



# Final Product/Process Change Notification

Document #:FPCN25618X

Issue Date:18 Dec 2024

<b>Title of Change:</b>	Assembly and Test Qualification of DPAK Case Outline 369C at JCET Semiconductor (Suqian) Co., Ltd., China
<b>Proposed First Ship date:</b>	31 Mar 2025 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office
<b>Type of Notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>
<b>Marking of Parts/ Traceability of Change:</b>	Changed material can be identified by assembly plant code.
<b>Change Category:</b>	Test Change, Assembly Change
<b>Change Sub-Category(s):</b>	Material Change, Manufacturing Site Addition

<b>Sites Affected:</b>	
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>
None	JCET, China

## Description and Purpose:

This Final Notification announces to customers the qualification of new assembly and test site of DPAK packaged (Case Outline 369C) products to JCET Semiconductor (Suqian) Co.Ltd., China for capacity expansion.

	Before Change	After Change	
Assembly Site	onsemi, Vietnam	onsemi, Vietnam	JCET, China
LeadFrame	LF DPAK SINGLE GAUGE	LF DPAK SINGLE GAUGE	Single Gauge, Ni plating
Die Attach	Pb95Sn5	Pb95Sn5	Pb95.5Sn2Ag2.5
Mold Compound	G700HF	G700HF	CEL-9240HF10

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



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## Reliability Data Summary:

QV DEVICE NAME: NVD5C668NLT4G

RMS: 90360

PACKAGE: DPAK

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=175°C, 100% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= Ta=175°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, H3TRB for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
High Humidity High Temperature Reverse Bias	JESD22-A101	85°C, 85% RH, bias	1008 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

## 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 [PCN Customized Portal](#).

Part Number	Qualification Vehicle
NTD5C632NLT4G	NVD5C668NLT4G

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**Appendix A: Changed Products**

**PCN#: FPCN25618X**  
**Issue Date: Dec 17, 2024**

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DIKG: DIGI-KEY

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTD5C632NLT4G		NVD5C668NLT4G	#NONE	