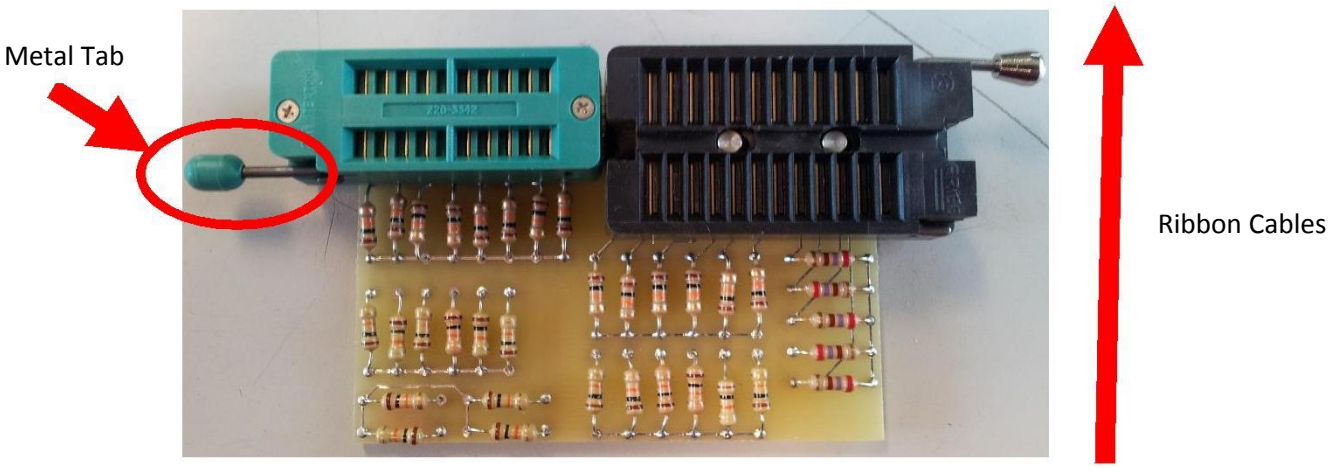
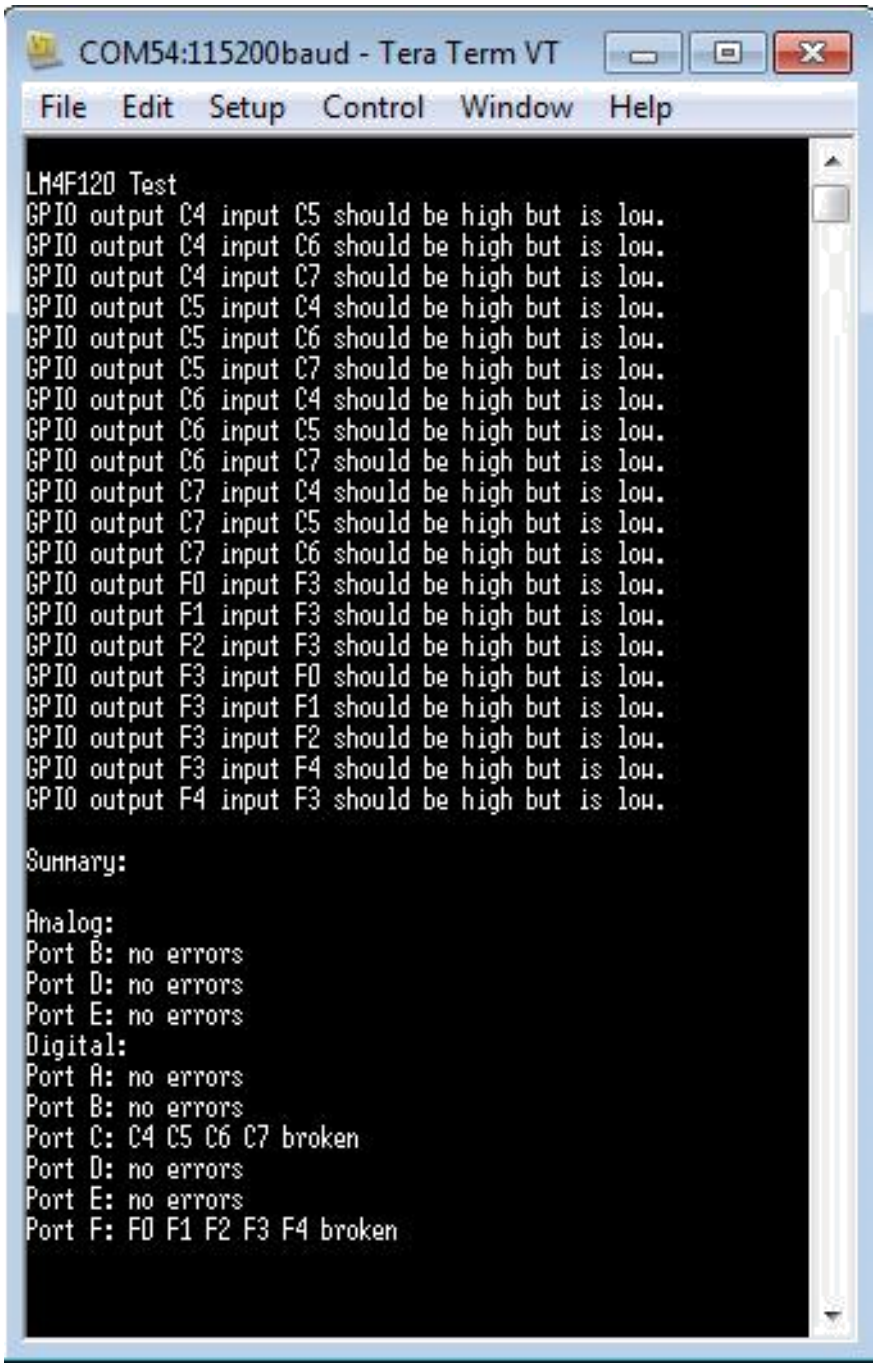
**Tiva Pin Testing Board Instructions V2**
**SPDL, 09/18/2017**
**Adriano Quiroga & Ed Carryer**

In order to test the integrity of every pin on the Tiva and the attached cables follow these instructions:

1) Locate the Tiva testing board, it should be sitting on the table or in a box near the whiteboard outside the TA office. **Please remember this is a shared resource, so return it to where you found it outside the TA office immediately after use.**
2) Lift the metal tabs on the sides of both zif sockets (shown below).
3) Insert the protection board cables into the zif sockets with the ribbon cables facing out of the board as shown below, and lower the metal tabs to lock the connectors. Be sure that the pins on the cables are seated in the zif sockets before locking
4) Connect the Tiva to the computer and power the protection board.
5) On the Start menu locate and open the **LM Flash Programmer** application.
6) On the *Program* tab, in the *Select .bin file* field browse to `U:\_Samples\TivaTester\Tester.bin`.
7) Press the *Program* button.
8) The status bar at the bottom of the LM Flash Programmer application will show **Program Complete** when programming has completed successfully.
9) Press the Tiva's reset button. If the LED on the Tiva blinks **green** you are done, all the pins are working properly. If the blinking is **yellow or red** continue to step 10.
10) Open a TeraTerm terminal and connect to the Tiva (115200 baud).
11) Press reset button.
12) The terminal will display a detail of the tests that failed and a summary of which pins are malfunctioning (example shown below).
13) Copy (`Edit:Select screen`, `Edit:Copy`) the test results from the TeraTerm window and paste them into the SPDL Problem Report form.
14) Turn off power supply, disconnect Tiva from the computer, lift tabs, pull out connector and **return the testing board to its original location.**




COM54:115200baud - Tera Term VT
File Edit Setup Control Window Help
LM4F120 Test
GPIO output C4 input C5 should be high but is low.
GPIO output C4 input C6 should be high but is low.
GPIO output C4 input C7 should be high but is low.
GPIO output C5 input C4 should be high but is low.
GPIO output C5 input C6 should be high but is low.
GPIO output C5 input C7 should be high but is low.
GPIO output C6 input C4 should be high but is low.
GPIO output C6 input C5 should be high but is low.
GPIO output C6 input C7 should be high but is low.
GPIO output C7 input C4 should be high but is low.
GPIO output C7 input C5 should be high but is low.
GPIO output C7 input C6 should be high but is low.
GPIO output F0 input F3 should be high but is low.
GPIO output F1 input F3 should be high but is low.
GPIO output F2 input F3 should be high but is low.
GPIO output F3 input F0 should be high but is low.
GPIO output F3 input F1 should be high but is low.
GPIO output F3 input F2 should be high but is low.
GPIO output F3 input F4 should be high but is low.
GPIO output F4 input F3 should be high but is low.
Summary:
Analog:
Port B: no errors
Port D: no errors
Port E: no errors
Digital:
Port A: no errors
Port B: no errors
Port C: C4 C5 C6 C7 broken
Port D: no errors
Port E: no errors
Port F: F0 F1 F2 F3 F4 broken