2x2 Multiband Mesh Rider Radio - Hardware Integration Guide

This Hardware Integration Guide provides the information to facilitate smooth integration and use of the mini-OEM Mesh Rider Radio.

The mini-OEM Mesh Rider Radio is a small mesh radio, capable of switching between 6 operating bands for deploying Private Wireless Networks. It is available in many frequency bands between 900 MHz and 6 GHz. The mini-OEM radio integrates Doodle Labs' Mesh Rider technology.

Hardware Description

The mini-OEM has a primary connector which includes power, Ethernet, USB and UART ports. The interfaces are shown in Fig. 1.

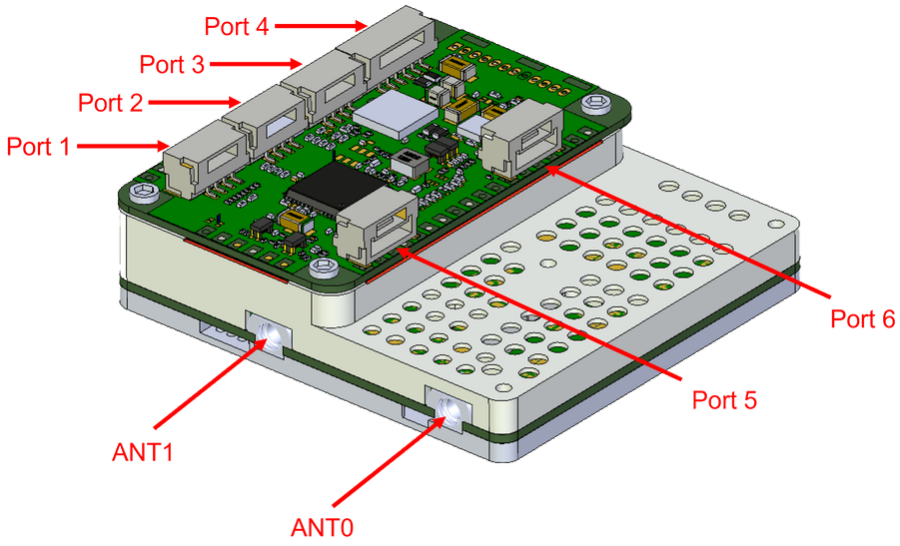

Fig. 1 Wearable Mesh Rider Radio Overview

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Port1. USB-Device port
Port2. Ethernet (ETH1) port
Port3. UART + RESET port
Port4. 5-V Power port
Port5. USB-Host port
Port6. 3x GPIO Port
ANT0. Mesh Rider Antenna 0 port
ANT1. Mesh Rider Antenna 1 port
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Hardware Integration Notes

Power Supply Integration

Note that the mini-OEM Mesh Rider Radio requires a 5-V supply. See the datasheet for voltage tolerance. Exceeding the rated supply voltage can cause damage to the Mesh Rider Radio.

Additional Guidelines

The mini-OEM Mesh Rider Radio does not include galvanic isolation.

Additional hardware Integration Guidelines can be be found on our Hardware Integration Guidelines page.