

effect processor code + interface code in Onedrive

try the encoders first then do debouncing for buttons, lastly try debouncing for encoders

Outstanding items:

Effect Processor

2 memory chips (8 effects + way more effects)

- both external chips (not on FV-1)

need memory management between the two

the RGB LED has a common positive connection and have to pull down (high signal = go off)

Interface Controller

OLED is on I2C lines

the OLED regulator needs to be enabled

need to verify that the OLED needs the boost converter to be enabled

I/O - button signals with a RC filter to help with debouncing and buttons pulls down to low, no external pull-ups so we need pull-up resistors and in the code?

Encoders - have A and B signals, some debouncing hw stuff already there, all signals need internal pull-ups in order to not have them floating

Voltage Sense - cuts the voltage in half and sends to ESP, helps measure battery voltage, in code there is a simple method to calculate battery voltage and outputs at the beginning,

want to implement a battery voltage check (maybe avg over a period), and if it's at a low point, we disabled the OLED boost circuit (turns off screen) and put ESP into deepest sleep to make sure battery lasts (it's bad for the Li-ion battery to discharge like that)

better functions for buttons, better functions for encoder, manage the memory and communications with processor

names and details on effects need to be on the interface as well + last analog position

UI for display too

the programs on OneDrive should define the connections+pins