

Final Product/Process Change Notification

Document #:FPCN23597XD Issue Date:16 Nov 2021

Title of Change:		Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter.		
Proposed First Ship date:	28 Feb 2022 or earlier	28 Feb 2022 or earlier if approved by customer		
Contact Information:	Contact your local ons	Contact your local onsemi Sales Office or <u>Jan.Gryzbon@onsemi.com</u>		
PCN Samples Contact:	Sample requests are to Initial PCN or Final PCN Samples delivery timin	Contact your local onsemi Sales Office or < <u>PCN.samples@onsemi.com</u> >. 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 <u>Tomas.Vajter@onsemi.com</u>		
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:

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

Increase wafer fab productivity by converting smaller wafer size to larger wafer size.

Wafer size: 150mm

Location: onsemi, Czech Republic (Roznov) wafer fab

After Change

Increase wafer fab productivity by converting smaller wafer size to larger wafer size.

Wafer size: 200mm

Location: onsemi, Czech Republic (Roznov) wafer fab

TEM001793 Rev. E Page 1 of 2



Final Product/Process Change Notification Document #:FPCN23597XD

Issue Date:16 Nov 2021

Reliability Data Summary:

QV DEVICE NAME: MC33074

RMS# 69241 PACKAGE: SOIC14

Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 125°C, Test @ R, H, C	2016 hrs	0/240
D.C.	JA112	CMD auth. Took @ 0.9 FD		0/231
PC	JA113	SMD only, Test @ 0 & EP		
SAT		Test pre- and post- PC		pass
ELFR	JA018	TA = 125°C for 48 hrs; Test @ R, H	48hrs	0/2400
TC	JA104	Test @ R, H	1000cyc	0/270
BS	AEC-Q100-001	30 bonds from 5units; after TC500/1000cyc		pass
BPS	M883	2cm Pull Force Min. ofter TCF00/1000mg		pass
	Method 2011	3gm Pull Force Min; after TC500/1000cyc		
ESD HBM	AEC-Q100-002	c = 0, Test @ R, H	2kV	0/3
ESD CDM	AEC-Q100-011	c = 0, Test @ R, H	1kV	0/3
ED	ON Data Sheet	Cpk > 1.67 Cpk>1.67		Pass
		Test @ R, H, C		(3 wafer lots)
LU	AEC-Q100-004	Test @ EP; Test & Stress @ R, H	LU+>100mA	0/6
	ALC-Q100-004	Test w Lr, Test & Stiess w K, H	LU->100mA	

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	
MC34074VDR2G	MC33074ADR2G	
MC33074DR2G	MC33074ADR2G	
LM393DMR2G	MC33074ADR2G	
LM293DMR2G	MC33074ADR2G	
LM2903DMR2G	MC33074ADR2G	

TEM001793 Rev. E Page 2 of 2