

Wi-Fi® 802.11 b/g/n Network Controller Module Model: SN820X



Embedded WiFi
802.11 b/g/n

The SN820X is a family of small, low-power, self-contained, certified Wi-Fi® network controller modules that provide simple serial-to-Wi-Fi® connectivity to the internet. These modules are an ideal solution for device manufacturers who are looking to add wireless connectivity to home appliances, smart energy systems, healthcare and industrial control equipment.

The SN820X modules are enabled with Broadcom Corporation's Wireless Internet Connectivity for Embedded Devices (WICED) architecture. They can host the Wi-Fi®, TCP/IP network stack, security supplicant, and other network application features. Those features are supported by the Murata Simple Network Interface Controller (SNIC) software and EZ Web Wizzard™ platform. The modules are also compatible with Broadcom WICED SDK.

SN820X Module Features

- 2.4GHz IEEE 802.11b/g/n
- Chipset: Broadcom BCM43362 Wi-Fi® and ST Micro STM32 ARM Cortex-M3
- Supports WPA/WPA2 PSK, WPS
- Supports Wi-Fi AP/STA Dual mode
- Supports built-in TCP/IP Stack, SSL/TLS, HTTP, DHCP, DNS, and Web Server with:
Murata EZ Web Wizzard™ software or
Broadcom WICED™ SDK

SN820X Module Applications

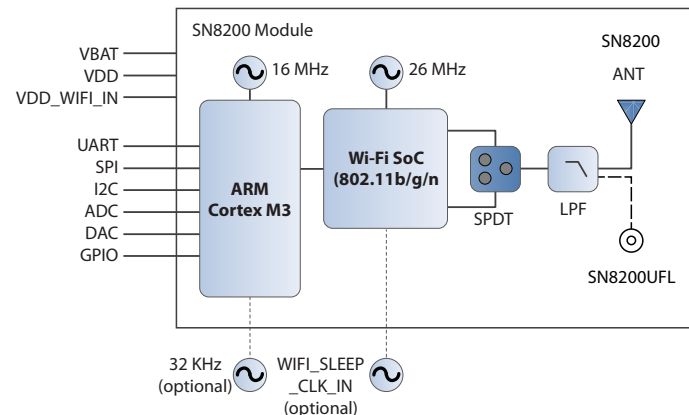
- Home Automation & Home Energy Management Systems
- Smart Appliances
- Industrial Control and Monitoring
- Medical and Healthcare

Note: Information in this brief is subject to change without notice.

SN820X Family

Model Number	RAM Size	Flash Size
SN8200/SN8200UFL	96KB	768KB
SN8205/SN8205UFL	128KB	1024KB

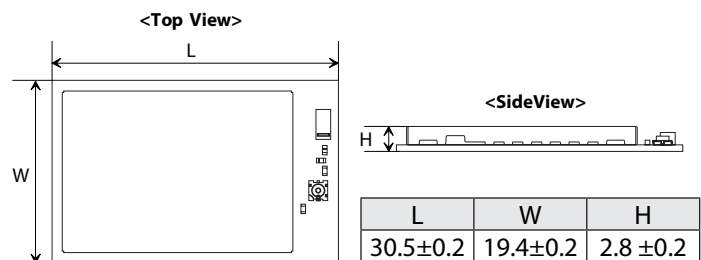
Module Block Diagram

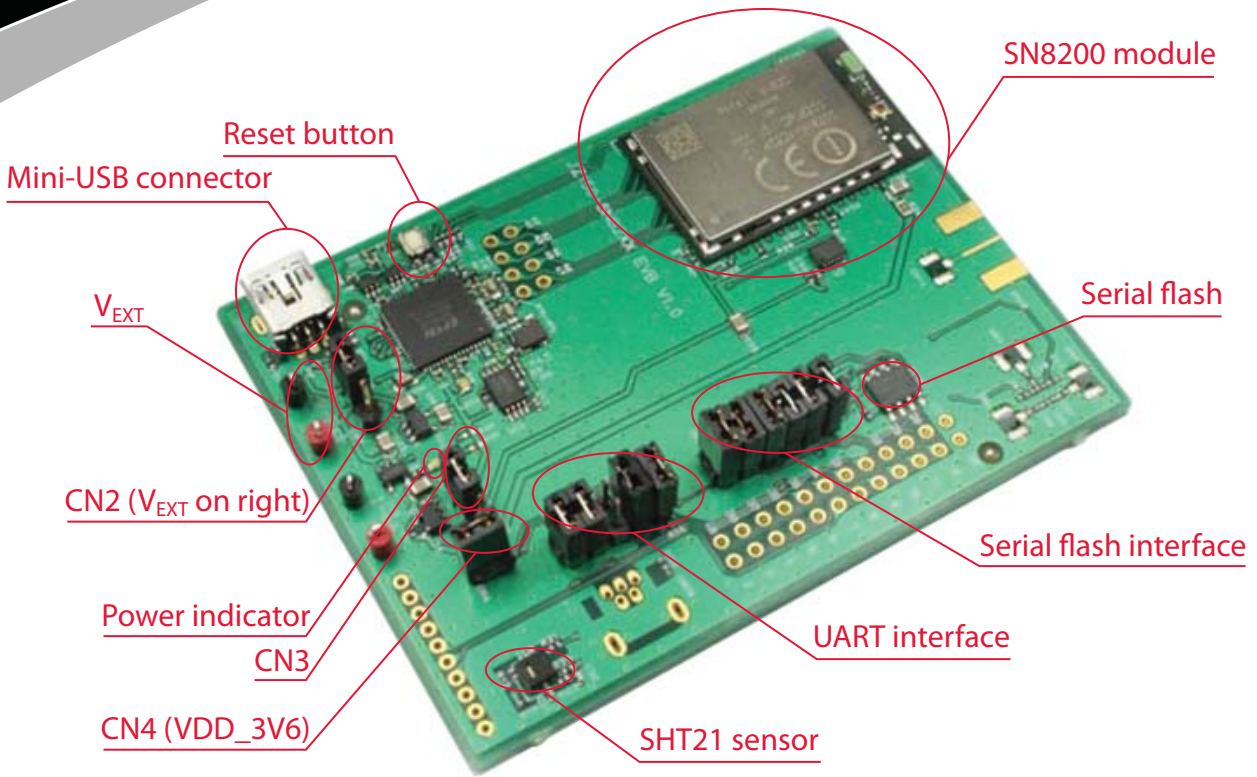


Module Specifications

Technology	2.4GHz IEEE 802.11b/g/n
Antenna Configuration	On-board or U.FL Connector
Transmit power	+18 dBm @b mode/11Mbps
Max receive sensitivity	-96dbm
Host Interface	UART, SPI
Sensor applications support	GPIO, I2C, ADC, DAC
Operating Temperature	-40°C to +85°C

Dimensions (mm)





Evaluation Board Features

- SN820X Wi-Fi Network Controller
- Mini-USB connector supporting USB-JTAG and USB-serial interfaces
- Pads for headers to access the I/O pins of the SN820X module.
- Serial flash (8M bits) and interface header
- SHT21 temperature and relative humidity sensor
- UART interface header

Module Ordering Information

Model Number	Part Number
SN8200	88-00151-00
SN8200UFL	88-00151-02
SN8205	88-00158-00
SN8205UFL	88-00158-02

Evaluation Kit Ordering Information

Model Number	Part Number
SN8200 EVK+	88-00151-95
SN8200UFL EVK+	88-00151-97
SN8205 EVK+	88-00158-95
SN8205UFL EVK+	88-00158-97

