

KNOW YOUR TOUCHPANEL WITH EZ-FPC

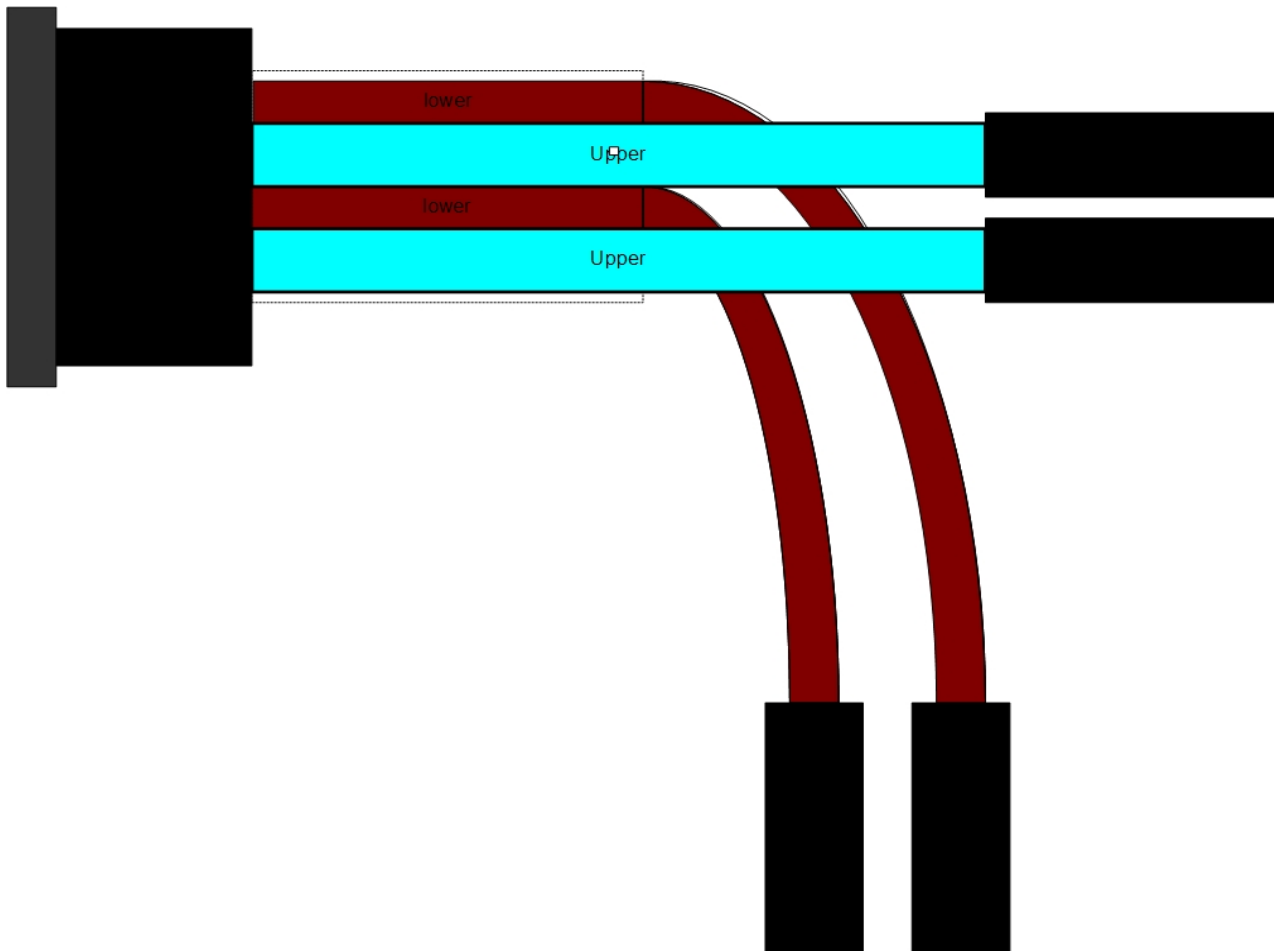
EZ-FPC is your touchpanel interface friend. Not only does it allow you to create an easy and quick interface to your favorite microcontroller for testing and development, a simple test on a development board and you will discover your X and Y Plates and the correct direction of voltage drop for the Left To Right X motion, and the Top To Bottom Y axis motion as a stylus moves across the Touchpanel.

CONNECT EZ-FPC:

To connect your EZ-FPC to the Touchpanel, pull the face of the ZIF (Zero-Insertion- Force) connector forward slightly and then insert the Touchpanel FPC Tab as deeply as possible, to the back of the connector. Note that the copper side of the Touchpanel FPC tab must connect to the rails of the ZIF connector. When the tab is fully inserted, snap the face piece back into position on the connector which will secure the touchpanel FPC tab.

QUICK PLATE TEST USING EZ-FPC:

As you look at the ZIF FPC connector wiring through the clear strain relief tubing there is an upper and lower set of 2 wires connected. Each 2 wire set is a Plate, regardless of the Touchpanel manufacturer. Whether it is the X or Y plate is specific to the manufacturer of the Touchpanel being connected and a quick test using the development board will tell you everything you need to know to identify the Plates and Direction of Stylus Movement.



ID THE X AND Y PLATES:

1. Choose a pair of wires (upper or lower) and connect them directly to the VCC and GND pins on one of the Development Board headers and energize that Plate. It doesn't matter the polarity.
2. Connect only one of the other Plate pair wires (it doesn't matter which one) to a single PORT pin on any header which has an LED connected.
3. Take your stylus and run it from LEFT to RIGHT across the touchpanel. If the LED changes brightness, then you have found the energized X PLATE. If you move your stylus from TOP to BOTTOM and the LED brightness changes, you have found the energized Y PLATE.

ID PLATE POLARITY FOR STYLUS DIRECTION:

Graphical LCD's have pixel addresses that start in the UPPER LEFT and move to the LOWER RIGHT of the screen. The Touchpanel output should also correspond to these addresses to correctly identify graphical screen objects.

Once an energized Plate is identified it is important to polarize it correctly so that the LED brightness in the previous tests moves from dim to bright corresponding to stylus pressure from LEFT TO RIGHT, for the X PLATE, and dim to bright corresponding to stylus pressure from TOP TO BOTTOM for the Y PLATE. If the LED is doing the opposite simply swap the VCC and GND connections.

Software development is now much easier with this connection information.