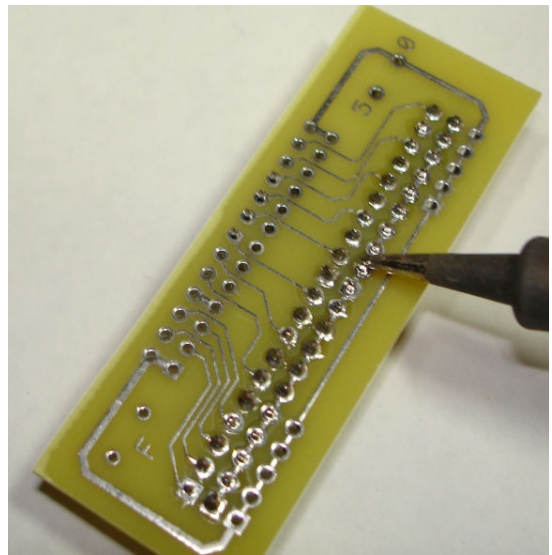
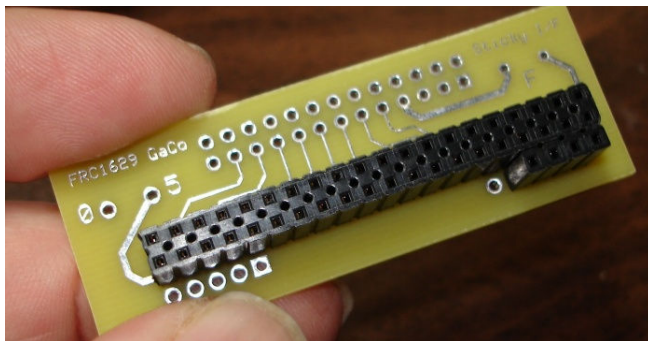


Team 1629 Driver Station Adapter (Sticky I/F) board.

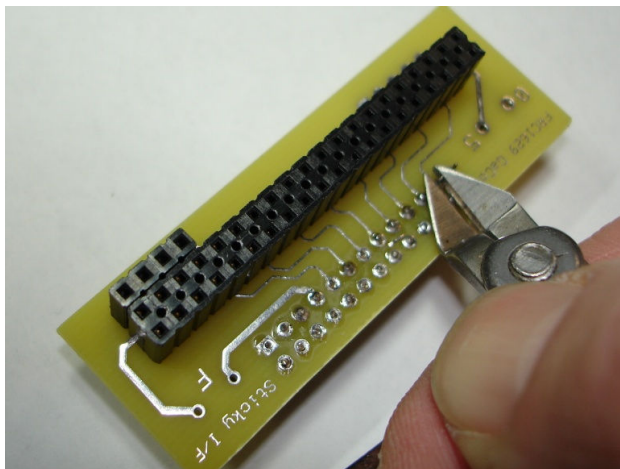
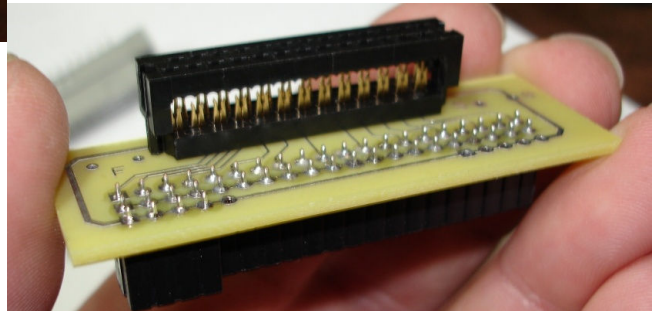
Step 1) Mount the 40 pin connector to the side of the board with the “FRC1629 Text”. Ensure that when soldering, the “F” fuse indicator is on the left.

Insert the connector into the TOP two rows of pins (closest to the 24 pin connector)

Step 2) Add the small 4 pin connector to either end, below the 40 pin connector. Ensure that it is square, and that the pins line up. Some boards have holes all the way across. (below)



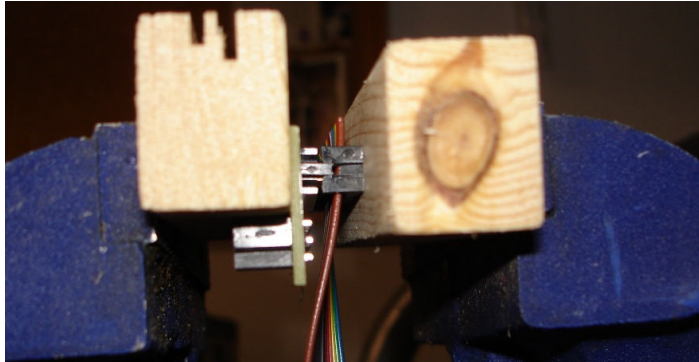
Step 3) Mount the 24 Pin cable connector on the reverse side of the board. Take care not to close down the back plate. It needs to be open to accept the cable.



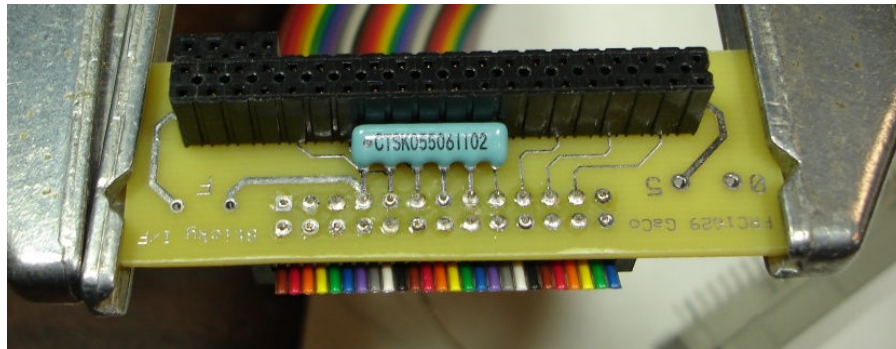
Step 4) Snip off the excess pin length on the back of the 24 pin connector. This will make it easier to clamp down on the connector without bending any pins.

Step 5) Insert the ribbon cable into the connector with the BROWN wire at the end labeled “F”. This is the Pin 1 end of the cable. I prefer the cable running down, but based on your requirements it could also run up.

I suggest putting two small blocks of wood on either side of the assembly and then clamping down in a vice. Slow pressure will cause the connector to displace the insulation on the cable and make a very solid connection. Two views are shown below.



Step 6) If you want to add pull-ups to the interface, take the assembled board and add the two small resistor packs to the back. Not that pin 6 of each pack has been removed (we only need 4 resistors from each pack) and Pin 1 (black dot on pack) has been soldered to the connector pin that has the large trace running from it. I trimmed the length of the resistor pack legs to make fitting easier. One pack is used on the back row, the other is used on the front row.



Step 7) Add the small poly fuse to the two holes on the left (see the legs sticking out in the picture above)

When installing the board on the Driver Station, the 24-Pin ribbon header is ABOVE the 40-Pin DS connector. Note, the DS connector is VERY TIGHT, so take great care when removing it, otherwise it may slip and bend the pins sideways. Remove it slowly with a levering action on both ends.

PINOUTS: Pin 1 of the ribbon cable connector is marked with a square pad. It is at the F(use) end of the board. In the picture below, it's the Brown wire on the LEFT side.

Signals are assigned as follows:

- | | |
|----|---------------|
| 1 | Gnd |
| 2 | Gnd |
| 3 | Analog In1 |
| 4 | Analog In2 |
| 5 | Analog In3 |
| 6 | Analog In4 |
| 7 | +5V (fused) |
| 8 | +5V (fused) |
| 9 | Digital In 1 |
| 10 | Digital In 2 |
| 11 | Digital In 3 |
| 12 | Digital In 4 |
| 13 | Digital In 5 |
| 14 | Digital In 6 |
| 15 | Digital In 7 |
| 16 | Digital In 8 |
| 17 | Digital Out 1 |
| 18 | Digital Out 2 |
| 19 | Digital Out 3 |
| 20 | Digital Out 4 |
| 21 | Digital Out 5 |
| 22 | Digital Out 6 |
| 23 | Digital Out 7 |
| 24 | Digital Out 8 |
| 25 | Gnd |
| 26 | Gnd |

