



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 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 Nor'Ain.Lotepi@onsemi.com for Bipolar Power Transistor (BJT) and MohdHezri.AbuBakar@onsemi.com or SitiNurhaza.MohdRamli@onsemi.com or Rafidah.MohdRasid@onsemi.com for Metal–Oxide–Semiconductor Field-Effect Transistor (MOSFET) for Metal–Oxide–Semiconductor Field-Effect Transistor (MOSFET)
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

None

External Foundry/Subcon Sites

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 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	Pb95.5Sn2Ag2.5
Mold Compound	G700HF GE 8000CH4ES	G700HF GE 8000CH4ES	G700HF GE 8000CH4ES	G700HF GE 8000CH4ES	CEL-9240HF10



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Qualification Plan:

QV DEVICE NAME: MJD340T4G

RMS: 85509

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
ELFR	JESD22-A108	Ta=150°C, 100% max rated V	48 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
LTSL	JESD22-A	Ta= -40°C	168 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-A110	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	

QV DEVICE NAME: MJD350T4G

RMS: 85510

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
ELFR	JESD22-A108	Ta=150°C, 100% max rated V	48 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
LTSL	JESD22-A119	Ta= -40°C	168 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-A110	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	



Initial Product/Process Change Notification

Document #: IPCN24888X

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QV DEVICE NAME: NSV50350ADT4G

RMS: 85513

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
ELFR	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
LTSL	JESD22-A119	Ta= -40°C	168 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= -65°C to +150°C, mount on board	1000 cyc
PTC	JESD22-A105	Temp = -40°C to +125°C, mount on board	1000 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 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	

QV DEVICE NAME: NSV50150ADT4G

RMS: 85511

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
ELFR	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs
HTSL	JESD22-A103	Ta= 150°C	2016 hrs
LTSL	JESD22-A119	Ta= -40°C	168 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
TC	JESD22-A104	Ta= -65°C to +150°C, mount on board	500 cyc
PTC	JESD22-A105	Temp = -40°C to +125°C, mount on board	1000 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 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	



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 2022

QV DEVICE NAME: NTD24N06LT4G

RMS: 84109

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	

QV DEVICE NAME: NTD5862NT4G

RMS: 84110

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	



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 2022

QV DEVICE NAME: MBRD5H100T4G

RMS: 84190

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	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	

QV DEVICE NAME: NTD25P03LT4G

RMS: 84104

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	



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 2022

QV DEVICE NAME: MURHD560T4G

RMS: 84192

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	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: 31 January 2023

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
NTD18N06LT4G	NTD24N06LT4G
NTD20N06LT4G	NTD24N06LT4G
NTD20N06T4G	NTD24N06LT4G
NTD20P06LT4G	NTD24N06LT4G
NTD24N06LT4G	NTD24N06LT4G
NTD2955T4G	NTD24N06LT4G
NTD3055-094T4G	NTD24N06LT4G
NTD3055-150T4G	NTD24N06LT4G
NTD3055L104T4G	NTD24N06LT4G
MBRD1035CTLT4G	MBRD5H100T4G
MBRD1045T4G	MBRD5H100T4G
MBRD330RLG	MBRD5H100T4G



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 2022

MBRD340T4G	MBRD5H100T4G
MBRD350T4G	MBRD5H100T4G
MBRD360RLG	MBRD5H100T4G
MBRD360T4G	MBRD5H100T4G
MBRD5H100T4G	MBRD5H100T4G
MBRD620CTT4G	MBRD5H100T4G
MBRD640CTT4G	MBRD5H100T4G
MBRD650CTT4G	MBRD5H100T4G
MBRD660CTRLG	MBRD5H100T4G
MBRD660CTT4G	MBRD5H100T4G
MBRD835LT4G	MBRD5H100T4G
NTD14N03RT4G	NTD25P03LT4G
NTD20N03L27T4G	NTD25P03LT4G
NTD25P03LT4G	NTD25P03LT4G
MSRD620CTT4G	MURHD560T4G
MSRD620CTT4RG	MURHD560T4G
MURD320T4G	MURHD560T4G
MURD340T4G	MURHD560T4G
MURD530T4G	MURHD560T4G
MURD550PFT4G	MURHD560T4G
MURD620CTT4G	MURHD560T4G
MURHD560T4G	MURHD560T4G
MURHD560W1T4G	MURHD560T4G
NTD5802NT4G	NTD5862NT4G
MJD112G	MJD340T4G
MJD112RLG	MJD340T4G
MJD112T4G	MJD340T4G
MJD122T4G	MJD340T4G
MJD148T4G	MJD340T4G
MJD200G	MJD340T4G
MJD200RLG	MJD340T4G
MJD200T4G	MJD340T4G
MJD243G	MJD340T4G
MJD243T4G	MJD340T4G



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 2022

MJD3055RLG	MJD340T4G
MJD3055T4G	MJD340T4G
MJD31CG	MJD340T4G
MJD31CRLG	MJD340T4G
MJD31CT4G	MJD340T4G
MJD31T4G	MJD340T4G
MJD340G	MJD340T4G
MJD340T4G	MJD340T4G
MJD41CRLG	MJD340T4G
MJD41CT4G	MJD340T4G
MJD44E3T4G	MJD340T4G
MJD44H11G	MJD340T4G
MJD44H11T4G	MJD340T4G
MJD47G	MJD340T4G
MJD47T4G	MJD340T4G
MJD50G	MJD340T4G
MJD50T4G	MJD340T4G
MJD6039T4G	MJD340T4G
NJD1718T4G	MJD340T4G
NJD2873T4G	MJD340T4G
NJD35N04G	MJD340T4G
NJD35N04T4G	MJD340T4G
MJD117G	MJD350T4G
MJD117T4G	MJD350T4G
MJD122G	MJD350T4G
MJD127G	MJD350T4G
MJD127T4G	MJD350T4G
MJD128T4G	MJD350T4G
MJD210G	MJD350T4G
MJD210RLG	MJD350T4G
MJD210T4G	MJD350T4G
MJD253T4G	MJD350T4G
MJD2955G	MJD350T4G
MJD2955T4G	MJD350T4G



Initial Product/Process Change Notification

Document #: IPCN24888X

Issue Date: 29 Sep 2022

MJD32CG	MJD350T4G
MJD32CRLG	MJD350T4G
MJD32CT4G	MJD350T4G
MJD32RLG	MJD350T4G
MJD32T4G	MJD350T4G
MJD340RLG	MJD350T4G
MJD350T4G	MJD350T4G
MJD42CG	MJD350T4G
MJD42CRLG	MJD350T4G
MJD42CT4G	MJD350T4G
MJD44H11RLG	MJD350T4G
MJD45H11G	MJD350T4G
MJD45H11RLG	MJD350T4G
MJD45H11T4G	MJD350T4G
MJD5731T4G	MJD350T4G
NSS1C300ET4G	MJD350T4G
NSS1C301ET4G	MJD350T4G
NSI45060JDT4G	NSV50150ADT4G
NSI45090JDT4G	NSV50150ADT4G
NSI50150ADT4G	NSV50150ADT4G
NSI50350ADT4G	NSV50350ADT4G