

EMBEDDED RTL-SDR PANADAPTER IN FT-991A

NOTES

- USB Hub Q1012 (USB2512BI) must be replaced with USB2514BI
- Use thermal pad to dissipate RTL-SDR heat
- Be careful on component positioning to avoid shorts

Revisions:

- A - Initial Release
- B - Added a AND port to inhibit signal to RTL when either SCPON or GPIO are down
- C - Removed a utterly unnecessary and badly-designed transistor
- D - Unified Sig Control in Panadapter (PAT) reusing OE2DOR board design
- E - Changed switch to RF switch and voltages to 3.3V
- F - New board layout, added 1nF caps to RF lines in switch
- G - Removed a forgotten DC blocking capacitor Added a choke in DC in lines.
- H - Better signal routing on the board Unified silk markings and footprints Flipped SCP/IF ports

Embedded RTL-SDR Panadapter in FT-991A

This project takes advantage of internal FT-991A USB hub to export seamlessly a inside-the-radio RTL-SDR dongle, exporting the IF data from the SCH board, using the PAT-70 board. No chassis drilling or external wires.

PY2RAF

Sheet: /

File: panadapter.sch

Title: FT-991A EMBEDDED RTL-SDR

Size: A4

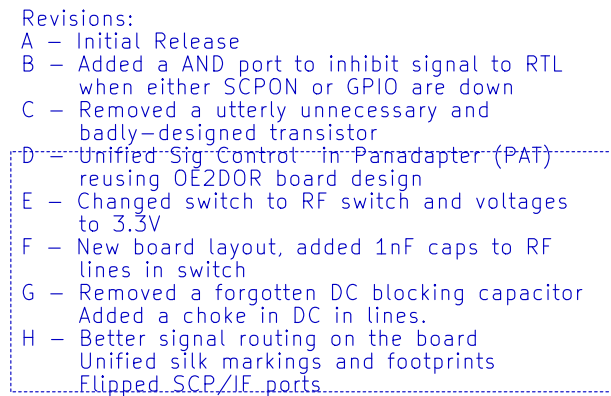
Date: 2019-03-27

Rev: g

KiCad E.D.A. kicad 4.0.6

Id: 1/1

- USB Hub Q1012 (USB2512BI) must be replaced with USB2514BI
- Use thermal pad to dissipate RTL-SDR heat
- Be careful on component positioning to avoid shorts



This project takes advantage of internal FT-991A USB hub to export seamlessly a inside-the-radio RTL-SDR dongle, exporting the IF data from the SCH board, using the PAT-70 board. No chassis drilling or external wires.

Id: 1/1