ON Semiconductor

Product Bulletin

Document # : PB21544X
Issue Date: 16 November 2016

Title of Change:	NCP81239 Datasheet update
Effective date:	16 November 2016
Contact information:	Contact your local ON Semiconductor Sales Office or <Joe.Chong@onsemi.com>
Type of notification:	ON Semiconductor will consider this change accepted.
Change category:	☐ Wafer Fab Change ☐ Assembly Change ☐ Test Change ☒ Other Datasheet Update

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:

ON Semiconductor has updated the NCP81239MNTXG data sheet with the latest version. Latest datasheet can be downloaded from www.onsemi.com

Specific changes are shown on page 2.

Parameter	Symbol	Test Conditions	From				To			
			Min	Typ	Max	Units	Min	Typ	Max	Units
VCC UVLO Rising Threshold	VCC_{START}			4.16		V		4.3		V
UVLO Hysteresis for VCC	$VCCV_{HYS}$	Falling Hysteresis		200		mV		300		mV
VDRV UVLO Rising Threshold	$VRDV_{START}$			4.16		V		4.3		V
UVLO Hysteresis for VDRV	$VDRV_{HYS}$	Falling Hysteresis		200		mV		300		mV
VCC Output Voltage	VCC	With no external load	4.9	5		V	4.5	5		V
VDRIVE Switching Current Buck	IV1_SW	EN = 5, Cgate = 2.2 nF, VSW = 0 V FSW = 600 kHz, Comp = 1 V		12		mA		15		mA
VDRIVE Switching Current Boost	IV1_SW	EN = 5, Cgate = 2.2 nF, VSW = 0 V FSW = 600 kHz, Comp = 1 V		12		mA		15		mA
Voltage Accuracy Over Temperature	VOUTERT	VFB < 0.5 V	-3.3		3	%	-5		5	mV
	VOUTER	TA = 25°C VFB > 0.5 V	-0.35		0.35	%	-0.45		0.45	%
Forward Voltage Drop	VFBOT	IF = 10 mA, TA = 25°C	0.42	0.46	0.51	V	0.35	0.46	0.55	V
Reverse Bias Leakage Current	DIL	BST−VSW = 5 V VSW = 28 V, TA = 25°C		0.05	0.16	µA		0.05	1	µA
Oscillator Frequency	FSW_0	FSW = 000, default	540	600	660	kHz	528	600	672	kHz
	FSW_1	FSW = 001	135	150	166	kHz	132	150	168	kHz
	FSW_7	FSW = 110	1058	1200	1320	kHz	1056	1200	1344	kHz
Oscillator Frequency Accuracy	FSWE		-12		10	%	-12		12	%
Interrupt Low Voltage	VINTI	IINT(sink) = 2 mA			0.04	V			0.2	V
Interrupt High Leakage Current	INII	3.3V		3	11	nA		3	100	nA
FB Overvoltage Threshold	FB_OV			116		%		120		%
Current Limit Indicator Output Low	CLINDL	Input current = 500 µA		5.6	10	mV		5.6	100	mV
Internal Current Sense Gain for PWM	ICG	CSPx−CSNx = 100 mV	9.3	9.8	10.42	V/V	9.2	9.8	10.5	V/V
Pull Down Delay	CFETD	Measured at 10% to 90% of VCC, −40°C < TA < 100°C		1.3		mS		10		mS
Dead Battery Output Voltage	VIO	VDB = 5 V, −40°C < TA < 100°C Output Current 32 mA	4.4	4.7	4.77	V	4	4.7	5	V
EN High Threshold Voltage	ENHT	EM_MASK = ENPU = ENPOL = 0		798	808	mV		798	820	mV
EN Low Threshold Voltage	ENLT		652	665		mV	640	665		mV
Communication Speed	I2CSP		0.4		1	MHz			1	MHz

List of affected Standard Parts:

NCP81239MNTXG