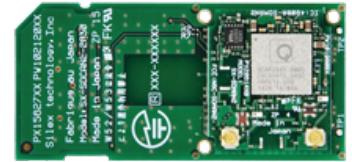# SX-SDCAN2
802.11a/b/g/n 2x2 Wi-Fi Plus Bluetooth

SDIO Wireless Radio Card with MIMO Technology

The Silex SX-SDCAN2 is a dual-band 802.11a/b/g/n plus Bluetooth SDIO card that is based on the SX-SDPAN2 (Qualcomm Atheros AR6234 SiP). The SX-SDCAN2 is mechanically designed in a SD card form factor to provide customers with a vendor independent form factor. It enables customers to evaluate wireless connectivity for the SX-SDMAN2 with the i.MX 6 evaluation platform which includes integrated radio software support (driver and security supplicant).

The SX-SDCAN2 integrates an external 5 GHz Front End Module (FEM) and is individually tuned to optimize WLAN performance. The radio module design approach also saves cost as the SX-SDCAN2 provides FCC/IC/ETSI/TELEC modular certification.
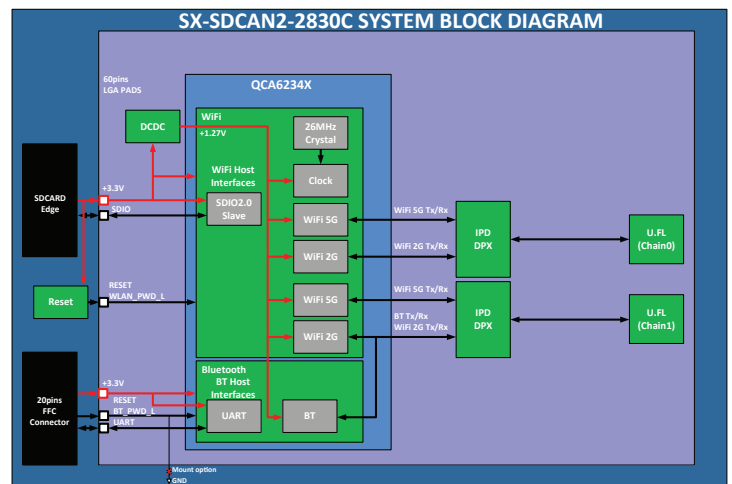
The SX-SDCAN2 provides superior product quality. Silex has validated that our design meets IEEE standards and each module is individually tested during the production process. This ensures that each of our products will perform to our published specification.

In order to expedite your product development process, Silex can provide both hardware and software engineering services including custom driver development, as well as turnkey product design and manufacturing.

Key Features:

- IEEE 802.11a/b/g/n conformity (2.4 GHz & 5 GHz)
- 2 x 2 MIMO technology and 40 MHz bandwidth mode for 5 GHz
- Data rates upto 300Mbps
- Supports IEEE 802.11e, IEEE 802.11h and IEEE 802.11i
- Supports SDIO 2.0 as host IF of wireless LAN
- Supports Bluetooth 4.0 + LE dual mode
- Supports antenna diversity
- Supports UART and USB as the host IF of Bluetooth
- Calibrated Tx Power per module
- FCC/IC/ETSI/TELEC modular certification
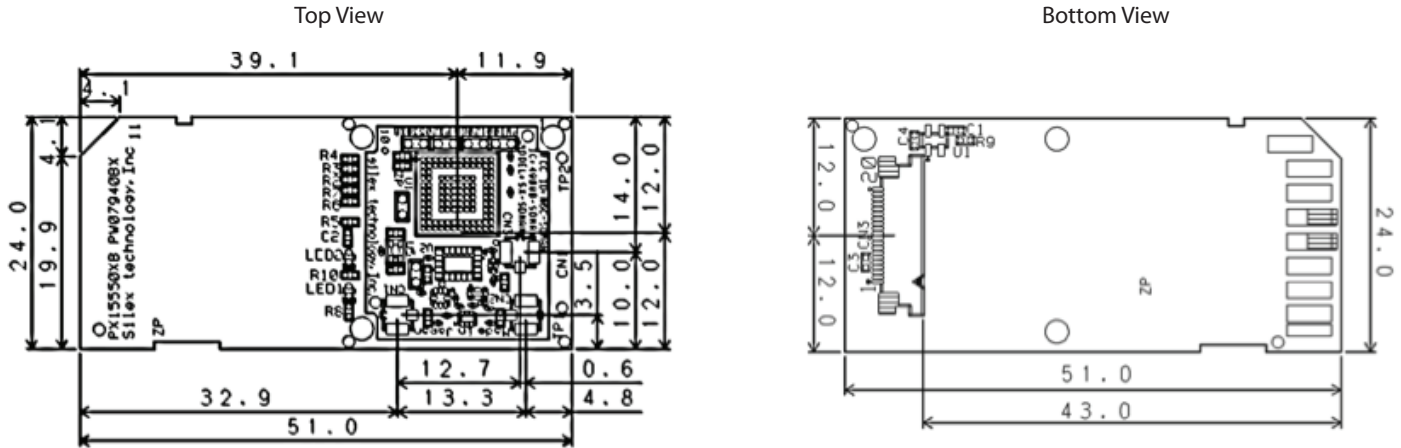- SD card form factor

Diagram:

SX-SDCAN2-2830C SYSTEM BLOCK DIAGRAM

Specifications:

Product Name	SX-SDCAN2-2830
Chipset	Qualcomm Atheros AR6234
Host Interface	SDIO V 2.0 (4-bit, 1-bit)
Operating Voltage	3.30 VDC +/- 5%
Radio Specifications	802.11b/g/n 2.412 - 2.484 GHz 802.11a/n 5.18 - 5.825 GHz
Baseband Specifications	CSMA/CA media access; DSSS, OFDM
Bluetooth Specifications	BT3.0+HS, BT4.0, Class 1.5
Dimensions	24.0 x 51.0 x 5.8 mm (W x H x D)
Connector Type	SD Card Edge 9 Pins FFC Connector 20 Pins
Antenna Connectors	U.FL Alternative connector x 2

Dimensions and Architecture

Top View

Bottom View

All dimension tolerances are ±0.15 mm, unless otherwise specified.

General Specifications

On-Chip Functionality:	Single-chip MAC/BB/RF/PA/LNA
Frequency Band:	2.4 GHz / 5 GHz
Network Standard:	802.11a, 802.11b, 802.11g, 802.11n (1-stream)
Modulation Modes:	OFDM (64QAM, 16QAM, QPSK, BPSK), DSSS (CCK, DQPSK, DBPSK), DSSS-OFDM (64QAM, 16QAM, QPSK, BPSK)
Hardware Encryption:	WEP, WPA/WPA2 (TKIP/AES-CCMP), WAPI
Quality of Service (QoS):	WMM, WMM-PS, 802.11e

Interfaces

Communications:	SDIO 2.0
Supported Data Rates:	
IEEE 802.11b	1-11 Mbps
IEEE 802.11g	6-54 Mbps
IEEE 802.11a	6-54 Mbps
IEEE 802.11n HT20	13 - 144.4 Mbps (2x2)
IEEE 802.11n HT40	27 - 300.0 Mbps (2x2)
Bluetooth:	BDR/EDR/LE
Physical Specifications:	24.0 x 51.0 x 5.8 mm (W x H x D)

Driver Support

Reference Drivers:

- Linux
- Kernel Version 3.10.17
- Windows

Ordering Information

SX-SDCAN2-2830:	Bulk Package
SX-SDCAN2-2830-SP:	Sample Pack

silex global sales & support locations

US Office
silex technology america, Inc.
+1-801-748-1199
US toll free 866-765-8761
www.silexamerica.com
sales@silexamerica.com

Europe Office
silex technology europe, GmbH
+49-2151-65009-10
Germany toll free 0800-7453938
www.silexeurope.com
contact@silexeurope.com

Corporate Headquarters
silex technology, Inc.
+81-774-98-3781
www.silex.jp
support@silex.jp

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for WiFi Modules - 802.11 *category:*

Click to view products by Silex *manufacturer:*

Other Similar products are found below :

KBPC10/15/2506WP WIFI-RT5392-SB-R10 SX-PCEAN2C-SP 849WM520100E WIFI-AT2350 7265.NGWG.SW HDG204-DN-3 FXX-3061-MIX EMIO-1533-00A2 7265.NGWWB.W PPC-WL-KIT02-R11 RC-CC2640-B HLK-7688A WH-NB73-BA NF-02-PA LSD4BT-E92ASTD001 EAR00364 3168.NGWG MY-WF003U AX210.NGWG.NV ESP-15F32Mbit ESP32-S32Mb TG-01M ESP-13 ESP-01F-2M ESP-01E-2M ESP-12S-8285-2M ESP-20 ESP32-SL ESP-12K-PSRAM ESP-12K-PSRAM-IPEX ESP-12H BW18 BW12-16Mb BW14 BW15 TG-12F SIM7600CE-L1S CB3S(tjrl) CB3S(hvk9) CB3S(qh6) WB2S(csyd) WB3S(ppty) WB3S(h238) WB3S(uvmz) 1005869 1012 QCA4004X-BL3B 32-2006-BU WT51822-S4AT