

WICED WI-FI

Cypress provides a full-featured WICED® Development Kit and is working with partners to deliver turnkey hardware solutions of various form factors to readily enable Wi-Fi connectivity in system designs. The following reference WICED boards are available for development and device prototyping.

BCM943362WCD4_EVB:

The BCM943362WCD4 SIP module is mounted on a full-featured USB-based evaluation and development board that is fully compatible with the WICED Wi-Fi Software Development Kit (SDK). The onboard SIP module leverages the CYW43362 802.11n 2.4 GHz Wi-Fi controller with integrated antennas and diversity to improve the quality and reliability of a wireless link, plus the STM32F205 32-bit ARM microcontroller.

BCM943364WCD1_EVB:

The BCM943364WCD1 SIP module is mounted on a full-featured USB-based evaluation and development board that is fully compatible with the WICED Wi-Fi Software Development Kit (SDK). Designed to be a lower cost alternative to the popular CYW43362, the onboard SIP module leverages the CYW43364 2.4 GHz WLAN IEEE 802.11b/g/n MAC/baseband/radio. In addition, the module integrates a power amplifier (PA) that meets the output power requirements of most handheld systems, a low-noise amplifier (LNA) for best-in-class receiver sensitivity, and an internal transmit/receive (iTR) RF switch, further reducing the overall solution cost and printed circuit board area. Powered by the STM32F411 32-bit ARM microcontroller, the board is also provisioned to support the authentication chip utilized by Apple's HomeKit offering.

BCM94343WWCD1_EVB:

The BCM94343WWCD1 SIP module is mounted on a full-featured USB-based evaluation and development board that is fully compatible with the WICED Wi-Fi SDK. Designed to be a lower cost alternative to the popular CYW4334X series, the onboard SIP module leverages the CYW4343W featuring a 802.11b/g/n MAC/baseband/radio and Bluetooth 4.1 support. In addition, the module integrates a power amplifier (PA) that meets the output power requirements of most handheld systems, a low-noise amplifier (LNA) for best-in-class receiver sensitivity, and an internal transmit/receive (iTR) RF switch, further reducing the overall solution cost and printed circuit board area. Powered by the STM32F411 32-bit ARM microcontroller, the board is also provisioned to support the authentication chip utilized by Apple's HomeKit offering.



WICED WI-FI SOFTWARE DEVELOPMENT KIT

The WICED Wi-Fi SDK includes the following:

- An open-source build system and toolchain based on GNU 'make'.
- A GUI development environment based on Eclipse CDT that seamlessly integrates with a JTAG programmer and single-step, thread-aware debugger based on OpenOCD and gdb.
- A comprehensive software stack with a choice of several RTOS/ TCP stack options including ThreadX/NetX, ThreadX/NetX Duo, and FreeRTOS/LwIP.
- Advanced security and networking features, incorporating SSL/TLS, IPv4/IPv6 networking, and mDNS (Bonjour) device discovery.
- WICED Application Framework incorporating production-ready features, including bootloader, Flash storage API, over-the-air (OTA) upgrades, factory reset, and system monitor.
- Production-ready sample applications and application snippets that demonstrate how to use the WICED API feature set, including examples of Wi-Fi to Bluetooth (BT/BLE) bridging and Apple HomeKit (requires MFi license).
- Support for Amazon Web Services (AWS), Alibaba Aliyun and IBM Bluemix.
- Various test applications to aid manufacturing and certification.
- Full documentation included in the SDK.

For additional information on WICED modules currently in production, go to: https://community.cypress.com/community/wiced-wifi



The BCM943364WCD1 WICED module mounted on a full-featured BCM943364WCD1_EVB development board.



The BCM94343WWCD1 SIP module mounted on a full-featured BCM94343WWCD1_EVB evaluation board.

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