

SlimeVR Tracker Circuit Description

A microcontroller module with integrated Wi-Fi capabilities (ESP-12F) and its own PCB antenna is connected to an Interrail Measurement Unit (IMU) via I²C protocol. Microcontroller and IMU are powered via 3V DC-DC converter. Microcontroller is connected to USB-to-UART converter, USB-to-UART converter is connected to the USB Type-C port. 3V DC-DC converter is connected to a switch and is powered either from internal 3.7V Li-Po battery or from USB port when it's connected to an external power source (a USB charger or a host USB device/PC). Li-Po battery is charged via a charger IC powered from the USB port.

The device contains external port connected directly to the microcontroller via I²C and to 3V power for external modules and extensions.