

Changes on the mcHF UI board v 0.6

- added R33a and R34a option jumpers for connecting of alternative pins for LCD TP interface
- added R30a, R31a and R32a option jumpers for connecting the SPI interface on the LCD
- added R32b-R32u option jumpers to allow complete disconnection of the LCD parallel port, thus freeing GPIOs for optional features
- All above extra components are on Top PCB layer, right under the LCD, so from version 0.6 upwards the LCD needs to be mounted on 2mm pitch header!
- Restored connection of SWI debugging on P8 service connector (data, clock and reset)
- Service connector P8 has been upgraded to 5 pins, to include GND
- Added optional 5V on the USB- DFU connector J11, so that is the R43b (fuse or jumper), but please with care, don't cook your PC or mcHF CPU!
- Eeprom address pins connected to support 24LC1025
- C74a moved due to interfering with the speaker magnet hole on the RF board, this would require change in the shielding plate though

Changes on the mcHF RF board v 0.6

- added optional oven heater circuit to the LO. Simple analog design using only two transistors and NTC probe. To avoid using the CPU DAC and temperature feedback
- added two diode protection circuits on the CW keyer jack
- BPF filter moved further away from the LPF on the PCB
- Quad pre-amp removed and new TX pre-amp added as per the mod described on my blog
- Two 100pF caps added to the quad op amp to improve symmetry
- The TX mixer was relocated to reduce module interference
- The LO was relocated to be closer to RX and TX mixers and further away from the speaker so better thermal insulation could be achieved
- The LO is located in the corner of the RF PCB, with major cutouts to prevent temperature leaks via connecting copper
- The RX mixer now 'sits' behind large copper shield on the opposite side of the PCB, together with better digital signal routing away from it, hopefully to further reduce noise floor
- Much better overall signal routing due to the new layout