

PIC LCD frequency counter

This project is just a pcb for a variant of the “Weeder Frequency Counter” published at: <http://www.piclist.com/techref/piclist/weedfreq.htm>

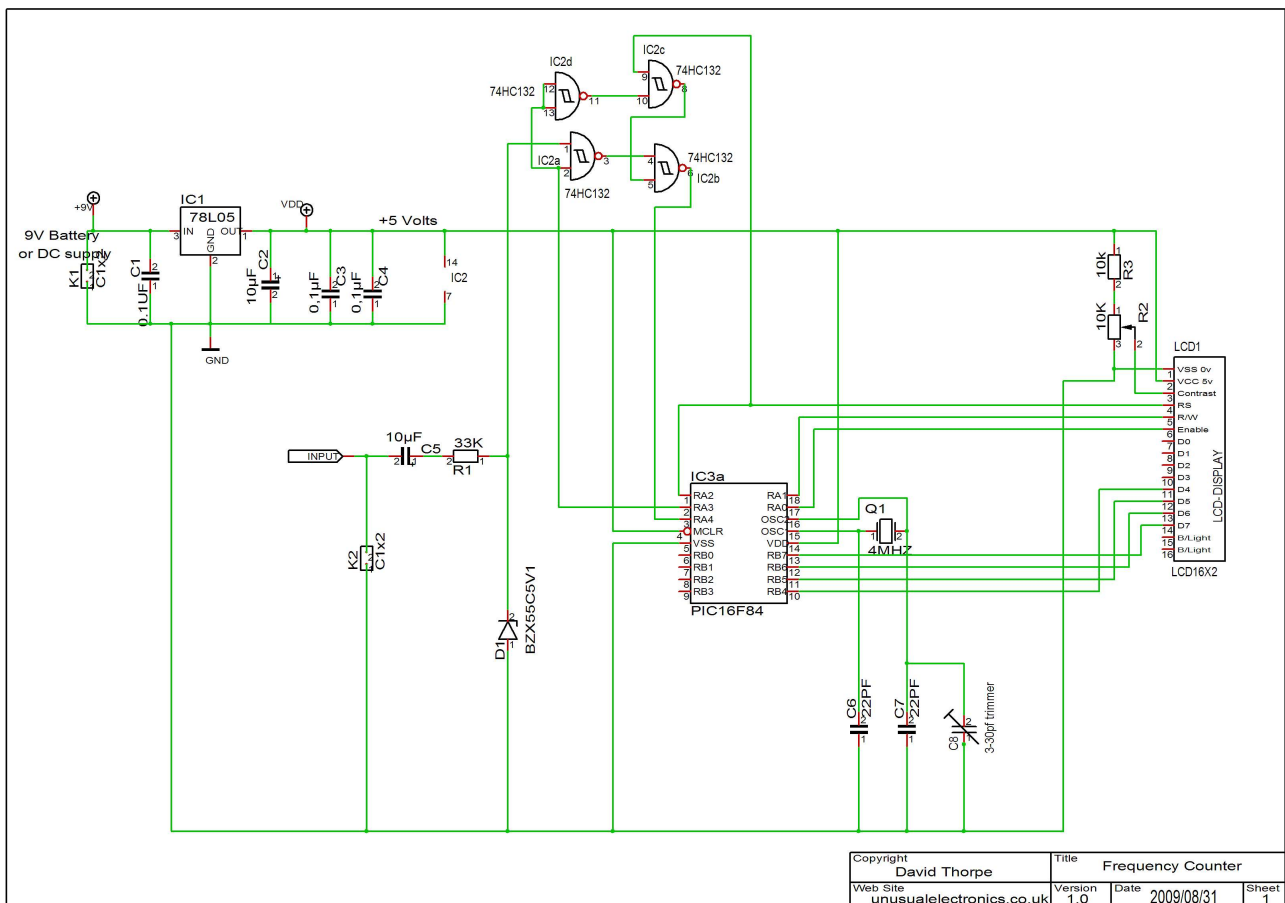
On that web site is a link to a modified version of the ASM software by Barry Smith: <http://www.piclist.com/techref/piclist/weedfreq/4bitlcdusart.htm>

Barry's software version allows either a PIC16f84 or a PIC16f628 to be used with the LCD in 4 bit mode, which simplifies the pcb layout slightly and provides the option of a serial data output if using the 16f628 chip.

As there is no link to a circuit or pcb layout for Barry's version, I have made my own pcb as shown here.

It is a single sided board with 4 jumper wire links and is small enough to fit behind the lcd module if you use the same type as mine. (single row connector at top of the module)
I did not bother with any preamp transistors as I will only be using it to show the frequency of my old valve-based Heathkit model AO-1U Sine-Square audio generator.

Circuit



Reduce value of C7 to 10pF if using Trimmer (C8)

I used a 16x2 line LCD module (although only a 16x1 line type is needed)

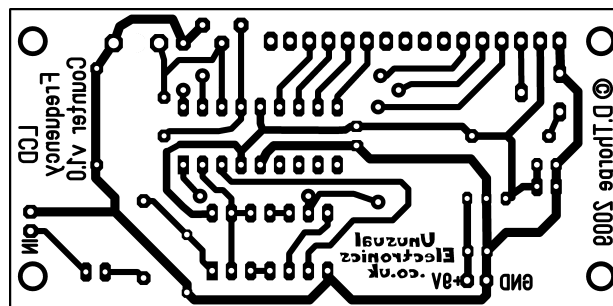
A PIC16F628 can be substituted for the 16F84 if you wish.

PCB Track Layout

The circuit can be built on this single sided pcb layout.

PCB is shown actual size: 81 x 39.77 mm and is ready for printing, using the toner transfer method.

Print this page actual size (ensure that print option for "Page Scaling" is set to "None")



Disclaimer

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