

Test Procedure for the CAT4201AGEVB Evaluation Board

Introduction

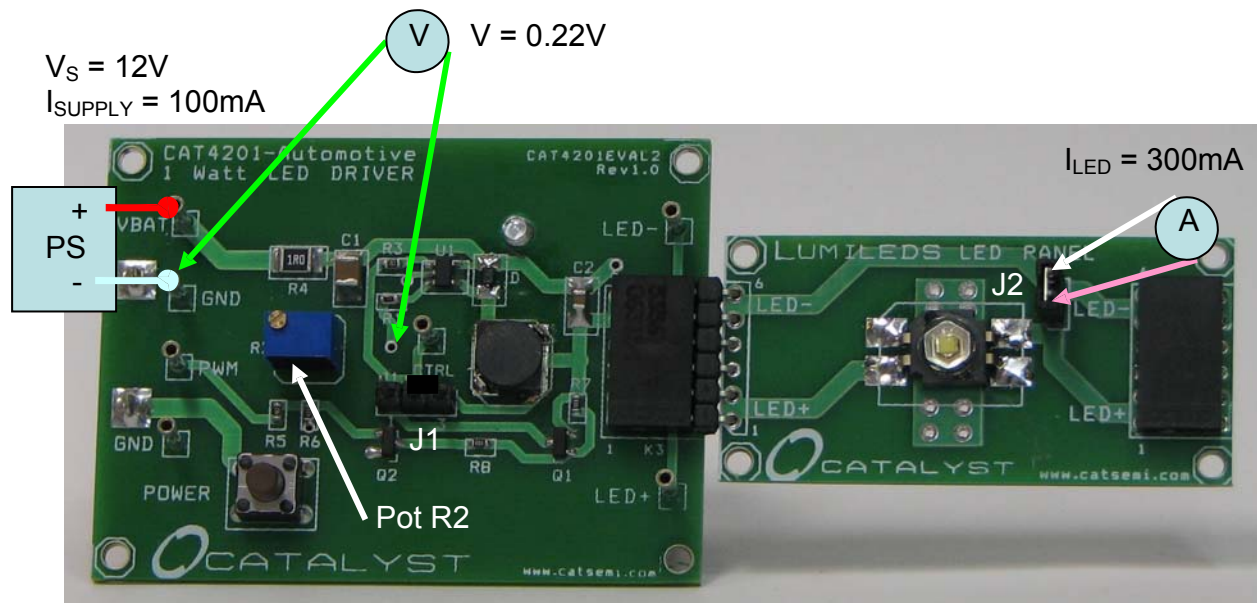
This document describes the test procedure for the CAT4201 evaluation board. The test procedure must be followed step-by-step in order to verify that the evaluation board is fully functional.

Test set-up

The CAT4201 evaluation board must have the jumper J1 installed between pins 2 and 3 (right position).

The test set-up uses the LED module plugged into the CAT4201 evaluation board.

The LED current is measured by removing the LED module jumper J2 and connecting an ammeter (A) between those two pins, see figure below.



Legend:

- f (PS) = 12V DC power supply, connected between GND and VBAT
- f (A) = Ammeter, connected to LED module across J2 connector (jumper removed)
- f (V) = Voltmeter, connected between R1/R2 midpoint and GND

Note: The LED of the LED module is very bright and should be covered for eye protection.



Test Procedure

The test procedure is achieved by following the sequence below step-by-step.

1. Connect the voltmeter (V) between R1/R2 midpoint and GND.
2. Connect the power supply (PS) between VBAT (+) and GND (-).
3. Turn the power supply on.
4. Measure the voltage on voltmeter (V).
5. Turn the potentiometer R2 and adjust until voltage is **0.22V**.
6. Measure the LED current (A).
7. The LED current must be between: **$270\text{mA} \leq I_{\text{LED}} \leq 330\text{mA}$** .
8. Measure the supply current on the power supply.
9. The supply current must be between: **$90\text{mA} \leq I_{\text{SUPPLY}} \leq 115\text{mA}$** .
10. Turn off the power supply (PS).
11. Disconnect the CAT4201 evaluation board.

Appendix

CAT4201 evaluation board schematic

