

CHANGE NOTIFICATION



Linear Technology Corporation
1630 McCarthy Blvd., Milpitas, CA 95035-7417
(408) 432-1900

June 20, 2014

Dear Sir/Madam:

PCN# 062014

Subject: Notification of Change to LT3579/LT3579-1 Datasheet

Please be advised that Linear Technology Corporation has made a minor change to the LT3579/LT3579-1 product datasheet to facilitate improvement in our manufacturing yield. We have changed the condition for the FAULT Output Voltage Low spec for pull-up current to 50uA from 100uA. By lowering the pull-up current, the typical voltage was changed from 150mV to 100mV to meet datasheet specification consistently without losing yield. A redlined datasheet characteristics table is attached.

Product shipped after August 21, 2014 will be tested to the new limits.

Should you have any further questions, please feel free to contact me at 408-432-1900 ext. 2077, or by email at JASON.HU@LINEAR.COM. If I do not hear from you by August 21, 2014, we will consider this change to be approved by your company.

Sincerely,

Jason Hu
Quality Assurance Engineer

LT3579/LT3579-1

ELECTRICAL CHARACTERISTICS

The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at $T_A = 25^\circ\text{C}$. $V_{IN} = 5\text{V}$, $V_{SHDN} = V_{IN}$, $V_{FAULT} = V_{IN}$ unless otherwise noted. (Note 2).

PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
Soft-Start Charge Current	$V_{SS} = 30\text{mV}$, Current Flows Out of SS pin	●	5.7	8.7	11.3	μA
Soft-Start Discharge Current	Part in FAULT $V_{SS} = 2.1\text{V}$, Current Flows into SS Pin	●	5.7	8.7	11.3	μA
Soft-Start High Detection Voltage	Part in FAULT	●	1.65	1.8	1.95	V
Soft-Start Low Detection Voltage	Part Exiting FAULT	●	30	50	85	mV
SHDN Minimum Input Voltage High	Active Mode, SHDN Rising	●	1.27	1.33	1.41	V
	Active Mode, SHDN Falling	●	1.24	1.3	1.38	V
SHDN Input Voltage Low	Shutdown Mode	●			.3	V
SHDN Pin Bias Current	$V_{SHDN} = 3\text{V}$			40	60	μA
	$V_{SHDN} = 1.3\text{V}$		9.5	11.4	13.4	μA
	$V_{SHDN} = 0\text{V}$			0	0.1	μA
CLKOUT Output Voltage High	$C_{CLKOUT} = 50\text{pF}$		1.9	2.1	2.3	V
CLKOUT Output Voltage Low	$C_{CLKOUT} = 50\text{pF}$			100	200	mV
CLKOUT Duty Cycle	LT3579, $T_J = 25^\circ\text{C}$			42		%
	LT3579-1, All T_J			50		%
CLKOUT Rise Time	$C_{CLKOUT} = 50\text{pF}$			12		ns
CLKOUT Fall Time	$C_{CLKOUT} = 50\text{pF}$			8		ns
GATE Pull Down Current	$V_{GATE} = 3\text{V}$	●	800	933	1100	μA
	$V_{GATE} = 80\text{V}$	●	800	933	1100	μA
GATE Leakage Current	$V_{GATE} = 50\text{V}$, GATE Off			0.01	1	μA
FAULT Output Voltage Low	50 μA into FAULT Pin	●		100	300	mV
FAULT Leakage Current	$V_{FAULT} = 40\text{V}$, FAULT Off			0.01	1	μA
FAULT Input Voltage Low Threshold		●	700	750	800	mV
FAULT Input Voltage High Threshold		●	950	1000	1050	mV

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: The LT3579E is guaranteed to meet performance specifications from 0°C to 125°C junction temperature. Specifications over the -40°C to 125°C operating junction temperature range are assured by design, characterization and correlation with statistical process controls. The LT3579I is guaranteed over the full -40°C to 125°C operating junction temperature range.

Note 3: Current limit guaranteed by design and/or correlation to static test.

Note 4: This IC includes overtemperature protection that is intended to protect the device during momentary overload conditions. Junction temperature will exceed 125°C when overtemperature protection is active. Continuous operation over the specified maximum operating junction temperature may impair device reliability.

Used to be 100 μA , and is now changed to 50 μA

Used to be 150 mV, and is now changed to 100 mV

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