



Final Product/Process Change Notification

Document #:FPCN24896ZA

Issue Date:02 Sep 2024

Title of Change:	The addition of JCET, China as an assembly and test operation for (DPAK Package: Case Outline 369C) to provide capacity flexibility.
Proposed Changed Material First Ship Date:	09 Mar 2025 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 – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or Jolo.Manga@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:	30 Jul 2024
PPAP Availability Date:	30 Jul 2024
Additional Reliability Data:	Contact your local onsemi Sales Office or MohdAzizi.Azman@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
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Die attach material, Change of direct material supplier

Description and Purpose:

onsemi would like to inform our customers of the addition of JCET, China for assembly and test of NCV8774CDT50RKG & NCV8774CDT33RKG (DPAK package: Case Outline 369C) to enable capacity flexibility. Product bill of material changes are shown in the table below, and all products continue to meet electrical specification requirements listed in the product datasheet. This change is for capacity flexibility, so future deliveries will be sourced from JCET, China, or any of the previously qualified assembly & test locations at the discretion of our supply chain.

Description	Before Change	After Change	
Assembly / Test Site	onsemi, Seremban, Malaysia	onsemi, Seremban, Malaysia	JCET Semiconductor Co. Ltd., Suqian, China
LeadFrame	ICDPAK 3 lead Bare Copper PMC90	ICDPAK 3 lead Bare Copper PMC90	TO-252-2L(6R)-B Bare Copper PMC90
Die Attach	Solder: 95%Pb 5%Sn	Solder: 95%Pb 5%Sn	Solder: 92.5%Pb 5%Sn 2.5%Ag



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Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials 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		JCET, China		
Marking of Parts/ Traceability of Change:	Changed material can be identified by assembly plant code.			
Reliability Data Summary: QV DEVICE NAME: NCV8774CDT50RKG RMS: S88332 / S93281 / S97481 PACKAGE: DPAK 369C				
Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Low Temperature Storage Life	JESD22-A119	Ta= -40°C	168 hrs	0/75
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/2400
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, HAST, PTC for surface mount pkgs only		0/828
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C, mount on board	500 cyc	0/231
Power Temperature Cycling	JESD22-A105	Ta= -40°C to +125°C, mount on board	500 cyc	0/135
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90
Solderability	JSTD002	Ta = 245°C, 5 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
NCV8774CDT33RKG	#NONE	NCV8774CDT50RKG
NCV8774CDT50RKG	#NONE	NCV8774CDT50RKG