



Title of Change:	NCV47821 datasheet update
Effective date:	28 February 2017
Contact information:	Contact your local ON Semiconductor Sales Office or <Joyce.Keiser@onsemi.com>
Type of notification:	ON Semiconductor will consider this change accepted.
Change category:	<input type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input checked="" type="checkbox"/> Other <u>Datasheet update</u>

Change Sub-Category(s):
☐ Manufacturing Site Change/Addition
☐ Manufacturing Process Change

☐ Material Change
☐ Product specific change
☒ Datasheet/Product Doc change☐ Shipping/Packaging/Marking☐ Other: _____**Sites Affected:**☐ All site(s) ☒ not applicable☐ ON Semiconductor site(s) :☐ External Foundry/Subcon site(s)**Description and Purpose:**

Adding a new parameter I_{out}/I_{CSO} current ratio for the $I_{out1,2} = 1 - 10\text{mA}$ range to the datasheet. So far the I_{out}/I_{CSO} current ratio has only been guaranteed for a range of $I_{out1,2} = 10 - 300\text{mA}$.

The new I_{out}/I_{CSO} current ratio @ $I_{out1,2}=1-10\text{mA}$ parameter will be guaranteed by design only (note11 in the datasheet).

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OUTPUT CURRENT SENSE						
CSO Voltage Level at Current Limit	$V_{out1,2} = 0.9 \times V_{out_nom1,2}$, ($V_{out_nom1,2} = 5\text{ V}$) $R_{CSO1,2} = 1\text{ k}\Omega$	$V_{CSO_lim1,2}$	2.448 (-4%)	2.55	2.652 (+4%)	V
CSO Transient Voltage Level	$C_{CSO1,2} = 4.7\text{ }\mu\text{F}$, $R_{CSO1,2} = 1\text{ k}\Omega$ $I_{out1,2}$ pulse from 10 mA to 300 mA, $t_r = 1\text{ }\mu\text{s}$	$V_{CSO1,2}$	-	-	3.3	V
Output Current to CSO Current Ratio (Note 11, 12)	$V_{CSO1,2} = 2\text{ V}$, $I_{out1,2} = 1\text{ mA to } 10\text{ mA}$ ($V_{out_nom1,2} = 5\text{ V}$)	$I_{out1,2}/I_{CSO1,2}$	- (-5%)	98	- (+5%)	-
Output Current to CSO Current Ratio (Note 12)	$V_{CSO1,2} = 2\text{ V}$, $I_{out1,2} = 10\text{ mA to } 300\text{ mA}$ ($V_{out_nom1,2} = 5\text{ V}$)	$I_{out1,2}/I_{CSO1,2}$	- (-5%)	100	- (+5%)	-
CSO Current at no Load Current	$V_{CSO1,2} = 0\text{ V}$, $I_{out1,2} = 0\text{ mA}$, ($V_{out_nom1,2} = 5\text{ V}$)	$I_{CSO_off1,2}$	-	-	10	μA

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

8. Performance guaranteed over the indicated operating temperature range by design and/or characterization tested at $T_A = T_J$. Low duty cycle pulse techniques are used during testing to maintain the junction temperature as close to ambient as possible.

9. Minimum input voltage V_{in_min} is 4.4 V or ($V_{out_nom1,2} + 1\text{ V}$) whichever is higher. $V_{out_nom1,2}$ measured at ADJ1,2 pin due to excluding R_{n1} and R_{n2} accuracy.

10. Measured when the output voltage $V_{out1,2}$ has dropped by 2% of $V_{out_nom1,2}$ from the nominal value obtained at $V_{in} = V_{out1,2} + 8.5\text{ V}$.

11. Values based on design and/or characterization.

12. Not guaranteed in dropout.

The change will not impact form, fit, or function of product.

List of affected Standard Parts:

NCV47821PAAJR2G