Initial Product/Process Change Notification

Document #:IPCN25618X

Issue Date:16 Aug 2023

Title of Change:	DPAK case outline 369C - Assembly and Test Qualification to JCET Semiconductor (Suqian) Co.Ltd., China for Capacity Expansion
Proposed First Ship date:	14 Jul 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or MohdHezri.AbuBakar@onsemi.com
PCN Samples Contact:	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.
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 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>
Marking of Parts/ Traceability of Change:	Changed material can be identified by assembly plant code.
Change Category:	Test Change, Assembly Change
Change Sub-Category(s):	Material Change, Manufacturing Site Transfer

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	JCET, China

Description and Purpose:

This Initial Notification announces to customers of its plans to qualify 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.

Qualification Plan:

QV DEVICE NAME: NVD5C668NLT4G
RMS: 90360
PACKAGE: DPAK

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs
HTSL	JESD22-A103	Ta=150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc
TC	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc
H3TRB	JESD22-A101	85°C, 85% RH, bias	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	

Estimated date for qualification completion: 14 March 2024

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