Projected Capacitive Demo Kit Setup Guide

DawarTouch®

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Document Revision History

| Revision	Date	Content	Author
A	04-02-12	Released Doc	Jason Liao
B	10-24-12	Added COF setup	Bill Dorfner

Controller Board Option

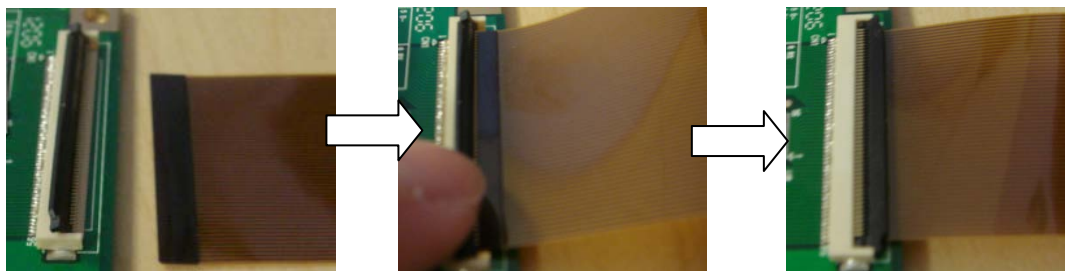There are four main components you have received with your PCAP demo kit:

- ✓ Touch Screen (1x)
- ✓ Controller Board (1x)
- ✓ Y Cable (PN: CT10050) (1x)
- ✓ USB Cable (PN: CT10051) (1x)

The steps below will guide you through the setup of the demo.

1. Connect touch screen cables to controller as shown below.
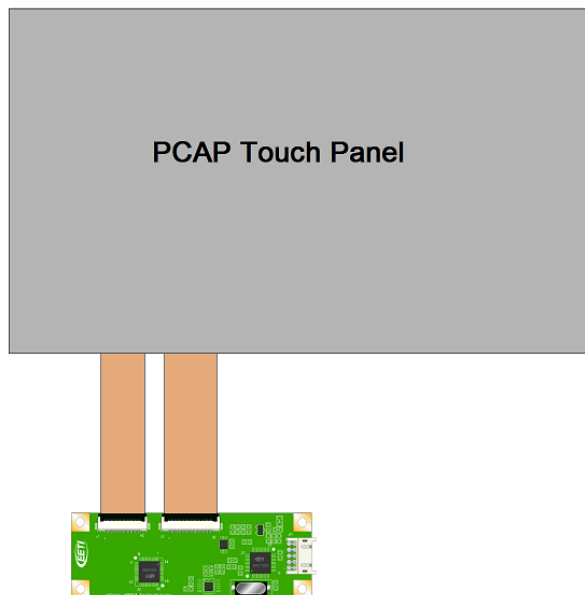
2. Flip the black latch up on each of the connectors on the board and carefully slide the tails into the connector. Snap down the latch and make sure the tail is securely fastened in the housing.

3. Connect the 5x2 pin Y-Cable to the controller then connect the USB cable to its corresponding connector on the Y-Cable. If you are using a USB hub, make sure the hub supplies sufficient power to the controller.

Nov 12, 2012
QAD 19-4 Rev B
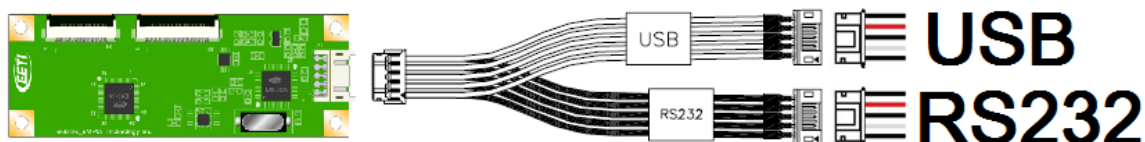
Chip On Flex Option

There are 5 main components you have received with your PCAP COF demo kit:

- ✓ Touch Screen with COF circuit (1x)
- ✓ COF adapter board (PN: CT10064) (1x)
- ✓ USB to I^2C board (PN: CT10054) (1x)
- ✓ USB cable (PN: CT10051) (1x)
- ✓ I^2C connection leads (PN: CT10079) (5x)

The steps below will guide you through the setup of the demo. Depending on customer specifications, the touch panel uses either a USB interface or I^2C interface. The firmware for the specified interface is already loaded onto the COF.
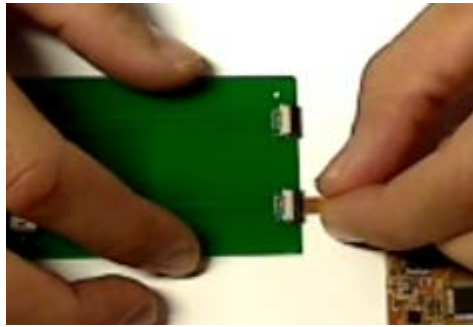
USB Interface

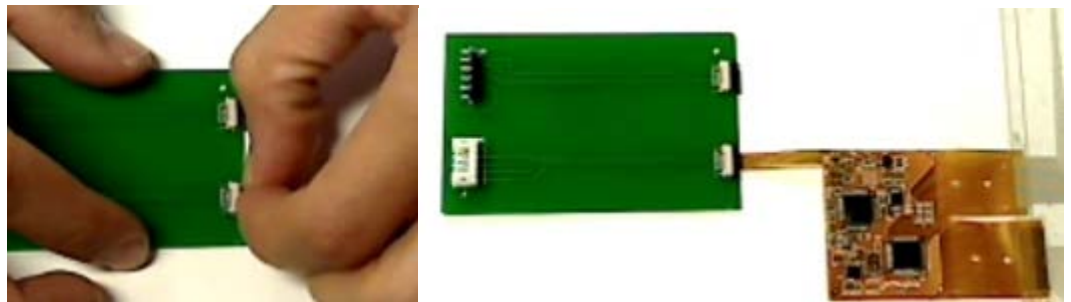1. Connect the COF circuit to the COF adapter board as shown below.
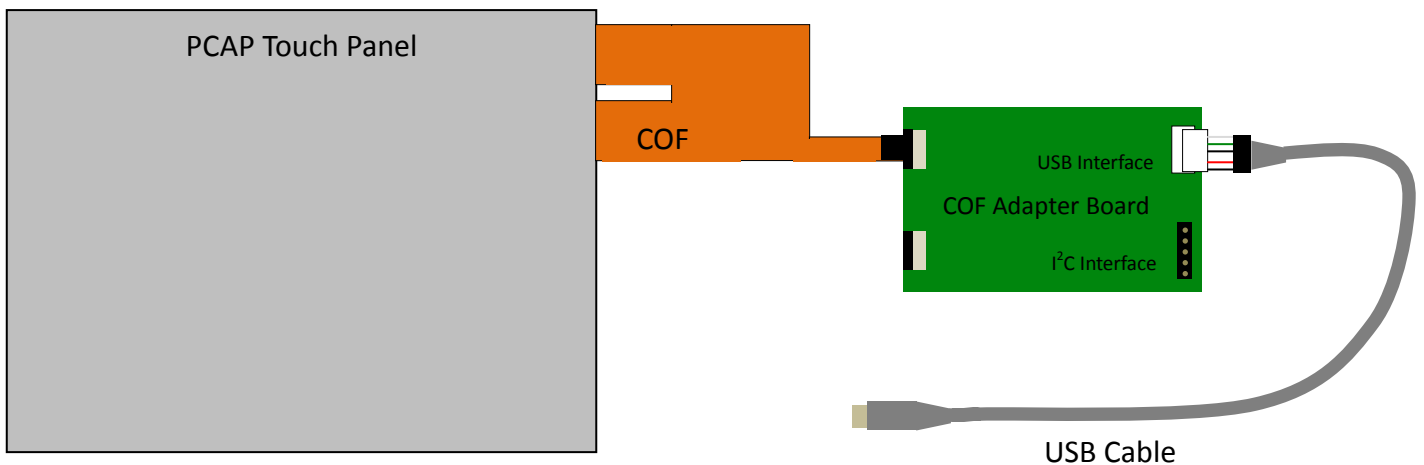
2. Pull out the black latch for the USB interface on the COF adapter board.
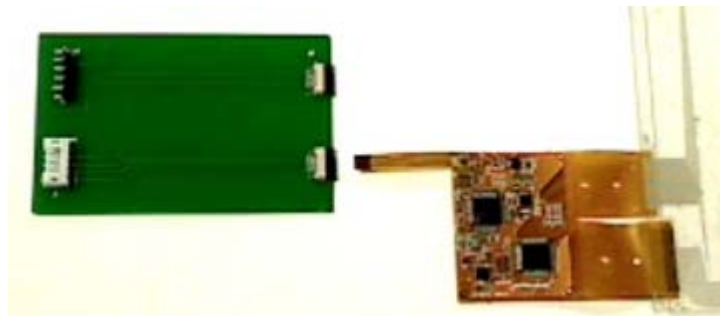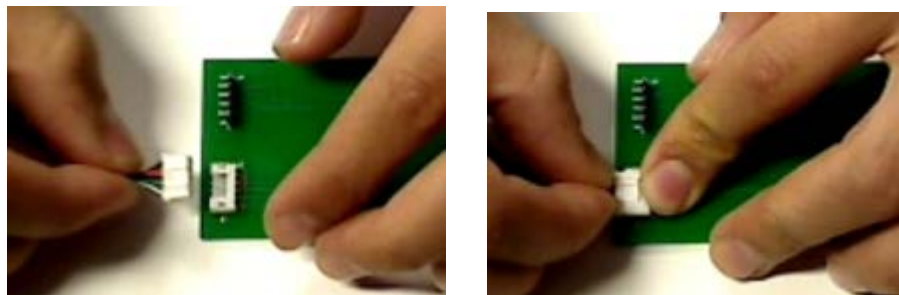
3. Carefully slide the tail into the connector.

4. Push both ends of the connector in to lock and make sure the tail is securely fastened.

5. Connect the 5x1 white connector of the USB cable to the USB interface connector on the COF adapter board.
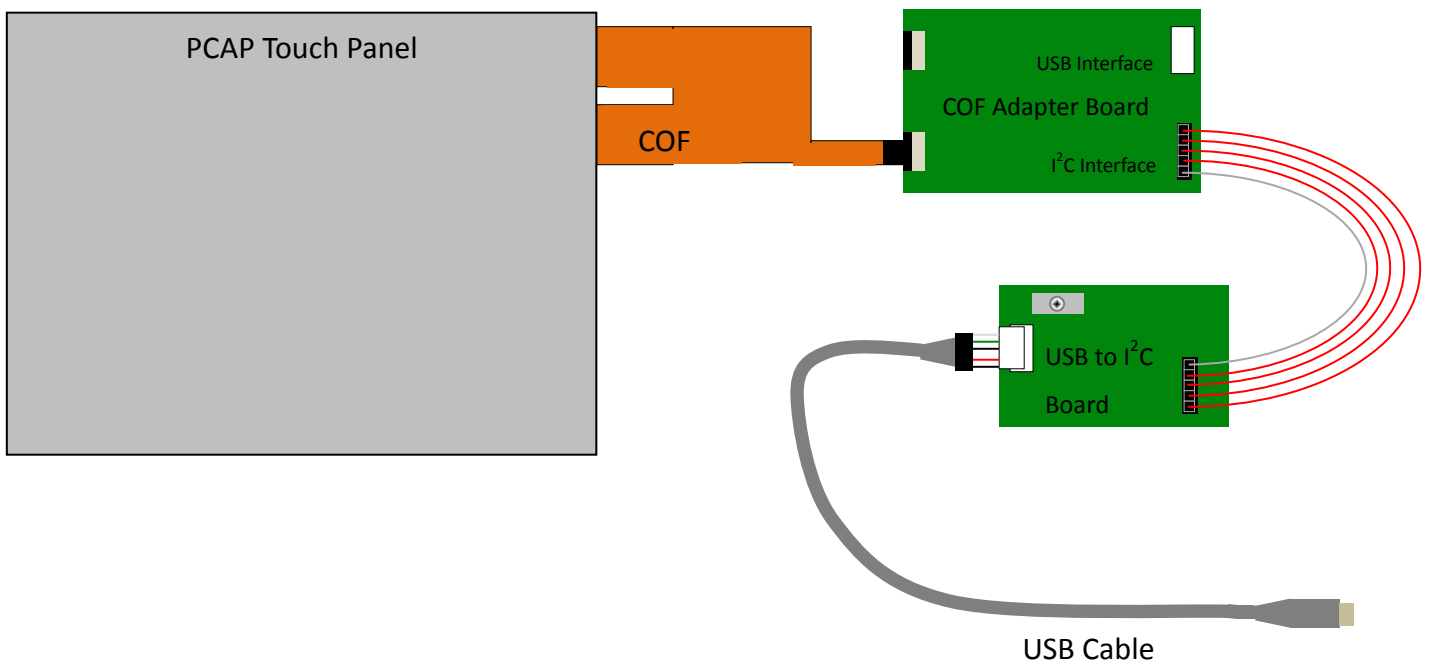

6. Plug the USB cable into the computer.

I²C Interface

The USB to I²C board is included with the demo kit to test the functionality of the touch panel through the USB port, and also to load new firmware to the COF.

1. Connect the COF circuit to the COF adapter board as shown below.
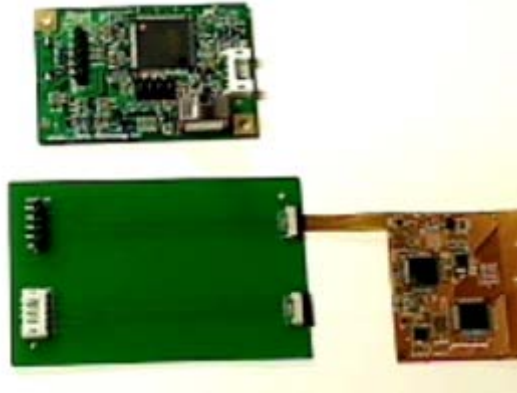

2. Pull out the black latch for the I²C interface on the COF adapter board.

3. Carefully slide the tail into the connector.

4. Push both ends of the connector in to lock and make sure the tail is securely fastened.

5. Connect each connection lead to one of the pins on the COF adapter board and connect the other end to the corresponding pin on the USB to I^{2}C board (the pins are labeled the same on both boards). The USB to I^{2}C board has an extra pin labeled **RST**; this is not used.
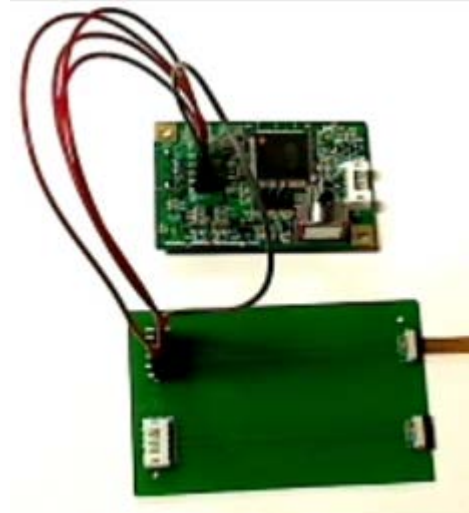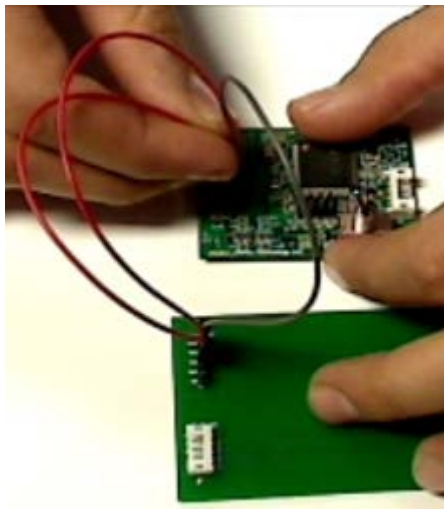
6. Connect the 5x1 white connector of the USB cable to the USB to I^{2}C board.
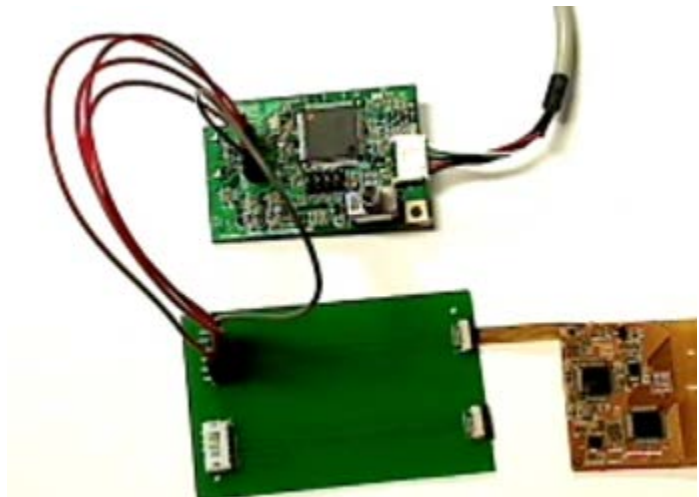
7. Plug the USB cable into the computer. Turn on the USB to I^{2}C board with the toggle switch on the board. The board is ON when the green LED (D2) on the board is lit.

> PCAP technology supports multi-touch input however, only certain operating systems, for instance Windows 7 (Home Premium or higher version, see below table), embraces native multi-touch while running the controller in USB HID (Human Interface Device) class driver. You can use PCAP technology in single touch mode with other operating systems that do not support native multi-touch or you can program the controller to respond to multi touch input.   For this example we are using Windows 7 and USB interface.

Versions	Starter	Home Basic	Home Premium	Professional	Enterprise	Ultimate
Multi-touch	No		Yes			

8. If your computer has installed eGalaxTouch driver before you will need to uninstall it otherwise, the PCAP controller will be recognized as an eGalax Touch device instead of an HID compliant device.

9. Turn your system completely on then follow the instructions below:
   a. Plug the USB cable into your computer.
   b. The controller will be recognized as USB HID device and automatically install.   The following pop up messages will appear.
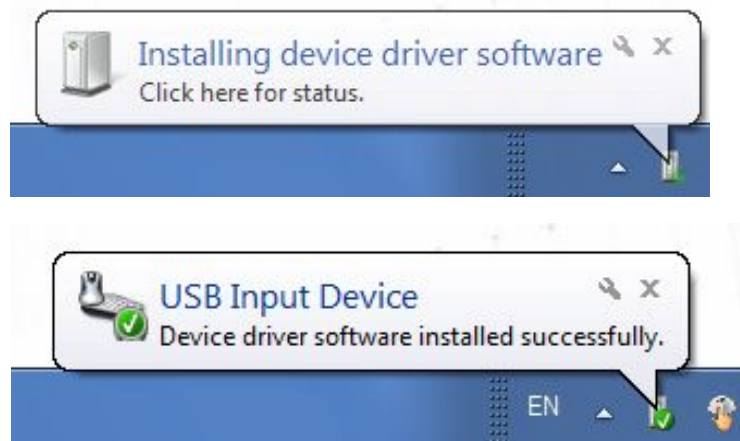
   c. Touch the sensor to check function.

- There is no need to do calibration for PCAP technology.
- The PCAP touch sensor will work from either side but the firmware has been optimized for the orientation which was specified on the drawing.
- If you require a change to the orientation, please contact Dawar Tech Support for the required tools and firmware.
- There are a few standard Microsoft programs you can use to demo the multi-touch functionality of PCAP Technology:
    a. Windows Paint will allow you to draw simultaneous lines with your fingers.
    b. Windows Photo Viewer will allow you to demo the gesture functionality; pinch (zoom out), expand (zoom in), flick and rotate.
    c. For additional multi-touch software applications, download Microsoft Touch Pack for Windows 7 from the Microsoft website.

For technical support, please contact us at:
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