

Final Product/Process Change Notification

Document #:FPCN23597XF Issue Date:05 Jan 2022

Title of Change:		Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter - LM2931 family.		
Proposed First Ship date:	12 Apr 2022 or earlier	12 Apr 2022 or earlier if approved by customer		
Contact Information:	Contact your local ons	Contact your local onsemi Sales Office or Jan.Gryzbon@onsemi.com		
PCN Samples Contact:	Sample requests are to Initial PCN or Final PCN Samples delivery timin	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 ons	Contact your local onsemi Sales Office or Tomas.Vajter@onsemi.com		
Type of Notification:	days prior to implement onsemi will consider th	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	The affected products will be identified with date code		
Change Category:	Wafer Fab Change	Wafer Fab Change		
Change Sub-Category(s):	Manufacturing Process	Manufacturing Process Change		
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites		
onsemi Roznov, Czech Republic		None		

Description and Purpose:

Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter. The purpose is to increase the wafer fab productivity.

The 200mm wafer process is being created at Roznov in order to get the same electrical and reliability performances as the 150mm process. This is a change in wafer diameter only; there will be no changes to assembly or test locations as a result of this changed.

A full electrical characterization over the temperature range will be performed for each product to check the device functionality and electrical specifications.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed onsemi standards.

onsemi recommends that customers evaluate sample units in each associated application circuit to ensure there are no unexpected electrical incompatibilities.

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Reliability Data Summary:

QV DEVICE NAME: LM317BD2TG

RMS# 67729 PACKAGE: D2PAK

Test	Specification	Condition	Interval	Results	
HTOL	JA108	Ta= 125°C	1008 hrs	0/240	
PC	JA112 JA113	SMD only, Test @ 0 & EP		0/372	
SAT		Test pre- and post- PC		pass	
ELFR	JA018	TA = 125°C for 48 hrs	48hrs	0/2400	
TC	JA104	Test @ R 500cyc		0/276	
BS	AEC-Q100-001	Cpk 1.33, 30 bonds from 5units		pass	
BPS	M883 Method 2011	3gm Pull Force Min After TC		pass	
ESD HBM	AEC-Q100-002	c = 0, Test @ R	2kV	0/3	
ESD MM	AEC-Q100-003	c = 0, Test @ R	200V	0/3	
ESD CDM	AEC-Q100-011	c = 0, Test @ R 1kV		0/3	
ED	ON Data Sheet	Cpk > 1.67 Test @ R, H, C		pass	
LU	AEC-Q100-004	Test @ EP; Test & Stress @ R	LU+>100mA LU->100mA	0/6	

Electrical Characteristics Summary:

Electrical characteristics are not impacted. All Data Sheet specifications remain the same.

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	
LM2931T-5.0G	LM317BD2TG	
LM2931DT-5.0G	LM317BD2TG	
LM2931D-5.0R2G	LM317BD2TG	
LM2931D2T-5.0R4G	LM317BD2TG	
LM2931CDR2G	LM317BD2TG	
LM2931AT-5.0G	LM317BD2TG	
LM2931ADT-5.0RKG	LM317BD2TG	
LM2931AD-5.0R2G	LM317BD2TG	
LM2931AD-5.0G	LM317BD2TG	
LM2931AD2T-5R4G	LM317BD2TG	
LM2931ACDR2G	LM317BD2TG	
LM2931ACD2TR4G	LM317BD2TG	

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Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
LM2931T-5.0G		LM317BD2TG	NA	
LM2931DT-5.0G		LM317BD2TG	NA	
LM2931D-5.0R2G		LM317BD2TG	NA	
LM2931D2T-5.0R4G		LM317BD2TG	NA	
LM2931CDR2G		LM317BD2TG	NA	
LM2931AT-5.0G		LM317BD2TG	NA	
LM2931AD-5.0R2G		LM317BD2TG	NA	
LM2931AD-5.0G		LM317BD2TG	NA	
LM2931AD2T-5R4G		LM317BD2TG	NA	
LM2931ACDR2G		LM317BD2TG	NA	
LM2931ACD2TR4G		LM317BD2TG	NA	
LM2931ADT-5.0RKG		LM317BD2TG	NA	