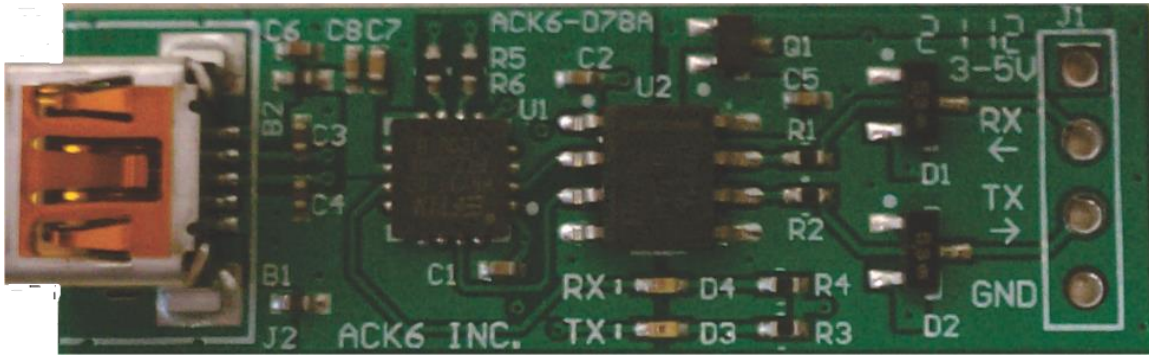


## Isolated USB to TTL UART Converter



### ACK6-ISO-USB-UART-078A Board

- Isolated connection for safety
  - Isolation IC used is rated at 2500 Vrms
- Works from 3V to 5V – no jumpers or solder bridges required.
- Visible indication:
  - Red LED for Transmit (TX)
  - Green LED for Receive (RX)
- Up to 230400 baud
- Reverse polarity protection
- ESD protection
- No special USB drivers needed as automatically configures as COM port
- Micro B connector to USB Host
- 4-pin 0.1" ( 2.54mm ) connector allows flexible attachment to Target Board
- Typical current draw from Target Board: ~8mA ( all baud rates )
- Encased in clear heat shrink tubing for protection
- Board dimensions: 1.5" x 0.5" ( 38.1mm x 12.7mm )
- Board comes with 4-pin right angle header preinstalled and covered in clear heatshrink for additional protection
- Order includes USB cable and 4-pin to 4-pin female cable



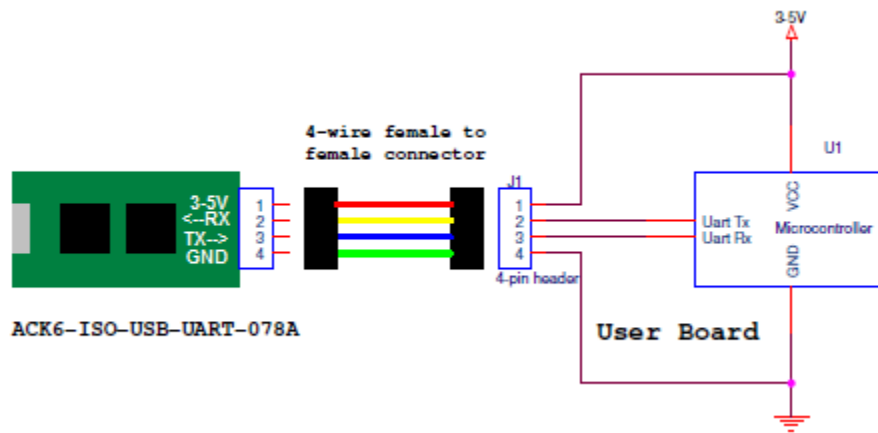
ACK6-ISO-USB-UART-078A

## Target board UART Connection

If you have a UART on your board, it can be used for debug and testing without any additional cost. You only need to place a layout for a 4-pin 0.1" ( 2.54mm) connector.

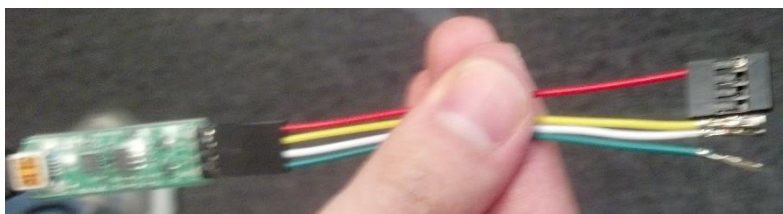
### New PCB

For a straight pin-to-pin connection between the UART and the ACK6-ISO-USB-UART-078A, the layout on the PCB for the 4-pin header is as depicted below:



### Existing PCB

- 4-pin connector with different pinout than above
  - It is easy to rearrange the wires in the 4-wire cable going to the connector on the User Board





- Header pins in various locations
  - Use female to female jumper wires to connect between the ACK6-ISO-USB-UART-078A and the pins on your board.

## Driver Installation

- When device is plugged in, it should automatically find and install the driver
- If you need to manually install the driver:
  - Click on the <http://www.ftdichip.com/Drivers/VCP.htm>
  - At the bottom of the page there is a chart containing the driver information
  - Follow the instructions on the page to install the driver
    - Note: Windows users may find it easier to use the *setup executable* found in the comments of the Windows section.

### Note:

8/2/2012 – According to the manufacturer, it is possible for the USB IC used in this unit to lock up during data transfer. While we have not been able to duplicate this within the lab environment, the potential of a lock up event does exist. In the event that a lockup does occur, the unit must be re-enumerated (unplugging from the PC and reattaching it). This issue will be resolved in future hardware versions of this IC. For more information, please see the IC manufacturer's link below.

[http://www.ftdichip.com/Support/Documents/TechnicalNotes/TN\\_139\\_FT230X%20Errata%20Technical%20Note.pdf](http://www.ftdichip.com/Support/Documents/TechnicalNotes/TN_139_FT230X%20Errata%20Technical%20Note.pdf)