



Initial Product/Process Change Notification

Document #: IPCN25366X

Issue Date: 17 May 2023

Title of Change:	TO-220-IC 5LD Assembly and Test Qualification to JCET Semiconductor (Suqian) Co.Ltd.	
Proposed First Ship date:	31 Mar 2024 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or Wayne.Cheng@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.	
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:	The affected products will be identified with date code	
Change Category:	Test Change, Assembly Change	
Change Sub-Category(s):	Manufacturing Site Addition	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
None	JCET, China	
Description and Purpose: Capacity expansion, turnkey (Assembly and FT site) from SBN to JCET ➤ For assembly changes:		
	From	To
Assembly 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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Qualification Plan:

QV DEVICE NAME: MC33167TG

RMS: 86841

PACKAGE: TO-220

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C, mount on board	500 cyc
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
Solderability	JSTD002	Ta = 245°C, 5 sec	
Early Life Failure Rate	AECQ100-008	Ta=125°C, 100 % max rated Vcc	48 hrs

Estimated date for Qual Completion: Q1 2024

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-3.3G	MC33167TG
LM2576TV-ADJG	MC33167TG
LM2596TVADJG	MC33167TG
MC33166TVG	MC33167TG
MC33167TVG	MC33167TG
LM2576TV-5G	MC33167TG
LM2576T-ADJG	MC33167TG
LM2576T-005G	MC33167TG
LM2575TV-ADJG	MC33167TG
LM2575T-ADJG	MC33167TG
LM2575T-5G	MC33167TG