



<b>Title of Change:</b>	Transfer of Automotive Assembly and Test operations of DPAK packaged products to On Semiconductor Vietnam (OSV).
<b>Proposed Changed Material First Ship Date:</b>	10 January 2018 <i>or earlier upon customer approval</i>
<b>Current Material Last Order Date:</b>	1 November 2017 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.
<b>Current Material Last Delivery Date:</b>	31 December 2017 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.
<b>Product Category:</b>	<i>Active components – Discrete components</i>
<b>Contact information</b>	Contact your local ON Semiconductor Sales Office or <Phuong.Hoang@onsemi.com>
<b>Samples</b>	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.
<b>Sample Availability Date:</b>	1 July 2017
<b>PPAP Availability Date:</b>	31 July 2017
<b>Additional Reliability Data</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:cheanching.sim@onsemi.com">cheanching.sim@onsemi.com</a> >.
<b>Type of Notification</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 6 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and its conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >.
<b>Change Category</b>	<b>Type of Change</b>
Process – Assembly	Move of all or part of assembly to a different location/site/subcontractor.
Process – Assembly	Change of product marking.
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.
<b>Description and Purpose:</b>	
<p>This Final Notification announces the transfer of Assembly and Test of DPAK packaged products from ON Semiconductor Malaysia (SBN) to ON Semiconductor Vietnam (OSV).</p> <p>Upon completion of this transfer, these specified products will be sourced solely from OSV Vietnam location using the same Bill of Material and will no longer be available from SBN.</p> <p>ON Semiconductor Vietnam (OSV) is qualified site for DPAK 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>	
<b>Reason / Motivation for Change:</b>	<ul style="list-style-type: none"> <li>• Change benefits for customer(s): <ul style="list-style-type: none"> <li>○ Unconstrained Automotive Sourcing; Mfg floor space for future expansion</li> <li>○ Sustained TS16949 Certification with the Same BOM / Equipment / Processes</li> <li>○ Allow for increased support for Seremban packages that are currently constrained</li> <li>○ OSV has been audited to VDA6.3</li> </ul> </li> <li>• Risks for delayed conversion: <ul style="list-style-type: none"> <li>○ No Seremban supply after December 31<sup>st</sup>, 2017</li> <li>○ Limited ability to support bridge build availability.</li> </ul> </li> </ul>



<b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability</b>	<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>
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<p><b>Sites Affected:</b></p> <p> <input type="checkbox"/> All site(s)                      <input type="checkbox"/> not applicable                      <input checked="" type="checkbox"/> ON Semiconductor site(s):                      <input type="checkbox"/> External Foundry/Subcon site(s)             </p> <p style="margin-left: 150px;"> <i>ON Seremban, Malaysia</i>  <i>ON Dong Nai Province, Vietnam</i> </p>	
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<b>Marking of Parts/ Traceability of Change:</b>	<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>
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<p><b>Reliability Data Summary:</b></p>				
<p><b>QV DEVICE NAME:</b> MJD340T4G (Bipolar)  <b>PACKAGE:</b> DPAK</p>				
Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, bias = 80% of rated V	1008 hrs	0/84
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/84
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/84
TC	JESD22-A104	Temp = -65°C to +150°C	1000 cyc	0/84
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/84
H3TRB	JESD22-A101	Temp = 85°C, RH=85%, bias = 100V max	1008 hrs	0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/336
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/30



**QV DEVICE NAME:** MJD350T4G (Bipolar)

**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, bias = 80% of rated V	1008 hrs	0/84
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/84
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 2min	15000 cyc	0/84
TC	JESD22-A104	Temp = -65°C to +150°C	1000 cyc	0/84
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/84
H3TRB	JESD22-A101	Temp = 85°C, RH=85%, bias = 100V max	1008 hrs	0/84
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/336
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/30

**QV DEVICE NAME:** MURHD560T4G (Ultrafast)

**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, Tj(est) = 175 °C, bias = 80% 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	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

**Note: AEC-1pager is attached:**

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 Standart Parts:**

Transferring Malaysia (SBN) Part Number	Qualification Vehicle
NJVMJD112G	
NJVMJD112T4G	
NJVMJD117T4G	
NJVMJD127T4G	
NJVMJD128T4G	
NJVMJD210T4G	
NJVMJD243T4G	
NJVMJD2955T4G	
NJVMJD3055T4G	
NJVMJD31CG	
NJVMJD31CRLG	
NJVMJD31T4G	
NJVMJD32CG	
NJVMJD32T4G	
NJVMJD350T4G	
NJVMJD42CRLG	
NJVMJD44E3T4G	
NJVMJD44H11G	
NJVMJD45H11G	
NJVMJD47T4G	
NJVMJD50T4G	
NJVMJD6039T4G	
NJVND1718T4G	
NJVND35N04G	
NJVND35N04T4G	
SJD112T4G	

MJD340T4G  
MJD350T4G  
MURHD560T4G

**List of Customer Special Parts:**

*NOTE: Please be informed that parts impacted by this PDN/PCN are Special/Customer specific parts, thus MPN & CPN info will be available to affected customers only by clicking the "Custom PCN for Selected Company Button" in the Document Analysis page of PCMS/PCN Alert*