

# EZ-BLE™ MODULE ARDUINO EVALUATION BOARD

## CYBLE-013025-EVAL



The EZ-BLE Module Arduino Evaluation Board (CYBLE-013025-EVAL) enables you to evaluate and develop applications on the CYBLE-0130XX-00 WICED Modules (CYBLE-013025-00 and CYBLE-013030-00). CYBLE-013025-EVAL can be used as a standalone evaluation kit or can be combined with Arduino compatible shields.

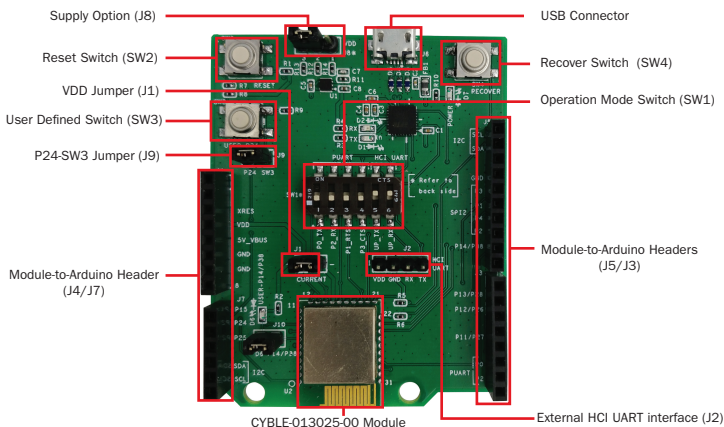
The CYBLE-0130XX-00 WICED Modules are fully integrated, fully certified, 14.5 mm x 19.2 mm x 2.25 mm, programmable, Bluetooth® Smart modules designed to reduce your time-to-market.

For more information, visit:

[www.cypress.com/EZ-BLEModule](http://www.cypress.com/EZ-BLEModule) - EZ-BLE Module home pages

[www.cypress.com/EZ-Serial](http://www.cypress.com/EZ-Serial) - EZ-Serial BLE Firmware Platform page

[www.cypress.com/WICED](http://www.cypress.com/WICED) - WICED Platform page



**Figure 1: CYBLE-013025-EVAL Top View**

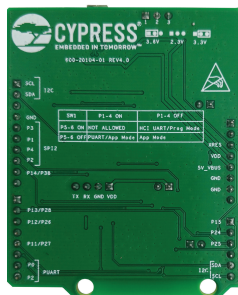
To use the CYBLE-013025-EVAL,

- 1) Configure the evaluation board headers/switches to the desired settings
- 2) Connect the evaluation board to a PC via a USB cable
- 3) Open the WICED Smart SDK, develop your application, program and test

The Arduino compatible headers (J3/J4/J5/J7) are optional connections, which provide additional I/O connections to the module, and allows for Arduino Compatible shields to be used during development.

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## CYBLE-013025-EVAL



**Figure 2: CYBLE-013025-EVAL Bottom View**

SW1: Jumper configuration for UART connections as shown in the below table:

| SW1 Position           | Position 1/2/3/4 = ON                                    | Position 1/2/3/4 = OFF                                          |
|------------------------|----------------------------------------------------------|-----------------------------------------------------------------|
| Position 5 and 6 = ON  | <b>Do Not Use</b><br>(HCI and PUART compete)             | <b>HCI mode</b><br>Reprogramming or testing                     |
| Position 5 and 6 = OFF | <b>PUART Application Mode</b><br>PUART connected to host | <b>General Application Mode</b><br>PUART disconnected from host |

SW2: Reset Switch routed to the XRES connection on the module.

SW3: User-defined Switch routed to the P24 connection on the module.

SW4: Recover Switch routed to the SDA connection on the module.

J1: Used for power supply current measurement.

J2: Connection for external interface for direct HCI UART communication.

J3/J4/J5/J7: Arduino-compatible headers used with an Arduino-compatible shield.

J8: Configures the VDD voltage input to the module as shown in the below table:

| J8 Jumper Configuration | VDD Voltage Level |
|-------------------------|-------------------|
| Short 1 & 2             | 3.6V              |
| Short 2 & 3             | 3.3V              |
| No Jumper               | 2.3V              |

J9: Connects the P24 pad on the module to SW3.

J10: Connects the P14/38 pad on the module to LED D6.

The CYBLE-0130XX-00 WICED Modules are qualified for the Bluetooth 4.1 specification and are certified for the 2.4 GHz unlicensed frequency range in USA (FCC), Canada (ISED), Europe (CE) and Japan (MIC).

Visit [www.cypress.com/support](http://www.cypress.com/support) for technical support.