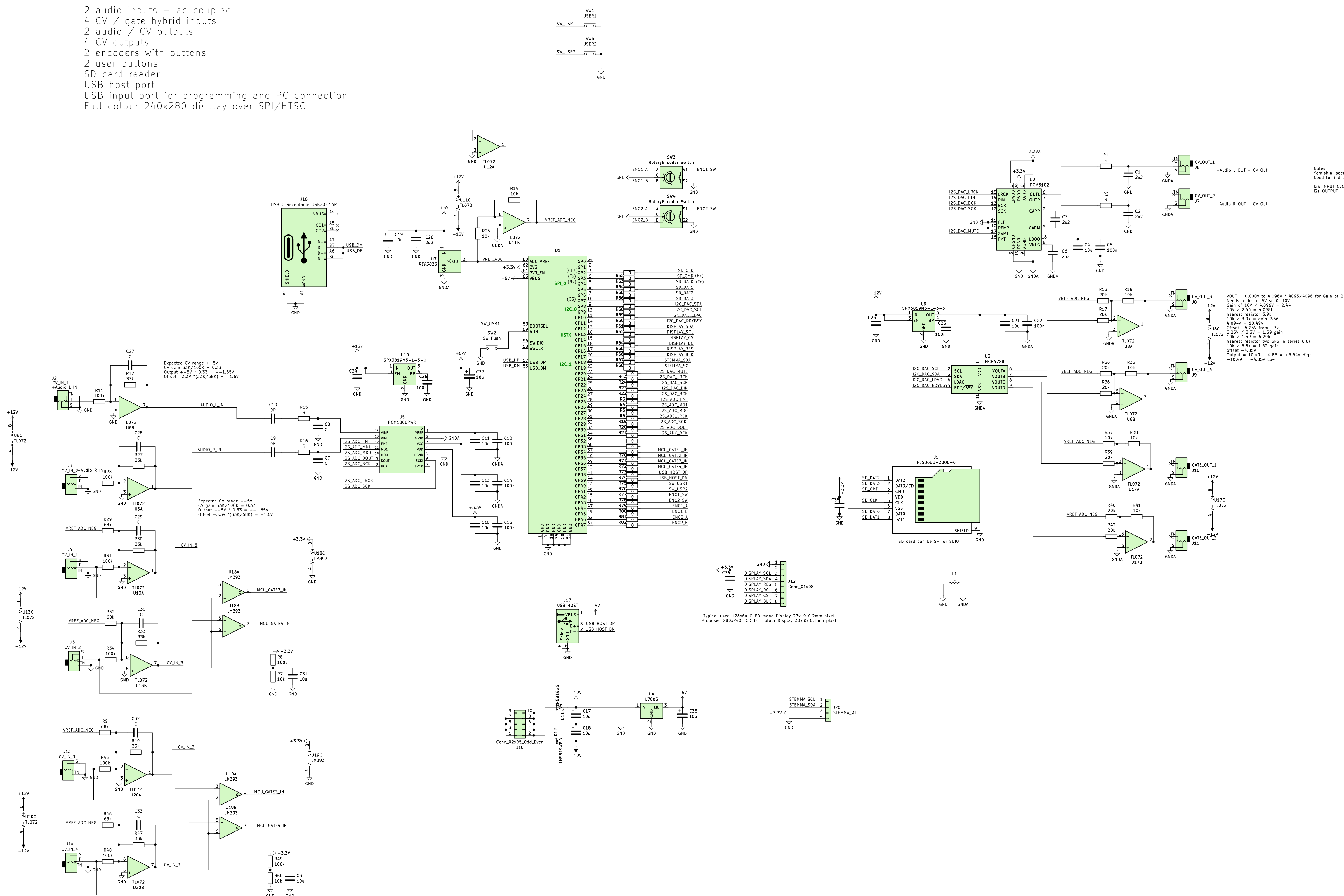


- 2 audio inputs – ac coupled
- 4 CV / gate hybrid inputs
- 2 audio / CV outputs
- 4 CV outputs
- 2 encoders with buttons
- 2 user buttons
- SD card reader
- USB host port
- USB input port for programming and PC connection
- Full colour 240x280 display over SPI/HTSC



Notes:  
Yamishini seems to be the only vertical micro SD card holder  
Need to find an I2S equivalent for audio input  
I2S INPUT CJC5340 or CJC1808  
I2S OUTPUT

VOUT = 0.000V to 4.096V \* 4095/4096 for Gain of 2  
Needs to be +5V so 0-10V  
Gain of 10V / 4.096V = 2.44  
10V / 2.44 = 4.098  
nearest resistor 3.9k  
10k / 3.9k = gain 2.56  
4.094V = 10.49V  
Offset -5.25V from -3V  
5.25V / 3.3V = 1.59 gain  
10k / 1.59 = 6.29k  
nearest resistor two 3k3 in series 6.6k  
10k / 6.6k = 1.52 gain  
offset -4.85V  
Output = 10.49 - 4.85 = +5.64V High  
-10.49 = -4.85V Low

Typical used 128x64 OLED mono Display 27x19 0.2mm pixel  
Proposed 280x240 LCD TFT colour Display 30x35 0.1mm pixel