



Final Product/Process Change Notification

Document # : FPCN22196Z

Issue Date: 12 April 2018

Title of Change:	Transfer of Automotive Assembly and Test operations of DPAK Planar Ultrafast products to On Semiconductor Vietnam (OSV).
Proposed Changed Material First Ship Date:	12 April 2019
Current Material Last Order Date:	15 December 2018 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 March 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 <Tai.Truong@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:	30 April 2018
PPAP Availability Date: 45 days	30 April 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 tool) without change of process.
Description and Purpose:	
<p>This Final Notification announces the transfer of Automotive Assembly and Test of DPAK Planar Ultrafast products from ON Semiconductor Malaysia (SBN) to ON Semiconductor Vietnam (OSV).</p> <p>The Planar Ultrafast products in DPAK package are currently being assembled and tested at Seremban. Upon the expiration of this FPCN, Planar Ultrafast products in DPAK package will be processed at OSV location using same Bill of Material.</p> <p>ON Semiconductor Vietnam (OSV) is qualified site for SMB 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>	

Reason / Motivation for Change:	<ul style="list-style-type: none"> • Change benefits for customer(s): <ul style="list-style-type: none"> ○ Unconstrained Automotive Sourcing; Mfg 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 14 March 2019 ○ Limited ability to support bridge build availability. 	
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: ON Seremban, Malaysia ON Dong Nai Province, Vietnam	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	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.	

Reliability Data Summary:

QV DEVICE NAME: NRVHPD660T4G

PACKAGE: DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 175°C, bias = 100% of rated V	1008 hrs	0/252
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/252
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/252
AC	JESD22-A102	Ta = 121°C, 100% RH, 15psig, unbiased	96 hrs	0/252
H3TRB	JESD22-A101	Ta = 85°C, 85% RH, 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

NOTE: AEC 1 Pager Attached

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



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Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of affected Standard Parts:

Current Part Number	Qualification Vehicle
NRVHPD660T4G	NRVHPD660T4G
NHPD660T4G	