ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN22689Z
Issue Date: 21 June 2019

Title of Change:	Release of T2000 tester platform for product NCV78723MW0R2G.	
Proposed Changed Material First Ship Date:	21 June 2020 or earlier after customer approval.	
Current Material Last Order Date:	Not applicable. FPCN covers the release of an additional tester platform (T2000); the current tester platform (Micro Flex) remains qualified.	
Current Material Last Delivery Date:	Not applicable. FPCN covers the release of an additional tester platform (T2000); the current tester platform (Micro Flex) remains qualified.	
Product Category:	Active components – Integrated circuits	
Contact information:	Contact your local ON Semiconductor Sales Office or <Bernard.Blanchet@onsemi.com> , <Robert.Bartos@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or <PCN.samples@onsemi.com> Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	Not applicable	
PPAP Availability Date:	Not applicable	
Additional Reliability Data:	Not applicable	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.	
Change Category	**Type of Change**	
Equipment	Change in final test equipment type that uses a different technology	
Description and Purpose: Release of the T2000 tester platform for Final Test and QC to improve tester capacity balancing and loading.		
Reason / Motivation for Change:	Release of T2000 tester platform for Final test and QC to improve tester capacity balancing and loading for NCV78723MW0R2G.	
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.	
Sites Affected:	ON Semiconductor Sites: All Sites	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	No change in marking. A dedicated OPN has been created: NCV78723MW0CR2G.	

Reliability Data Summary:

Not applicable. No change of material.

Electrical Characteristic Summary:

QC ambient correlation data between the source tester (Micro Flex) and the target tester (T2000) is provided in a separate qualification report.

The correlation procedure will be used, like done as in previous PCN's covering the release of additional tester platforms:

Two correlation units will be serialized and datalogged in 30 loops using the source tester platform where the device is already qualified. The test will be done at room temperature, using the QC program.

- Then, the same correlation units will be used to gather data on target tester T2000.
- The same datalogging procedure used for Micro Flex will be followed for T2000.

Full parametric correlation will be performed and for every test the shift will be evaluated as follows:

Δmean = abs(mean(ref)-mean(qual))
Δsigma = 0 **if sigma(qual) < sigma(ref)**
Δsigma = sigma(qual) – sigma(ref) **if sigma(qual) > sigma(ref)**

shift = Δmean + 4 * Δsigma

If shift < max(5% specwidth, 6*sigma(ref)) then correlation is OK for this test,
else correlation is NOK for this test

Any parameter that is NOK is independently analyzed and explained.

List of Affected Part:

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.**

Current Part Number	New Part Number	Qualification Vehicle
NCV78723MW0R2G	NCV78723MW0CR2G	NCV78723MW0R2G

Appendix A: Changed Products

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Product	Customer Part Number	New Part Number	Qualification Vehicle
NCV78723MW0R2G		NCV78723MW0CR2G	NCV78723MW0R2G