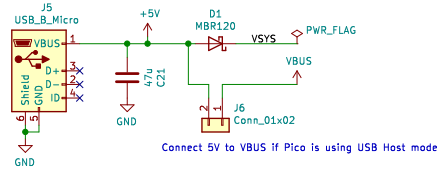
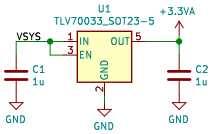
Power Options:
1) Connect J5 to 5V uUSB power supply. This provides power for this board & Pico, via diode D1 to VSYS.
2) Connect uUSB power supply to Pico directly. VSYS will then power this board.
N.B. If USB Host functionality is required on Pico, then use option 1, and also fit Jumper J6 to provide VBUS for Pico.

5V Power In

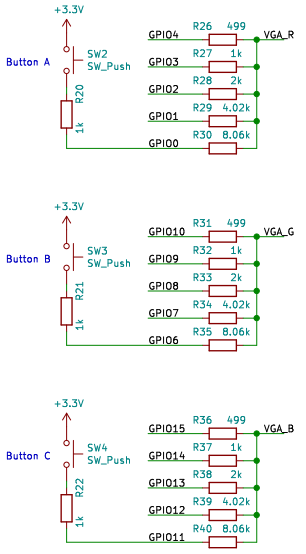


Connect 5V to VBUS if Pico is using USB Host mode

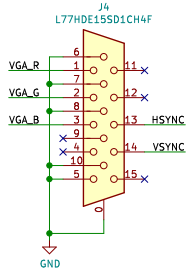
Audio Power



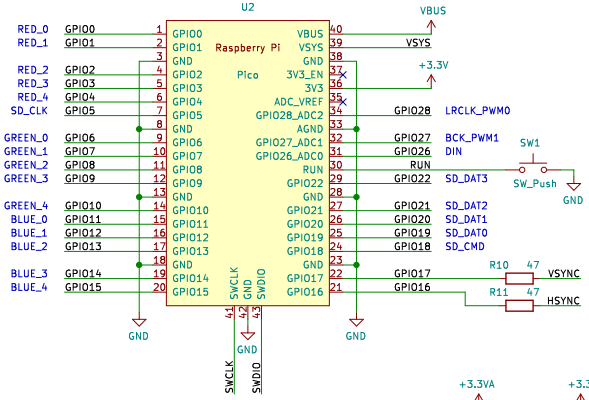
VGA 'DAC'



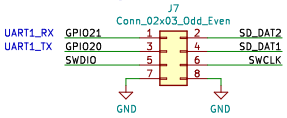
VGA



Pico

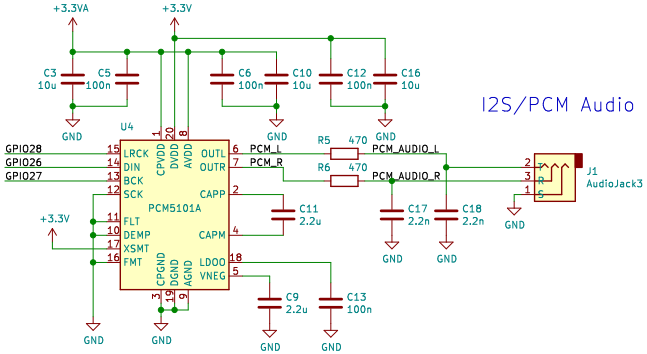


UART / 4-bit SD Selector & Debug

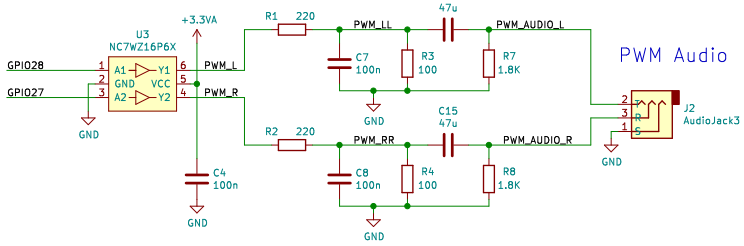


For 4-bit SD Card operation, place jumpers between 1-2 and 3-4.
To use as a UART, remove the jumpers and attach a suitable UART device.
Ensure TX is connected to RX and vice versa.

I2S/PCM Audio

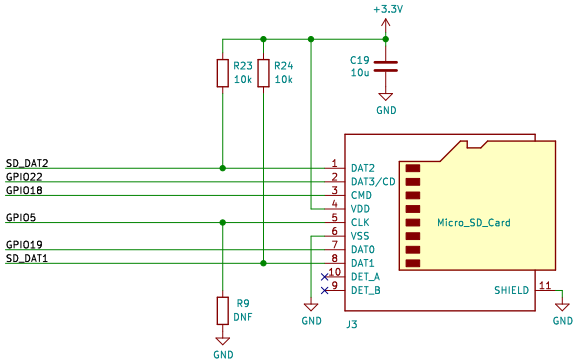


PWM Audio



Audio Options:
Either I2S/PCM audio or PWM audio may be used, but NOT both at the same time, as they share the same IOs.
If PWM is to be used, the Pico software must be built as such, and similarly with I2S/PCM.

Micro SD Card



H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

(c) Raspberry Pi 2020
Raspberry PI
Sheet: /
File: pico_vga_sd_aud.sch

Title: RPI-PVSA VGA, SD Card & Audio Demo Board for Pico

Size: A3	Date: 2020-09-04	Rev: REV2
KiCad E.D.A. kicad (5.1.6)-1		Id: 1/1