The J Cesar VFO as modified by Pete ZL2FSK

This VFO is easily found as a sketch for an Arduino on the web by googling J Cesar VFO. It is there for the benefit of hams who can programme – and many versions of vfos seem to derive from this.
It could be used "as is" as long at you know how to get the required libraries and compile it. But even then, unless you put in the i.f. frequencies and so on, it would be a bit limited – basically to the output of a single tuneable frequency – though there are a large number of pre-programmed frequencies for many bands.
Pete has been using this to show me how I can make some basic changes and compile it – so that I have learned at least to understand *how* it is done.
But the plan is to make it more user-friendly by incorporating a menu. And then to provide the hex file for the flash memory.

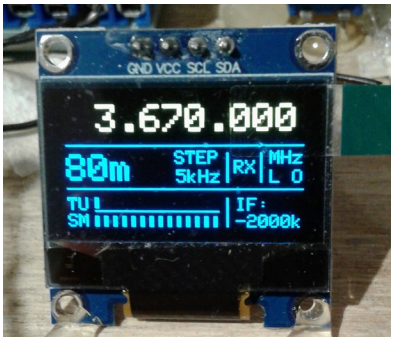
So far Pete has modified the programme to read a bfo frequency from the eeprom and to put out two frequencies – the bfo and vfo for use in an ssb radio. These frequencies need to be written into the eeprom with the same cable and program that would put the hex file into the flash. Its not really finished at this stage but email if you want more details.
Actually, as long as your have a decimal to hex converter (online app) in front of you, working out the hex numbers is not all that difficult. Its basically what ZL2PD does with his spreadsheet – in fact you could use that to calculate the numbers you need.

By all means download the compiled hex file and put it on your Arduino (I'm assuming you have read my other pages which tell you how to do this).

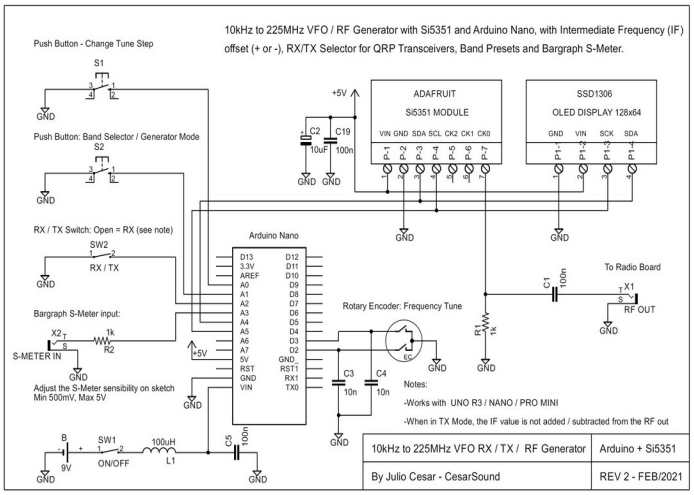
One thing about this vfo is that the screen (128x64) has a large amount of info on it, as well as a nice bargraph that could be used as a sig strength meter or maybe a rudimentary battery voltage indicator with a few wiring changes. It also has a wide frequency range – well up into vhf, though I have not tested it extensively.

So we will provide a hex file for you to use – and in time there may be more useful versions. At some stage I will give the instructions for entering the bfo frequencies (can add or subtract) – if people want them.
The circuit diagram is basically the same as for the EWV with some changes to digital input/output pins. I will show it here or you can get it from the original writeup.
So this is just a work in progress. Look for the hex file in the downloads.

Eric ZL2BMI



A version of the Cesar VFO



Circuit diagram – or get from downloads