



Final Product/Process Change Notification

Document #:FPCN23768Z

Issue Date:14 Dec 2022

Title of Change:	Qualification of 8 mils Aluminum wire for selected Ultrafast devices in DPAK package.
Proposed Changed Material First Ship Date:	14 Jun 2023 or earlier if approved by customer
Current Material Last Order Date:	N/A <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:	N/A <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 – Discrete components
Contact information:	Contact your local onsemi Sales Office or Danh.Trinh@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. 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:	06 Jan 2023
PPAP Availability Date:	30 Dec 2022
Additional Reliability Data:	Contact your local onsemi Sales Office or ffxg4t@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi 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
Process - Assembly	Change of wire bonding

Description and Purpose:

This is the Final Product Change Notification to announce the plan to qualify 8 mils wire size on selected Rectifier Ultrafast devices in DPAK package. This change is to improve quality robustness, with proven superior product performance. Once the expiration of the FPCN, all products listed here will be changed with new wire size.

	Before Change Description	After Change Description
Aluminum Wire	5 mils	8 mils

There is no product marking change as a result of this change.

Reason / Motivation for Change:	Quality improvement			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	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 onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.			
Sites Affected:				
onsemi Sites			External Foundry/Subcon Sites	
onsemi Seremban, Malaysia			None	
onsemi Vietnam				
Marking of Parts/ Traceability of Change:	Clean date code will be advised upon of request.			
Reliability Data Summary:				
QV DEVICE NAME: NRVUD620CTT4G RMS: V72850, S81414 PACKAGE: DPAK				
Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/231
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/231
UHASt	JESD22-A102	130°C, 100% RH, 18.8psig, unbiased	96 hrs	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/924
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45
NOTE: AEC-1pager is attached. <i>To view attachments:</i> 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				
Electrical Characteristics Summary:				
Electrical characteristics are not impacted.				



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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
NRVSRD620VCTT4G	N/A	NRVUD620CTT4G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NRVSRD620VCTT4G		NRVUD620CTT4G		