



# Final Product/Process Change Notification

Document # : FPCN22642Z

Issue Date: 27 February 2019

<b>Title of Change:</b>	Datasheet modification to adjust Vin test conditions for Load Regulation, Output Current Limit and Short Circuit current for the NCV8177 product family.
<b>Proposed Changed Material First Ship Date:</b>	1 March 2020 <i>or earlier with customer approval.</i>
<b>Current Material Last Order Date:</b>	Not Applicable
<b>Current Material Last Delivery Date:</b>	Not Applicable The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.
<b>Product Category:</b>	Active components – Integrated circuits
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:Milos.Dvorak@onsemi.com">Milos.Dvorak@onsemi.com</a> >
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office to place sample order or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> > Sample requests are to be submitted no later than 45 days after publication of this change notification.
<b>Sample Availability Date:</b>	1 March 2019
<b>PPAP Availability Date:</b>	Not Applicable.
<b>Additional Reliability Data:</b>	Not Applicable.
<b>Type of Notification:</b>	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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> .
<b>Change Category</b>	<b>Type of Change</b>
Data Sheet	Change of datasheet parameters/electrical specification (min./max./typ. values) and/or AC/DC specification Specification of additional parameters

## Description and Purpose:

The product datasheet will be updated to correct VIN for below mentioned tests (Load Regulation, Output Current Limit and Short Circuit Current) and to add a new Output Current Limit test for VIN=1.6V. The change affects parts with output voltage 1.2V and below.

	Before datasheet change	After datasheet change	
	Test Conditions	Test Conditions	QA
			QA
			Typ
			MAX
<b>Load Regulation</b>	1 mA ≤ IOUT ≤ 500 mA, VIN = VOUT-NOM + 0.5 V or VIN =1.6V (whichever is higher)	1 mA ≤ IOUT ≤ 500 mA, VIN = VOUT-NOM + 0.5 V or VIN = 1.75 V (whichever is higher)	
<b>Output Current Limit</b>	VOUT = VOUT-NOM - 100 mV, VIN = VOUT-NOM + 0.5 V or VIN =1.6V (whichever is higher)	VOUT = VOUT-NOM - 100 mV VIN = VOUT-NOM + 0.5 V or VIN = 1.75 V (whichever is higher)	
<b>Output Current Limit (New test in the datasheet)</b>		VOUT = VOUT-NOM - 100 mV VIN = VOUT-NOM + 0.5 V or VIN = 1.6 V (whichever is higher)	300 600
<b>Short Circuit Current</b>	VOUT = 0 V, VIN = VOUT-NOM + 0.5 V or VIN =1.6V (whichever is higher)	VOUT = 0 V, VIN = VOUT-NOM + 0.5 V or VIN = 1.75 V (whichever is higher)	

There has been no change in product manufacturing, die design, or bill of material.

There are no product material changes as a result of this change.

There are no marking changes as a result of this change.



<b>Reason / Motivation for Change:</b>	<ul style="list-style-type: none"> <li>- Change benefits for customer: Supply continuity</li> <li>- Risk for late release for customer: Supply disruption</li> </ul>											
<b>Anticipated impact on fit, form, function, reliability, product safety or manufacturability</b>	<p>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.</p> <p>No anticipated impacts.</p>											
<b>Sites Affected:</b>	<p>ON Semiconductor Sites: All Sites</p>	<p>External Foundry/Subcon Sites: All Sites</p>										
<b>Marking of Parts/ Traceability of Change:</b>	<p>There are no changes to product marking or package labeling. Product traceability and ship history will distinguish product before and after this notification.</p>											
<p><b>Reliability Data Summary:</b></p> <p>Not applicable.</p>												
<p><b>Electrical Characteristic Summary:</b></p> <p>Electrical characteristics (specifications) are changed as noted in the document description. This change is to specification forcing functions only, as defined in the datasheet.</p>												
<p><b>List of Affected Parts:</b></p> <p><b>Note:</b> 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 <a href="#">PCN Customized Portal</a>.</p>												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #92d050;"> <th style="text-align: center;">Current Part Number</th> <th style="text-align: center;">Qualification Vehicle</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">NCV8177AMX075TCG</td> <td rowspan="7" style="text-align: center; vertical-align: middle;">NA</td> </tr> <tr> <td style="text-align: center;">NCV8177AMX120TCG</td> </tr> <tr> <td style="text-align: center;">NCV8177BMX075TCG</td> </tr> <tr> <td style="text-align: center;">NCV8177BMX120TCG</td> </tr> <tr> <td style="text-align: center;">NCV8177AMTW090TCG</td> </tr> <tr> <td style="text-align: center;">NCV8177AMTW110TCG</td> </tr> <tr> <td style="text-align: center;">NCV8177AMTW120TCG</td> </tr> </tbody> </table>			Current Part Number	Qualification Vehicle	NCV8177AMX075TCG	NA	NCV8177AMX120TCG	NCV8177BMX075TCG	NCV8177BMX120TCG	NCV8177AMTW090TCG	NCV8177AMTW110TCG	NCV8177AMTW120TCG
Current Part Number	Qualification Vehicle											
NCV8177AMX075TCG	NA											
NCV8177AMX120TCG												
NCV8177BMX075TCG												
NCV8177BMX120TCG												
NCV8177AMTW090TCG												
NCV8177AMTW110TCG												
NCV8177AMTW120TCG												

**Appendix A: Changed Products**

Product	Customer Part Number	New Part Number	Qualification Vehicle
NCV8177AMTW090TCG		NA	NA
NCV8177AMTW110TCG		NA	NA
NCV8177AMTW120TCG		NA	NA
NCV8177AMX075TCG		NA	NA
NCV8177AMX120TCG		NA	NA
NCV8177BMX075TCG		NA	NA
NCV8177BMX120TCG		NA	NA