silex
technology

When it **Absolutely Must** Connect

Wi-Fi 7 (IEEE 802.11be) Wireless LAN Access Point Module SX-PCEBE-AP

Enables wider, more stable communication in factories, warehouses, and industrial sites

Overview

The SX-PCEBE-AP is a Wi-Fi 7 access point module supporting IEEE 802.11be (2.4GHz and 5GHz). Powered by the Qualcomm QCN9274-1 chipset, it's ideal for Wi-Fi base stations, industrial access points, and gateways requiring large device connections. With Wi-Fi 7's high speed and efficiency, its high-output design ensures stable wireless communication across wide areas.

Features

New Wi-Fi 7 Features

Communication remains stable even in environments with many wireless devices.	Communication remains uninterrupted even in the presence of interference.
Multi-RU	**Puncturing**

"Wi-Fi 7" for stable communications in the future

In industrial IoT environments, the increasing use of data-intensive devices, such as video equipment, demands faster and more stable Wi-Fi networks.
Wi-Fi 7's advanced features are designed to ensure reliable communication, even in environments with a mix of data, image, and video devices.

Modular Certification. Faster Time to Market

This product will receive wireless certification in Japan, the U.S., Canada, Europe, and the U.K.

We also offer support for antenna installation positioning, ensuring a quick and reliable wireless integration.

Easy Wi-Fi
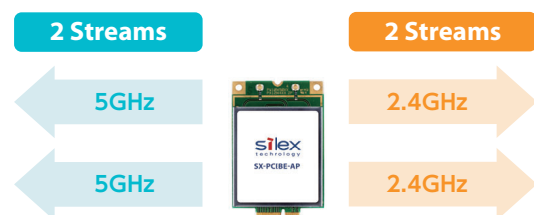
Optimized Design
Pre-Certified

Silex Optimized Design for Wider Range

This product features a high Tx Power-output design, extending radio wave reach and ensuring a wide communication range.

Modular Design Saves Cost

The module supports simultaneous operation of two 2.4GHz and two 5GHz streams, reducing component costs.

2 Streams		**2 Streams**
5GHz		2.4GHz
5GHz		2.4GHz

Maximum Simultaneous Client Connections

This product is a wireless LAN module for Wi-Fi gateways and access points, designed to support multiple client connections. Station modules cannot achieve this with SoftAP mode.

▶**Number of Simultaneous ClientConnections**

Wi-Fi Access Point Module SX-PCEBE-AP	Wi-Fi Station Module SX-PCEBE
Upt o **512** clients	Up to 10 clients

Wi-Fi 7 (IEEE 802.11be)
Wireless LAN Access Point Module

SX-PCEBE-AP

Specifications

Product Name	SX-PCEBE-AP
Chipset	QCN9274
Host Interface	WLAN：PCI Express 3.0
WLAN Specification	IEEE 802.11a/b/g/n/ac/ax/be 2.4GHz：2×2、5GHz：2×2 (Simultaneous Operation)
Frequency	2.4GHz、5GHz
Channel Bandwidth	2.4GHz：20MHz、40MHz 5GHz　：20MHz、40MHz、80MHz、160MHz
Antenna Connector	MHF1 Connector：x2
Operating Voltage	Main Power Supply: 3.3V、FEM Power Supply: 5.0V
Operating Environment	Temperature：-40 ～ 85℃ Humidity　　：15 ～ 80％RH (No Condensation)
Storage Environment	Temperature：-40 ～ 85℃ Humidity　　：15 ～ 80％RH (No Condensation)
Dimensions	40.0×60.0×3.9mm
Package Type	M.2 Card Type Key E
Certifications	USA, Canada, Europe, UK, Japan

※As this product is under development, specifications are subject to change without prior notice.

Product Lineup

SX-PCEBE-AP

Product Name	Form Factor	MoQ / Lot	Package
SX-PCEBE-AP	M.2 Key E Card Type	100 pcs	Bulk
SX-PCEBE-AP-SP	M.2 Key E Card Type	1 pc	Sample Pack 2 antennas included

【SX-PCEBE-AP Web Page】

https://www.silextechnology.com/connectivity-solutions/embedded-wireless/sx-pcebe-ap

【SX-PCEBE Web Page】

https://www.silextechnology.com/connectivity-solutions/embedded-wireless/sx-pcebe

◀SX-PCEBE-AP　　◀SX-PCEBE

Silex Reference Driver for Easy Integration

Silex provide a fully tested, enhanced and optimized version of the Qualcomm's reference wireless LAN driver, ensuring smooth evaluation and easy porting to your environment.

Evaluation Environment

Silex will provide an evaluation Linux OS image for easy testing of wireless functions.

● **Reference Platform**
- NXP's Layerscape LS1043A Reference Design Board (LS1043ARDB-PD)

● **Features (Linux OS)**
- Access Point Function
- WPA2™/WPA3™ authentication methods
- IEEE 802.1X（TLS、TTLS、PEAP、LEAP、FAST）

● **Other Tools Included in Evaluation Image**
- Wireless LAN management command – iw Commands
- Throughput test – iperf
- Wi-Fi AP function – hostapd
- DHCP – udhcpd、udhcpc

①	**Purchase SX-PCEBE-AP-SP** - 2 Antennas Included
②	**Sign Evaluation License Agreement** - Available Online. Contact Sales for more Information
③	**Download from Silex Website** - Various documents, Linux OS image (including Silex reference driver)
④	**Reference Platform Required** - LS1043ARDB-PD
⑤	**Start Evaluation**

Other Wi-Fi 7 Products

Next Gen Wi-Fi 7 plus Bluetooth®v 5.4 Station Module
SX-PCEBE

This module supports 4/5/6GHz bands, ensuring stable communication with minimal interference.

SX-PCEBE-SMT　　SX-PCEBE-M2

ISO 9001　JQA-2667
ISO 14001　JQA-EM3813

03/01/2025