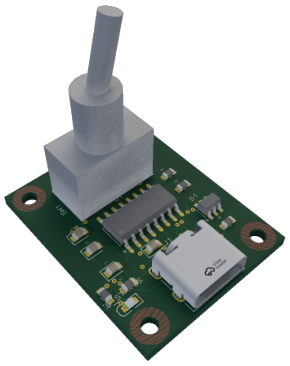
USB-C Toggle Switch

1.1 Description

A maintained two-position lever switch for controls that should stay on or off when you let go.



Assembly view

1.2 Device specifications

Parameter	Specification
Switch	Maintained, two-position lever
Host interface	Web Serial contact input (CTS), 9600 baud
Lever clearance	Approximately 26.5 mm above PCB in the modeled position. Allow room for travel.
PCB dimensions	24 × 30 mm
Mounting holes	4 × Ø2.2 mm for M2 screws; 19 × 25 mm center spacing

1.3 Using the board

Choose **Add device** → **Toggle switch** and flip the lever. The card displays **On** or **Off**. Leave room in the front panel for the lever to reach both stops.

Device guide

2 Protocol reference

USB contact input. Read the clear-to-send signal (CTS) to get the switch state.

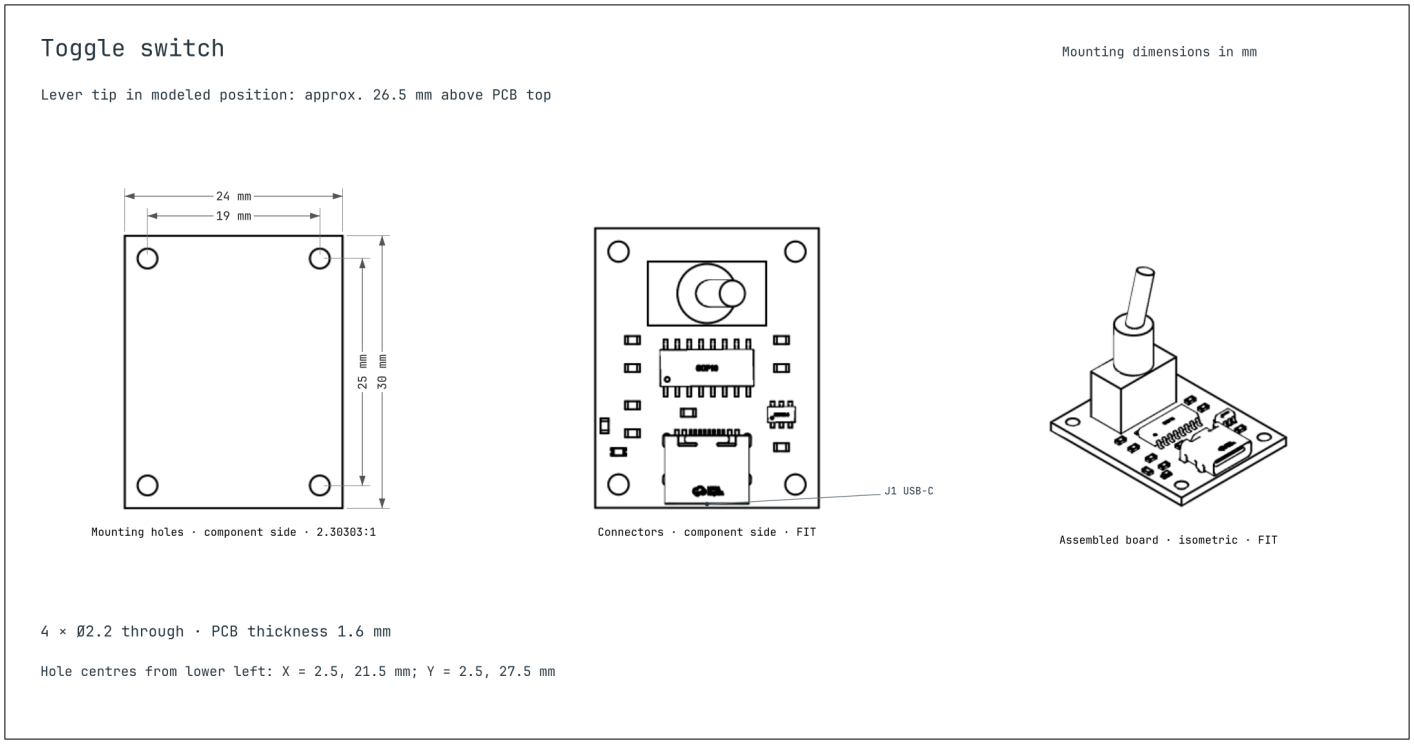
Operation	Request or signal	Result
Open with Web Serial	`port.open({baudRate: 9600, flowControl: "none"})`	Opens the port for polling.
Set DTR low	`port.setSignals({dataTerminalReady: false})`	Configures the serial control line.
Read with Web Serial	`(await port.getSignals()).clearToSend`	`true` = **On**, `false` = **Off**.
Read with WebUSB	Vendor IN request to the device: `0x95`, value `0x0706`, index `0`, length `2`.	Bit 0 of byte 0: `0` = **On**, `1` = **Off**.

Use either the Web Serial or WebUSB path. The console polls every 10 ms and displays a change after 20 ms of stable readings.

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 **24 × 30 mm**, with **4 × Ø2.2 mm** clearance holes for M2 screws. The centre-to-centre spacing is **19 × 25 mm**. Orient the component side with the **J1 USB-C port at the bottom**. Measure right and up from the **lower-left corner of the PCB** in the component-side view. The hole centres are at X = 2.5, 21.5 mm and Y = 2.5, 27.5 mm.

Modeled lever-tip height: approximately 26.5 mm above the component-side PCB surface in the illustrated position. Allow room for the lever to sweep between both stops and for the retaining hardware.

3.3 Design resources

Device guide · **Full-size mounting drawing** · **Drawing TSX** · **PCB source**