



PCN #: 06 0050

Title:

ADN8831 Product Redesign and Datasheet Change

#### **Date Published:**

May 25, 2006

Type: Device

Part Number: ADN8831

## **Proposed Change:**

Redesign the circuit to:

- 1. Create a single threshold point for changing the TEC bias level. The old design had two threshold levels occurring at VDD equal to 3.5V and 4.5V. The new design has a single threshold level occurring at VDD equal to 4.0V.
- 2. Remove the fault protection mode. This mode of operation has been removed from the product.

# **Reason for Change:**

- 1. It was found that on some designs and layouts, the device would transition the TEC bias point during a start up or transient condition when VDD momentarily dipped below the threshold voltage. By eliminating the second threshold point and shifting the new single threshold from 4.5V to 4.0V, this problem has been eliminated.
- 2. It was also found on some designs that if the TEC bias point shifted as VDD changed, the part could erroneously enter into a fault mode and not recover. By removing the fault detection, this problem has been eliminated.

### **Summary of Supporting Information:**

Full characterization was performed and the device now meets datasheet requirements. The new silicon will replace the old silicon.

# **Planned Date Change Effective:**

September 13, 2006

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