



<b>Title of Change:</b>	Update to <b>FPCN22642X</b> - Datasheet modification to adjust Vin test conditions for Load Regulation, Output Current Limit and Short Circuit current for the NCP177 product family.	
<b>Proposed first ship date:</b>	4 June 2019 <i>or earlier with customer approval.</i>	
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <Milos.Dvorak@onsemi.com>	
<b>Samples:</b>	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com> 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.	
<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 90 days prior to implementation of the change. ON Semiconductor 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>	
<b>Change Part Identification:</b>	There are no changes to product marking or package labeling. Product traceability and ship history will distinguish product before and after this notification.	
<b>Change Category:</b>	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>datasheet specification</u>	
<b>Change Sub-Category(s):</b>	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Manufacturing Site Addition</div> <div style="width: 33%;"><input type="checkbox"/> Material Change</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Datasheet/Product Doc change</div> <div style="width: 33%;"><input type="checkbox"/> Manufacturing Site Transfer</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Product specific change</div> <div style="width: 33%;"><input type="checkbox"/> Shipping/Packaging/Marking</div> <div style="width: 33%;"><input type="checkbox"/> Manufacturing Process Change</div> <div style="width: 33%;"><input type="checkbox"/> Other: _____</div> </div>	
<b>Sites Affected:</b>	ON Semiconductor Sites: All Sites	External Foundry/Subcon Sites: All Sites
<b>Description and Purpose:</b>		
<p><b>FPCN22642X</b> was previously announced the change of the product datasheet to correct VIN for 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.</p> <p>This Update Notification announces the following:</p> <ol style="list-style-type: none"> <li>1. Corrected typo error of description under the "QA" column from "Typ" to "Min"</li> <li>2. Corrected typo error of description under the "QA" column from "Max" to "Typ"</li> </ol>		

Before change

	Before datasheet change	After datasheet change	
	Test Conditions	Test Conditions	QA
			Typ
Load Regulation	$1\text{ mA} \leq I_{OUT} \leq 500\text{ mA}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	$1\text{ mA} \leq I_{OUT} \leq 500\text{ mA}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.75\text{ V}$ (whichever is higher)	MAX
Output Current Limit	$V_{OUT} = V_{OUT-NOM} - 100\text{ mV}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	$V_{OUT} = V_{OUT-NOM} - 100\text{ mV}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.75\text{ V}$ (whichever is higher)	
Output Current Limit (New test in the datasheet)		$V_{OUT} = V_{OUT-NOM} - 100\text{ mV}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	300
Short Circuit Current	$V_{OUT} = 0\text{ V}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	$V_{OUT} = 0\text{ V}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.75\text{ V}$ (whichever is higher)	

After change

	Before datasheet change	After datasheet change	
	Test Conditions	Test Conditions	QA
			Min
Load Regulation	$1\text{ mA} \leq I_{OUT} \leq 500\text{ mA}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	$1\text{ mA} \leq I_{OUT} \leq 500\text{ mA}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.75\text{ V}$ (whichever is higher)	Typ
Output Current Limit	$V_{OUT} = V_{OUT-NOM} - 100\text{ mV}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	$V_{OUT} = V_{OUT-NOM} - 100\text{ mV}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.75\text{ V}$ (whichever is higher)	
Output Current Limit (New test in the datasheet)		$V_{OUT} = V_{OUT-NOM} - 100\text{ mV}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	300
Short Circuit Current	$V_{OUT} = 0\text{ V}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.6\text{ V}$ (whichever is higher)	$V_{OUT} = 0\text{ V}$ , $V_{IN} = V_{OUT-NOM} + 0.5\text{ V}$ or $V_{IN} = 1.75\text{ V}$ (whichever is higher)	

**Reliability Data Summary:**

Not applicable.

**Electrical Characteristic Summary:**

Electrical characteristics (specifications) are changed as noted in the document description. This change is to specification forcing functions only, as defined in the datasheet.

**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
NCP177AMX070TCG	NA
NCP177AMX090TCG	
NCP177AMX100TCG	
NCP177AMX110TCG	
NCP177AMX120TCG	
NCP177BMX070TCG	
NCP177BMX100TCG	
NCP177BMX110TCG	
NCP177BMX120TCG	
NCP177BMX120TCG	