

Final Product/Process Change Notification

Document #:FPCN25732Z Issue Date:10 Jan 2024

Title of Change:	Assembly site qualification in HANA for SOIC8 exposed pad (751AC) - NCV51511PDR2G		
Proposed Changed Material First Ship Date:	13 Jul 2024 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 onsemi Sales Office or mitch.paris@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:	29 Feb 2024		
PPAP Availability Date:	10 Jan 2024		
Additional Reliability Data:	Contact your local onsemi Sales Office or Chielo.Basa@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		
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.		
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Die attach material, Change of lead frame finishing material / area (internal), Change of specified assembly process sequence (deletion and/or additional process step), Change of lead and heat slug plating material/plating thickness (external)		

Description and Purpose:

onsemi would like to inform its customers of the qualification of HANA for the assembly of NCV51511PDR2G in this Product Change Notification;

	From	То	
Assembly Site	AMKOR	HANA	
LeadFrame	PPF	CuAg with Tin plated	
Die Attach	Ablestick 8290	EN4900LC-18	
Mold Compound	G700LS	G700LS CV8214C	

Changed material can be identified by assembly site code.

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Reason / Motivation for Change:	Subcon/Supplier Product Change		
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	
None		HANA Semiconductor, Thailand	
Marking of Parts/ Traceability of Change:	"Changed material can be identified by assembly plant code."		

Reliability Data Summary:

QV DEVICE NAME: NCV51511PDR2G-ASY

RRF: 80638

PACKAGE: SOIC-8 EP

Test	Specification	Condition	Interval	Test Result
HTOL	JESD22-A108	Ta= 150°C 1008 hrs		0/231
ELFR	AECQ100-008	Ta= 150°C	48 hrs	0/2400
HTRB	JESD22-A108	Ta= 150°C	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -55°C to + 150°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 2 @ 260°C		0/693
PD	JESD22-B100 and JESD22-B108	Per Case Outline		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/45

Refer to the attached AEC1 Pager for more details.

To view attachments:

- 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 <u>PCN Customized Portal</u>.

Current Part Number	New Part Number	Qualification Vehicle
NCV51511PDR2G	NA	NCV51511PDR2G

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Appendix A: Changed Products

PCN#: FPCN25732Z

Issue Date: Jan 09, 2024

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCV51511PDR2G		NCV51511PDR2G	NA	