



# Final Product/Process Change Notification

Document #:FPCN23597XG

Issue Date:18 Mar 2022

<b>Title of Change:</b>	Conversion of select onsemi, Czech Republic (Roznov) wafer fab technologies from 150mm to 200mm wafer diameter - MC78M and MC78L families.
<b>Proposed First Ship date:</b>	30 Jun 2022 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Jan.Gryzbon@onsemi.com">Jan.Gryzbon@onsemi.com</a>
<b>PCN Samples Contact:</b>	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.
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:Tomas.Vajter@onsemi.com">Tomas.Vajter@onsemi.com</a>
<b>Type of Notification:</b>	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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>
<b>Marking of Parts/ Traceability of Change:</b>	The affected products will be identified with date code
<b>Change Category:</b>	Wafer Fab Change
<b>Change Sub-Category(s):</b>	Manufacturing Process Change

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

<b>Description and Purpose:</b> <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 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.</p> <p>A full electrical characterization over the temperature range will be performed for each product to check the device functionality and electrical specifications.</p> <p>Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed onsemi standards.</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: **MC78M05BDTRKG**

RMS# S78980

PACKAGE: DPAK-3

Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 125°C, Test @ R	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, Test @ R	48hrs	0/2400
TC	JA104	Test @ R	1000cyc	0/276
HAST	JA110	130°C/85% RH, Test @ R	96hrs	0/270
BS	AEC-Q100-001	Cpk 1.67, 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
MC78L05ABDR2G	MC78M05BDTRKG
MC78L05ACDR2G	MC78M05BDTRKG
MC78L08ABDR2G	MC78M05BDTRKG
MC78L08ACDR2G	MC78M05BDTRKG
MC78L09ABDR2G	MC78M05BDTRKG
MC78L09ACDR2G	MC78M05BDTRKG
MC78L12ABDR2G	MC78M05BDTRKG
MC78L12ACDR2G	MC78M05BDTRKG
MC78L15ABDR2G	MC78M05BDTRKG
MC78M18CDTRKG	MC78M05BDTRKG
MC78M15CTG	MC78M05BDTRKG
MC78M15CDTRKG	MC78M05BDTRKG



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MC78M15CDTG	MC78M05BDTRKG
MC78M15BDTRKG	MC78M05BDTRKG
MC78M12CTG	MC78M05BDTRKG
MC78M12CDTRKG	MC78M05BDTRKG
MC78M12CDTG	MC78M05BDTRKG
MC78M12BTG	MC78M05BDTRKG
MC78M12BDTRKG	MC78M05BDTRKG
MC78M12BDTG	MC78M05BDTRKG
MC78M09CDTRKG	MC78M05BDTRKG
MC78M09BDTRKG	MC78M05BDTRKG
MC78M08CDTRKG	MC78M05BDTRKG
MC78M08BDTRKG	MC78M05BDTRKG
MC78M06CDTRKG	MC78M05BDTRKG
MC78M05CTG	MC78M05BDTRKG
MC78M05CDTRKG	MC78M05BDTRKG
MC78M05CDTG	MC78M05BDTRKG
MC78M05BTG	MC78M05BDTRKG
MC78M05BDTRKG	MC78M05BDTRKG
MC78M05BDTG	MC78M05BDTRKG
MC78L15ACDR2G	MC78M05BDTRKG