

Initial Product/Process Change Notification Document #:IPCN23790Z

Issue Date:03 Feb 2021

Title of Change:	AHPM DSC&DSB 750V/800A Device Spacer and DBC 2nd source supplier qualification	
Proposed Changed Material First Ship Date:	01 Apr 2022 or earlier if approved by customer	
Current Material Last Order Date:	N/A 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:	N/A The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory	
Product Category:	Active components – Integrated circuits	
Contact information:	Contact your local ON Semiconductor Sales Office or Daisy.Zhi@onsemi.com	
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office to place sample order or <pcn.samples@onsemi.com>. 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.</pcn.samples@onsemi.com>	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or Frank.Tuan@onsemi.com	
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 12 months prior to implementation of the change. In case of questions, contact <pcn. support@onsemi.com="">.</pcn.>	
Change Category		
Category	Type of Change	
Process - Assembly	Change of direct material supplier	

Description and Purpose:

- 1. Qualify spacer 2nd source(IPT&ATTL)
- 2. Qualify DBC 2nd source(KCC)

	Before Change Description	After Change Description
Package Substrate	DBC Supplier: TongHsing, DBC structure: Cu-Al2O3+9%ZrO2-Cu	DBC Supplier: KCC, DBC structure: Cu-Al2O3+10.5%ZrO2-Cu
Other Changes	IGBT FRD Spacer supplier: ALMT Mid Spacser supplier: ALMT All Spacer composition:Cu30Mo70	IGBT FRD Spacer supplier: IPT Mid Spacser supplier: ATTL IGBT FRD Spacer composition:Cu30Mo70 Mid composition: Bare Cu

[&]quot;There is no product marking change as a result of this change"

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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 ON Semiconductor in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.			
Sites Affected:				
ON Semiconductor Sites		External Foundry/Subcon Sites		
ON Semiconductor Suzhou, China		None		
Marking of Parts/ Traceability of Change:	Marking no change and traceability based on date code			

Reliability Data Summary:

QV DEVICE NAME :NVG800A75L4DSC RMS: During Qual Lot building will provide

PACKAGE: AHPM15 DSC module

Test	Specification	Condition	Interval
TC	JESD22-A104	Ta= -40°C to +125°C	1000 cyc
H3TRB	JESD22-A101	Temp = 85C, RH=85%, VCE = 80V or 80% BV 1008hours	

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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 <u>PCN Customized Portal</u>.

Current Part Number	New Part Number	Qualification Vehicle
NVG800A75L4DSC	N/A	NVG800A75L4DSC
NVG800A75L4DSB	N/A	NVG800A75L4DSC

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