

CHANGE NOTIFICATION



Linear Technology Corporation
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November 20, 2014

Dear Sir/Madam:

PCN# 112014

Subject: Notification of Change to LTC3880

Please be advised that Linear Technology Corporation has made minor changes to the LTC3880/LTC3880-1 product die to address two unrelated issues. The first issue occurs in applications using a new generation of low gate charge 25V MOSFETs, including the BSC050NE2LS and BSC010NE2LSI from Infineon. Minor shoot-through and lower than expected efficiency may be observed when the output current exceeds approximately 25 Amps per phase. The second issue may be observed during customer manufacturing in the case of significant X-ray exposure. Cumulative long PCB X-ray inspection times can cause the product telemetry (and servo mode) to exhibit errors when reporting Vin or Vout voltages and duty cycles. Both issues have been fixed in the new release.

In addition, the ADC_PGOOD propagation to GPIO feature is no longer supported. The associated latency and timing uncertainty between when VOUT transitions through the VOUT_UV threshold and the GPIO pin asserting high or low can cause application problems. The comparator PGOOD signal (VOUT_BELOW_UV) is now the only supported GPIO propagation of PGOOD. This comparator delay is nominally 250usec with little timing variation.

Device electrical specifications are unchanged, and the GPIO feature change is the only change to the datasheet. The die change was qualified by performing characterization over the full operating junction temperature range and through rigorous engineering evaluation across a broad range of application conditions. Optical comparison of old versus new masks and electronic error checking were also performed. Samples of the revised die are available now upon request. The revised product will have successfully completed 168 hours burn-in before production release. Product built using the new die will be shipped with a datecode of approximately 1527.

Should you have any further questions, please feel free to contact me at 408-432-1900 ext. 2077, or by E-mail JASON.HU@LINEAR.COM. If I do not hear from you by January 20, 2015, we will consider this change approved by your company.

Sincerely,

Jason Hu
Quality Assurance Engineer