stub

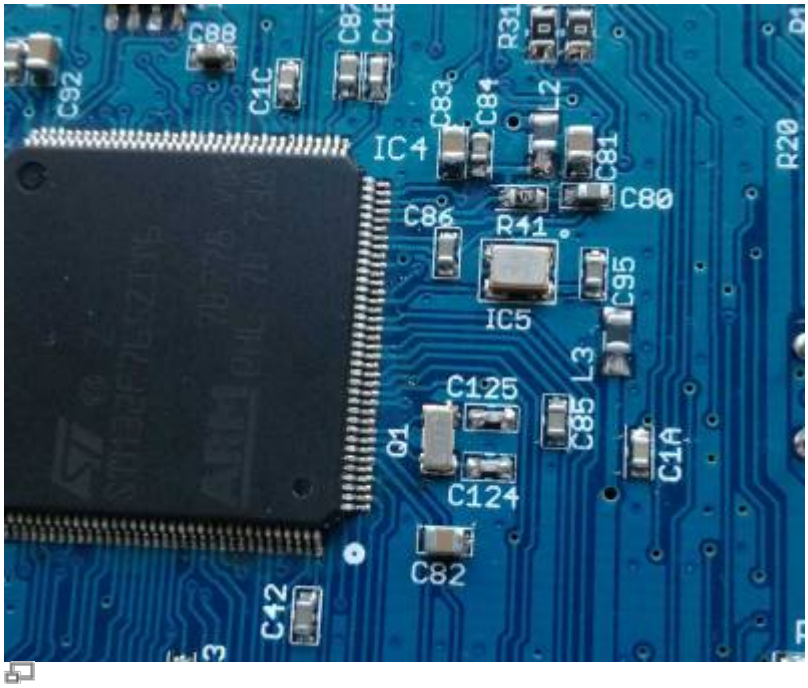
# UI Board Test & Fehlersuche

die MCU hat zwei (!) Pin 1 Markierungen

Note: Also ganz wichtig: Wie auf dem Bild zu sehen unbedingt den einen Anschlußpin vor dem Einbau kürzen/abschneiden.




Potential Shortcut (photo DF9EH)



Orientation of TXCO & MCU (photo DF9EH)

Note: Achtung: die MCU hat zwei (!) Pin 1 Markierungen

Im falle von fehlendem Audio out: just in case, please check the SW_12V connection. This is power supply connector for Audio power amplifier stage unlike the mcHF.

Typischer Stromverbrauch: mit Display 280mA und ohne Display sind es 190mA. Die 80mA waren ohne Display direkt nach der Inbetriebnahme.

Flashprobleme:

- Uhrenquarz und TCXO sind für das Flashen beide absolute Voraussetzung.
- Bitte genau prüfen ob der TCXO richtig herum eingelötet ist!
- wenn die 3V3 am C95 nicht mehr anliegen ist L3 wohl defekt

Helle LEDS: Mit den Bausatz-Vorwiderständen leuchten die LEDs sehr hell. DF9EH hat die Werte reduziert:

- R36 auf 22,6k (D1 grün)
- R37 auf 6,8k (D2 rot)
- R116 auf 6,8k (D3 blau)

## MCU wiederbeleben ("bricked MCU")

If something strange or unexpected happened to your board and none of the usual procedure are working to install the Bootloader or the Firmware, this might bring life back into your UI.

You will need : - an up to date STM32 ST-LINK utility ( http://www.st.com/en/development-tools/stm32-programmers.html?querycriteria=productId=LN2013 ) running on something (you choose) - a ST-LINKV2 probe (

http://www.st.com/content/st_com/en/products/development-tools/hardware-development-tools/development-tool-hardware-for-mcus/debug-hardware-for-mcus/debug-hardware-for-stm32-mcus/st-link-v2.html ), (you might use some other compatible hardware) - latest version of the Bootloader and/or UHSDR Firmware

The only tricky part is to connect the probe JTAP connector to the JP8 UI board, here are the needed wires :

JP8-3 (SWDIO) to JTAG-7 JP8-4 (SWCLK) to JTAG-9 JP8-5 (UI_3V3) to JTAG-1 JP8-6 (GND) to JTAG-20

The rest of the procedure is straight forward : connect, erase, flash and you are done.

One additional trick, when I first connected to the MCU, I got an error message « Readout Protection Mode » and was unable to erase the chip. I finally choosed to try to flash a first time and the utility did what was necessary to remove the protection mode. Cool, thank you STM !



ST-Link connection to UI board (Photo F4HTX)

A couple of us faced the same issue during beta testing the new UI board. But as you could see a cheap chinese ST Link adapter from Amazon or eBay saves your day

Here are the steps. Unfortunately in German but maybe it helps. https://www.amateurfunk-sulingen.de/forum/index.php?board=15;action=display;threadid=577;start=315 Register values from Andreas: https://www.amateurfunk-sulingen.de/forum/index.php?board=15;action=display;threadid=577;start=285

The URLs are from a (forgotten) I40 UI thread in the mcHF folder.

From:
https://www.amateurfunk-sulingen.de/wiki/ - **Afu - Wiki des DARC OV Sulingen I40**

Permanent link:
**https://www.amateurfunk-sulingen.de/wiki/doku.php?id=ovi40test:uiboardtest&rev=1516319944**

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