CHANGE NOTIFICATION



January 31, 2014

Dear Sir/Madam: PCN# 013114

Subject: Notification of Change to LTC3589/-1/-2 Die

Please be advised that Linear Technology Corporation has made a minor change to the LTC3589/-1/2 device family to eliminate a delayed start-up issue that may occur during a slow VIN ramp. A slow V_{IN} rise time (<0.25V/msec) with PWR_ON tied to V_{IN} (or PWR_ON asserted when V_{IN} <2V) may present a 6 second delay before the LTC3589-1/-2 outputs are enabled.

This issue is a result of the part improperly detecting an under voltage fault when attempting to enable the outputs. The normal fault power down time is one second before retry, but at initial turn-on, the internal state machine first waits for a 5 second timer before checking for PWR_ON to remain high. Therefore the potential delay before the enable retry is about 6 seconds.

The problem has been eliminated in the revised silicon by a metal-only edit to the logic. The change has been fully characterized over the full operating temperature and voltage ranges and bench validated in a number of typical applications. No other functional or parametric specifications are affected, so the datasheet is unchanged.

Products built with the new die will be available with approximate datecodes as mentioned below:

Part number	Datecode
LTC3589	1415
LTC3589-1	1421
LTC3589-2	1522

Should you have any further questions, please feel free to contact me at 408-432-1900 ext. 2077, or by e-mail at JASON.HU@linear.com. If I do not hear from you by April 2, 2014, we will consider this change approved by your company.

Sincerely,

Jason Hu Quality Assurance Engineer