

WirelessUSB™ LP Evaluation Kit (CY3630)

2.4GHz Wireless Platforms - Delivered

When the time comes to go wireless, only Cypress's WirelessUSB LP 2.4GHz radio system on chip (SoC) delivers the robustness and ease of use needed to Cut the Cord™. And there's no easier way to discover WirelessUSB LP's wealth of features than the **WirelessUSB LP Evaluation Kit (EVK)**. The EVK showcases the advanced features of WirelessUSB LP, such as Auto Transaction Sequencer, AutoRate™ receiver, high data rate with DSSS, and low power. The EVK is loaded with customer-friendly features like firmware demos, tutorials, multi-configuration MCU slots, large prototyping area, radio modules and MCU programming hardware, all of which provide a flexible and high performance platform for developing 2.4GHz wireless applications.



FIGURE 1. WirelessUSB LP EVK Platform boards with radio and LCD modules

Applications

Wireless Keyboards and Mice
Wireless Gaming Devices
Presenter Tools
Remote Controllers
VoIP and Wireless Headsets

Consumer Electronics
Home Automation
White Goods
Toys
Personal Health & Entertainment

A Complete Suite of Development Tools

In addition to the EVK, Cypress provides a complete line of value-add kits to simplify design and reduce time to market for WirelessUSB LP applications.

CY3630M WirelessUSB LP Radio Modules | Pack of 4 socketed WirelessUSB LP radio modules for evaluation and prototyping. \$99.

CY4636 Keyboard-Mouse Reference Design Kit (RDK) | Complete reference design for building a wireless keyboard and mouse solution based on WirelessUSB LP. Includes schematics, layout, firmware, and demo units. \$199.

CY3631 Manufacturing Test Kit (MTK) | An industry first, the MTK is an automated RF test platform providing a cost-effective method of early detection of assembly level failures. \$895. **Available now.**

CY3636 Development Kit (DVK) | Powered by the general purpose protocol, enables the development of sophisticated wireless applications. Includes platform boards, radio modules, and detailed documentation. **Available Q3'06.**



FEATURES

- Easy hardware prototyping through flexible platform boards
- Evaluation boards are small and can be battery powered for portability during evaluation and demonstration
- Included radio modules enable prototyping and evaluation of wireless communication with zero RF board design
- Fast track learning provided with four firmware tutorials, a wireless range demo, and thorough documentation
- Integrated switches and LEDs enable quick "buttons and lights" projects
- Integrated LCD modules provide text display feedback during evaluation and demonstration
- Multi-configuration MCU sockets can accommodate a wide variety of Cypress MCUs and adapter modules, including the Wireless enCoRe™ II family and PSoC mixed signal array
- Conveniently includes all components necessary for evaluation, demonstration, and development
- Attractively priced at \$250, and available through Cypress distributors and Online Store

WirelessUSB LP Evaluation Kit (EVK)

Kit Contents

- **WirelessUSB EVK Platform Boards (2)** – General purpose evaluation platform board including power supply options, breadboard area, radio and LCD module connectors, and a multi-purpose MCU socket that can accommodate the CY8C27000 and CY8C29000 PSoC devices directly, as well as variety of MCU adapter modules for the Wireless enCoRe II family of devices.
- **Socketed CY7C60323 MCU Adaptor Module (2)** – Contains a Wireless enCoRe II MCU and plugs into the multi-purpose MCU socket on the platform board in order to control platform board functions and WirelessUSB LP radio operations.
- **Socketed CY7C60323 Emulation Module (1)** – Allows in-circuit emulation of Wireless enCoRe II, for use with the Cypress ICE Cube tool (supplied separately).
- **Socketed WirelessUSB LP Radio Modules (2)** – Complete plug-in radio modules with integrated RF passives and antenna for simple evaluation and prototyping.
- **3.3v LCD Modules (2)** – Displays application data providing text feedback to simplify evaluation and enable effective demonstrations.
- **MiniProg Programmer (1)** – Portable device that connects to PC via a USB cable for in-system serial programming (ISSP) of Cypress Flash MCUs.
- **RS232 Cable (1)** – Provides real-time serial debug connectivity to a PC
- **Multiple power supply options** – External power adapter, 2 AAA, or 9V battery



FIGURE 2. WirelessUSB LP EVK contents including platform board, MiniProg, modules, batteries, and adapter

HIGHLIGHTS

■ Fast Track Learning

Four tutorials provide incremental learning to the user. Each tutorial builds upon the features and training from the prior tutorial:

- Tutorial 1: Introduces basic features and ease of use for WirelessUSB LP via direct radio operation. Demonstrates a simple buttons and lights project
- Tutorial 2: Familiarizes the user with basic features of the provided firmware radio driver, and demonstrates the buttons and lights application utilizing the driver
- Tutorial 3: Showcases the low power consumption of the radio by simulating a real world HID application example using additional radio driver features
- Tutorial 4: Demonstrates packet retries, and provides real time debugging capabilities by adding UART support

■ Wireless Range Demo

The included range demo firmware showcases the RF robustness of Wireless USB LP (works reliably at 10m in a hostile RF environment)



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