



# Final Product/Process Change Notification

Document #:FPCN24888XB

Issue Date:11 April 2023

<b>Title of Change:</b>	DPAK case outline 369C - Assembly and Test Qualification to JCET Semiconductor (Suqian) Co.Ltd., China for Capacity Expansion
<b>Proposed First Ship date:</b>	31 Jul 2023 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 or <a href="mailto:MohdAzizi.Azman@onsemi.com">MohdAzizi.Azman@onsemi.com</a>
<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>	Assembly Change, Test Change
<b>Change Sub-Category(s):</b>	Manufacturing Site Transfer, Material Change

**Sites Affected:**

onsemi Sites	External Foundry/Subcon Sites
onsemi Seremban, Malaysia	JCET, China
onsemi Vietnam	

**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 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, Ni 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: MJD340T4G**

**RMS: S85509 and S86567**

**PACKAGE: DPAK**

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=150°C, 100% max rated V	48 hrs	0/2490
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST 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, reverse biased	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 = 268°C, 10 sec Required for through hole devices only		0/90
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45
Physical Dimensions	JESD22-B120			0/10

**QV DEVICE NAME: MJD350T4G**

**RMS: S85510 and S86572**

**PACKAGE: DPAK**

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=150°C, 100% max rated V	48 hrs	0/2490
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST 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



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High Humidity High Temperature Reverse Bias	JESD22-A101	85°C, 85% RH, reverse biased	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 = 268°C, 10 sec Required for through hole devices only		0/90
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45
Physical Dimensions	JESD22-B120			0/10

**QV DEVICE NAME: NSV50350ADT4G**

**RMS: S85513 and S88009**

**PACKAGE: DPAK**

Test	Specification	Condition	Interval	Results
High Temperature Operation Life	JESD22-A108	Ta=125°C, 100% max rated V	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100% max rated V	48 hrs	0/1230
High Temperature Storage Life	JESD22-A103	Ta=175°C	2016 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST 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	30000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C, mount on board	1000 cyc	0/231
Temperature Humidity Bias	JESD22-A101	85°C, 85% RH, biased	2016 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 = 268°C, 10 sec Required for through hole devices only		0/90
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45
Physical Dimensions	JESD22-B120			0/10

### 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
MJD112G	MJD340T4G
MJD112RLG	MJD340T4G



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MJD112T4G	MJD340T4G
MJD122T4G	MJD340T4G
MJD148T4G	MJD340T4G
MJD200G	MJD340T4G
MJD200RLG	MJD340T4G
MJD200T4G	MJD340T4G
MJD243G	MJD340T4G
MJD243T4G	MJD340T4G
MJD3055RLG	MJD340T4G
MJD3055T4G	MJD340T4G
MJD31CG	MJD340T4G
MJD31CRLG	MJD340T4G
MJD31CT4G	MJD340T4G
MJD31T4G	MJD340T4G
MJD340G	MJD340T4G
MJD340T4G	MJD340T4G
MJD41CRLG	MJD340T4G
MJD41CT4G	MJD340T4G
MJD44E3T4G	MJD340T4G
MJD44H11G	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



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MJD128T4G	MJD350T4G
MJD210G	MJD350T4G
MJD210RLG	MJD350T4G
MJD210T4G	MJD350T4G
MJD253T4G	MJD350T4G
MJD2955G	MJD350T4G
MJD2955T4G	MJD350T4G
MJD32CG	MJD350T4G
MJD32CRLG	MJD350T4G
MJD32CT4G	MJD350T4G
MJD32RLG	MJD350T4G
MJD32T4G	MJD350T4G
MJD340RLG	MJD350T4G
MJD350T4G	MJD350T4G
MJD42CG	MJD350T4G
MJD42CRLG	MJD350T4G
MJD42CT4G	MJD350T4G
NSI50350ADT4G	NSV50350ADT4G
NSS1C301ET4G	MJD350T4G
NSS1C300ET4G	MJD350T4G
MJD5731T4G	MJD350T4G
MJD45H11T4G	MJD350T4G
MJD45H11RLG	MJD350T4G
MJD45H11G	MJD350T4G
MJD44H11RLG	MJD350T4G
MJD44H11T4G	MJD340T4G

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
MJD112G		MJD340T4G	NA	
MJD112T4G		MJD340T4G	NA	
MJD122T4G		MJD340T4G	NA	
MJD148T4G		MJD340T4G	NA	
MJD200G		MJD340T4G	NA	
MJD200RLG		MJD340T4G	NA	
MJD200T4G		MJD340T4G	NA	
MJD243G		MJD340T4G	NA	
MJD243T4G		MJD340T4G	NA	
MJD3055T4G		MJD340T4G	NA	
MJD31CG		MJD340T4G	NA	
MJD112RLG		MJD340T4G	NA	
MJD31CT4G		MJD340T4G	NA	
MJD31T4G		MJD340T4G	NA	
MJD31CRLG		MJD340T4G	NA	
MJD340T4G		MJD340T4G	NA	
MJD340G		MJD340T4G	NA	
MJD41CT4G		MJD340T4G	NA	
MJD41CRLG		MJD340T4G	NA	
MJD44E3T4G		MJD340T4G	NA	
MJD47G		MJD340T4G	NA	
MJD44H11G		MJD340T4G	NA	
MJD50G		MJD340T4G	NA	
MJD47T4G		MJD340T4G	NA	
MJD6039T4G		MJD340T4G	NA	
MJD50T4G		MJD340T4G	NA	
NJD2873T4G		MJD340T4G	NA	
NJD1718T4G		MJD340T4G	NA	
NJD35N04G		MJD340T4G	NA	
NJD35N04T4G		MJD340T4G	NA	
MJD117T4G		MJD350T4G	NA	
MJD117G		MJD350T4G	NA	
MJD127G		MJD350T4G	NA	
MJD122G		MJD350T4G	NA	
MJD128T4G		MJD350T4G	NA	
MJD127T4G		MJD350T4G	NA	
MJD210RLG		MJD350T4G	NA	
MJD210G		MJD350T4G	NA	
MJD253T4G		MJD350T4G	NA	
MJD210T4G		MJD350T4G	NA	
MJD2955T4G		MJD350T4G	NA	
MJD2955G		MJD350T4G	NA	
MJD32CRLG		MJD350T4G	NA	
MJD32CG		MJD350T4G	NA	
MJD32T4G		MJD350T4G	NA	
MJD32CT4G		MJD350T4G	NA	
MJD350T4G		MJD350T4G	NA	
MJD340RLG		MJD350T4G	NA	
MJD42CRLG		MJD350T4G	NA	
MJD42CG		MJD350T4G	NA	
NSI50350ADT4G		NSV50350ADT4G	NA	
MJD42CT4G		MJD350T4G	NA	
NSS1C300ET4G		MJD350T4G	NA	
NSS1C301ET4G		MJD350T4G	NA	
MJD45H11T4G		MJD350T4G	NA	
MJD5731T4G		MJD350T4G	NA	
MJD45H11G		MJD350T4G	NA	
MJD45H11RLG		MJD350T4G	NA	
MJD44H11T4G		MJD340T4G	NA	
MJD44H11RLG		MJD350T4G	NA	