USBSID-Pico PCB revision v1.0 manual
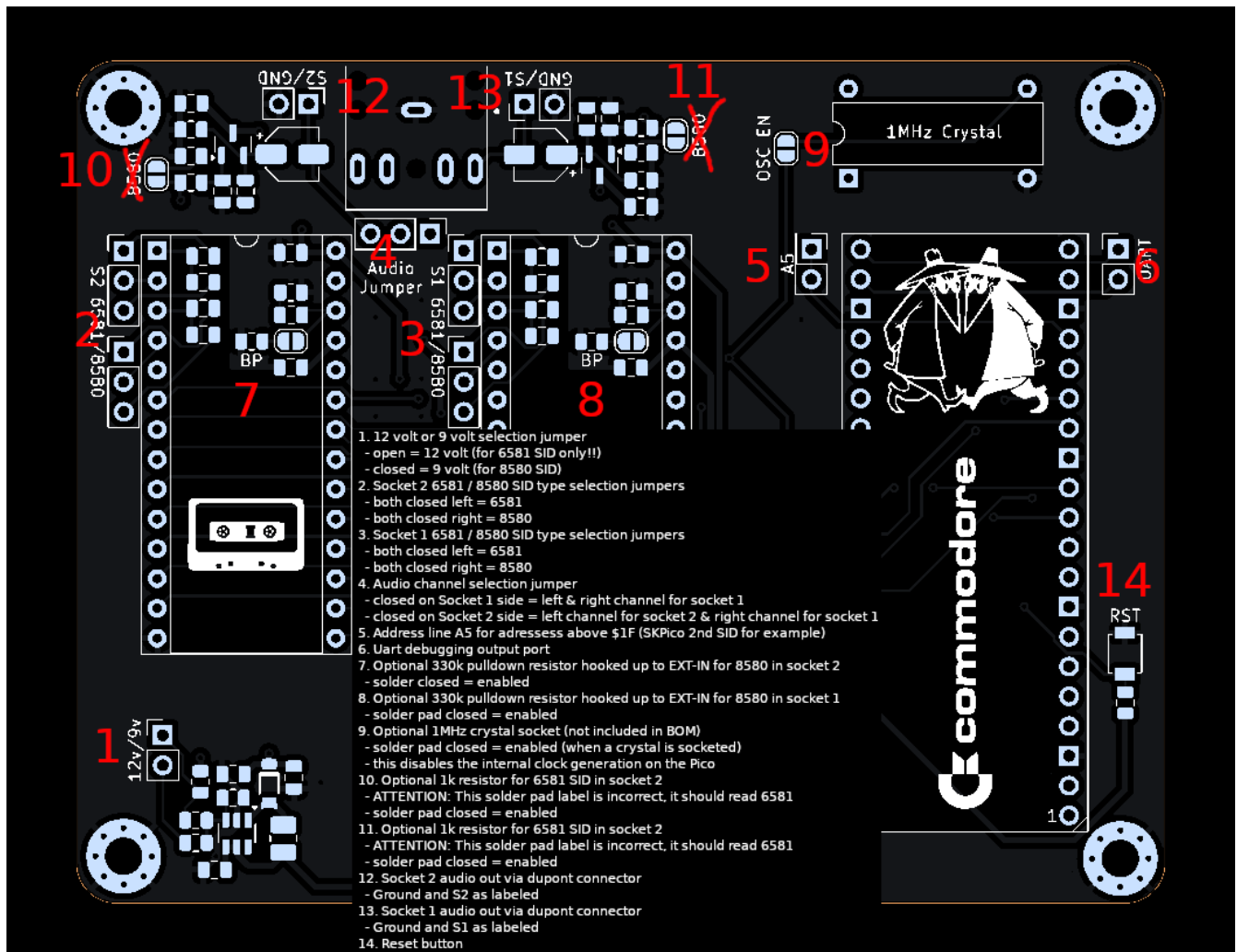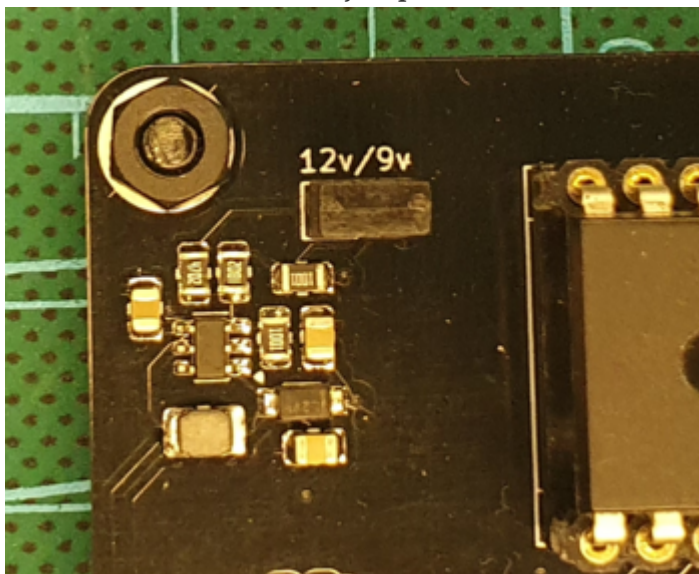

1. 12 volt or 9 volt selection jumper
   - open = 12 volt (for 6581 SID only!!)
   - closed = 9 volt (for 8580 SID)
2. Socket 2 6581 / 8580 SID type selection jumpers
   - both closed left = 6581
   - both closed right = 8580
3. Socket 1 6581 / 8580 SID type selection jumpers
   - both closed left = 6581
   - both closed right = 8580
4. Audio channel selection jumper
   - closed on Socket 1 side = left & right channel for socket 1
   - closed on Socket 2 side = left channel for socket 2 & right channel for socket 1
5. Address line A5 for adressess above $1F (SKPico 2nd SID for example)
6. Uart debugging output port
7. Optional 330k pulldown resistor hooked up to EXT-IN for 8580 in socket 2
   - solder closed = enabled
8. Optional 330k pulldown resistor hooked up to EXT-IN for 8580 in socket 1
   - solder pad closed = enabled
9. Optional 1MHz crystal socket (not included in BOM)
   - solder pad closed = enabled (when a crystal is socketed)
   - this disables the internal clock generation on the Pico
10. Optional 1k resistor for 6581 SID in socket 2
    - ATTENTION: This solder pad label is incorrect, it should read 6581
    - solder pad closed = enabled
11. Optional 1k resistor for 6581 SID in socket 2
    - ATTENTION: This solder pad label is incorrect, it should read 6581
    - solder pad closed = enabled
12. Socket 2 audio out via dupont connector
    - Ground and S2 as labeled
13. Socket 1 audio out via dupont connector
    - Ground and S1 as labeled
14. Reset button
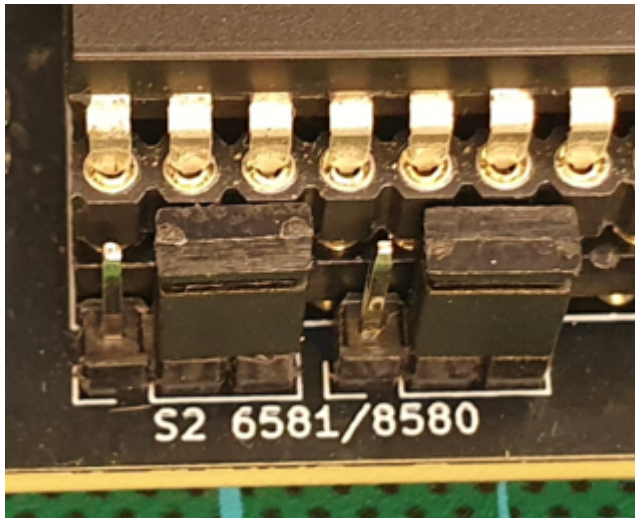
Figure 1. Explained

1. 12 volt or 9 volt selection jumper

   - open = for 6581 SID only!! (12 volts)

- closed = for 8580 SID (9 volts)

2. Socket 2 6581 / 8580 SID type selection jumpers

- both closed left = 6581
- both closed right = 8580

3. Socket 1 6581 / 8580 SID type selection jumpers

- both closed left = 6581
- both closed right = 8580

4. Audio channel selection jumper

- closed on Socket 1 side = left & right channel for socket 1
- closed on Socket 2 side = left channel for socket 2 & right channel for socket 1

5. Address line A5 for adressess above $1F (SKPico 2nd SID for example)
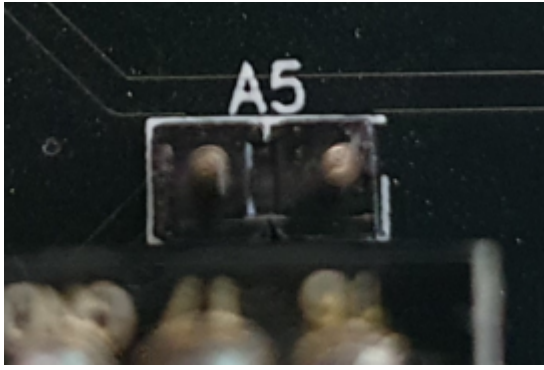
   - both pins are routed to the same GPIO for using adresses higher then $20

6. Uart debugging output port
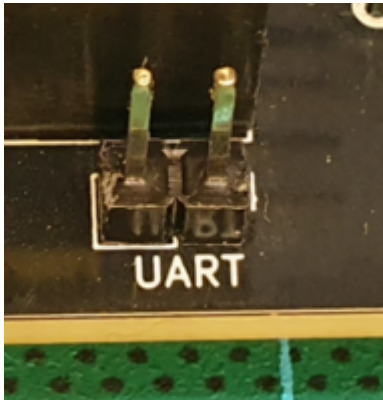
   - TX on the right
   - RX on the left

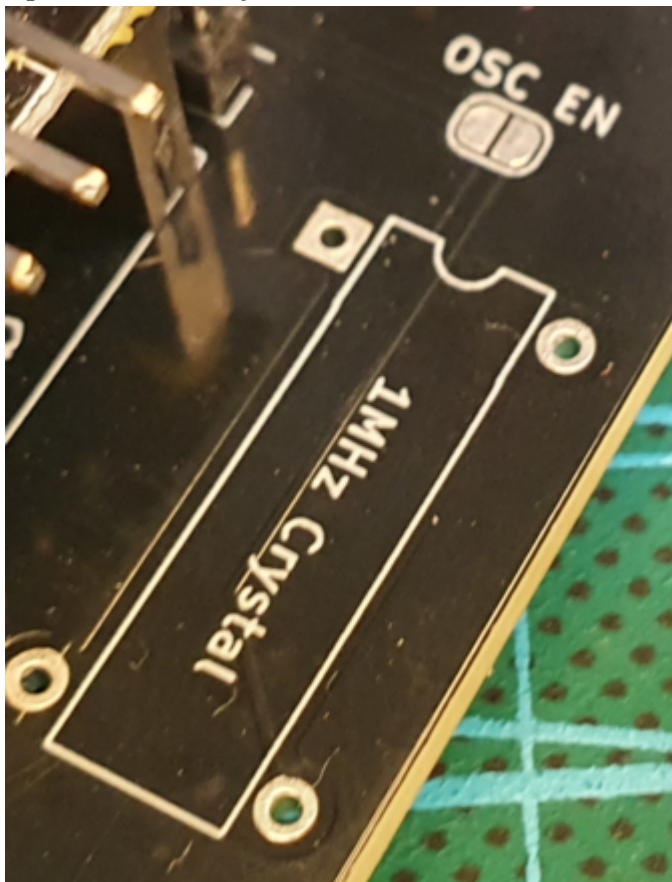7. Optional 330k pulldown resistor hooked up to EXT-IN for 8580 filter bypass in socket 2
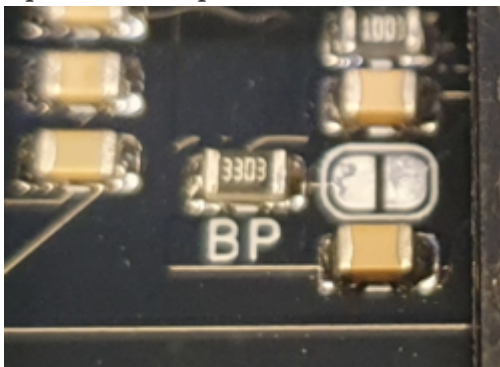
   - solder closed = enabled

8. Optional 330k pulldown resistor hooked up to EXT-IN for 8580 filter bypass in socket 1

- solder pad closed = enabled

9. Optional 1MHz crystal socket (not included in BOM)

- solder pad closed = enabled (when a crystal is socketed)
- this disables the internal clock generation on the Pico

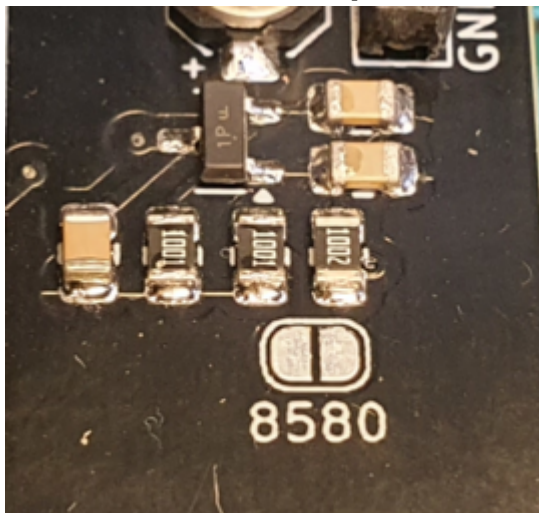10. Optional 1k resistor for 6581 SID in socket 2

- **ATTENTION!**: *This solder pad label is incorrect, it should read 6581!*
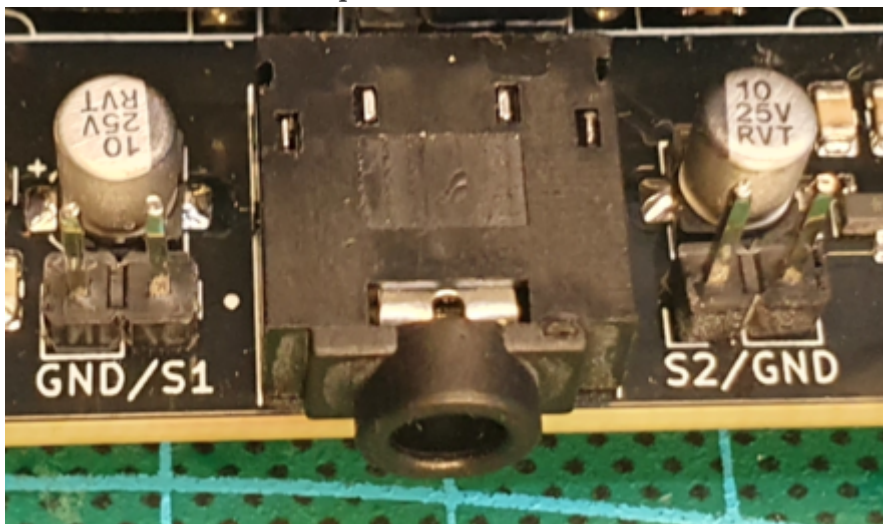
- solder pad closed = enabled

11. Optional 1k resistor for 6581 SID in socket 2

    - **ATTENTION!**: *This solder pad label is incorrect, it should read 6581!*
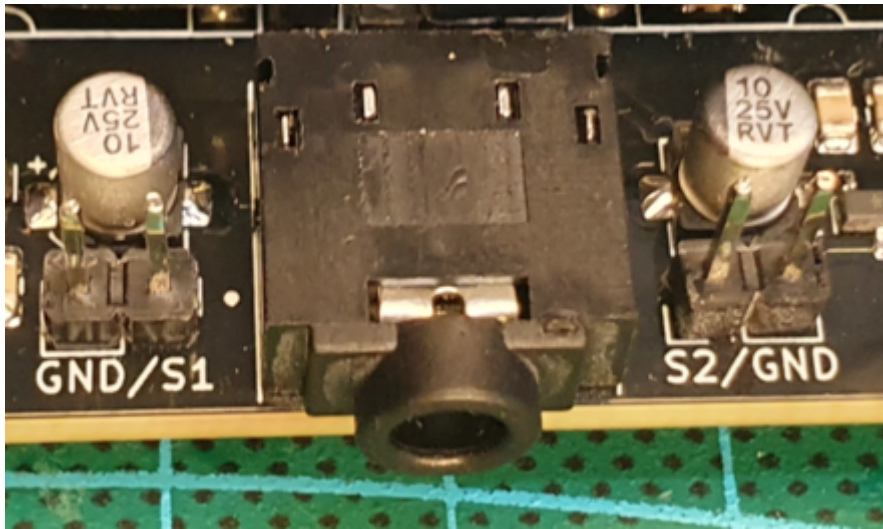

    - solder pad closed = enabled

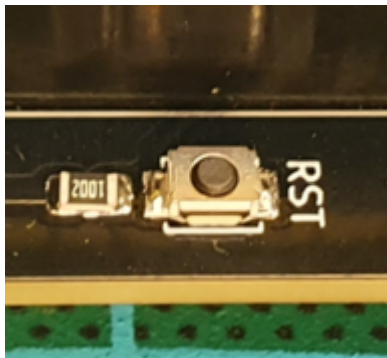12. Socket 2 audio out via dupont connector

    - Ground and S2 as labeled

13. Socket 1 audio out via dupont connector

- Ground and S1 as labeled

14. Reset button

Author: LouD - generated on 2025-05-27 08:57:07 +0200