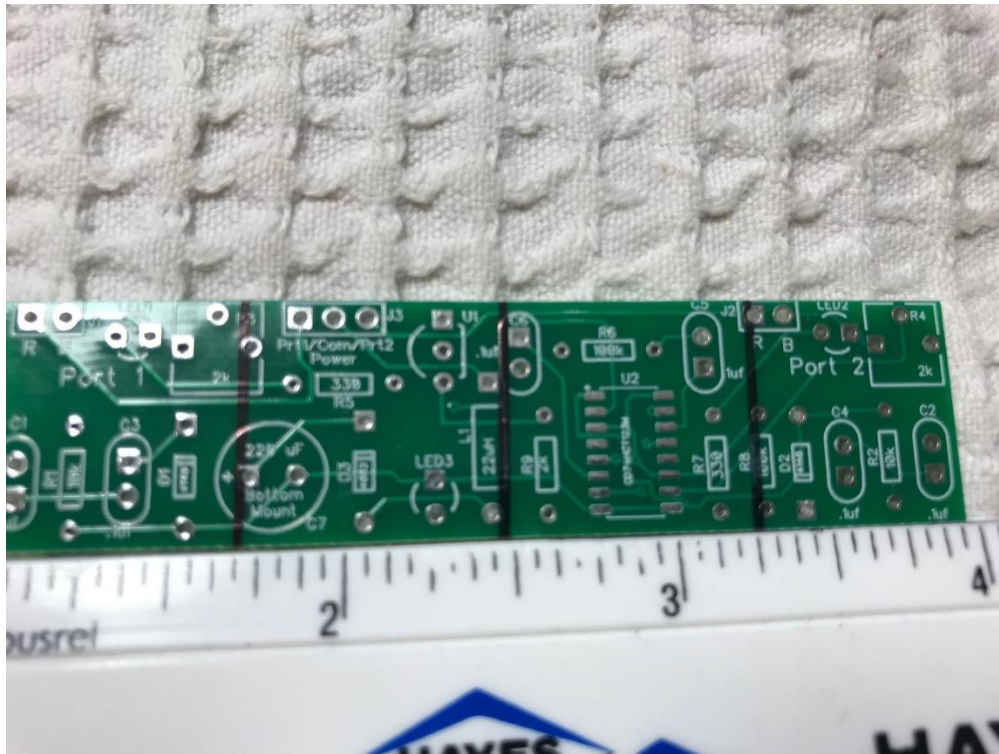


## Notes for R1.23a

This board is 76 x 18.8 mm in size. It is designed for center mounting when used with the two Fixed TIU outputs. Optionally two boards can be used to monitor all 4 TIU outputs. It uses mostly readily available thru-hole components, and a SOIC-16 CD74HCT123M chip.

## Single Board Application

Before beginning assembly mark with a black Sharpie the locations where the board will fit up against the 3 case ribs, like below. Refer to the applicable "In Case" view.



Suggested order of assembly:

- diodes (3); observe polarity
- resistors (7) and L1 inductor (1); non-polar
- 0.1uF ceramic caps (6); non-polar
- trim pots (2)
- LM78L05 Vreg; align pin 1
- LEDs (3); observe polarity
- U2 16 pin IC; align pin 1
- 220uF aluminum cap; observe polarity
- power jumper J3
- install board lead wires

It will be beneficial to shift the locations of components L1, C6 and R8 slightly to the left and right, so that they won't interfere with the board fitting tight up against the ribs.

Note that the 220 uF cap C7 should mount on the bottom of the board, so it does not interfere with the case.

Pots R3/R4 normally mount on top of the board. R3 conflicts with the rib just left of case centerline, and will require rib cutting to provide clearance. Refer to the "In Case" view. Optional case holes can be drilled to facilitate later adjustment of these pots. Refer to the drill template. They can also be mounted on the bottom of the board.

### Two Board Application

Refer to the applicable "In Case" view.

For the right side board mount ceramic cap C1 on the bottom of the board to avoid rib conflict.

For the left side board the outermost rib should fit between LED 1 and pot R3 without issue. If not cut and remove a small section of the rib to provide clearance. Ceramic caps C2, C4 and C5 should be mounted on the bottom of the board. If pots R3/R4 are top side mounted, pot R4 will need to have the same rib modification as for a single board application, to the rib just left of centerline. If converting from a single board to a two board application, the previously modified rib will work fine.