



Final Product/Process Change Notification

Document #:FPCN24888X

Issue Date:18 Dec 2022

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:	30 Apr 2023 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or MohdHezri.AbuBakar@onsemi.com and Rafidah.MohdRasid@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.
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:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Transfer, Material Change

Sites Affected:

onsemi Sites

None

External Foundry/Subcon Sites

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		
	onsemi Seremban, Malaysia	onsemi Vietnam	onsemi Seremban, Malaysia	onsemi Vietnam	JCET Semiconductor (Suqian) Co.Ltd.
Assembly Site	onsemi Seremban, Malaysia	onsemi Vietnam	onsemi Seremban, Malaysia	onsemi Vietnam	JCET Semiconductor (Suqian) Co.Ltd.
LeadFrame	LF DPAK SINGLE GAUGE	LF DPAK SINGLE GAUGE	LF DPAK SINGLE GAUGE	LF DPAK SINGLE GAUGE	Single Gauge, Ag plating
Die Attach	Pb95Sn5	Pb95Sn5	Pb95Sn5	Pb95Sn5	92.5%Pb,2.5%Sn,5%Ag
Mold Compound	G700HF GE 8000CH4ES	G700HF GE 8000CH4ES	G700HF GE 8000CH4ES	G700HF GE 8000CH4ES	CEL-9240HF10



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Reliability Data Summary:

QV DEVICE NAME: NTD24N06LT4G

RMS: 84109

PACKAGE: DPAK

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/924
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias	1008 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90
SD	JSTD002	Ta = 245°C, 5 sec		0/45

QV DEVICE NAME: NTD5862NT4G

RMS: 84110

PACKAGE: DPAK

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/924
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias	1008 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90
SD	JSTD002	Ta = 245°C, 5 sec		0/45



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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
NTD5802NT4G	NTD5862NT4G
NTD3055L104T4G	NTD24N06LT4G
NTD3055-150T4G	NTD24N06LT4G
NTD3055-094T4G	NTD24N06LT4G
NTD2955T4G	NTD24N06LT4G
NTD24N06LT4G	NTD24N06LT4G
NTD20P06LT4G	NTD24N06LT4G
NTD20N06T4G	NTD24N06LT4G
NTD20N06LT4G	NTD24N06LT4G
NTD18N06LT4G	NTD24N06LT4G
NTD5862NT4G	NTD5862NT4G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTD5802NT4G		NTD5862NT4G	NA	
NTD3055-150T4G		NTD24N06LT4G	NA	
NTD3055-094T4G		NTD24N06LT4G	NA	
NTD2955T4G		NTD24N06LT4G	NA	
NTD24N06LT4G		NTD24N06LT4G	NA	
NTD20P06LT4G		NTD24N06LT4G	NA	
NTD20N06T4G		NTD24N06LT4G	NA	
NTD20N06LT4G		NTD24N06LT4G	NA	
NTD18N06LT4G		NTD24N06LT4G	NA	
NTD5862NT4G		NTD5862NT4G	NA	
NTD3055L104T4G		NTD24N06LT4G	NA	