Notes for PSWS ClementineSDR - 07-15-2023

Includes progress with HF103-redux

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Recent activity

- Continued work on redraw/capture of the design elements of Oskar Stella's HF103 and BBRF103 radio designs in KiCad. The HF103 is an HF only version. The BBRF103 design supports VHF/UHF and is a more direct predecessor of the RF-666, RF-888, and RF-888 MK-II designs. All may be descendants of a project called booyaSDR. All use the Cypress CYFX3SDK or its component chips. Several different LTC ADC chips are used, All very similar.
- Introduced myself to Oskar Stella by email. Received his kind permission to ask questions (sparingly) about his designs.
- Created an initial private GitHub repo for the resulting KiCad project. Invited some initial interested parties as collaborators. It is early-daze for this, lots to learn about how to make a KiCad project hang together in GitHub.
- Though this schematic and all related documents will be open to all, I'm holding them 'private' until I'm sure that the repo works as intended.
- Received a booyaSDR kit for study. So have Dave Larsen and Mike Hauan. Seller indicates that he has run out of stock due to Cypress CYFX3SDK's being unavailable. This is true for US distributors, but the SDK's are available (often at a premium) from overseas suppliers.
- The individual SDK components seem to be in good supply.
- Received an LTC2208-16 board to supplement the LTC2208-14 board that I have. Unfortunately, the one that I have is a variant that supports input data at >140 MHz. I should have bought the version that supports 1 MHz > 70 MHz. Not sure that I want to buy another board for ~$ 250.00.

Plans for the next week:

- Work on requirements document (!!)
- Try to get to work with the Cypress SDK examples (!)
- Make sure everyone who needs access to the GitHub has it.
- Make especially sure that people who are interested are communicating about clocking issues are keeping everyone informed of their strategies.
- Try to solicit feedback concerning schematic design.