

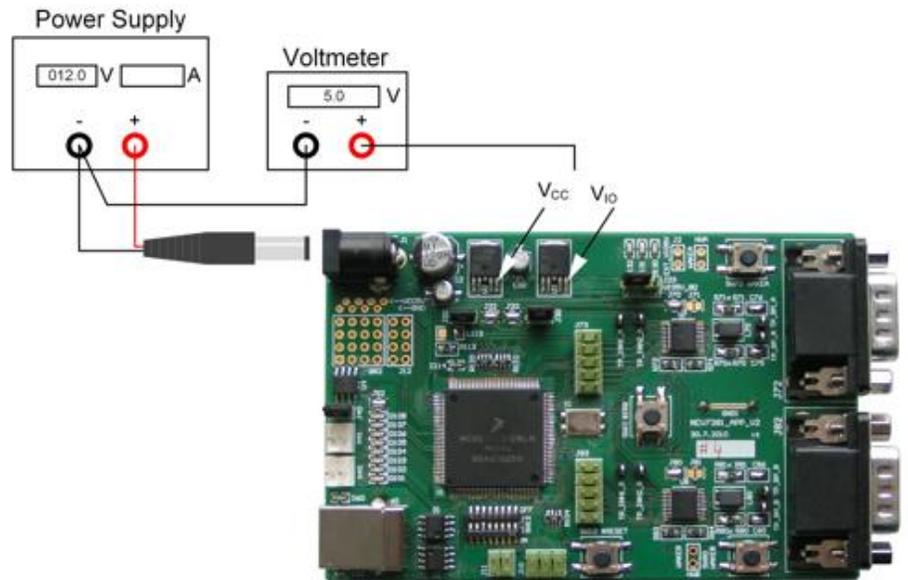


Test Procedure for the NC V7381A0V2GEVB Evaluation Board

Required Equipment

- Dual channel Oscilloscope
- Bench Power Supply
- Voltmeter
- Two NCV7381A0V2GEVB Evaluation Boards
- Two 12 V power supply adapters
- Two FlexRay bus cable assemblies

Test procedure Step1:



1. Set the boards to default configuration according to Jumpers and Default Configuration section.
2. Connect the setup as shown above.
3. Apply an input voltage, $V_{BAT} = 12\text{ V}$
4. Check I_N , V_{CC} and V_{IO}

Table 1. Desired Results

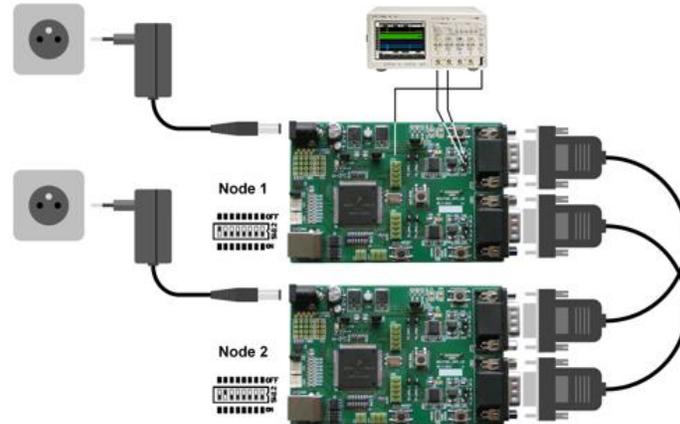
$I_N = 100\text{ mA to }130\text{ mA}$

$V_{CC} = 4.9\text{ V to }5.1\text{ V}$

$V_{IO} = 4.9\text{ V to }5.1\text{ V}$



Test procedure Step2:



5. Connect two boards according to figure above.
6. Set a different board address on each board. One of the boards must be set with address 1 and is considered as Master Board. Node address is configurable by address switch (SW12).
7. Connect an oscilloscope to BP and BM test-points (Channel A or B).
8. After the power supply is applied, FlexRay communication should be automatically initialized, what should be signaled by blinking LED1 on both nodes. Communication on FlexRay bus should be visible on oscilloscope (BP and BM test-points).
9. Press and hold SW11 (#IRQ) on Node 1 for more than 5 seconds. Both nodes should be switched to SLEEP mode. FlexRay communication is stopped and voltage regulators V_{CC} and V_{IO} are disabled.
10. Press one of the Local Wakeup buttons (SW70, SW80) on any node. Both nodes should be woken up and the FlexRay communication should be restarted.