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## **Test Procedure for the NIV6150MT1GEVB Evaluation Board**

The following steps detail the basic test procedure for these boards:

Necessary Equipment:

1 0 to 10 V or higher Adjustable DC Power Supply

1 4 channel Digital Phosphor Oscilloscope



Figure 1: EVB

## Test Procedure:

During evaluation keep the JCIN2 jumper engaged. Hang jumpers on one side of J\_VC\_SEL, JCOUT2, and JOUTPUTSHORT for later use but do not actually connect them.

- 1. Connect a 5 Vdc supply to the input and ground. The output may be connected to a load. Once this is done one green light will be on. This one is for the output voltage.
- 2. Press the blue pushbutton switch, and notice that the green light turns off and the yellow fault indicator LED turns on. This means that the eFuse is in the off state.
- 3. There is a potentiometer to adjust the current limit set resistor from 0  $\Omega$  to 20  $\Omega$ . Set to 2 ohms for the 6150 and 5 ohms for the 6350 as a starting point.
- 4. A voltage probe can be connected to the IMONITOR pin and a voltage will appear if a load current is being drawn.
- 5. Put the input voltage to 8 V and check the level of output voltage. It will be clamped at the Vclamp level. Engage the J\_VC\_SEL jumper and check to see if the Vclamp level changes.
- 6. The output can be shorted in several ways. A jumper may be used (just below the Vout banana connector), or a cable can be connected from Vout to GND.
- 7. When the short occurs there will be a dynamic event so be sure that the oscilloscope is ready to trigger and that the current probe is set to a high value.
- 8. End of test

Note: After testing the boards please have the JCIN2 jumper engaged and all other jumpers disengaged but available for use by hanging them on one end of the headers.