# Orcpad Assembly Instructions

First solder the surface mount components to the back of your board. These are:
- 1 uF capacitors: stored in a set of three, plain white packaging. These go in C23, C6, and C14 (spots labeled 1 u). Finish putting on the 1 uF capacitors first so you don't mix them up with the 100 nF capacitors (or vica versa).
- 100 nF capacitors: stored in a set of three, packaging has orange marker on it. These go in C7, C24, and C13 (spots labeled 100 n).
- 33K resistor: stored all by itself. If you look closely on it, it is labeled '33k'. Goes in R17.
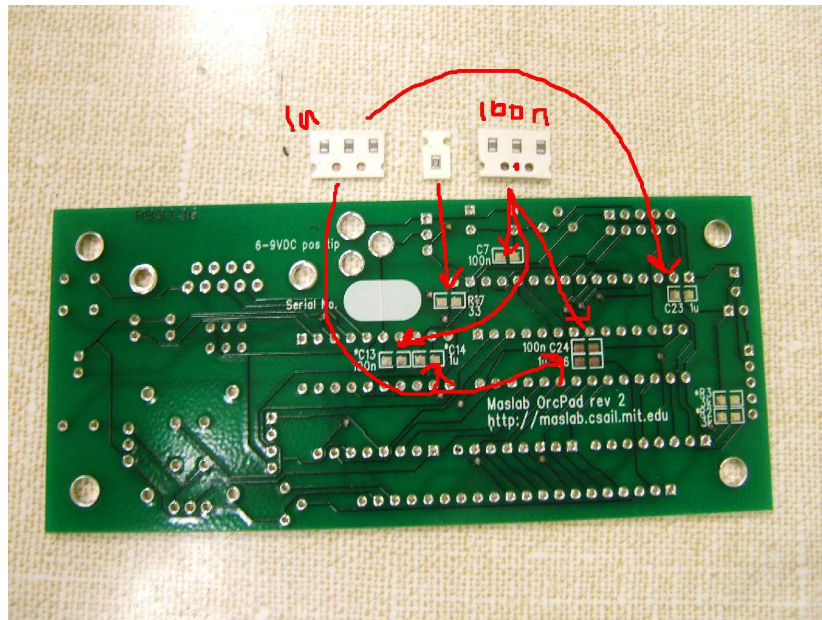

Next complete the front of your board. Solder flatter items first. Special notes:
- The right-angle header is soldered with the right angle part to the board (at J4)
- The female header (20 pin single-sided header) goes in J15
- The six-prong switch goes in the 'backlight'
- The variable resistor (three prongs, blue and yellow) goes in R1
- Cut off the extra-long leads on the white push button to make it fit in the 'menu' spot.
- Solder the socket so the half-circle notch on the short side matches the notch on the board (at U3).
- The LED goes in at 'low battery'. The longer lead is positive, and the shorter lead is negative. The negative lead goes in the flat side of the circle.
- The red button gets soldered to 'stop'
- The 10uF capacitor (labeled on its side) goes in C5; the 100uF capacitor goes in C8. The lead on the side with the white strip is negative. The negative lead goes in the round hole.
- Add the joystick last. Put the little plastic cap on top of the joystick to make a knob.
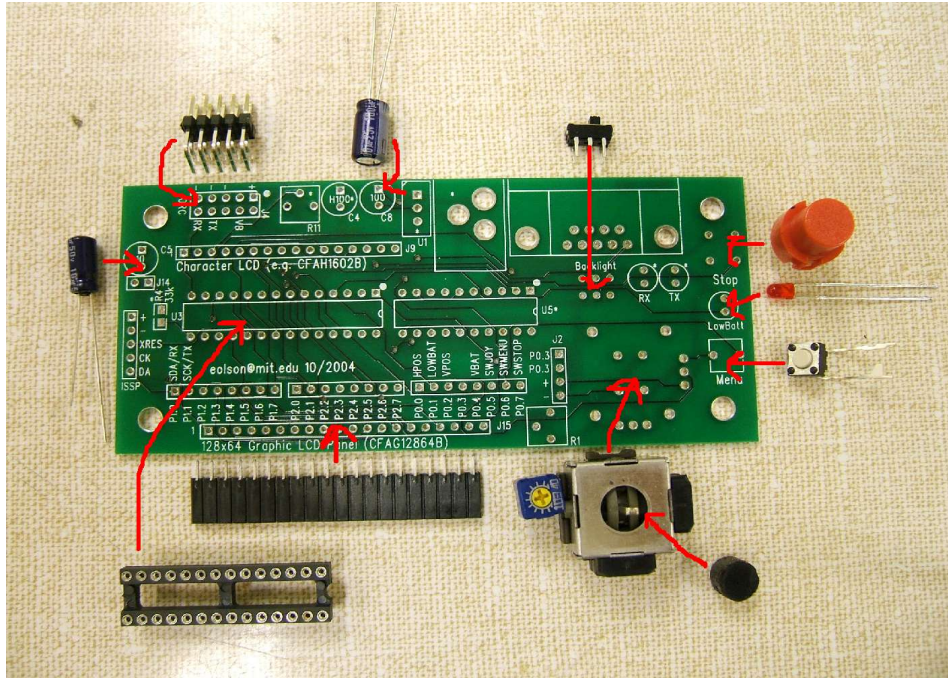
When you get done this far, take it to a staff member. They will give you the chip for the socket—make sure you put it in with the half-circle notch matching the board and socket. Carefully solder the male header to the LCD—take breaks if it starts getting hot—and attach it to your board.
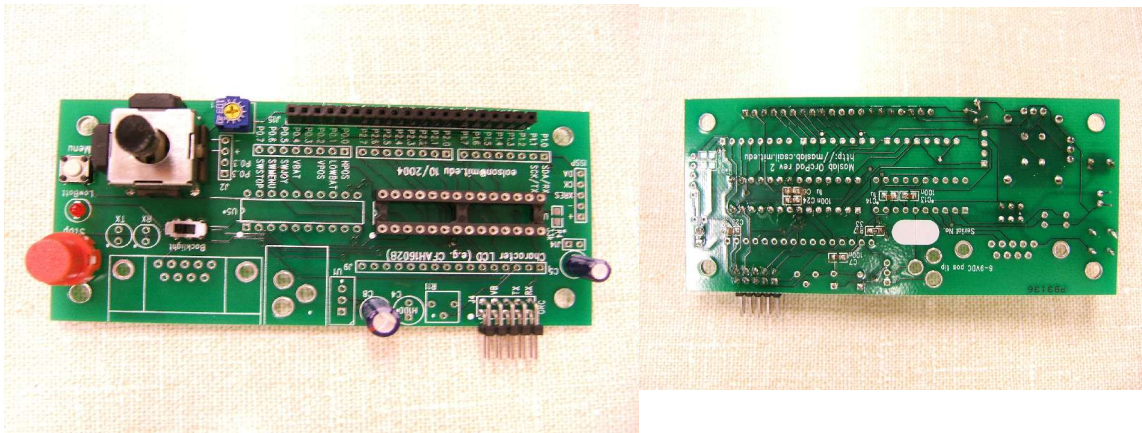
Now you can attach your orcpad to your orcboard. Make sure that the red strand of cable corresponds to the square-holed prong on the connecters.