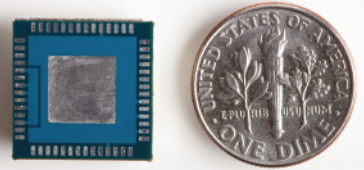# SX-SDPAG
802.11a/b/g SDIO Surface Mount Module

silex embedded

Ultracompact Wireless Solution for Embedded Applications

The Silex SX-SDPAG 802.11a/b/g wireless module is designed for OEMs who need a highly compact wireless radio/baseband solution with very low power consumption. This surface mount module contains all major components necessary to implement 802.11a/b/g wireless connectivity, including a radio, baseband processor, power amplifier, low pass filter, bandpass filter, crystal, and EEPROM. SX-SDPAG's diversity antenna option gives you better and wider wireless coverage.
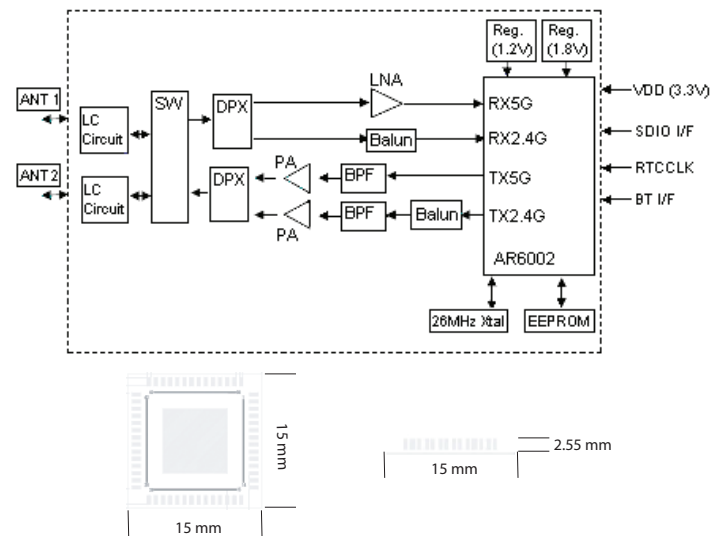
SX-SDPAG is ideal for low power / battery operated devices like portable medical devices, RFID readers, mobile printers, and many more.

The SX-SDPAG is designed to be directly mounted to an OEM's PCB to minimize size and cost. It features an industry-standard SDIO interface, and is pre-tuned for ease of design and manufacturing. In order to expedite your product development process, Silex can also provide both hardware and software engineering services, as well as turnkey product design and manufacturing.

Key Features:

- Highly Integrated System for 802.11a/b/g WLAN
- Integrated Atheros AR6002 Single Chip design
- Very low power consumption (20mW standby; 924mW transmit/299mW receive@5GHz typical; 904mW transmit/ 365mW receive@2.4GHz typical)
- Advanced power management to minimize standby and active power
- Bluetooth coexistence handshaking
- Built-In EEPROM for storage of MAC address and other parameters
- WEP 64/128, WPA (TKIP), WPA2 security
- Driver development/porting and hardware design services are available from Silex. Please consult with our sales representative for further information.

Diagrams

Specifications:

Product Name	SX-SDPAG
Chipset	Atheros Communications AR6002
Electrical Interface	SDIO V1.1 (4-bit, 1-bit)
Operating Voltage	3.30 VDC +/- 5%
Radio Specifications	2.4-2.4897GHz (FCC, ETSI, TELEC) 5.15-5.85GHz (FCC, ETSI, TELEC)
Radio Transmit Power (Typical)	18 dBm (802.11b/g); 16dBm (802.11a)
Baseband Specifications	CSMA/CA media access; DSSS, OFDM
Temperature	-20 to +70 degrees C*
Packaging	56-pin (15 x 15 x 2.55mm)

* Performance may vary across the temperature range and frequency depending on the implementation

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