Final Product/Process Change Notification

Document #:FPCN24888XC
Issue Date:15 Nov 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:	20 Feb 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office
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.
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. 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 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 Final Notification announces to customers the qualification of new assembly and test site of DPAK package (Case Outline 369C) products to JCET Semiconductor (Suqian) Co.Ltd., China.

	From	**To**
Assembly & Final Test Site	onsemi Seremban, Malaysia	JCET Semiconductor (Suqian) Co.Ltd., China
Lead Frame	LF DPAK Single Gauge	TO-252-2L(6R) (Bare Cu), stamped
Die Attach	Pb95Sn5	92.5%Pb,2.5%Sn,5%Ag

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

Reliability Data Summary:

QV DEVICE NAME: NSV50150ADT4G
RMS: S92218
PACKAGE: DPAK 3L

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
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, THB, IOL for surface mount pkgs only		0/924
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C, mount on board	500 cyc	0/231
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 Humidity 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
NSI50150ADT4G	NSV50150ADT4G
NSI45090JDT4G	NSV50150ADT4G
NSI45060JDT4G	NSV50150ADT4G