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Initial Product/Process Change Notification Document #:IPCN25366X Issue Date:17 May 2023

Title of Change:	TO-220-IC 5LD Assemb	TO-220-IC 5LD Assembly and Test Qualification to JCET Semiconductor (Suqian) Co.Ltd.			
Proposed First Ship date:	31 Mar 2024 or earlier	31 Mar 2024 or earlier if approved by customer			
Contact Information:	Contact your local onse	Contact your local onsemi Sales Office or <u>Wayne.Cheng@onsemi.com</u>			
PCN Samples Contact:	Sample requests are to Initial PCN or Final PCN Samples delivery timing	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:	advance notification ab change details and dev The completed qualific Product/Process Chang Product/Process Chang	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 < <u>PCN.Support@onsemi.com</u> >			
Marking of Parts/ Traceability of Change:	The affected products	The affected products will be identified with date code			
Change Category:	Test Change, Assembly	Test Change, Assembly Change			
Change Sub-Category(s):	Manufacturing Site Add	Manufacturing Site Addition			
Sites Affected:					
onsemi Sites		External Foundry/Subcon Sites			
None	None		JCET, China		
 Description and Purpose: Capacity expansion, turnkey (Assembly and FT site) from SBN to JCET For assembly changes: 					
		From	То		
Assembly Site	onsemi Seremban, N	1alaysia	JCET Semiconductor (Suqian) Co.Ltd.		
Lead Frame	LF TO-220-IC 5L DUA	L 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

PACKAGE: 10-220				
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 сус	
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	