![silex technology logo] When it **Absolutely Must** Connect

SX-582
Enterprise 802.11n Connectivity
for Embedded Applications

Next Generation Serial/Ethernet to Wi-Fi Intelligent Module

The SX-582 is the next generation high-performance Serial/Ethernet to Wi-Fi module that provides connectivity for low-power portable devices to 802.11 wireless local area networks (WLANS). Eliminating the need for the development of a wireless LAN driver and security supplicant, it is ideal for minimizing upfront engineering investment and reducing time to market. The module has modular certifications for North America, Europe and Japan, thus reducing certification costs.

Measuring 1.18 x 2.16 inches (30 x 55 mm), the SX-582 features a 32-bit 454 MHz Freescale i.MX28 processor with an 802.11a/b/g/n radio, a complete TCP/IP network protocol stack, and an optimized QCA6004 wireless radio driver and security supplicant in a self-contained hardware package. One major advantage of the SX-582 is enterprise security, including WPA2 with 802.1x authentication, which enables it to be used on almost any customer's network without security compromises. It ensures data integrity and privacy for highly sensitive requirements such as medical or financial applications.

The SX-582 is designed to connect to a wide range of OEM devices without the need for special software drivers or interface hardware. It includes a serial port that can run at speeds up to 3 Mbps and supports Ethernet bridging and AP mode.

Key Features:

- **Based on Qualcomm Atheros AR6004**
  This new technology from Qualcomm enables the SX-582 to provide 802.11n Wi-Fi performance with shorter time to market.

- **Reduced Power Consumption**
  SX-582 minimizes power while transmitting and receiving data (approximately 300mA) while its power management features reduce power usage during periods of inactivity.

- **Industry-Leading Enterprise Security**
  The SX-582 supports WPA and WPA2 including 802.1x Extensible Authentication Protocol (EAP) types.

- **Wi-Fi Protected Setup**
  WPS 2.0 implementation making it easy to add new devices to an existing network without entering long passphrases.

- **Linux Operating System with User Programmability**
  The SX-582 uses the Linux operating system and users can easily add new features. With a 454 MHz processor and 64MB of RAM and 8MB of flash memory, the SX-582 has plenty of capacity to handle complex user applications.

Specifications:

Product Name	SX-582-2700
CPU	Freescale i.MX280 ARM9/454 MHz
Memory	8MB ROM/64MB RAM
Radio Module	SX-SDMAN2
Radio Specifications	802.11a/b/g/n (1x1)
Operating System	Linux
Security	WPA/WPA2 802.11x (LEAP, PEAP, TLS, TTLS, FAST)
WPS 2.0	WPS - Push Button Configuration WPS- PIN Code Method
Interfaces	UART/Ethernet (USB/I2C/GPIO/SPI)
Operating Voltage	5V +/-5%
Operating Temperature	-10 to +70 degrees C
Dimensions	55.0 x 30.0 x 9.25 mm* (W x H x D)

* Minimum height using lowest profile mating connector.

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