



<b>Title of Change:</b>	NCV7710 Datasheet Update – Revision 0		
<b>Effective date:</b>	25 April 2016		
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or Roman Buzas <roman.buzas@onsemi.com>		
<b>Type of notification:</b>	ON Semiconductor will consider this change accepted.		
<b>Change category:</b>	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other _____		
<b>Change Sub-Category(s):</b>	<input type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Material Change <input type="checkbox"/> Product specific change		<input checked="" type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____
<b>Sites Affected:</b>	<input type="checkbox"/> All site(s) <input checked="" type="checkbox"/> not applicable <input type="checkbox"/> ON Semiconductor site(s) :		<input type="checkbox"/> External Foundry/Subcon site(s)
<b>Description and Purpose:</b>			
<p>Features list updated</p> <ul style="list-style-type: none"> <li>• AEC-Q100 Qualified and PPAP Capable” statement added (page 1)</li> </ul> <p>Pinout table corrected</p> <ul style="list-style-type: none"> <li>• Inconsistency between the pinout drawing and table for Pin 7 – table corrected</li> </ul> <p>Electrical Characteristics - Current Sense parameters updated</p> <ul style="list-style-type: none"> <li>• Current Sense output functional voltage range (Vis) extended (page 7)</li> <li>• Current Sense output ration (Kis) and accuracy (Iis,acc) test conditions updated (page 7)</li> <li>• Current Sense settling time (tis) values updated (page 7)</li> <li>• Current Sense blanking time parameter added (tis_blank) (page 7)</li> <li>• Isout output leakage (Ileak_isout) condition updated (page 8)</li> </ul> <p>Package drawing updated to the latest revision</p> <ul style="list-style-type: none"> <li>• Modified dimension A2 min value</li> <li>• Modified dimension b max value</li> </ul> <p>Minor text corrections</p> <ul style="list-style-type: none"> <li>• Added a note to Vs Functional supply voltage range conditions (page 6)</li> <li>• Thermal Characteristics table corrected (page 5)</li> <li>• Current Sensing paragraph (page 12)</li> </ul>			

**Electrical Characteristics Summary:****Current Sense output functional voltage range (Vis) extended (page 7)****Current Sense output ration (Kis) and accuracy (Iis,acc) conditions updated (page 7)****Current Sense settling time (tis) values updated (page 7)****Current Sense blanking time parameter added (tis\_blank) (page 7)**

## Original Datasheet

Vis	Current Sense output functional voltage range	Vcc = 5 V, Vs = 8–20 V	0		Vcc – 1	V
Kis (Note 5)	Current Sense output ratio OUT1/2	$K = I_{out} / I_{is}$ , $0 V \leq V_{is} \leq 4 V$ , Vcc = 5 V		13400		
Iis,acc (Notes 6, 7)	Current Sense output accuracy OUT1/2	$0 V \leq V_{is} \leq 4 V$ , Vcc = 5 V $I_{out1/2} = 0.5\text{--}5.9 A$	–7% – 4% FS		7% + 4% FS	
tis	Current Sense settling time	0 V to FSR (full scale range)		256		μs

## Updated Datasheet

Vis	Current Sense output functional voltage range	Vcc = 5 V, Vs = 8–20 V	0		Vcc – 0.5	V
Kis (Note 5)	Current Sense output ratio OUT1/2	$K = I_{out} / I_{is}$ , $0 V \leq V_{is} \leq 4.5 V$ , Vcc = 5 V		13400		
Iis,acc (Notes 6, 7)	Current Sense output accuracy OUT1/2	$0.3 V \leq V_{is} \leq 4.5 V$ , Vcc = 5 V $I_{out1/2} = 0.5\text{--}5.9 A$	–7% – 4% FS		7% + 4% FS	
tis_blank	Current Sense blanking time	CONTROL_2.OUTx_PWM = 0	50		65	μs
		CONTROL_2.OUTx_PWM = 1	5		10	
tis	Current Sense settling time	0 V to FSR (full scale range)		230	265	μs

**I<sub>leak\_isout</sub> output leakage (I<sub>leak\_isout</sub>) condition updated (page 8)**

## Original Datasheet

I <sub>leak_isout</sub>	Output leakage current	current sense enabled	–1		1	μA
-------------------------	------------------------	-----------------------	----	--	---	----

## Updated Datasheet

I <sub>leak_isout</sub>	Output leakage current	V <sub>pwm2</sub> = 0 V, current sense enabled	–1		1	μA
-------------------------	------------------------	---	----	--	---	----

**List of affected Standard Parts:**

NCV7710DQR2G