



Final Product/Process Change Notification

Document #:FPCN23597XC

Issue Date:03 Nov 2021

Title of Change:	Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter - MC1413 and UNL2003 families.
Proposed First Ship date:	10 Feb 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or PCN.Support@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office or < PCN.samples@onsemi.com >. 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:

The purpose of this FPCN is to announce the conversion of smaller wafer size to larger wafer size at the onsemi, Czech Republic (Roznov) wafer fab to increase fab productivity.

A full electrical characterization over the temperature range has been performed on each product to ensure the device functionality remain unchanged and electrical performance within specification.

Qualification tests are also performed on the transferred devices to ensure the reliability of these devices remain unchanged.

	Before Change Description	After Change Description
Wafer Size	150mm	200mm
Location	onsemi, Czech Republic (Roznov) wafer fab	onsemi, Czech Republic (Roznov) wafer fab



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Reliability Data Summary:

QV DEVICE NAME : NCV1413BDR2G

RMS# 68977

PACKAGE: SOIC16

Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 125°C	2016 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	1000cyc	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 CDM	AEC-Q100-011	c = 0, Test @ R	1.5kV	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
MC1413DR2G	ULN2003ADR2G
MC1413BDR2G	ULN2003ADR2G
ULQ2003ADR2G	ULN2003ADR2G
ULN2003ADR2G	ULN2003ADR2G

Appendix A: Changed Products**PCN#: FPCN23597XC**
Issue Date: Nov 02, 2021

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
MC1413DR2G		ULN2003ADR2G		
MC1413BDR2G		ULN2003ADR2G		
ULQ2003ADR2G		ULN2003ADR2G		
ULN2003ADR2G		ULN2003ADR2G		