Final Product/Process Change Notification

Document #:FPCN25400X
Issue Date:10 Jun 2024

Title of Change:	Qualification of JCET Suqian assembly and test operation for product housed in TO-264 (POD 340CA) package.
Proposed First Ship date:	17 Sep 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or JianHao.See@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 Horchner.Huo@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:	Affected products will be identified by date code
Change Category:	Assembly Change, Test Change
Change Sub-Category(s):	Manufacturing Site Transfer, Material Change

Sites Affected:

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

Description and Purpose:

This notification announces to customer the qualification on Dual source strategy on assembly and test site for TO 264 packaged (case outline 340CA) products. Currently ATO site will be in onsemi Suzhou (ONSZ) and will have additional source from JCET Semiconductor (Suqian) Co.Ltd., China for capacity expansion.

	Before Change Description	**After Change Description**	
Assembly and Test Site	onsemi Suzhou, ONSZ	onsemi Suzhou, ONSZ	JCET Semiconductor (Suqian) Co.Ltd
Lead Frame	Bare Cu plated Lead frame	Bare Cu plated Lead frame	Lead Nickel plated Lead frame

	From	**To**
Product marking change	Existing Line 1: Internal traceability Line 2: device marking	Corporate marking style Line 1: device marking Line 2: Internal traceability (AYWWZZ)

Reliability Data Summary:

QV DEVICE NAME: FDL100N50F
RMS: 96941,97685
PACKAGE: TO264

Test	Specification	Condition	Interval	Results
High Temp Reverse Bias	JESD22-A108	Tj = 150'C, bias = 80% of max rated	1008 hrs	0/80
High Temp Gate Bias	JESD22-A108	Ti = 150'C for 1008 hrs, Vgss Bias = 100% of max rated	1008 hrs	0/80
High Temp Storage Life	JESD22-A103	Ta =150'C for 1008 hrs	1008 hrs	0/80
Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 42V	96 hours	0/80
Temp Cycling	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles	1000 cyc	0/80
Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs	0/80
Resistance to Solder Heat	JESD22-B106	Ta=265C 10 sec dwell B106	End points	0/30

QV DEVICE NAME: FJL6920TU
RMS: 94383,94963,97010,97610
PACKAGE: TO264

Test	Specification	Condition	Interval	Results
High Temp Reverse Bias	JESD22-A108	Tj = 150'C, bias = 80% of max rated	1008 hrs	0/160
High Temp Storage Life	JESD22-A103	Ta =150'C for 1008 hrs	1008 hrs	0/160
Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 42V	96 hours	0/160
Temp Cycling	JESD22-A104	Temp = -55°C to +150°C; for 1000cycles	1000 cyc	0/160
Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs	0/160
Resistance to Solder Heat	JESD22-B106	Ta=265C 10 sec dwell B106	End points	0/60

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
FDL100N50F	FDL100N50F
FJL6920TU	FJL6920TU
FJL4315OTU	FJL6920TU
FJL4215OTU	FJL6920TU
2SC5200OTU	FJL6920TU
2SA1943OTU	FJL6920TU