

External Mesh Rider Radio (-J) and Embedded EVK Connector Descriptions

Overview

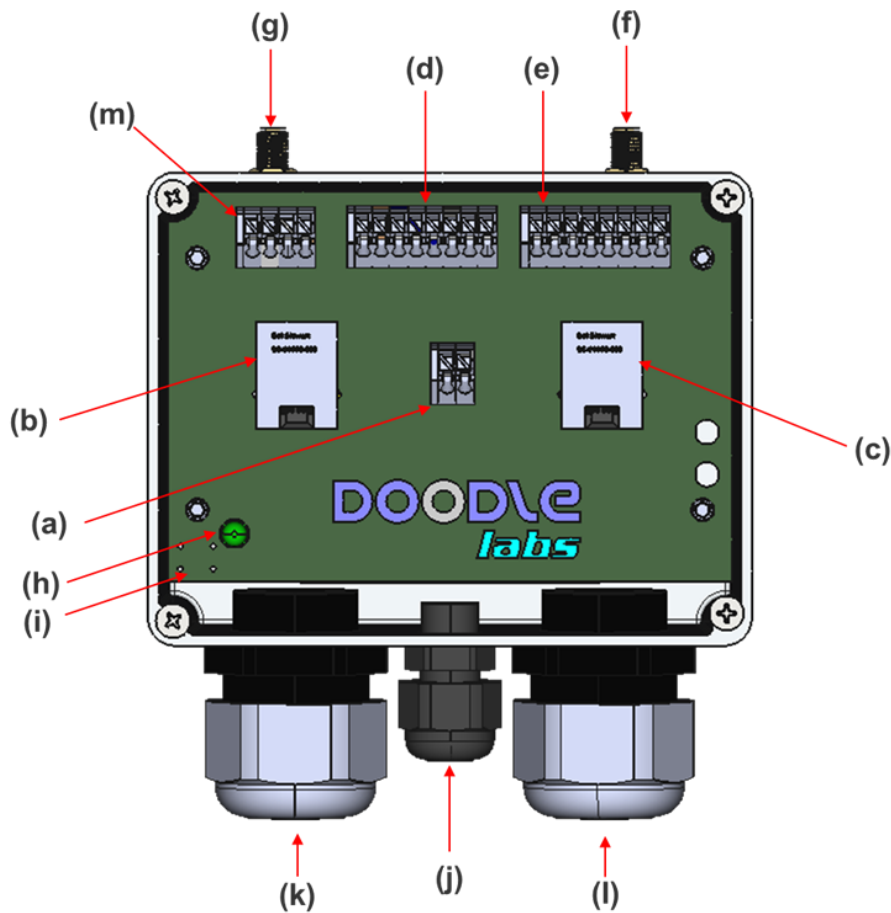


Fig. 1a External Mesh Rider Radio (-J) Electrical Interfaces

- a. Power Connector
- b. Standard RJ45 ETH0
- c. Standard RJ45 ETH1
- d. AUX1 Connector
- e. AUX2 Connector
- f. Standard SMA Connector (ANT1)
- g. Standard SMA Connector (ANT0)
- h. Power LED

- i. Reset Button
- j. PWR Cable Gland
- k. ETH0 Cable Gland
- l. ETH1 Cable Gland
- m. not populated

Power Connector (a)

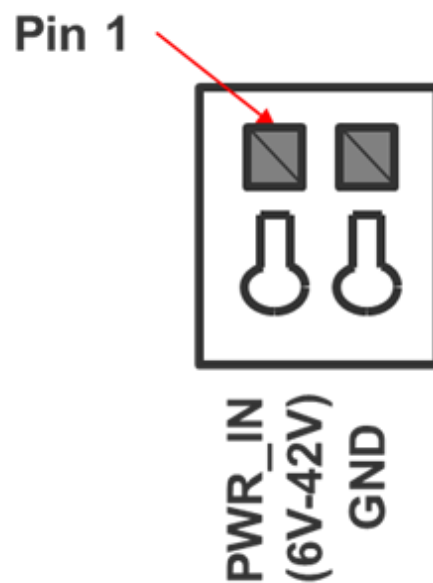


Fig. 2 Power Connector Pin Numbering

Power Connector (a)

Pin Number	Direction	Voltage	Pin Description
1	-	+6 V - +42 V	PWR
2	-	-	GND

AUX1 Connector (d)

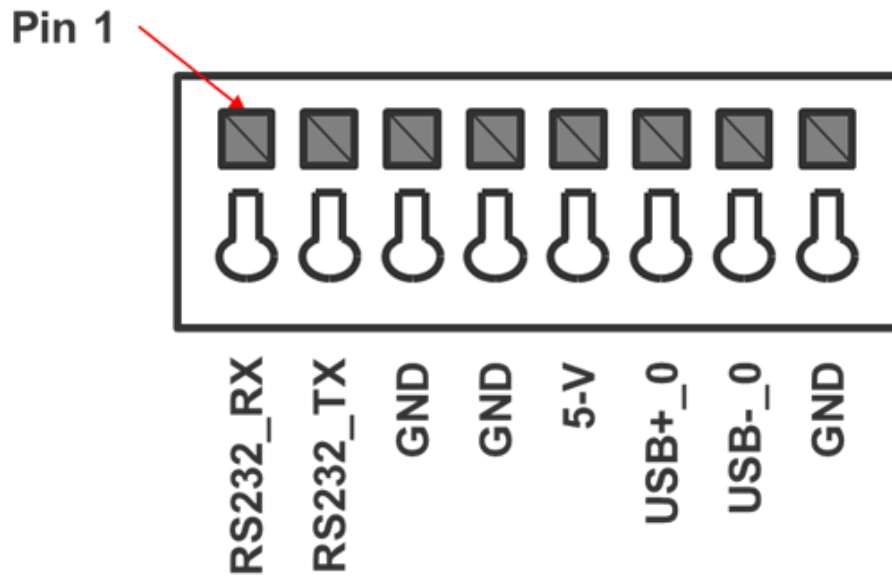


Fig. 3 AUX1 Pin Numbering

AUX1 Connector (d)

Pin Number	Direction	Voltage	Pin Description
1	I	-12 V - +12 V	RS232_RX
2	O	-12 V - +12 V	RS232_TX
3	-	GND	GND
4	-	GND	GND
5	O	+5 V	+5 V Output from Mesh Rider Radio
6	I/O	Diff Signal	USB0_DP
7	I/O	Diff Signal	USB0_DN
8	-	GND	GND

AUX2 Connector (e)

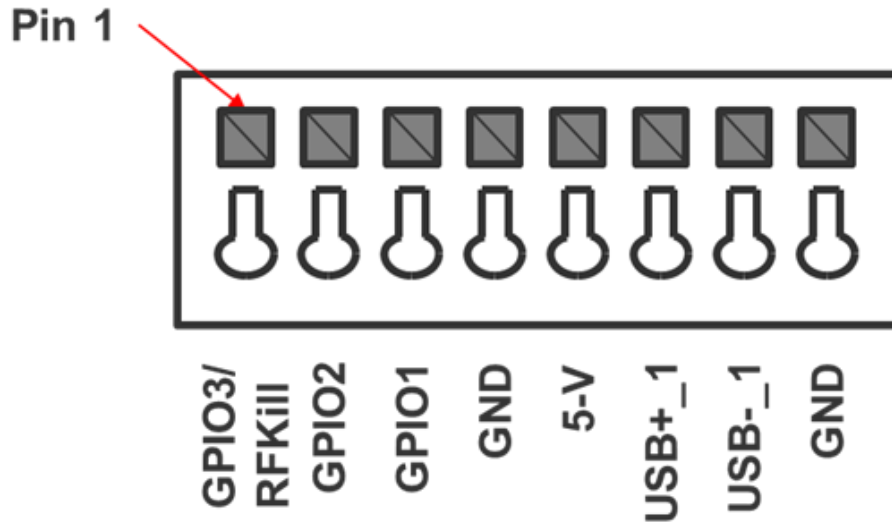


Fig. 4 AUX2 Pin Numbering

AUX2 Connector (e)

Pin Number	Direction	Voltage	Pin Description
1	I/O	+3 V	GPIO3/RFKill
2	I/O	+3 V	GPIO2
3	I/O	+3 V	GPIO1
4	-	GND	GND
5	O	+5 V	+5 V Output from Mesh Rider Radio
6	I/O	Diff Signal	USB1_DP
7	I/O	Diff Signal	USB1_DN
8	-	GND	GND

Embedded Mesh Rider Radio Evaluation Kit

The Embedded Mesh Rider Radio Evaluation Kit uses the same PCB as the External Radio with the following important changes.

1. In Fig. 1, (i) the reset button is not connected to the Mesh Rider Radio. Use the pin-hole reset on the Mesh Rider Radio instead.
2. In the AUX1 Connector (d), pins 1 and 2 use 0V - +3.3V TTL signalling levels instead of RS232.