON Semiconductor Seremban, Malaysia				
Marking of Parts/ Traceability of Change:	The affected products will be identified with date code.			
Reliability Data Summary:				
<p>QV device name : NCV8170AXV300T2G RMS : 55565 Package : SOT563</p>				
Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 25°C	2008 hrs	0/252
HTSL	J103	Ta= 25°C and +85°C	2008 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



NOTE: AEC-1pager is attached.

To view attachments:

1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file/s

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](#).

Current Part Number	New Part Number	Qualification Vehicle
NCV8170AXV120T2G	NA	NCV8170AXV300T2G
NCV8170BXV120T2G	NA	NCV8170AXV300T2G
NCV8170AXV150T2G	NA	NCV8170AXV300T2G
NCV8170BXV150T2G	NA	NCV8170AXV300T2G
NCV8170AXV180T2G	NA	NCV8170AXV300T2G
NCV8170BXV180T2G	NA	NCV8170AXV300T2G
NCV8170AXV250T2G	NA	NCV8170AXV300T2G
NCV8170BXV250T2G	NA	NCV8170AXV300T2G
NCV8170AXV280T2G	NA	NCV8170AXV300T2G
NCV8170BXV280T2G	NA	NCV8170AXV300T2G
NCV8170AXV300T2G	NA	NCV8170AXV300T2G
NCV8170BXV300T2G	NA	NCV8170AXV300T2G
NCV8170AXV310T2G	NA	NCV8170AXV300T2G
NCV8170BXV310T2G	NA	NCV8170AXV300T2G
NCV8170AXV330T2G	NA	NCV8170AXV300T2G
NCV8170BXV330T2G	NA	NCV8170AXV300T2G
NCV8170AXV360T2G	NA	NCV8170AXV300T2G
NCV8170BXV360T2G	NA	NCV8170AXV300T2G