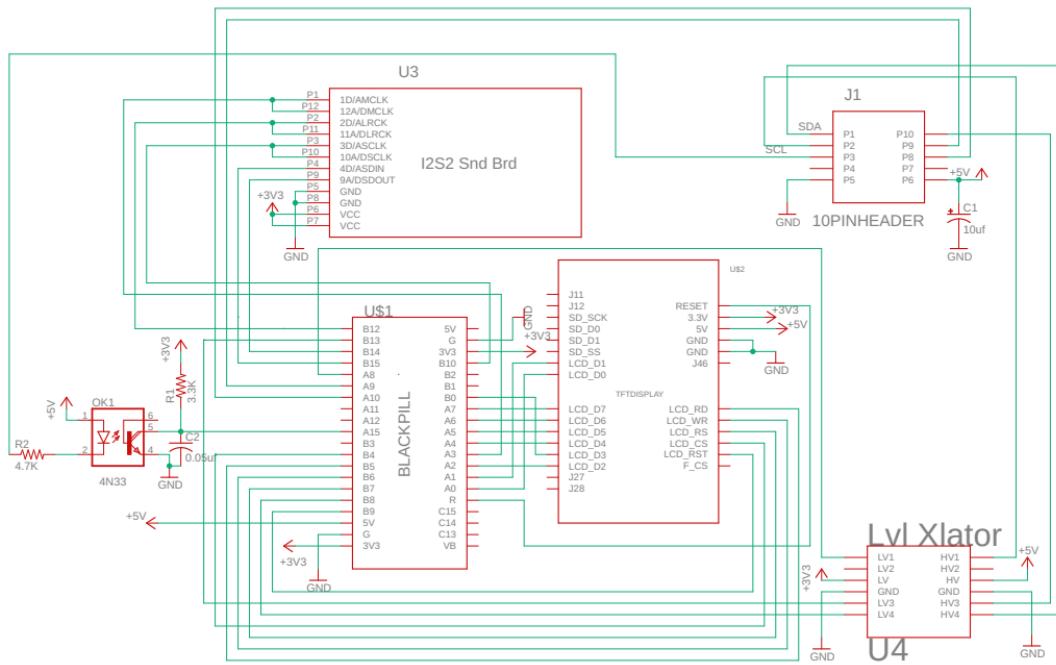
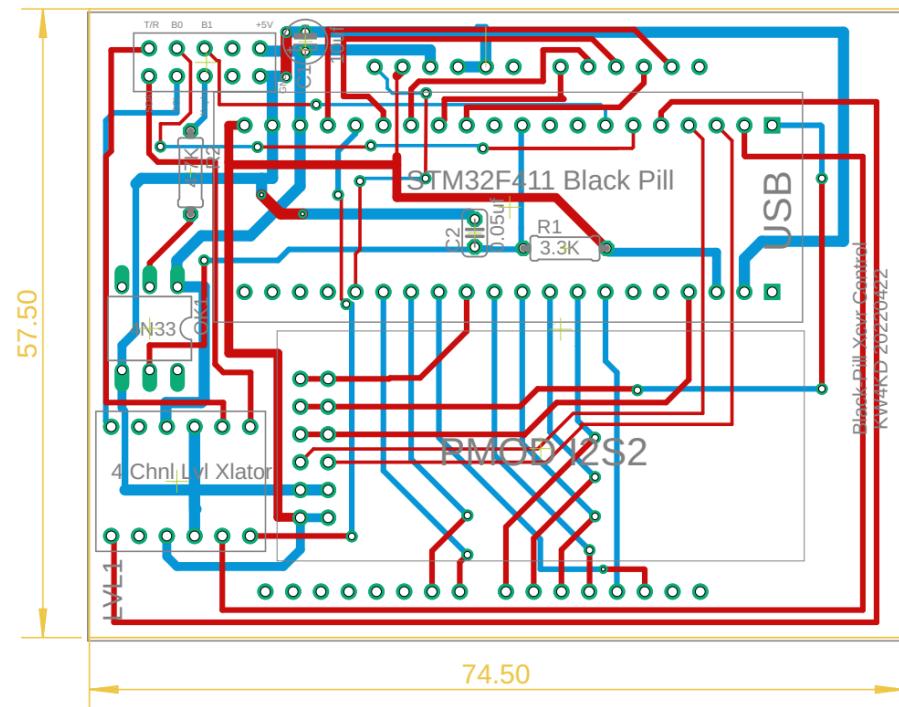


STM32F411(Black Pill) 4 Band CW Xcvr Schematic:



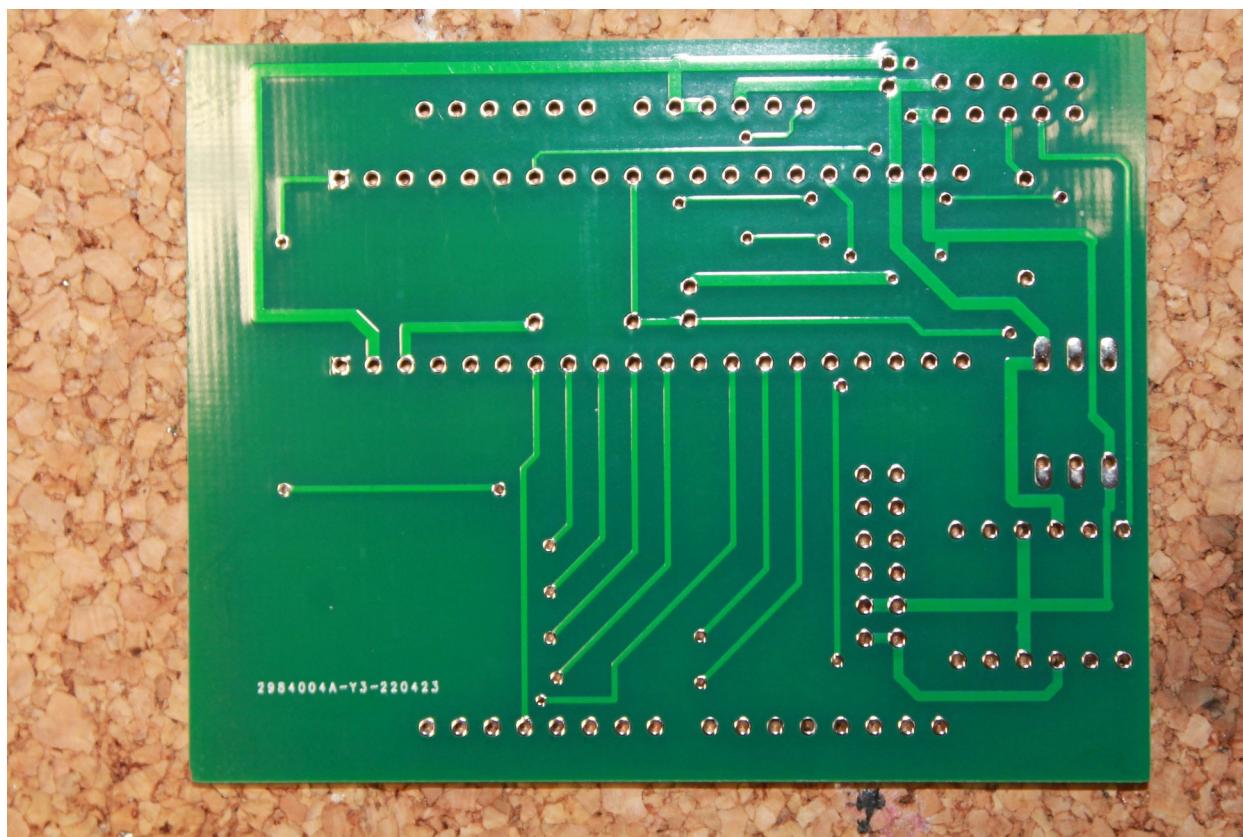
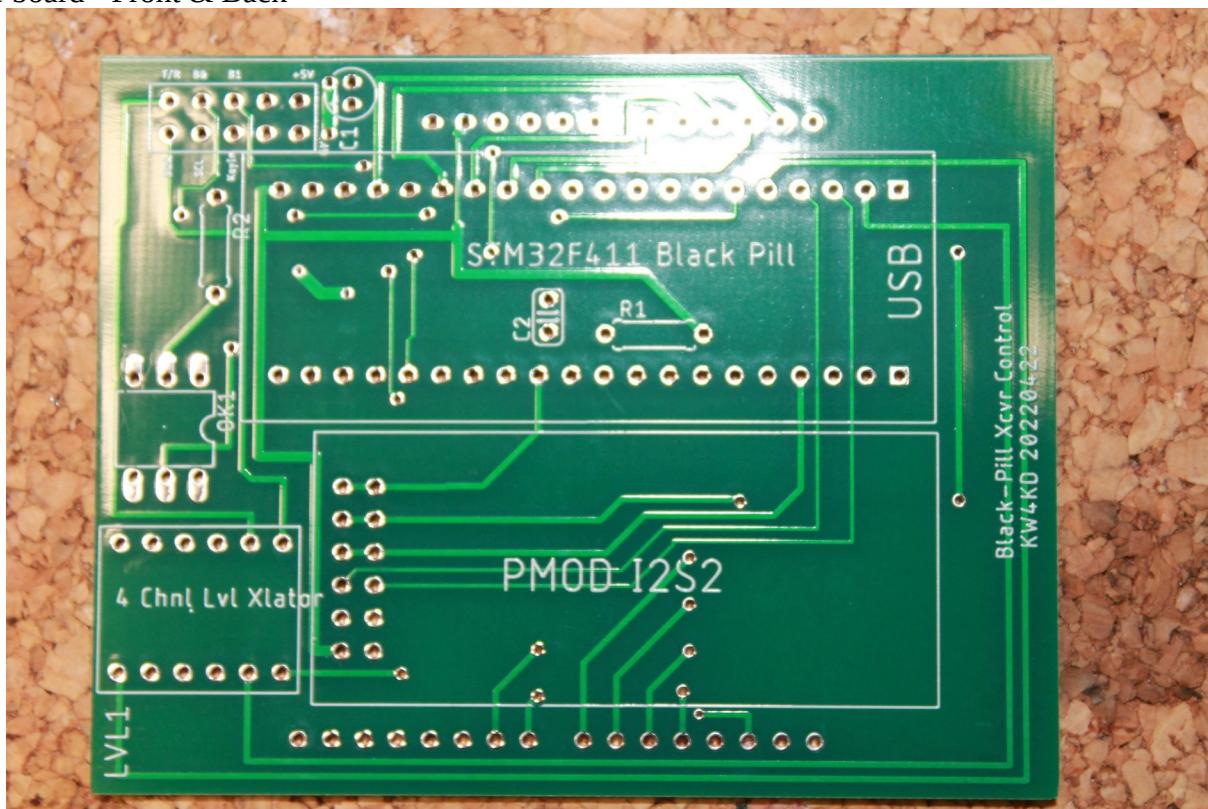
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AutoDesk Eagle Cad board layout:

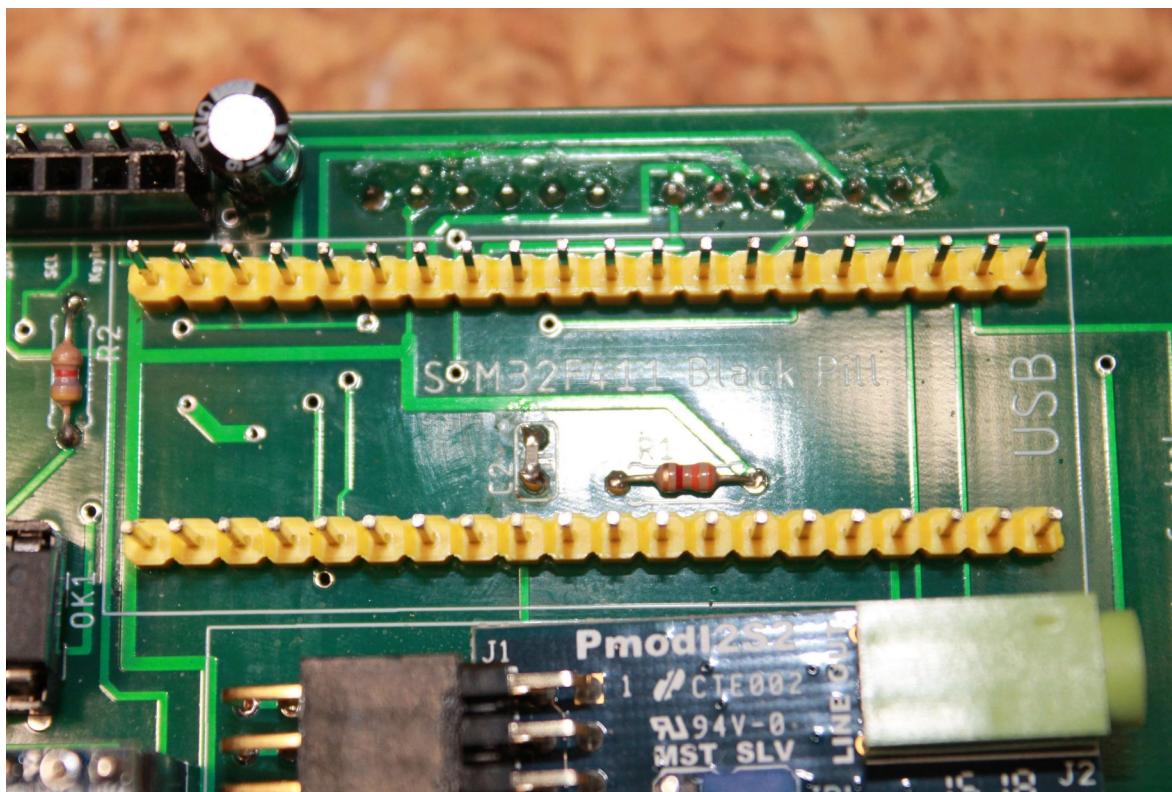
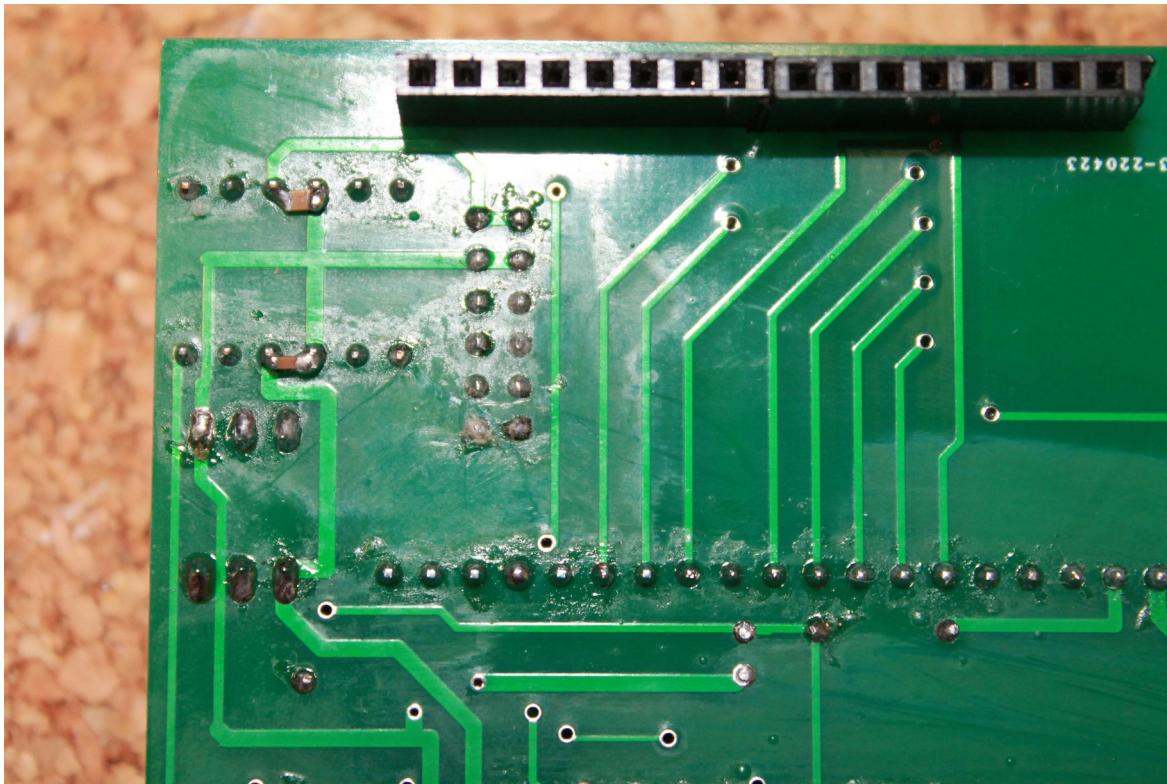


5/3/2022 8:57 AM f=3.17 C:\Users\Jim\Documents\eagle\BlackPillSDR\BlackPillSDR.brd

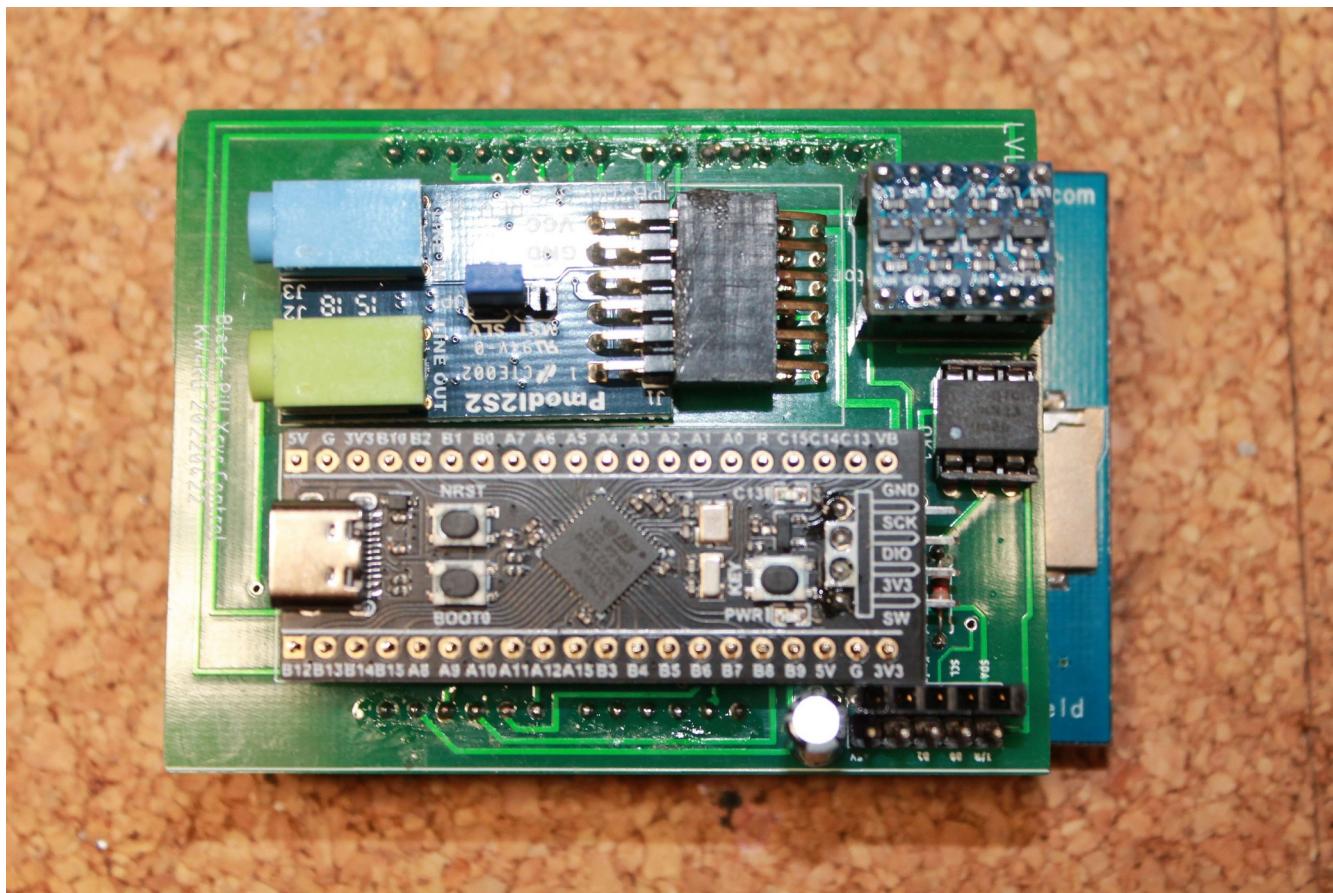
Bare board - Front & Back



Can SMD's be used. Yes & No. The board is not specifically designed for SMDs. But in a few places I've used 0805 style caps. Mostly as RFI bypass. See next two photos:

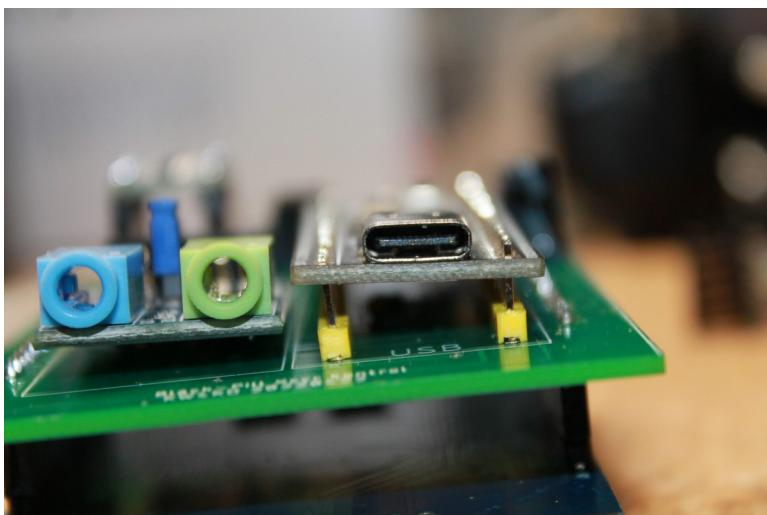


Overview of assembled Board:

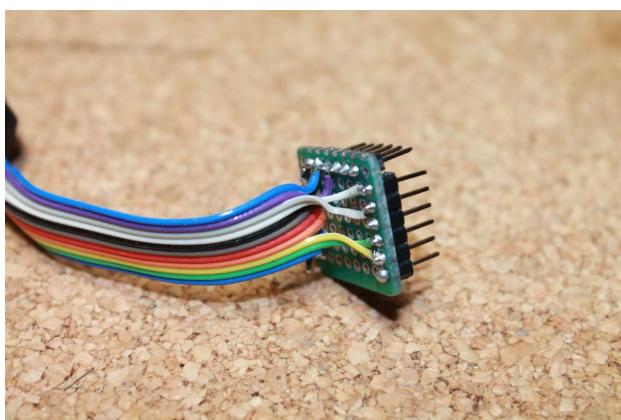
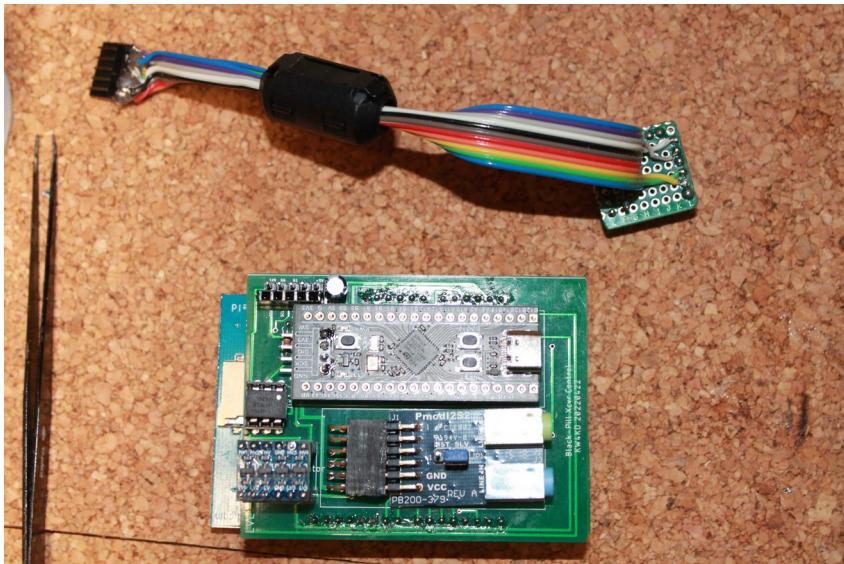


The board's hole spacing could be better. The worse place was in the Black Pill distance between the two header rows (was off by 0.75mm). Actually, that turned out NOT to be a bad thing.

Reason being, I like to install/test Black Pills without having to solder the 40 header pins. It allows me to swap boards without having to commit to pin/header placement, which could be different in a later application. Having the row distance a bit undersized gives good electrical connection to all 40 pins. See photo:



The Black Pill replaces the SS-micro on the Tayloe Mixer Board. To do that, I used a ten conductor ribbon cable connected to where the SS-micro would normally be. The next 3 photos detail this part of the project.



Finally, two photos of the unit in place, and working:

