



PRODUCT BULLETIN #20778

Generic Copy

Issue Date: 13-Feb-2015

TITLE: NCV97310 Datasheet Update

PROPOSED FIRST SHIP DATE: 06-May-2015 or earlier upon approval

AFFECTED CHANGE CATEGORY(S): Datasheet Change

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor sales office or Bill Fontes <bill.fontes@onsemi.com>

NOTIFICATION TYPE: Product Bulletin

ON Semiconductor considers this change approved unless specific conditions of acceptance are provided in writing. To do so, contact <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

After further device characterization, it has been decided to add some more "typical values" to the datasheet parametric table. Also, it was necessary to slightly raise the max limit for one parameter (previous value was 280).

All of the changes are on datasheet page 9. See below:

POWER SWITCH – SWITCHER 1

ON Resistance	R_{DS1ON}	$V_{BST1} = V_{SW1} + 3.0\text{ V}$, $I_{SW1} = 500\text{ mA}$		185	360	mΩ
Leakage current VBAT to SW1	I_{LKS1}	$V_{EN} = 0\text{ V}$, $V_{SW1} = 0$, $V_{BAT} = 18\text{ V}$			10	μA
Minimum ON Time	t_{ON1MIN}	Measured at SW1 pin	45		70	ns
Minimum OFF Time	$t_{OFF1MIN}$	Measured at SW1 pin	30	50	70	ns

POWER SWITCHES – SWITCHER 2

High-Side ON Resistance	R_{HS2ON}	$V_{BST2} = V_{SW2} + 3.0\text{ V}$, $I_{SW2} = 500\text{ mA}$		165	300	mΩ
Low-Side ON Resistance	R_{LS2ON}	$I_{SW2} = 500\text{ mA}$		130	230	mΩ
Leakage current high-side switch	I_{LKS2}	$V_{EN2} = 0\text{ V}$, $V_{SW2} = 0$, $V_{IN2} = 5.5\text{ V}$			5	μA
Minimum ON Time	t_{ON2MIN}	Measured at SW2 pin	60	80	95	ns
Minimum OFF Time	$t_{OFF2MIN}$	Measured at SW2 pin	35	55	75	ns
Non-overlap time	t_{NOVLP}			10		ns

POWER SWITCHES – SWITCHER 3

High-Side ON Resistance	R_{HS3ON}	$V_{BST3} = V_{SW3H} + 3.0\text{ V}$, $I_{SW3H} = 500\text{ mA}$		140	250	mΩ
Low-Side ON Resistance	R_{LS3ON}	$I_{SW3L} = 500\text{ mA}$		130	230	mΩ
Leakage current high-side switch	I_{LKS3}	$V_{EN3} = 0\text{ V}$, $V_{SW3H} = 0$, $V_{IN3} = 5.5\text{ V}$			5	μA
Minimum ON Time	t_{ON3MIN}	Measured at SW3x pin	60	80	95	ns
Minimum OFF Time	$t_{OFF3MIN}$	Measured at SW3x pin	35	55	75	ns

List of Affected General Parts:

NCV97310MW33R2G