



Title of Change:	Qualification of Power Schottky Top Metal And Back Metal Change for Powermite and SMA-Flat Lead Packages.											
Proposed first ship date:	13 November 2017											
Contact information:	Contact your local ON Semiconductor Sales Office or <SitiNurhaza.MohdRamli@onsemi.com>											
Samples:	Contact your local ON Semiconductor Sales Office											
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 12months 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 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.											
Change Part Identification:	There will be no change in the device marking scheme. Clean date code will be advised as requested.											
Change category:	<input checked="" type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____											
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Manufacturing Process Change	<input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Product specific change	<input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____									
Sites Affected:	<input checked="" type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input type="checkbox"/> ON Semiconductor site(s) :	<input type="checkbox"/> External Foundry/Subcon site(s)										
Description and Purpose:												
This is a Final Product Change Notification announcing to customers that ON Semiconductor is qualifying Power top metal and back metal change on selected automotive qualified Orderable Part Numbers (OPNs) listed in this FPCN. The change will affect multiple packages at its assembly sites.												
<table border="1"> <thead> <tr> <th></th> <th style="background-color: #92d050;">Change From</th> <th style="background-color: #92d050;">Change To</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Top Metal</td> <td style="text-align: center;">TiW/NiV/Au</td> <td style="text-align: center;">TiW/NiV/Ag</td> </tr> <tr> <td style="text-align: center;">Back Metal</td> <td style="text-align: center;">Cr/Ni/Au</td> <td style="text-align: center;">Ti/Ni/Ag</td> </tr> </tbody> </table>					Change From	Change To	Top Metal	TiW/NiV/Au	TiW/NiV/Ag	Back Metal	Cr/Ni/Au	Ti/Ni/Ag
	Change From	Change To										
Top Metal	TiW/NiV/Au	TiW/NiV/Ag										
Back Metal	Cr/Ni/Au	Ti/Ni/Ag										
Products had gone thru reliability testing as per automotive requirements and it's proven that device performances are not affected.												

**Reliability Data Summary:****NRVBS4201T3G**

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=90°C, 100% max rated V	1000 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/240
TC	JESD22-A104	Ta= - 65°C to +150°C	1000 cyc	0/240
H3TRB	JESD22 A101	Ta=85°C RH=85% bias=80% rated V or 100V Max	1000 hrs	0/240
AC	JESD22 A102	Ta = 121°C, P= 15 PSIG, RH = 100%, 96 Hours	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/960
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90

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:

There are no changes in electrical characteristic; product performance meets data sheet specifications. Characterization data is available upon request.



List of Affected Standard Parts:

Part Number	Qualification Vehicle
NRVB120ESFT1G	NRVBS4201T3G
NRVB120ESFT3G	NRVBS4201T3G
NRVB140ESFT1G	NRVBS4201T3G
NRVB140ESFT3G	NRVBS4201T3G
NRVB140SFT1G	NRVBS4201T3G
NRVB140SFT3G	NRVBS4201T3G
NRVB1H100SFT3G	NRVBS4201T3G
NRVB2H100SFT3G	NRVBS4201T3G
NRVBAF3200T3G	NRVBS4201T3G
NRVBAF440T3G	NRVBS4201T3G
NRVBM110ET1G	NRVBS4201T3G
NRVBM120ET1G	NRVBS4201T3G
NRVBM120ET3G	NRVBS4201T3G
NRVBM140T1G	NRVBS4201T3G
NRVBM140T3G	NRVBS4201T3G
NRVBM2H100T3G	NRVBS4201T3G