



Final Product/Process Change Notification

Document #:FPCN25366X

Issue Date:21 Nov 2023

Title of Change:	TO-220-IC 5LD Assembly and Test Qualification to JCET Semiconductor (Suqian) Co.Ltd.	
Proposed First Ship date:	23 Feb 2024 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or Albert.Tanyag@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:	The affected products will be identified with date code	
Change Category:	Assembly Change, Test Change	
Change Sub-Category(s):	Manufacturing Site Addition	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
None	JCET, China	
Description and Purpose:		
This final notification wants to notify customers regarding the capacity expansion in turnkey (Assembly and FT site) from SBN to JCET		
➤ For assembly and test changes:		
	From	To
Assembly + Test Site	onsemi Seremban, Malaysia	JCET Semiconductor (Suqian) Co.Ltd.
Lead Frame	LF TO-220-IC 5L DUAL GAUGE (BARE CU)	TO-220-5L (Bare Copper), stamped
Die Attach	Pb95Sn5	Pb92.5Sn5Ag2.5
Mold Compound	EME E500HL	EME E500HA



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Reliability Data Summary:

QV DEVICE NAME: MC33167TG

RMS: 86841

PACKAGE: TO-220

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
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs	0/800
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 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
LM2575T-5G	MC33167TG
LM2575T-ADJG	MC33167TG
LM2575TV-ADJG	MC33167TG
LM2576T-005G	MC33167TG
LM2576T-ADJG	MC33167TG
LM2576TV-5G	MC33167TG
MC33167TVG	MC33167TG
MC33166TVG	MC33167TG
LM2596TVADJG	MC33167TG
LM2576TV-ADJG	MC33167TG
LM2575T-3.3G	MC33167TG