



Final Product/Process Change Notification

Document #:FPCN23597XI

Issue Date:08 Feb 2023

Title of Change:	Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter - LM324, LM358 and LM393 families.
Proposed First Ship date:	15 May 2023 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Jan.Gryzbon@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 Tomas.Vajter@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:	Wafer Fab Change
Change Sub-Category(s):	Manufacturing Process Change

Sites Affected:	
onsemi Sites	External Foundry/Subcon Sites
onsemi Roznov, Czech Republic	None

Description and Purpose: <p>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.</p> <p>The 200mm wafer process has been 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 change.</p> <p>A full electrical characterization over the temperature range has been performed for each product to check the device functionality and electrical specifications.</p> <p>onsemi recommends that customers evaluate sample units in each associated application circuit to ensure there are no unexpected electrical incompatibilities.</p>
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Reliability Data Summary:

QV DEVICE NAME : MC7805BDTRKG

RMS# 68976

PACKAGE: DPAK

Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 125°C	1008 hrs	0/240
PC	JA112 JA113	SMD only, Test @ 0 & EP		0/240
SAT		Test pre- and post- PC		pass
ELFR	JA018	TA = 125°C for 48 hrs	48hrs	0/2400
TC	JA104	Test @ R	500cyc	0/270
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	Cpk>1.67	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
LM393DR2G	MC7805BDTRKG
LM2903DR2G	MC7805BDTRKG
LM358DR2G	MC7805BDTRKG
LM2904DR2G	MC7805BDTRKG
LM324DR2G	MC7805BDTRKG
LM2902DR2G	MC7805BDTRKG

Appendix A: Changed Products

PCN#: FPCN23597XI
Issue Date: Feb 07, 2023

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
LM393DR2G		MC7805BDTRKG	NA	
LM358DR2G		MC7805BDTRKG	NA	
LM2904DR2G		MC7805BDTRKG	NA	
LM324DR2G		MC7805BDTRKG	NA	
LM2902DR2G		MC7805BDTRKG	NA	
LM2903DR2G		MC7805BDTRKG	NA	