

CYPRESS

BLUETOOTH® WICED® MODULES

THE WORLD'S BEST RF PERFORMANCE DELIVERED IN A FULLY CERTIFIED BLUETOOTH SMART AND SMART READY SOLUTION

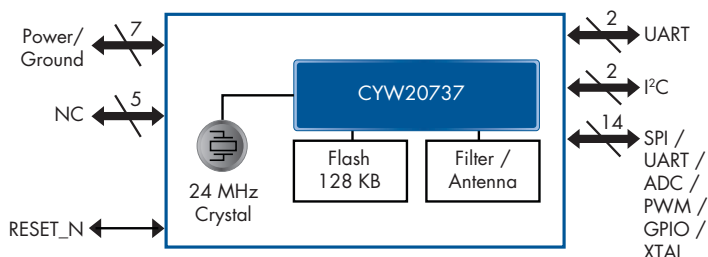


PRODUCT OVERVIEW

INTRODUCTION

Cypress Bluetooth WICED Modules are fully certified, programmable, Bluetooth Smart or Bluetooth Smart Ready modules designed for ease-of-use and reducing time-to-market. They contain Cypress's Bluetooth Smart or Smart Ready silicon devices, crystal(s), antenna, shield and passive components. Cypress Bluetooth WICED Modules provide a simple and low cost way to add Bluetooth connectivity and a microcontroller to any system. Cypress Bluetooth WICED Modules integrate various functions such as ADCs and PWMs to enable sensor-based designs for IoT products.

CYPRESS BLUETOOTH WICED MODULE BLOCK DIAGRAM (CYBLE-013025-00)



WICED SMART/STUDIO – SOFTWARE DEVELOPMENT KIT (SDK)

The Cypress WICED Smart and WICED STUDIO SDKs includes the tools and software needed to develop, and program Cypress Bluetooth WICED modules. The SDK is available as a standalone compressed file or as a separate installer bundled with the WICED Integrated Development Environment.

CYPRESS BLUETOOTH WICED MODULE ADVANTAGES

- Best-in-Class RF performance
- Cost effective module design
- Fully certified (QDID, FCC, ISSED, CE, MIC/TELEC) to get Bluetooth Smart or Smart Ready products to market faster and save on certification costs
- Fully integrated (Cypress Bluetooth Silicon, crystals, Chip/PCB antenna, shield and passive components)
- Industry proven Bluetooth protocol stack and profiles
- Integrated functional blocks and various interface options for sensor-based IoT system design

FEATURES

FULLY CERTIFIED

- Bluetooth 4.1/4.2 qualified with QDID
- Fully certified for RF regulations - FCC, ISSED, MIC/TELEC and CE

WICED® SOFTWARE DEVELOPMENT KIT

ARM® CORTEX®-M3 OR M4 MICROCONTROLLER

- 32-bit processor
- On chip RAM with on or off-chip flash

BLUETOOTH 4.1/4.2 COMPLIANT

- Rx sensitivity as low as -96.5dBm
- Output Power: Up to +9 dBm for Bluetooth Smart ; up to +12 dBm for Bluetooth Smart Ready
- Range up to 200 meters
- Supports Special Interest Group (SIG) adopted profiles and services

MULTIPLE INTERFACE OPTIONS

- UART/I2C/SPI
- I2S for audio
- GPIOs

ADDITIONAL ON-BOARD RESOURCES

- 1 x 16-bit, delta-sigma ADC
- 4 x PWMs

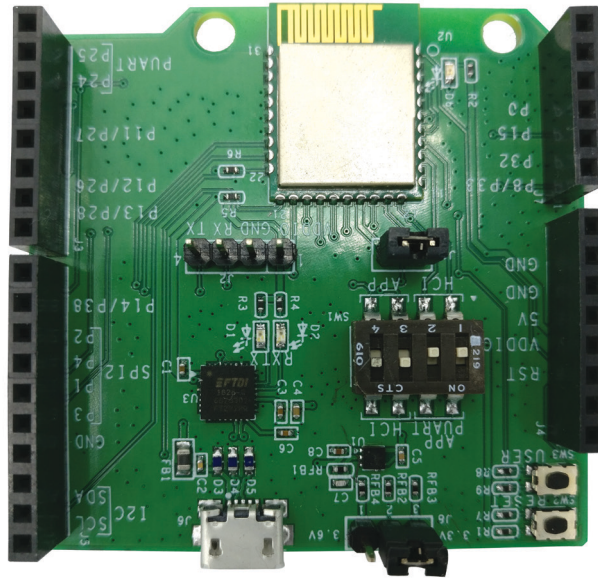
24 MHZ CRYSTAL

SMT-READY TEMPERATURE RANGE OF -30°C TO +85°C

CYPRESS BLUETOOTH WICED MODULE APPLICATIONS

Cypress Bluetooth WICED Modules are a perfect fit for a variety of medical and industrial applications, PC accessories, toys, remote controls, gaming controllers, beacons and any other applications that require easy-to-use, Bluetooth Smart or Smart ready based wireless connectivity.

CYPRESS BLUETOOTH WICED MODULE EVALUATION BOARDS



EZ-BLE WICED Evaluation Board
(CYBLE-013025-EVAL)

The Cypress Bluetooth WICED Evaluation Boards enable evaluation and development of applications with the Cypress Bluetooth WICED Modules. The Cypress Bluetooth WICED Evaluation Boards can be used standalone or with 3rd-party Arduino shields.

ORDERING INFORMATION

| Part Number | Size (mmxmm) | Flash (KB) | SRAM (KB) | BT Spec | CPU | Serial Interface | Delta-Sigma ADC | PWM | Max Transmit Power | Operating Voltage (V) | Operating Temperature | Package |
|-----------------|--------------|------------|-----------|---------|-----|---------------------------|-----------------|-----|----------------------|-----------------------|-----------------------|---------|
| CYBLE-013025-00 | 14x19 | 128 | 60 | 4.1 | M3 | SPI/I ² C/UART | 16bit | 4 | +4 dBm | 2.3 to 3.6 | -30°C to +85°C | 31-SMT |
| CYBLE-013030-00 | 14x19 | 0 | 60 | 4.1 | M3 | SPI/I ² C/UART | 16bit | 4 | +4 dBm | 1.6 to 3.6 | -30°C to +85°C | 31-SMT |
| CYBT-343026-01 | 12x15.5 | 512 | 352 | 4.2 | M3 | SPI/I ² C/UART | 16bit | 4 | +9 dBm/ +12 dbm * | 2.6 to 3.6 | -30°C to +85°C | 24-SMT |

Note(*): +9 dBm for Bluetooth Smart, +12 dBm for Bluetooth Smart Ready

To download datasheets, buy kits and for latest information on Cypress Bluetooth WICED Modules visit www.cypress.com/ez-blemodule

Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134
phone +1 408.943.2600 fax +1 408.943.6848
toll free +1 800.858.1810 (U.S. only) Press "1" to reach your local sales representative

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