



Test Procedure for the CS5171BSTGEVB Evaluation Board

1.0 Equipment

- DC power supply (1.0 A, 0 – 5.0 V)
- Oscilloscope (10 MHz, 0 – 5.0 V)
- DC voltmeter (0 – 10 V)
- DC ammeter (0 – 2.0 A)
- Electronic load (capable of sinking 0.5 A @ 5.0 V)

2.0 Procedure

1. Connect electronic load to V_{OUT} (J4) and GND (J5). Connect voltmeter to the same terminals.
2. Connect DC power supply to V_{IN} (J2) and GND (J3). Insert DC ammeter in series with power supply. Set power supply current limit to 1.0 A and voltage to 3.3 V.
3. Turn on power supply. Check $V_{OUT} = 5.0 \text{ V} \pm 5.0\%$.
4. Set electronic load to constant-current mode, 0.4 A.
5. Turn on load. Check $I_{IN} < 1.0 \text{ A}$. Check $V_{OUT} = 5.0 \pm 5.0\%$.
6. Check switching frequency (IC pin 8) ~260 KHz.
7. Turn off load. Turn off power supply.

3. Notes

1. **Do not** short the output terminals. The IC cannot protect against a short in a boost regulator.
2. The cathode of D1 is a convenient location to probe the switching frequency. Probe can be grounded to J3 or J5.