**Errata for ECE 4723/6723 Lab Development Board**

This document details the errata for the custom-developed ECE 4723/6723 lab development board. Details include affected areas and possible solutions. Please see the device’s datasheet for a full functional description.

**ECE 4723/6723 Lab Development Board Errata Summary**

1. **RD8 pin unconnected**
   * **PROBLEM DEFINITION**Pin number 42 on the PIC33EP512GP806 microcontroller (RD8) should connect to pad RD8 on H2 but does not.
   * **SCOPE OF IMPACT**PinOut of RD8 on H2 will be disconnected.
   * **WORKAROUND**  
     Connect pin 42 on the microcontroller to the RD8 pad on H2 using a wire.
2. **RF0 pin unconnected on FTDI – UART operation impossible**
   * **PROBLEM DEFINITION**Pin number 58 (RF0) on the PIC33EP512GP806 microcontroller should connect to pad RXD on CAN2 but does not.
   * **SCOPE OF IMPACT**PinOut RXD of the FTDI will be disconnected. This pin is necessary for UART operation.
   * **WORKAROUND**  
     Connect pinout RF0 the RXD pad on the H1 pinout the FTDI pad using a wire.
3. **MCLR pin unconnected on FTDI - UART operation impossible**
   * **PROBLEM DEFINITION**Pin number 7 on the PIC33EP512GP806 microcontroller (MCLR) should connect to pad RTS on CAN2 but does not.
   * **SCOPE OF IMPACT**Pin RST of the FTDI will be disconnected. This pin is necessary for UART operation, functioning as the FTDI equivalent of #MCLR.
   * **WORKAROUND**  
     Connect the MCLR# on ICSP pin 7 to the RTS pad of FTDI using a wire.
4. **R6 and R7 unconnected - LCD operation impossible**
   * **PROBLEM DEFINITION**Resister number 6 and 7 should connect but does not.
   * **SCOPE OF IMPACT**The resister R6 will be disconnected to VO pin of the LCD. This connection is necessary for creating voltage divider circuit and better performance by the LCD.
   * **WORKAROUND**  
     Connect the resister R6 and R7 using a wire.
5. **RG2(SCL) is not connected to the SCL pinout on H2**
   * **PROBLEM DEFINITION**RG2 does not connect to R10, and this connection is not shared with the SCL board pinout as it should be
   * **SCOPE OF IMPACT**Because the SCL bus is necessary for connecting I2C devices using the breadboard, a connection to the pinout is very important. Without this pinout, the I2C clock pin will not be accessible. Also, without the pullup resistor from R10, the open drain RG2 pin will be floating.
   * **WORKAROUND**  
     MCU pin RG2 must be connected to either R10 or the SCL pinout.
6. **RG3(SDA) is not connected to the SDA pinout on H2**
   * **PROBLEM DEFINITION**RG3 does not connect to R9, and this connection is not shared with the SDA board pinout as it should be
   * **SCOPE OF IMPACT**Because the SDA bus is necessary for connecting I2C devices using the breadboard, a connection to the pinout is very important. Without this pinout, the I2C data pin will not be accessible. Also, without the pullup resistor from R10, the open drain RG3 pin will be floating.
   * **WORKAROUND**  
     MCU pin RG3 must be connected to either R9 or the SDA pinout.
7. **No connection to DACCS# line on U4**
   * **PROBLEM DEFINITION**There is nothing connected to the pin 3 of the DAC, the Chip Select input.
   * **SCOPE OF IMPACT**The Chip Select Input is necessary for SPI communication with the DAC. The CS pin is set to zero while sending data, and raised to one when data sending is ending. With No CS pin, it is impossible to talk to the DAC, or any SPI file.
   * **WORKAROUND**  
     The DACCS# wire is connected to pinout RF1.