

ProtoConn Prototype Board

By Rodrigo Feliciano

<https://www.github.com/pakequis>

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Misc.

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Notes:

1. The header connectors have a pin spacing of 100 mils (2.54 mm) unless otherwise specified. The header connectors can be either male or female, depending on the application.

2. Resistor symbols marked as 0603 denote only the component size. They may represent resistors, jumpers, capacitors, inductors, or be left unmounted, depending on the requirement.

Main Page

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Sheet: /

File: ProtoConn.kicad_sch

Title: ProtoConn Schematics

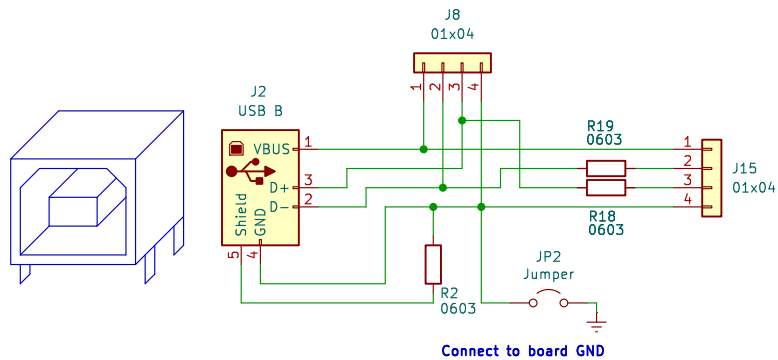
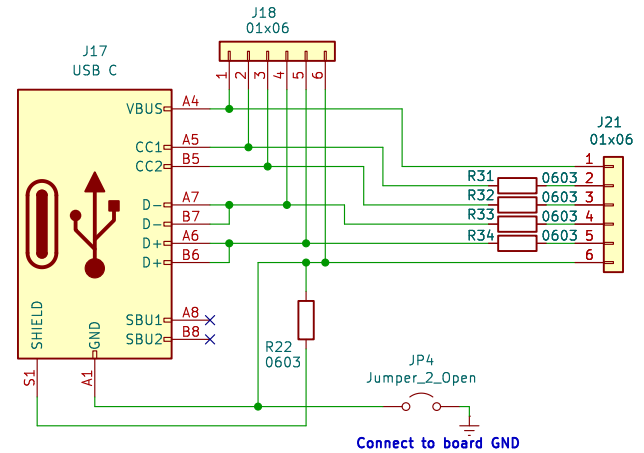
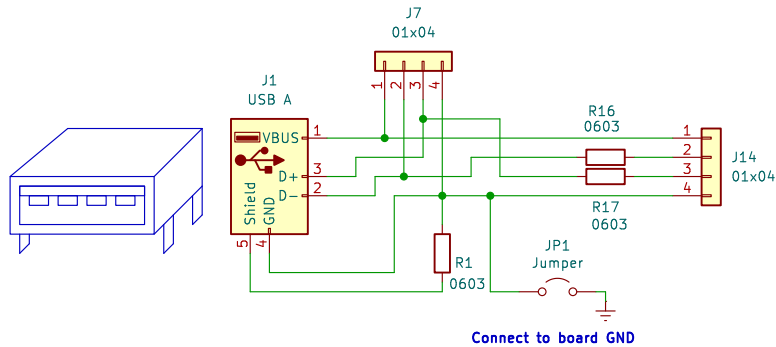
Size: A4

Date: 2024-12-01

Rev: 1

KiCad E.D.A. 8.0.6

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Notes:

1. This circuit is not recommended for high communication rates; it is more suited for power supply circuits.

USB

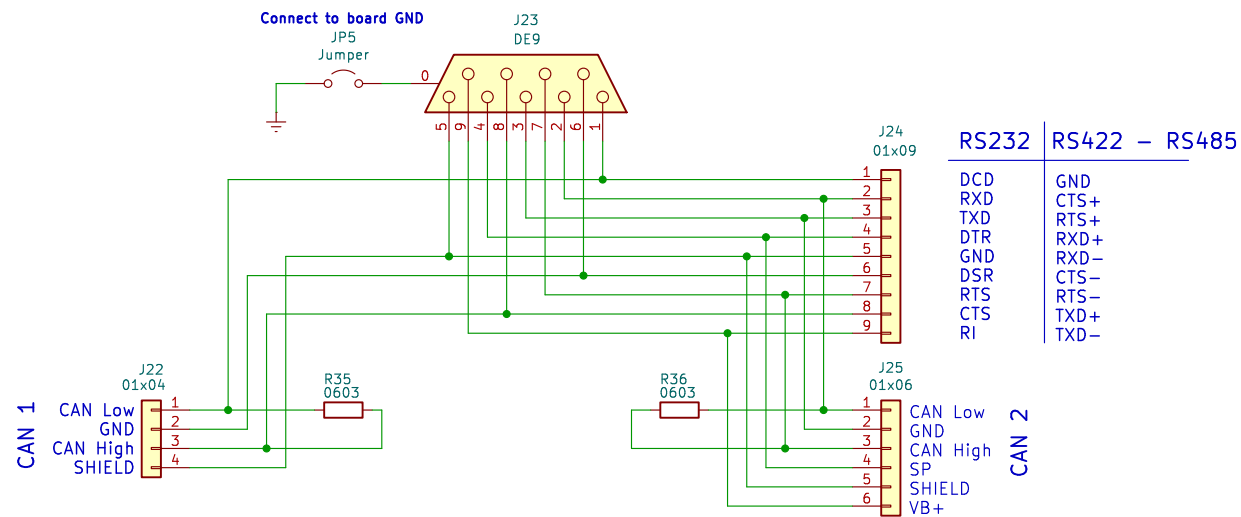
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Sheet: /USB/
File: USB.kicad_sch

Title: ProtoConn Schematics

Size: A4 Date: 2024-12-01
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Notes:

1. The resistors are for CAN termination or can be left unmounted, depending on the application.

2. The DE9 connector will be male or female based on the application requirements.

3. The markings are for the most common types of communication interfaces and may vary for other applications.

DE-9 Serial

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Sheet: /DE-9 Serial/

File: DE-9_Serial.kicad_sch

Title: ProtoConn Schematics

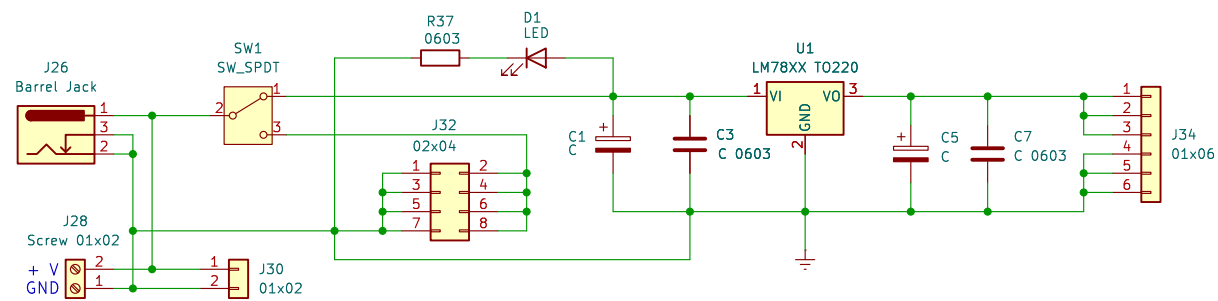
Size: A4

Date: 2024-12-01

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Notes:

1. Barrel Jack connected for center positive power supply.

POWER

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Sheet: /Power/

File: Power.kicad_sch

Title: ProtoConn Schematics

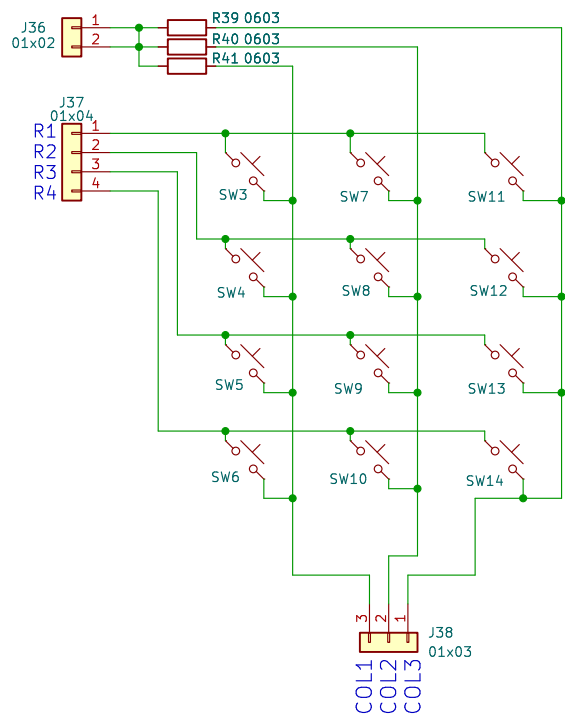
Size: A4

Date: 2024-12-01

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Notes:

1. The resistors are for pull-up or pull-down purposes as needed.

Keypad

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Sheet: /Keypad/

File: Keypad.kicad_sch

Title: ProtoConn Schematics

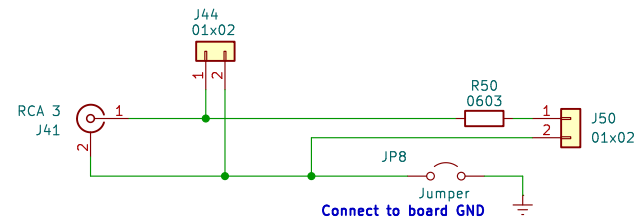
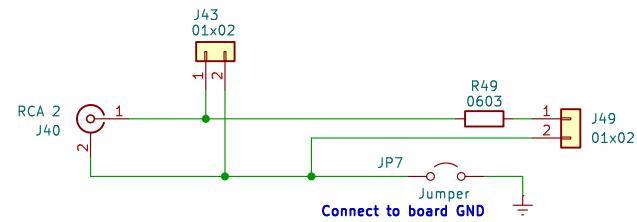
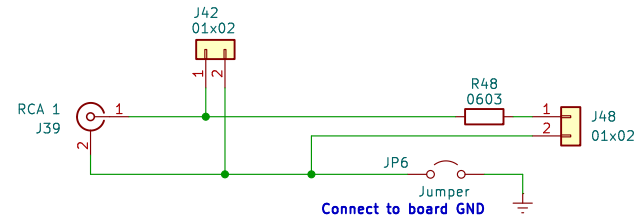
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Date: 2024-12-01

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Notes:

1. The circuits for the RCA connectors are intended for audio and may not be the best choice for video applications.

RCA

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Sheet: /RCA/

File: RCA.kicad_sch

Title: ProtoConn Schematics

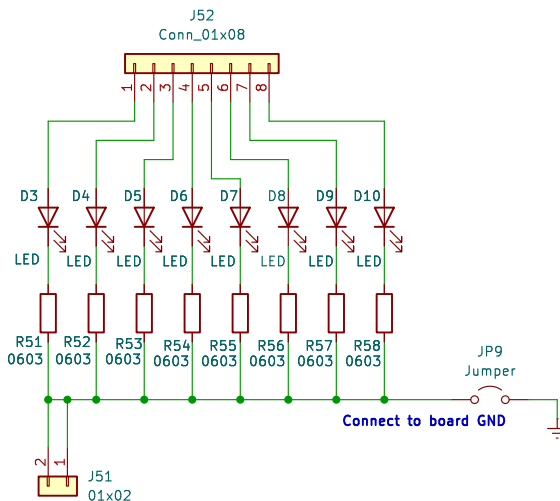
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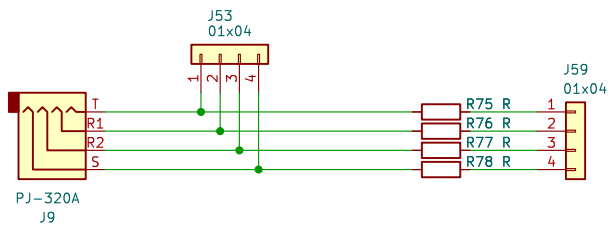
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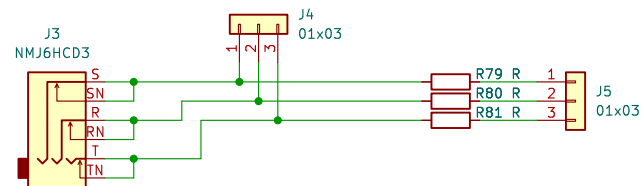
Notes:

1. The LEDs are connected as common cathode. To switch to common anode, the LEDs need to be reversed.

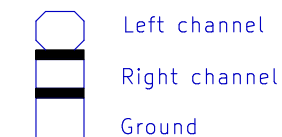
LED		
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Sheet: /LED/ File: LED.kicad_sch		
Title: ProtoConn Schematics		
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Jack 1/4"



Notes: Typical P2 3.5 mm connector pinouts



Headset 1	Headset 2	Raspberry Pi
Left channel	Left channel	Left channel
Right channel	Right channel	Right channel
Microphone	Ground	Ground
Ground	Microphone	Video

P2 Audio Jack

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Sheet: /P2 Audio Jack/
File: P2_Audio_Jack.kicad_sch

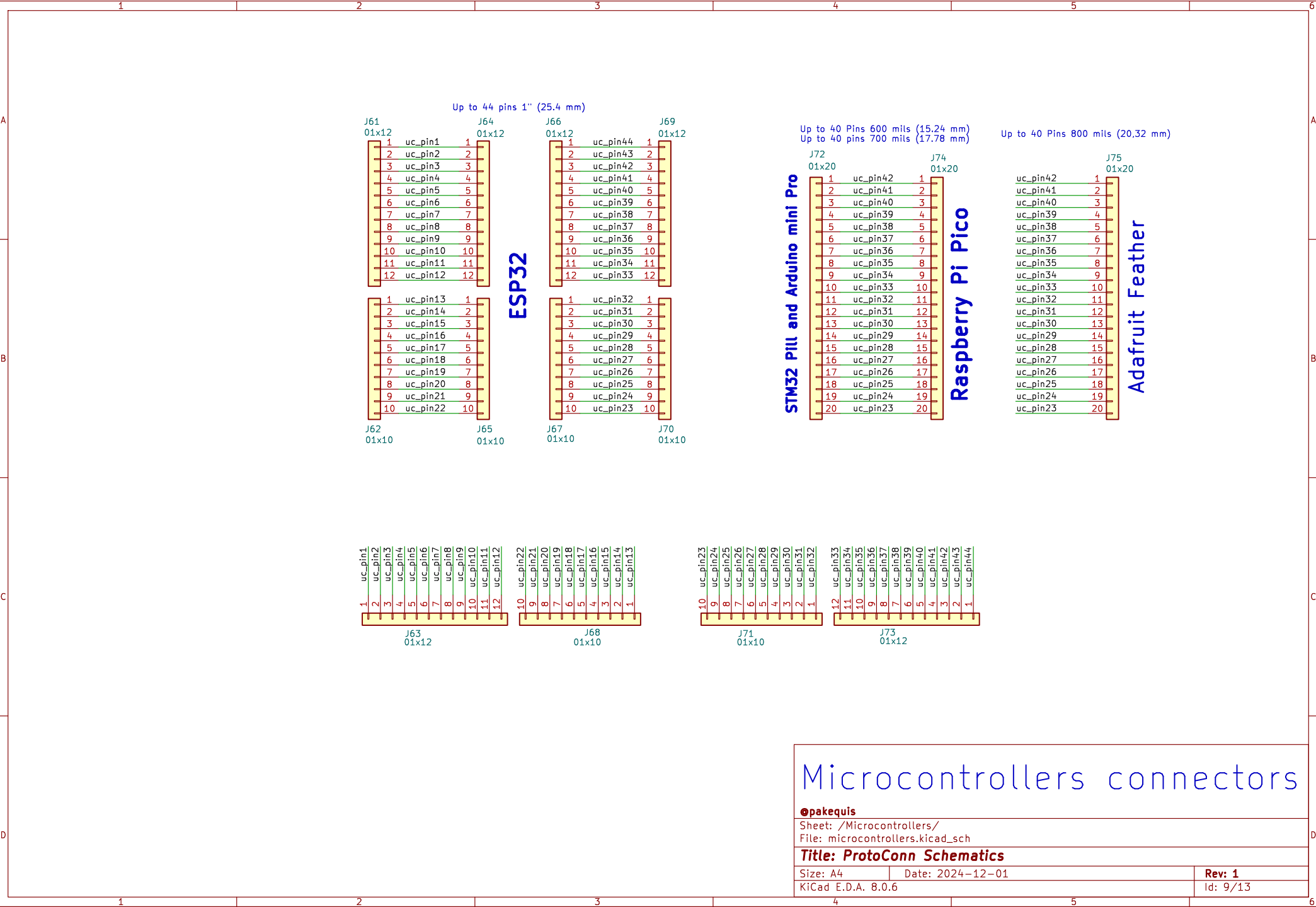
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Size: A4 Date: 2024-12-01

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Microcontrollers connectors

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Sheet: /Microcontrollers/
File: microcontrollers.kicad_sch

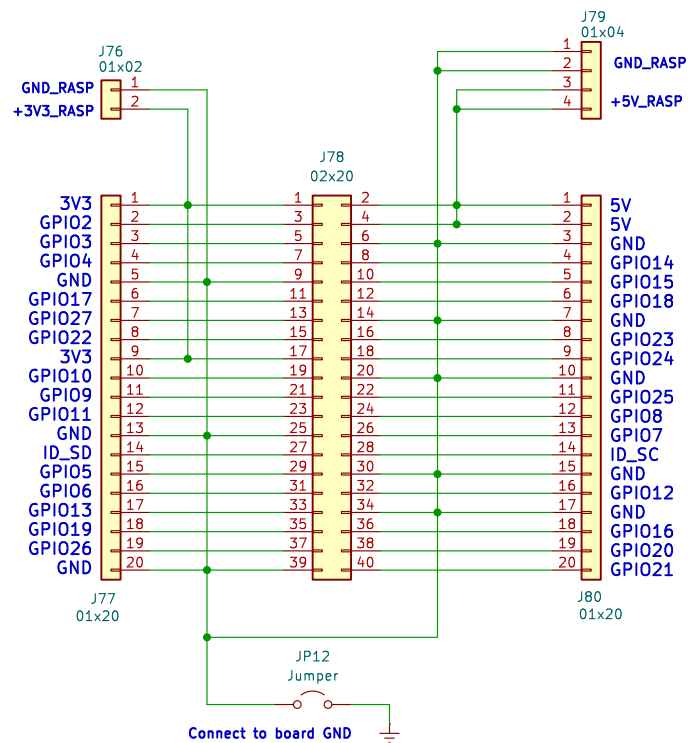
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Size: A4 Date: 2024-12-01

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Rev: 1

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Raspberry Pi connector

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Sheet: /Raspberry Pi connector/
File: Raspberry_Pi_connector.kicad_sch

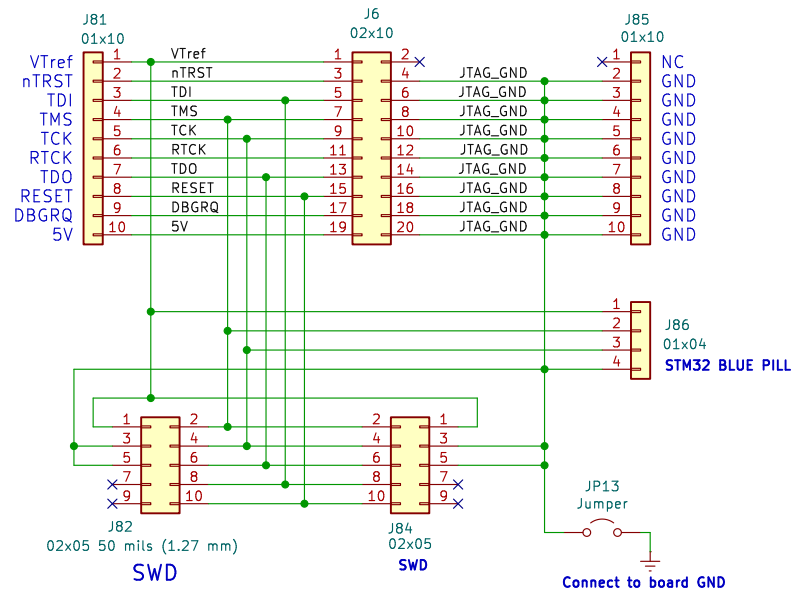
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JTAG

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File: JTAG.kicad_sch

Title: ProtoConn Schematics

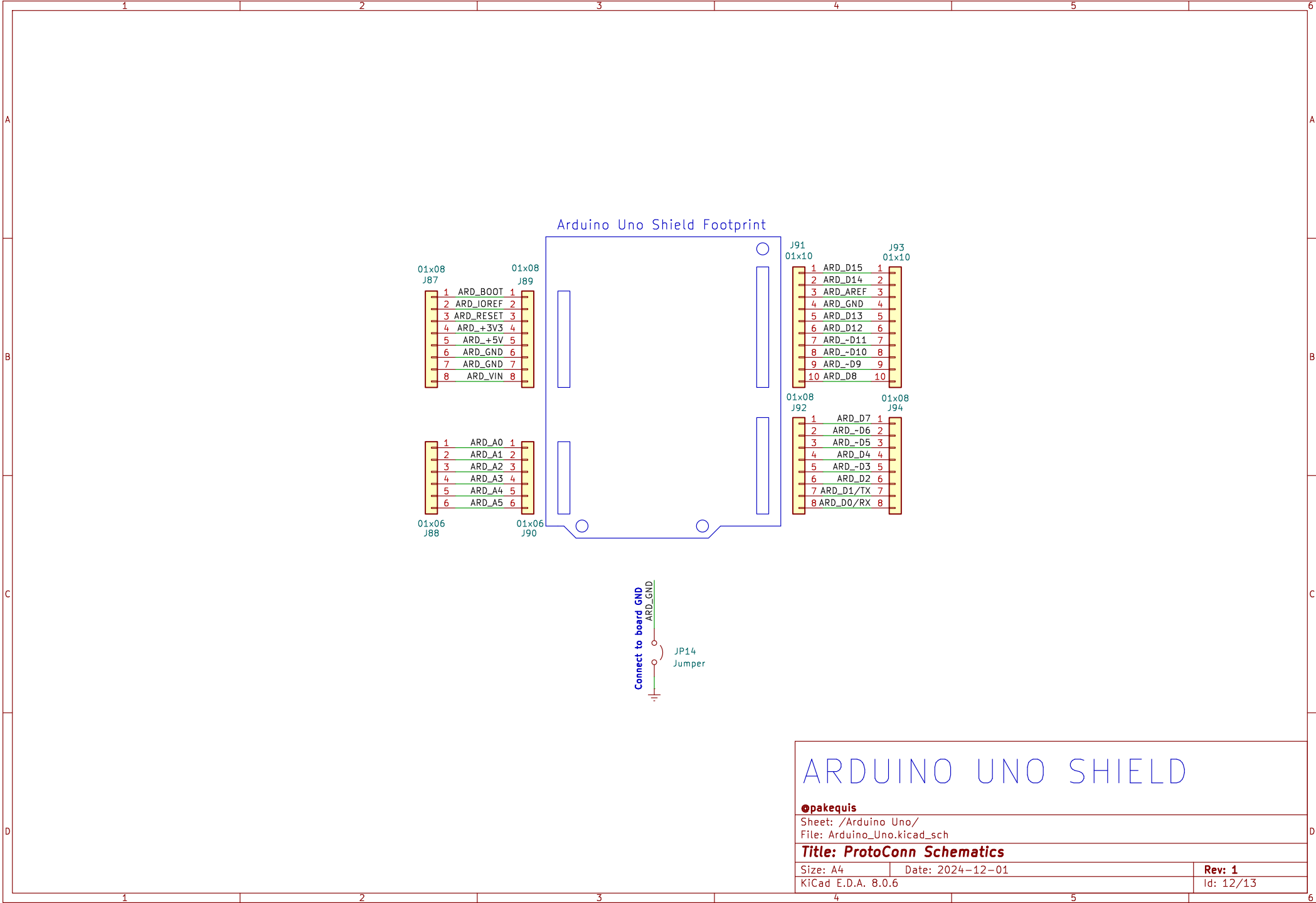
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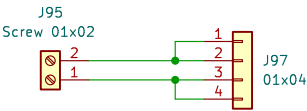
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Screw Block



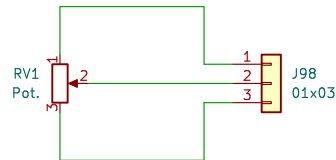
6,500 mils (16.51 cm)

Prototype Area

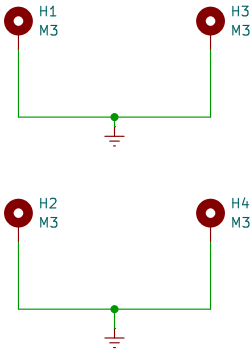
Perfoboard with 100 mils (2.54 mm) space.
or
Space for 1 Breadboard of 830 points

3,000 mils (76.2 cm)

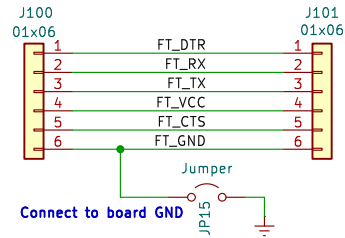
Potentiometer



Holes for M3 screws



FT232 USB-SERIAL ADAPTER



Misc.

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Title: ProtoConn Schematics

Size: A4

Date: 2024-12-01

Rev: 1

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