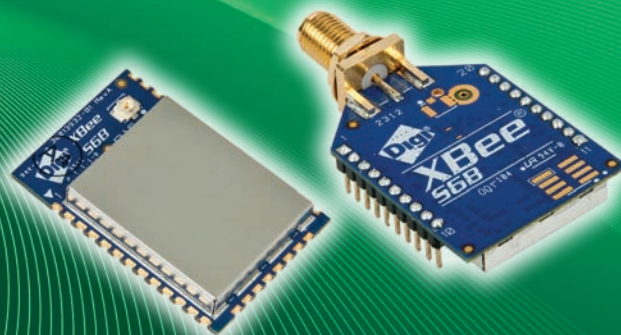


# XBee® Wi-Fi

Embedded Wi-Fi Module for OEMs

Embedded Wi-Fi modules provide ultra low-power 802.11b/g/n communications in the flexible XBee hardware and software footprint.



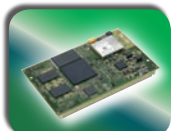
## Overview

XBee Wi-Fi embedded RF modules provide simple serial to IEEE 802.11 connectivity. By bridging the low-power/low-cost requirements of wireless device networking with the proven infrastructure of 802.11, the XBee Wi-Fi creates new wireless opportunities for energy management, process and factory automation, wireless sensor networks, intelligent asset management and more. Featuring easy provisioning methods and native Device Cloud by Etherios™ connectivity, XBee Wi-Fi modules give developers the fastest IP-to-device and device-to-cloud capability possible. Focused on the rigorous requirements of these wireless device networks, the module gives developers IP-to-device and device-to-cloud capability.

XBee modules offer developers tremendous flexibility and are available in surface mount and through-hole form factors. The XBee Wi-Fi shares a common footprint with other XBee modules. This allows different XBee technologies to be drop-in replacements for each other.

As a member of the XBee family, the XBee Wi-Fi combines hardware with software for a complete modular solution. XBee Wi-Fi modules are designed to communicate with access points in existing 802.11 infrastructures. Developers can use AT and API commands for advanced configuration options.

### Related Products



Wi-Fi System-on-Modules



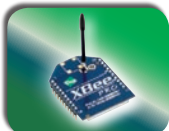
Wi-Fi Modules



Device Cloud Solutions



Wireless Serial Servers

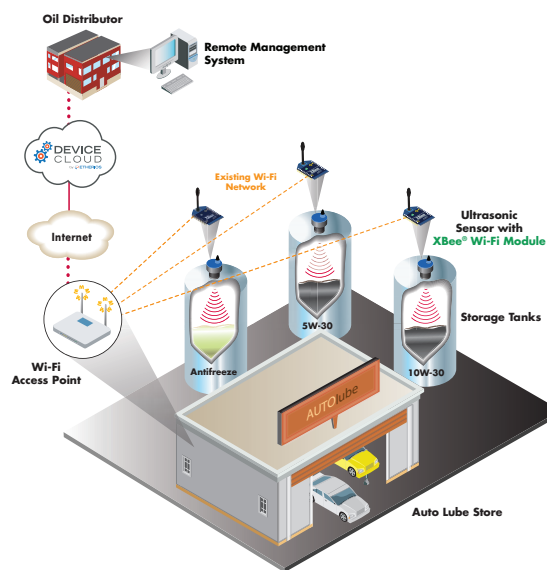


XBee Modules



Development Kits

## Application Highlight



## Features/Benefits

- Native Device Cloud integration for data acquisition and device management
- Hardware and software complete module easily joins existing 802.11 b/g/n (Wi-Fi) infrastructures
- Common XBee footprint allows OEMs to support a variety of wireless protocols
- Flexible SPI and UART serial interfaces
- Available in Surface Mount and Through-Hole form factors
- Support for low-power sleeping applications with  $<6 \mu\text{A}$  power-down current
- Over-the-air data rates up to 72 Mbps
- Simple provisioning methods including Soft AP and Wi-Fi Protected Setup (WPS)



| Platform   XBee® Wi-Fi (S6B) |                                                                                                                           |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Features                     |                                                                                                                           |
| Serial Data Interface        | UART up to 1 Mbps, SPI up to 6 Mbps                                                                                       |
| Configuration Method         | API or AT commands                                                                                                        |
| Frequency Band               | ISM 2.4 GHz                                                                                                               |
| ADC Inputs                   | 4 (12-bit)                                                                                                                |
| Digital I/O                  | 10                                                                                                                        |
| Form Factor                  | Through-Hole, Surface Mount                                                                                               |
| Antenna Options              | Through-Hole: PCB (Embedded), U.FL, RPSMA, Integrated Wire<br>SMT: PCB (Embedded), U.FL, RF Pad                           |
| Operating Temperature        | -30° C to +85° C                                                                                                          |
| Dimensions (L x W)           | Through-Hole: 0.960 in x 1.297 in (2.438 cm x 3.294 cm)<br>SMT: 0.87 in x 1.33 in x 0.12 in (2.20 cm x 3.40 cm x 0.30 cm) |
| Networking and Security      |                                                                                                                           |
| Security                     | WPA-PSK, WPA2-PSK and WEP                                                                                                 |
| Channels                     | 13 channels                                                                                                               |
| Wireless LAN                 |                                                                                                                           |
| Standard                     | 802.11b/g/n                                                                                                               |
| Data Rates                   | 1 Mbps to 72 Mbps                                                                                                         |
| Modulation                   | 802.11b: CCK, DSSS<br>802.11g/n: OFDM with BPSK, QPSK, 16-QAM, 64-QAM                                                     |
| Transmit Power               | Up to +16 dBm                                                                                                             |
| Receiver Sensitivity         | -93 to -71 dBm                                                                                                            |
| Power Requirements           |                                                                                                                           |
| Supply Voltage               | 3.14 - 3.46 VDC                                                                                                           |
| Transmit Current             | Up to 309 mA                                                                                                              |
| Receive Current              | 100 mA                                                                                                                    |
| Power-Down Current           | <6 µA @ 25° C                                                                                                             |
| Regulatory Approvals         |                                                                                                                           |
| FCC (USA)                    | Yes                                                                                                                       |
| IC (Canada)                  | Yes                                                                                                                       |
| CE/ETSI (Europe)             | Yes                                                                                                                       |
| C-TICK (Australia)           | Yes                                                                                                                       |
| Telec (Japan)                | Yes                                                                                                                       |
| Anatel (Brazil)              | Pending                                                                                                                   |

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- Консультации по применению компонента;
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