Available Spring 2024

ᅙ When it Absolutely Must Connect



IEEE 802.11ax (Wi-Fi 6/6E) Wireless LAN Access Point Modules

SX-PCEAX-AP/6E

OFDMA MU-MIMO



Silex's SX-PCEAX-AP Series modules are embedded wireless LAN modules using Qualcomm's QCN9072 chipset, ideal for access points, gateways, and routers in medical and industrial applications. The SX-PCEAX-AP Wi-Fi 6 module enables a stable 2.4GHz/5GHz communication even in crowded wireless environments, while the SX-PCEAX-AP6E Wi-Fi 6E module provides a 6GHz connection. Combining both the Wi-Fi 6 and 6E modules can seamlessly provide a Wi-Fi access point compatible with 2.4GHz/5GHz.

Faster data speeds and lower latency in congested wireless environments

With the benefits of OFDMA and MU-MIMO, enjoy improved efficiency during multi-device communications, maximizing communication stability. Data is delivered reliably with low latency even in congested wireless environments.





OFDMA supports multiple access, enabling multiple users or devices to transmit and receive data simultaneously within the same frequency band.

While single-user MIMO (SU-MIMO) can transmit multiple data streams to only one device at a time, multi-user MIMO (MU-MIMO) can send multiple streams of data to multiple devices simultaneously.

Standard form factor reduces development and certification costs

The SX-PCEAX-AP Series modules' standard-compliant full-height Mini PCIe form factor enables customers to easily integrate the module in existing designs. By simply swapping out the wireless module of an existing access point, you can seam-lessly upgrade it to Wi-Fi 6/6E without the high development and certification costs.



Only module redevelopment with minimal changes

No application software changes

Modular certifications. No extra testing required.



IEEE 802.11ax (Wi-Fi 6/6E) Wireless LAN Access Point Modules

SX-PCEAX-AP/6E

Experience the Power of 6GHz Wi-Fi with SX-PCEAX-AP6E

Resists radio interference for faster connectivity.

Experience seamless connectivity with 6GHz Wi-Fi, offering a hassle-free connection in a single frequency band with minimal radio interference and no DFS restrictions.

Eliminates channel shortage.

6GHz Wi-Fi eliminates channel shortage to ensure an abundance of available channels for seamless and uninterrupted connectivity, addressing the issue commonly faced in lower frequency bands.

Provides a more reliable and efficient wireless connection.

The 6GHz band can only be used by Wi-Fi 6E-compatible devices, thus maximizing performance by filtering out interference from other frequency bands. This results in improved data speeds, reduced latency, and an overall enhanced user experience.

Product Specifications



Part no.	SX-PCEAX-AP		SX-PCEAX-AP6E		
Bandwidth	2.4GHz/5GHz (Wi-Fi 6)		6GHz (Wi-Fi 6E)		
Chipset	QCN9072		QCN9072		
Host interface	PCI Express 3.0		PCI Express 3.0		
WLAN	IEEE 802.11a/b/g/n/ac/ax (2x2)		IEEE 802.11ax (2x2)		
Antenna connector	MHF Connector x2		MHF Connector x2		
Operation power	3.3V		3.3V		
Operating environment	Temperature: -40~+85°C Humidity: 10~95%RH (no condensation)		Temperature: -40~+85°C Humidity: 15~95%RH (no condensation)		
Storage environment	Temperature: -40~+90°C Humidity: 10~95%RH (no condensation)		Temperature: -40~+90°C Humidity: 10~95%RH (no condensation)		
Size	29.85 x 50.80 x 4.55mm		29.85 x 50.80 x 4.55mm		
Package type	Mini PCI Express Card		Mini PCI Express Card		
Certification	JP, US, Canada, EU, UK		Contact us		
Product Lineup	Part no.	Form Factor		Lot	Package Type
Wi-Fi 6	SX-PCEAX-AP	PCI Express Mini Card		100	Bulk
	SX-PCEAX-AP-SP	PCI Express Mini	Card	1	Box antenna x2 inside
Wi-Fi 6E	SX-PCEAX-AP6E	PCI Express Mini	Card	100	Bulk
	SX-PCEAX-AP6E-SP	PCI Express Mini	Card	1	Box antenna x2 inside

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US Office silex technology america, Inc. +1-657-218-5199 www.silextechnology.com sales@silexamerica.com

silex global sales & support locations

Europe Office silex technology europe, GmbH +49-2154-88967-0 Germany toll free 0800-7453938 www.silextechnology.com sales@silexeurope.com China silex technology beijing, Inc. +86-10-8497-1430 www.silex.com.cn contact@silex.com.cn

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



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