DESCRIPTION

Demonstration circuit 482 is a regulated DC/DC Charge Pump inverter using the LTC1983-5 that produces a regulated negative –5V output voltage at up to 100mA of output current from 3V to 6V input. It demonstrates the small size, ease of use and appropriate layout techniques for the LTC1983-5 charge pump inverter. The circuit requires only small surface mount components, resulting in very small board space. This power supply circuit is particularly useful for applications such as portable equipment and –5V generation in single supply systems that require extremely low quiescent current and extremely small size.

Design files for this circuit board are available. Call the LTC factory.

QUICK START PROCEDURE

Refer to Figure 1 for proper measurement equipment setup and follow the procedure below:

1. Apply a voltage source to the input of the circuit between Connect input power to the Vin and the GND terminals. Input voltage is limited to between 3V to 5.5V.

2. Connect load between the GND and the Vout terminals.

3. To shut down the circuit, connect the JP1 to the off position. Connect JP1 to the on position to enable normal operation.

Figure 1. Proper Measurement Equipment Setup