



Title of Change:	Transfer of Assembly and Test operations of SMC packaged products from ON Semiconductor Malaysia (SBN) to On Semiconductor Vietnam (OSV), impacting Schottky and Constant Current Regulator (CCR) Product.
Proposed Changed Material First Ship Date:	15 May 2019
Current Material Last Order Date:	15 February 2019 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.
Current Material Last Delivery Date:	14 May 2019 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.
Product Category:	<i>Active components – Discrete components</i>
Contact information:	Contact your local ON Semiconductor Sales Office or < Phuong.Hoang@onsemi.com >
Samples:	Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.
Sample Availability Date:	15 February 2018
PPAP Availability Date:	30 March 2018
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < cheanching.sim@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	Type of Change
Process – Assembly	Move of all or part of assembly to a different location/site/subcontractor.
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.
Description and Purpose:	
<p>This Final Notification announces the transfer of Assembly and Test of Schottky and Constant Current Regulator (CCR) products assembled in SMC package from ON Semiconductor Malaysia (SBN) to ON Semiconductor Vietnam (OSV).</p> <p>Upon completion of this transfer, all affected SMC parts will be sourced solely from OSV and will no longer be available from SBN.</p> <p>ON Semiconductor Vietnam (OSV) is qualified site for SMC Standard discrete packaged products and is ISO TS16949 certified.</p> <p>Products sourced from OSV have been qualified to Automotive requirements and continue remain as Pb-free, Halide free and RoHS compliant.</p>	



<p>Reason / Motivation for Change:</p>	<ul style="list-style-type: none"> • Change benefits for customer(s): <ul style="list-style-type: none"> ○ Additional floor space for future expansion ○ Sustained TS16949 Certification with the Same BOM / Equipment / Processes ○ Allow for increased support for Seremban packages that are currently constrained ○ OSV has been audited to VDA6.3 • Risks for delayed conversion: <ul style="list-style-type: none"> ○ No Seremban supply after March 31st, 2019 ○ Limited ability to support bridge build availability. 	
<p>Anticipated impact on fit, form, function, reliability, product safety or manufacturability</p>	<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>	
<p>Sites Affected:</p>	<p>ON Semiconductor Sites: ON Seremban, Malaysia ON Dong Nai Province, Vietnam</p>	<p>External Foundry/Subcon Sites: None</p>
<p>Marking of Parts/ Traceability of Change:</p>	<p>Product from ON Semiconductor Vietnam (OSV) will be marked with site code "VN" prior to the date code while the Seremban device does not have site code marking.</p>	

Reliability Data Summary:

QV DEVICE NAME: NRVBS4201T3G (Schottky Rectifier)

PACKAGE: SMC

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 90 °C, bias = 100% of rated V	1008 hrs	0/252
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C max, Ton = Toff = 2min	15000 cyc	0/252
TC	JESD22-A104	Temp = -65°C to +150°C	1000 cyc	0/252
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/252
H3TRB	JESD22-A101	Temp = 85°C, RH=85%, bias = 100V max	1008 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/1008
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45

QV DEVICE NAME: NSV50350AST3G (CCR)

PACKAGE: SMC

Test	Specification	Condition	Interval	Result
HTOL	JESD22-A108	Ta = 125°C, Tj(est) = 175°C	1008 hrs	0/252
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/252
TC	JESD22-A104	Temp = -65°C to +150°C	1000 cyc	0/252
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/504
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45



Attached is the AEC-1pager:

To access file attachments on pdf copy of PCN, please be guided by the steps below:

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 Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
NRVBS3100T3G	NRVBS4201T3G
NRVBS3201T3G	
NRVBS330T3G	
NRVBS360T3G	
NRVBS410LT3G	
NRVBS4201T3G	
NRVBS540T3G	
SBRS8320T3G	
SBRS8340T3G	
NSV50350AST3G	NSV50350AST3G



Appendix A: Changed Products

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Product	Customer Part Number	New Part Number	Qualification Vehicle
NRVBS3100T3G		NA	NRVBS4201T3G
NRVBS3201T3G		NA	NRVBS4201T3G
NRVBS330T3G		NA	NRVBS4201T3G
NRVBS360T3G		NA	NRVBS4201T3G
NRVBS410LT3G		NA	NRVBS4201T3G
NRVBS4201T3G		NA	NRVBS4201T3G
NRVBS540T3G		NA	NRVBS4201T3G
NSV50350AST3G		NA	NSV50350AST3G
SBRS8320T3G		NA	NRVBS4201T3G
SBRS8340T3G		NA	NRVBS4201T3G