



Initial Product/Process Change Notification

Document #: IPCN23597XE

Issue Date: 14 Mar 2022

Title of Change:	Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter - UCx84xB, LM158A, MC33274A families.
Proposed First Ship date:	14 Jul 2022 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.
Type of Notification:	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 < 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

onsemi Roznov, Czech Republic

External Foundry/Subcon Sites

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 and 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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Qualification Plan:

QV DEVICE NAME: UC3843BNG

RMS#: S80801

PACKAGE: PDIP-8

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

Estimated date for qualification completion: 15 July 2022

QV DEVICE NAME: LM2904ADMR2G

RMS#: S80803

PACKAGE: Micro-8

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

Estimated date for qualification completion: 2 May 2022



Initial Product/Process Change Notification

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QV DEVICE NAME: MC33274ADR2G

RMS#: S80800

PACKAGE: SOIC-14

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

Estimated date for qualification completion: 3 October 2022

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
LM258DMR2G	LM2904ADMR2G
LM2904ADMR2G	LM2904ADMR2G
LM2904DMR2G	LM2904ADMR2G
LM2904VDMR2G	LM2904ADMR2G
LM358DMR2G	LM2904ADMR2G
LM358ADR2G	LM2904ADMR2G
MC33274ADR2G	MC33274ADR2G
MC33274ADTBR2G	MC33274ADR2G
UC2842BD1G	UC3843BNG
UC2842BD1R2G	UC3843BNG
UC2842BDR2G	UC3843BNG
UC2842BNG	UC3843BNG
UC2843BD1G	UC3843BNG
UC2843BD1R2G	UC3843BNG



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UC2843BDR2G	UC3843BNG
UC2843BNG	UC3843BNG
UC2844BD1R2G	UC3843BNG
UC2844BDR2G	UC3843BNG
UC2844BNG	UC3843BNG
UC2845BD1G	UC3843BNG
UC2845BD1R2G	UC3843BNG
UC2845BDR2G	UC3843BNG
UC2845BNG	UC3843BNG
UC3845BVDR2G	UC3843BNG
UC3845BVD1R2G	UC3843BNG
UC3845BNG	UC3843BNG
UC3845BDR2G	UC3843BNG
UC3845BD1R2G	UC3843BNG
UC3845BD1G	UC3843BNG
UC3844BVDR2G	UC3843BNG
UC3844BVD1R2G	UC3843BNG
UC3844BNG	UC3843BNG
UC3844BDR2G	UC3843BNG
UC3844BD1R2G	UC3843BNG
UC3844BD1G	UC3843BNG
UC3843BVDR2G	UC3843BNG
UC3843BVD1R2G	UC3843BNG
UC3843BNG	UC3843BNG
UC3843BDR2G	UC3843BNG
UC3843BD1R2G	UC3843BNG
UC3843BD1G	UC3843BNG
UC3842BVDR2G	UC3843BNG
UC3842BVD1R2G	UC3843BNG
UC3842BNG	UC3843BNG
UC3842BDR2G	UC3843BNG
UC3842BD1R2G	UC3843BNG
UC3842BD1G	UC3843BNG