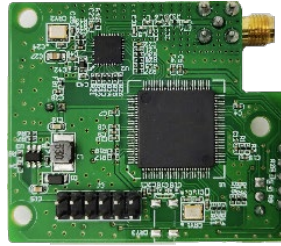


RA Ecosystem Partner Solution

RA Wi-SUN FAN Module

Wireless Connectivity Solution



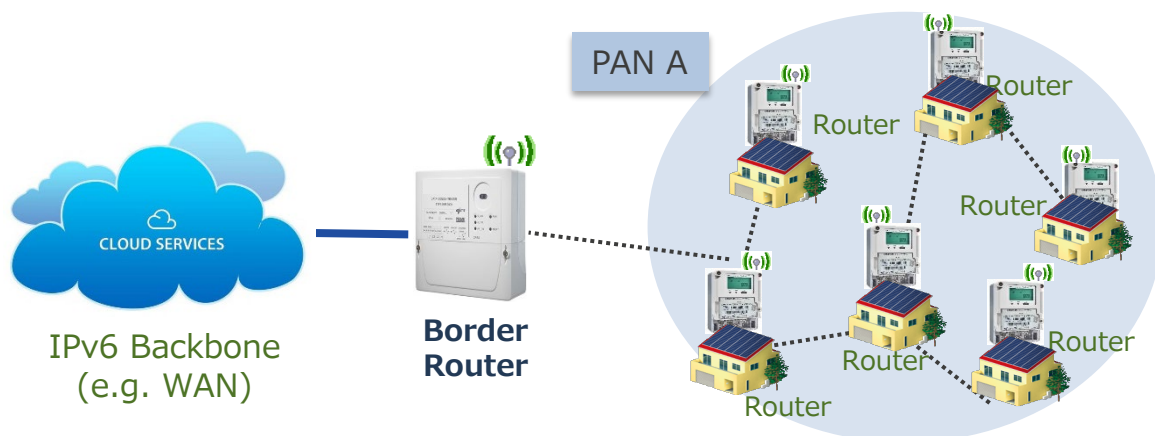
Solution Summary

This Wi-SUN solution – A Mbed OS based Wi-SUN FAN solution support Renesas [RA MCUs](#). It uses the RA6M4 microcontroller and RAA604S00 IEEE802.15.4 transceiver. Wi-SUN FAN is self-forming, which makes adding new devices to a network easy, and self-healing, so that if a pathway fails, the network will automatically re-routes to the gateways. It is a long range and highly-reliable wireless communication solution which allows user to use it in smart meter, smart grid and other wireless connectivity application.

Features/Benefits

- Sub-GHz wireless communications uses the 860/920MHz band.
- Re-routing automatically to avoid route failure for Robustness communication.
- Based on Wi-SUN Alliance's international wireless communication standards IEEE802.15.4g.
- Low power consumption and long battery life.
- B802.1X/EAP-TLS/PKI Authentication.
- Wide-range area and long-distance communication by multi hop and mesh network with suppressing interference/collision.

Diagrams/Graphics



RA - Teng Zhida Wi-SUN Solution

Target Markets and Applications

- Smart Meter
- Factory automation
- Smart City
- IoT edge devices
- Smart Lighting
- Smart Agriculture