

Release Note

This document describes upgrades and known issues related to a new release of Radiocrafts Industrial IP Mesh (RIIM™) SDK, and the included platform images and examples

Known Issues

Revision	Issue	Workaround
1.0.0 and prior	The BoarderRouter platform has a built-in driver for Ethernet connection, and therefore needs to be connected to a working Ethernet Controller. It is not necessary to connect an Ethernet cable	Connect a Microchip ENC28J60-I/ML (and associated hardware) to the module via SPI. or Use Radiocrafts RC1882-BRB.
1.2.0 and prior	Setting PAN ID in TSCH platforms does not work	Use default PAN ID (0x9812)
2.0.0	TSCH Mesh routers occasionally reset during joining phase	None. Nodes are stable when part of a network
3.0.0	None	

Product Change Notification

Radiocrafts defines product changes by:

- C:** Correction of an existing feature
- N:** Introduction of new features
- P:** Performance improvement

Revision	Changes	Date
0.9.1	N New product pre-release	2019-07-05
1.0.0	N New product release N Sleepy leaf nodes supported N Added new examples ICI applications P Improved buiding system for ICI application by introducing easy to use click-> compile_and_upload functions P Updated most of the documentation for better readability and more detailed description	2019-09-24
1.1.0	C Product update, new features and enhancements N New platform for Border Routers without Microchip ENC28J60 N UDP API added N CoAP packet without response added ("Fire and forget") N Multicast support added N Link layer security (LLSEC) added N Added static port maps in Border Router for easy direct access to all nodes from the outside (Ethernet) network N Added Robustness Factor for network stability P Stability fixes	2020-02-28
1.2.0	C Product update, new features and enhancements Default startup output power set to 0 dBm Channel hopping (TSCH) for 868 and 915 MHz	2020-04-30

	<p>N Single Channel (CSMA) supports both 868 and 915 MHz</p> <p>N Support for RC1882, RC1882HP and RC1892HP</p> <p>N Added UDP example</p> <p>N Stability fixes</p> <p>P</p>	
2.0.0	<p>Product update, new features and enhancements</p> <p>N Added redundant border router example</p> <p>N Added transparent UART example</p> <p>N Added EEPROM example</p> <p>N Added Clock example</p> <p>P Split upload platform scripts into TSCH and Single Channel</p> <p>N Added Clock API and Clock CoAP resource</p> <p>P User defined CoAP resources increased from 1 to 5</p> <p>N Added SLIP connection</p> <p>N Added possibility to read voltage input (Battery)</p> <p>P Increased number of GPIO handlers to 9 (all GPIOs)</p> <p>N Added support for 1-hop multicast</p> <p>P Stability fixes</p> <p>N Added Adaptive Frequency Agility</p> <p>N Added Listen Before Talk</p>	2021-02-01
3.0.0	<p>Product update, new features and enhancements</p> <p>N Added TX/RX pin control on UART for RS485</p> <p>N Added new UART termination criterias/parameters for reception (RX):</p> <ul style="list-style-type: none"> • Intra byte timeout • Total transmission timeout • Termination byte • Use of length byte <p>N Wake on UART</p> <p>C GPIO responds(wakes up) faster in sleeping nodes</p> <p>N User can get node reset reason</p> <p>C Removed RSSI measurement in network links</p> <p>P Reduced power consumption in TSCH sleeping mesh routers from minimum 180 uA to minimum 118 uA</p> <p>P Improved throughput in TSCH mode for data to border router.</p> <p>N Examples updated</p> <p>N Added possibility to get and set Ethernet MAC address</p> <p>N New frequency bands for Vietnam and India</p> <p>N New selectable predefined TSCH settings:</p> <ul style="list-style-type: none"> • Low power • Balanced • Low Latency • High throughput <p>P Stability and bug fixes</p>	2021-09-17

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