PRODUCT NEWS BULLETIN

ILC7526/36
USB Dual Power Control Switches

Applications

- USB Host and self-powered Hubs
- USB bus-powered Hubs
- Hot plug-in power supplies
- Battery Charger circuits

Power Saving Features

- <1µA typical off-state supply current
- 50µA typical on-state supply current

System Advantages

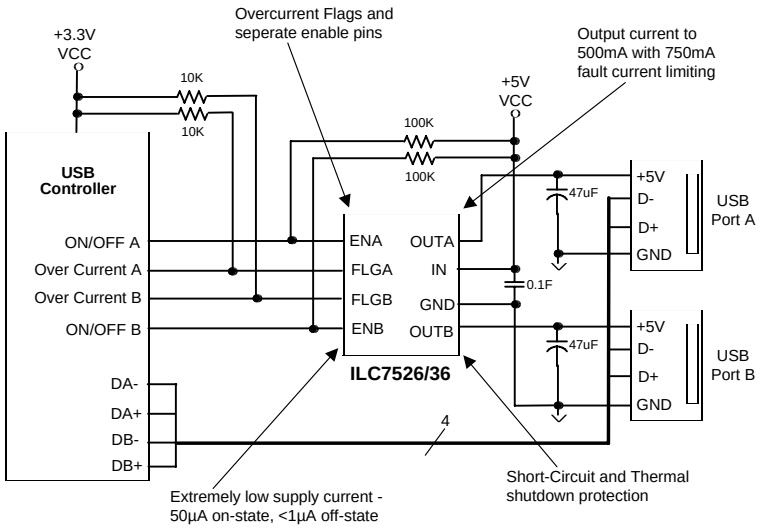
- Ultra low RDS_{ON} of 140mΩ per switch
- 500mA continuous load current per channel
- 2 independent switches with Enables and Flags
- 2.4V typical undervoltage lockout
- 1.25A maximum short circuit limit
- Soft-start with 1mS turn-on
- Over current / over temperature protection - No external components
- USB Specifications complaint

System Options

- ILC7526 has active High Enable
- ILC7536 has active Low Enable

Package Options

- 8-Pin SOIC



General Description

The ILC7526 contains dual high side power control switches, with independent enable and flag functions, integrated into a single 8-Pin SOIC package. With just a few external components, the ILC7526 can be easily configured to meet requirements for either self powered or bus powered USB (Universal Serial Bus) applications. The ILC7526 has active high ENABLE inputs, while the ILC7536 ENABLE inputs are active low. With maximum RDS_{ON} value of 140mΩ per switch, the USB voltage drop requirements can be achieved. Each switch can also supply up to 500mA, with internal circuitry limiting the fault current to 750mA. Fault conditions are also reported to the USB controller via one of the independent flag pins. Internal circuitry provides a soft-start that eliminates momentary upstream voltage drops when the switch is enabled, especially in bus powered applications. Additional features include undervoltage lockout (2.4V), fast turn-off, 2.8V to 5.8V input voltage range, thermal shutdown to prevent switch failure from high current loads, and 3.3V and 5V logic compatible enable inputs.

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