## CHANGE NOTIFICATION



March 4, 2011

PCN#: 030411

Dear Sir/Madam:

Subject: Notification of Change to LT4351 Datasheet

Please be advised that Linear Technology Corporation has made a minor change to the LT4351 product datasheet to better center the parametric distribution within the specification range. The change is shown on the attached page of the marked up datasheet. There was no change made to the die. The product shipped after April 4, 2011 will be tested to the new limits.

Should you have any further questions, please feel free to contact me at 408-432-1900 ext. 2519, or by e-mail at NGirn@Linear.com. If I do not hear from you by April 4, 2011, we will consider this change to be approved by your company.

Sincerely,

Naib Girn Quality Assurance Manager

Confidential Statement
This change notice is for Linear Technology's Customers only.
Distribution or notification to third parties is prohibited

**ELECTRICAL CHARACTERISTICS** The  $\bullet$  denotes the specifications which apply over the full operating temperature range, otherwise specifications are at  $T_A = 25^{\circ}C$ .  $V_{IN} = V_{OUT} = 5V$ ,  $V_{DD} = 16.1V$ ,  $V_{UV} = 0.4V$ ,  $V_{OV} = 0.2V$ , GATE Open, unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
lov	OV Input Bias Current	$V_{OV} = V_{OV(TH)} - 10 \text{mV}$	•		-100	-400	V
V <sub>F(ON)</sub>	FAULT Pin On-Voltage	I <sub>F</sub> = 5mA in Fault Condition	•		0.14	0.25	V
I <sub>F(OFF)</sub>	FAULT Pin Leakage Current	V <sub>F</sub> = 30V, V <sub>IN</sub> = 4.9V	•		0.04	1	μА
Boost Supply						V	11.4
$V_{BR}$	Boost Regulation Trip Voltage	Measured as V <sub>DD</sub> to V <sub>IN</sub> , Rising Edge	•	10.2	10.7	11.1	V
t <sub>OFF</sub>	Boost Supply Off-Time				600		ns
Iswlim	Boost Supply Switch Current Limit		•	350	450	650	mA
Gate Drive							
V <sub>IOR</sub>	Input-to-Output Regulated Voltage		•	4	15	25	mV
$\Delta V_{GL}$	Gate Voltage Limit	$V_{IN}$ = 5V, $V_{OUT}$ = 4.9V, $V_{DD}$ = 13V Measured with Respect to $V_{DD}$	•		-2.3	-3	V
$\Delta V_{G(MAX)}$	Maximum Gate Voltage	$V_{IN}$ = 5V, $V_{OUT}$ = 4.9V, $V_{DD}$ = 16.1V Measured with Respect to $V_{OUT}$	•	7	7.4	7.8	V
V <sub>G(OFF)</sub>	Gate Off-Voltage	V <sub>OUT</sub> = 5.1V	•		0.16	0.30	V
I <sub>GSO</sub>	Gate Source Current	V <sub>OUT</sub> = 4.9V, V <sub>GATE</sub> = 9V			0.670		А
I <sub>GSK</sub>	Gate Sink Current	V <sub>OUT</sub> = 5.1V, V <sub>GATE</sub> = 9V			0.670		А
$V_{DD}$	Operating Range		•			30	V
$I_{VDD}$	V <sub>DD</sub> Supply Current	$V_{IN}$ = 1.2V, $V_{OUT}$ = 1.1V, $V_{DD}$ = 12.3V, GATE Open $V_{IN}$ = 18V, $V_{OUT}$ = 17.9V, $V_{DD}$ = 29.1V, GATE Open	•		3 3.6	4 5.6	mA mA
Status Funct	ions						
$\Delta V_{GIS}$	Minimum Gate Voltage for Turning On Status	V <sub>OUT</sub> = 4.9V, I <sub>STATUS</sub> = 1mA	•		0.75	1	V
V <sub>IOGF</sub>	V <sub>IN</sub> to V <sub>OUT</sub> Fault Voltage with Open Gate	V <sub>OUT</sub> Falling, Measured with Respect to V <sub>IN</sub>		185	210	230	mV
V <sub>ST(ON)</sub>	Status Pin On-Voltage	I <sub>ST</sub> = 5mA, V <sub>OUT</sub> = 4.9V, Status On	•		0.13	0.25	V
I <sub>ST(OFF)</sub>	Status Pin Leakage Current	V <sub>ST</sub> = 30V, Status Off, V <sub>IN</sub> = 4.9V	•		0.04	1	μА

Note 1: Stresses beyond those listed under Absolute Maximum Ratings may cause permanent damage to the device. Exposure to any Absolute Maximum Rating condition for extended periods may affect device reliability and lifetime.

Note 2:  $T_J$  is calculated from the ambient temperature  $T_A$  and power dissipation  $P_D$  according to the following formula:

 $T_J = T_A + (P_D \cdot 120^{\circ}C/W)$ 

