User Manual

A1569 Proto Board

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Overview

The A1569 is a unique integrated circuit which combines an ultrasensitive Hall-effect switch with a linear programmable current regulator which provides up to 150 mA for driving a string of high brightness LEDs. This document accompanies the Allegro A1569 Proto Board. The A1569 Proto Board is intended to provide the user with a small format platform for integrating the A1569 into their own prototype designs.

Refer to the latest A1569 datasheet for the operational specifications of the A1569.

Description

The A1569 Proto Board is a small two-layer double-sided PCB with the A1569 mounted on the front of the board. All of the basic components are provided. If the A1569 Proto Board is ordered with an LED installed (see below), the only requirement is to connect power (VIN) and ground (GND) via two of the through-hole connections on P1 (see Figure 1, Figure 2, and Figure 3).

Through-hole connections are provided for all of the external connections that may be required for the target application. All of the through-hole connections with square pads, which are not labeled, are the ground connections. The remaining through-hole connections, the ones with round pads, are labeled for convenience on the bottom side of the board (see Figure 3).

A mounting hole for a #2 screw is also provided (see upper-right corner of Figure 2 and upper-left corner of Figure 3). This screw should be nonferrous to prevent interference with the operation of the Hall element.

LED Placement

There are three placement options for the LED supported by the A1569 Demo Board. Only one option should be selected at any given time, as the A1569 is designed to drive a single string of LEDs.

The A1569 Proto Board can be ordered with an LED pre-installed on the front side of the board (the same side as

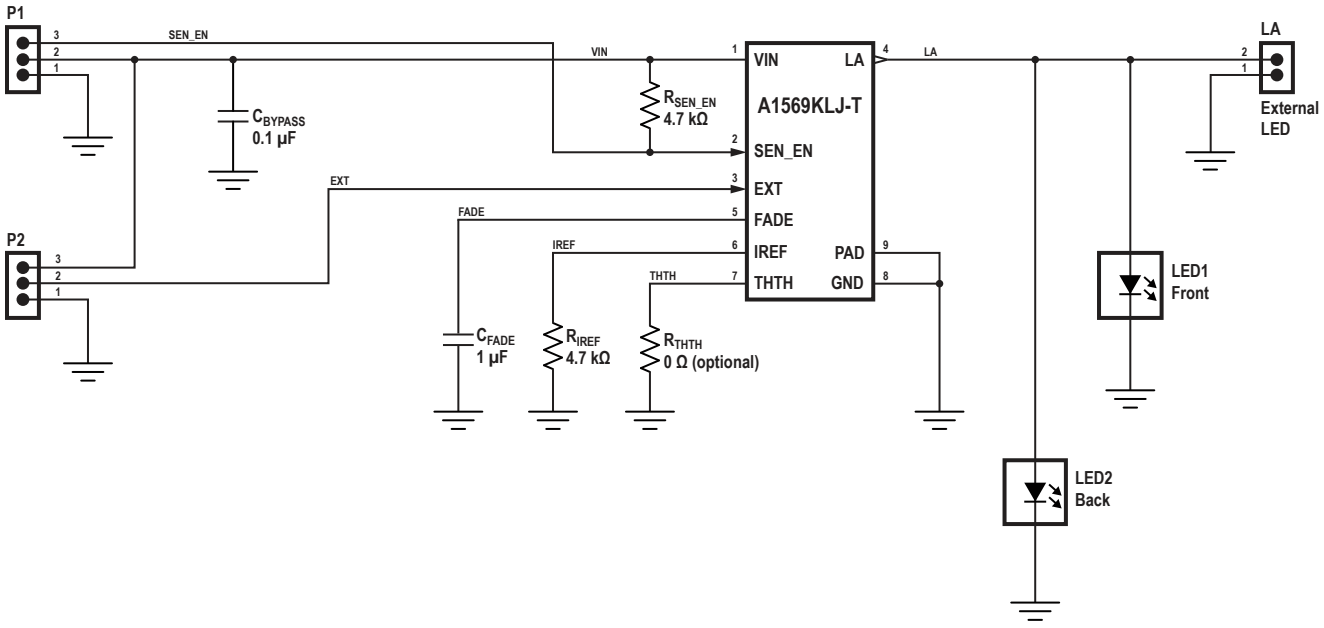

Figure 1: A1569 Proto Board Schematic

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