

SX-ULPAN-SB

Single-Band 802.11n Wi-Fi Module for IoT Applications



Low cost ultra-low power wireless LAN module

The SX-ULPAN-SB is a single-band 802.11 b/g/n ultra-low-power Wi-Fi module with commercial temperature support. With SPI as host interfaces, this module provides seamless connectivity for various micro-controller based networking applications that the user need.

The SX-ULPAN-SB uses a RF chip, Qualcomm QCA4004X intelligent networking platform. The new solder-down module connects your device to the Internet of Things and provides a cost-effective way to design Wi-Fi connected products.

Applications: SX-ULPAN-SB's small form factor, rich features, and ultra-low power make it perfect for many mobile wireless applications and portable battery-operated devices. This radio module makes it an ideal choice for many IoT applications like remote equipment monitoring, asset tracking and telemetry, security, wireless audio, home automation, medical devices, and many more.

Key Features:

- **SPI** slave type protocol that provides a simple and low cost interface between a micro-controller and its peripherals
- Single Stream System(1x1) & 20MHz Channel Width
- **Data Rates** - Radio module makes it upto 10 Mbps
- **Modular Certifications** - FCC/IC/TELEC modular certifications improves time-to-market and decreses costs.
- **Wi-Fi Protected Setup**
WPS 2.0 implementation makes it easy to add new devices to an existing network without entering long passphrases.
- Onboard Antenna & U.FL Connector Add-on
- Commercial temperature support

- **IPv4, TCP, and UDP protocol supported on chip**

It helps offload the host microcontroller. Functions supported are ARP, IPv4, UDP, TCP socket support, DHCPv4, neighbor discovery, broadcast, MTU discovery, address auto config, and TCP zero copy.

Specifications:

Product Name	SX-ULPAN-SB
Interfaces	SPI Slave
Radio Chip	QCA4004-BL3B
Radio Specifications	802.11 b/g/n
Security	Open System, WPA/WPA2-PSK.
Operating Voltage	3.3 V
Humidity	Operating 10 to 95 %RH Storage: 15 to 95 %RH
Operating Temperature	0 to +70 degrees C
Current Consumption	Tx ≤ 350mA Rx ≤ 100mA Suspend (SPI) = 5uA
Dimensions	20 x 15 x 2.2 mm
Driver Version	v3.3.4
Supported CPU	i.MX RT
Supported OS	FreeRTOS

Ordering Information

Bulk SKU	SX-ULPAN-SB
Sample Pack	SX-ULPAN-SB-SP
Evaluation Kit	SX-ULPAN-SB-SHIELD

silex technology is a registered trademark of silex technology, Inc. Other product or brand names may be registered trademarks or trademarks of their respective owners. Technical information and specifications are subject to change without notice. © 2018 silex technology, Inc. All rights reserved.

silex global sales & support locations