



Q88 IPv6 Wi-SUN FAN 1.1 Border Router

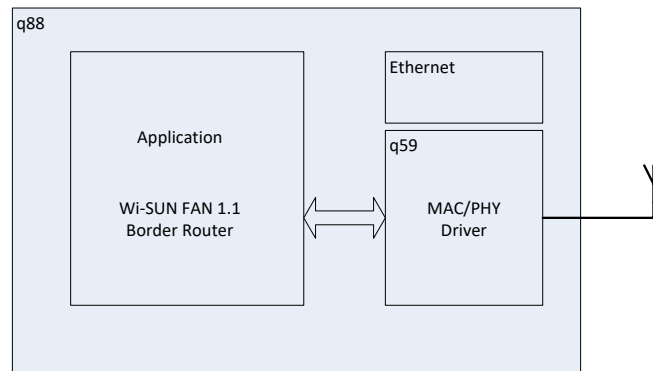
Wi-SUN FAN 1.1 CONNECTIVITY

overview

The Q88 is a compact IPv6 based Wi-SUN FAN 1.1 border router platform, designed to seamlessly forward IPv6 traffic from the outside world on an Ethernet link and a Wi-SUN FAN 1.1 wireless network.

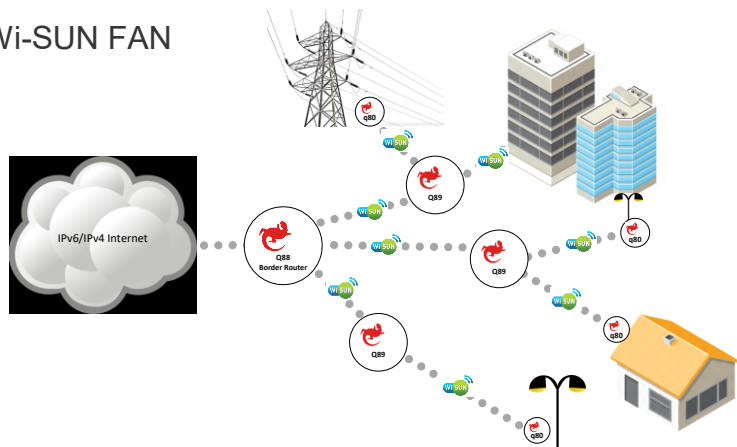
The Q88 uses the LWiPv6 network stack and Exegin's tested Wi-SUN FAN 1.1 components to provide one of the most reliable Wi-SUN FAN evaluation platforms available today.

The Q88 is based on a Beaglebone Green SBC. The Beaglebone Green SBC provides a versatile Linux based platform on which to base an Intermediate Routes. The Beaglebone Green SBC chassis provides a USB host interface, which Exegin uses for its Q59 radio module.



The Q59 supports a multimode Microchip RF215 radio that is capable of meeting all Wi-SUN FAN 1.1 PHY requirements with support for both sub-GHz and 2.4GHz frequency bands, baud rates from 10k to 2.4M bits per seconds and (G)FSK and OFDM modulations. The coupling of the Linux based platform with the feature rich radio module creates a versatile Wi-SUN FAN 1.1 evaluation platform with global applicability.

■ IPv6 Connected Wi-SUN FAN





Q88 IPv6 Wi-SUN FAN 1.1 Border Router



SPECIFICATIONS

FEATURES

● SYSTEM REQUIREMENTS

- IPv6 connectivity (Ethernet)

● DIMENSIONS

- Metric – 120mm x 80mm x 80mm

● WEIGHT

- Device – 300g / 12 oz.
- 110VAC Power Supply – 83g / 3 oz.
- 220VAC Power Supply – 94g / 3.5 oz.

● POWER SUPPLY

- Available with external DC power supplies for most voltages and frequencies (120V / 60Hz – 220V / 50Hz)

● ENVIRONMENTAL

- 0°C – 50°C operating
- -40°C – 85°C storage
- 95% maximum humidity, non-condensing

● REGULATORY CERTIFICATION

None

Wi-SUN FAN 1.1 PHY certification

Wi-SUN FAN 1.1 certification

● WARRANTY

- 1 year parts and labour

● HARDWARE

- 10/100/1000 Ethernet port

● FEATURE SET

RFC 768: User Datagram Protocol

RFC 793: Transmission Control Protocol

RFC 2460: Internet Protocol Version 6 (IPv6)

RFC 3315: Dynamic Host Configuration Protocol for IPv6 (DHCPv6)

RFC 3587: IPv6 Global Unicast Address Format

RFC 3748: Extensible Authentication Protocol

RFC 4279: Pre-Shared Key Ciphersuites for Transport Layer Security (TLS)

RFC 4492: ECC Cipher suites

RFC 4861: Neighbor Discovery for IP version 6 (IPv6)

RFC 4862: IPv6 Stateless Address Autoconfiguration

RFC 4944: Transmission of IPv6 Packets over IEEE 802.15.4 Networks

RFC 5191: Protocol for Carrying Authentication for Network Access (PANA)

RFC 6345: Protocol for Carrying Authentication for Network Access (PANA) Relay Element

RFC 5216: The EAP-TLS Authentication Protocol

RFC 5246: TLS version 1.2

RFC 6206: The Trickle Algorithm

RFC 6282: Compression Format for IPv6 Datagrams over IEEE 802.15.4-Based Networks

RFC 6434: IPv6 Node Requirements

RFC 6550: RPL: IPv6 Routing Protocol for Low-Power and Lossy Networks

RFC 6551: RPL: Routing Metrics Used for Path Calculation in Low-Power and Lossy Networks

RFC 6552: RPL: Objective Function Zero

RFC 6553: RPL: The Routing Protocol for Low-Power and Lossy Networks (RPL) Option for Carrying RPL Information in Data-Plane Datagrams

RFC 6554: An IPv6 Routing Header for Source Routes with the Routing Protocol for Low-Power and Lossy Networks (RPL)

RFC 6775: Neighbor Discovery Optimization for IPv6 over Low-Power Wireless Personal Area Networks (6LoWPANs)

RFC 7731: Multicast Protocol for Low-Power and Lossy Networks (MPL)



401 - 2071 kingsway avenue
port coquitlam | bc | canada | v3c 6n2
t +1.604.468.2552
info@exegin.com | www.exegin.com