ON Semiconductor

Test Procedure for the CAT4103AEVB Evaluation Board

Test Procedure for the CAT4103 EVAL Board

1. Initial Setup and Jumper Configuration

CAT4103EVAL Board:

1.1. Verify that jumper J1 is shunted in the (2, 3) position.
1.2. Verify that jumpers J2 to J5 is shunted in the (1, 2) position.
1.3. Set the cursor of potentiometers R1 to R3 to the mid-scale position.
1.4. On connector K1, connect pin 2 (SIN) to pin 1 (VBUS) with a wire.
1.5. On connector K1, connect pin 5 (BIN) to pin 6 (GND) with a wire.

2. Power Supply

2.1. Connect an external 5V DC power supply between pin 1 (VBUS) and pin 6 (GND) of connector K1. There is no protection against reverse voltage on pin 1 and pin 6.

2.2. Connect a function generator with a 1 kHz square wave signal (amplitude is 0V to 5V) to pin 3 (CIN) and pin 6 (GND) of connector K1.

3. Test Procedure

3.1. Turn on the 5V DC power supply and 1 kHz function generator.

3.2 On connector K1, connect pin 4 (LIN) to pin 1 (VBUS) with a wire. The RGB LED will light up.

3.3. Rotate the cursor of any of the R1, R2 or R3 potentiometers. The brightness level of the corresponding LED's color will change.

3.4. On connector K1, disconnect pin 5 (BIN) from pin 6 (GND).

3.5. On connector K1, connect pin 5 (BIN) to pin 1 (VBUS). The RGB LED will turn off.

3.6. Turn off the 5V DC power supply and 1 kHz function generator.