**LTC3882 ERRATA**

This errata describes the conditions that cause an LTC®3882 device to operate differently than expected or as described in the data sheet.

**REVISION HISTORY**

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<td>When VOUT is Set Between 1.1V and 2.4V, IOUT_OC_WARN May Erroneously be Detected</td>
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**ERRATA #1: IOUT_OC_WARN**

The device may incorrectly detect an overcurrent warning condition when the current is within limits if VOUT is set between 1.1 and 2.4 volts.

**Conditions:**

The following conditions, when present simultaneously, may expose this problem:

1. VOUT command is set between 1.1 and 2.4 volts.
2. A large voltage transient occurs on VOUT due to a large load transient or the part is turned on or off or margined high or margined low.

**Impact:**

If the output voltage is set between 1.1V and 2.4V and the output voltage moves, the ADC may detect a large current when no such current exists. This large current can trigger an overcurrent warning, possibly asserting ALERT low. The ADC error will have no impact on LTC3882 PWM control or overcurrent supervisor operation.

**Root Cause:**

An internal ADC calculation can cause errors when VOUT is set between 1.1V and 2.4V and the output voltage is moving.

**Workarounds:**

Two workarounds are possible, depending on the system configuration and requirements. Additional workarounds may be possible. Contact Factory Applications for additional assistance if required.

**Work Around 1:**

Use the SMBALERT_MASK command 0x1B to set bit[5] for IOUT_OC_WARN (0x7B) so the condition does not cause ALERT to pull low if an overcurrent warning is detected. Specifically set the mask value for command 0x7B to 0x20 using command 0x1B.

**Work Around 2:**

Set the IOUT_OC_WARN_LIMIT to 20mV divided by IOUT_CAL_GAIN expressed in ohms. The overcurrent warning may exceed the overcurrent limit in this case, causing a design rule violation in the GUI. Ignore the design rule check and allow the large overcurrent warn limit. This will have no impact on overcurrent supervisor operation.