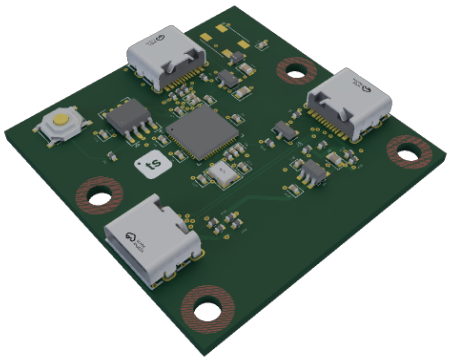
USB-C Power Resetter (original)

1.1 Description

A three-port USB power switch that can restart a downstream device on a timer.



Assembly view

1.2 Device specifications

Parameter	Specification
Ports	Three USB-C ports: control, passthrough input and switched output
Function	Switch downstream power on or off, or run a timed power cycle
Host interface	USB serial, 115200 baud
Board revision	Original JLCPCB panel
PCB dimensions	42 × 42 mm
Mounting holes	4 holes for M3 screws; 35 × 21 mm center spacing

1.3 Using the board

Connect the control port to the computer, the passthrough input to the upstream supply, and the target to the output. Choose **Add device → USB resetter**. Send `status` to read the input and output voltages, or `cycle 1` to interrupt downstream power for one second. Leave access to all three connectors.

Device guide

2 Protocol reference

USB serial · 115200 baud · DTR on. Send one ASCII command per line, ending in LF (`\n`).

Command	Purpose	Reply
`id`	Identify the device and firmware.	`DEVICE tscircuit resetter 1.0.0`
`help`	List supported commands.	One line of command syntax.
`?`	Alias for `help`.	Same command list.
`status`	Read output state and measured input/output voltages.	Status line shown below.
`on`	Enable output power and cancel a pending cycle.	Status line with `out=on`.
`off`	Cut output power and cancel a pending cycle.	Status line with `out=off`.
`cycle`	Cut power for the default 1 second, then restore it.	`OK cycling`
`cycle 0.5`	Cut power for the given number of seconds (0.01–60).	`OK cycling`
`reset`	Alias for `cycle`, with the same optional duration.	`OK cycling`
`led on`	Turn the indicator on.	`OK led=on`
`led off`	Turn the indicator off.	`OK led=off`
`led auto`	Show power state on the indicator.	`OK led=auto`

Status reply

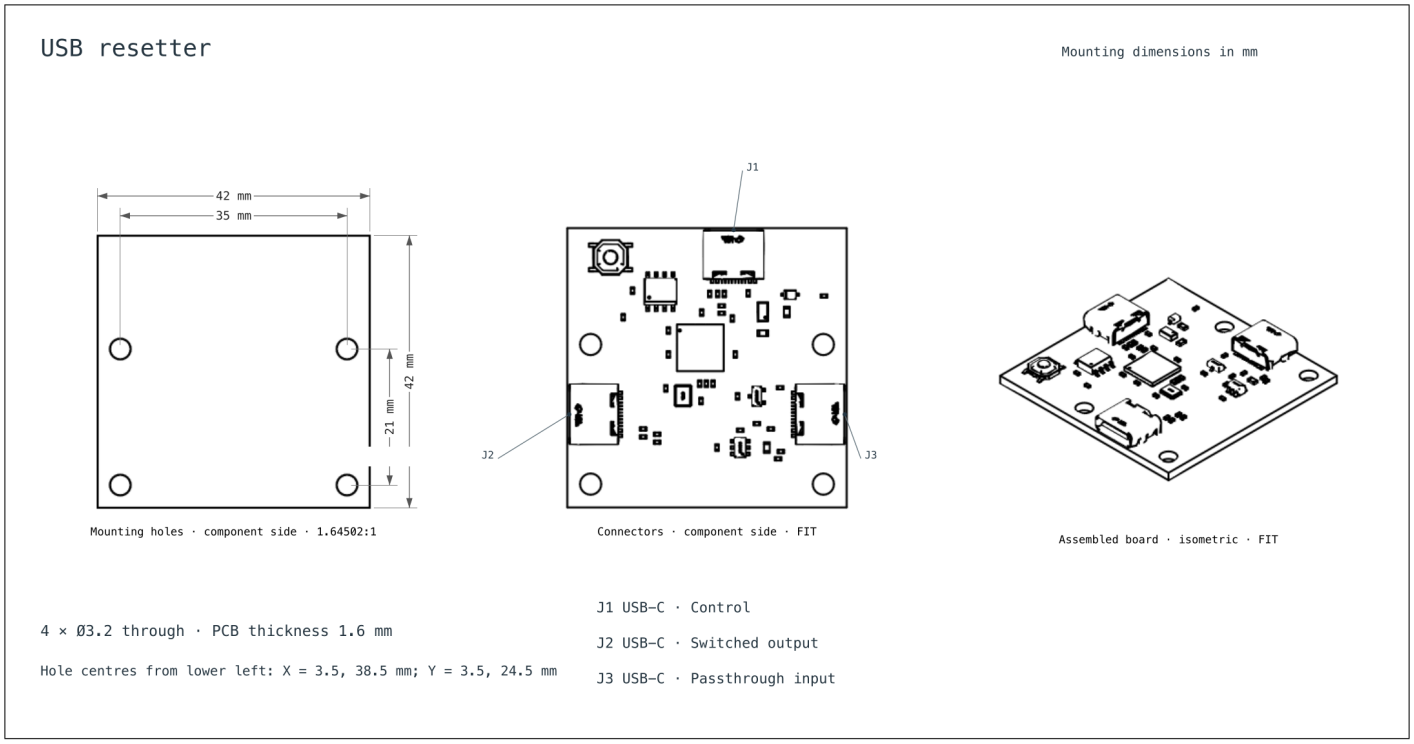
```
OK out=on vin=5.001 vout=4.992
```

`out` is the commanded switch state. `vin` and `vout` are measured in volts. The board starts with output enabled and times each power cycle locally.

Protocol implementation

3 Mechanical information

3.1 Assembly and mounting



Component-side plan and isometric assembly. Dimensions in millimeters.

3.2 Installation dimensions

The PCB measures **42 × 42 mm**, with **4 × Ø3.2 mm** clearance holes for M3 screws. The centre-to-centre spacing is **35 × 21 mm**. Orient the component side with the **J1 USB-C port at the top**. Measure right and up from the **lower-left corner of the PCB** in the component-side view. The hole centres are at X = 3.5, 38.5 mm and Y = 3.5, 24.5 mm.

Modeled component height: approximately 3.3 mm above the component-side PCB surface.

3.3 Design resources

Device guide · **Original mounting drawing** · **Drawing TSX** · **PCB source**