



Release Notes

CY8CKIT-042-BLE Bluetooth® Low Energy Pioneer Kit

Release Date: February 12, 2016

Thank you for your interest in the CY8CKIT-042-BLE Bluetooth® Low Energy (BLE) Pioneer Kit. This document lists kit contents, installation requirements, limitations, and known issues with the kit.

Kit Content

The CY8CKIT-042-BLE Bluetooth Low Energy Pioneer Kit includes the following:

- BLE Pioneer baseboard preloaded with CY8CKIT-142 PSoC® 4 BLE Module
- CY5671 PRoC™ BLE Module
- CY5670 CySmart™ USB Dongle (BLE Dongle)
- Quick Start Guide
- USB Standard-A to Mini-B cable
- Four jumper wires (4 inch) and two proximity sensor wires (5 inch)
- Coin cell (3-V CR2032)

Installation

Installation instructions are provided in the CY8CKIT-042-BLE Bluetooth Low Energy Pioneer Kit User Guide, available at www.cypress.com/CY8CKIT-042-BLE.

Kit Installer Revision

This is revision *E of the CY8CKIT-042-BLE Bluetooth Low Energy Pioneer Kit installer. This revision includes PSoC Creator 3.3 Service Pack 1, which adds support for Bluetooth 4.2-capable devices.

This revision also adds the Eddystone™ Beacon example project to the installer.

The kit supports the following BLE modules:

- CY5671 PRoC BLE Module
- CY5674 PRoC BLE SMA Module
- CY5676 PRoC BLE 256KB Module
- CY5676A PRoC BLE 256KB Module
- CY8CKIT-141 PSoC 4 BLE SMA Module
- CY8CKIT-142 PSoC 4 BLE Module
- CY8CKIT-143 PSoC 4 BLE 256KB Module
- CY8CKIT-143A PSoC 4 BLE 256KB Module

The following USB dongles are supported:

- CY5670 CySmart USB Dongle (BLE Dongle)
- CY5677 CySmart BLE 4.2 USB Dongle (BLE Dongle)



For more information on the BLE Modules and BLE Dongle, refer to the “BLE Modules and BLE Dongles Compatible with the BLE Pioneer Kit” section in the Appendix of the BLE Pioneer Kit Guide.

Limitations and Known Issues

PSoC Creator 3.3 SP1 packages the BLE Component 3.0, which is a prototype version and is intended to be used for Bluetooth 4.2-capable devices only.

The following are limitations and issues that are known in this revision of the BLE Pioneer Kit. These will be resolved in future revisions of the kit.

- When the kit is not in use, remove the coin cell. The protection circuit in the development kit has a leakage current of ~300 μ A. To evaluate battery life, solder R7 (zero-ohm resistor) to bypass the protection circuit. This change will reduce leakage current but will compromise the protection circuit when an external supply is used.
- The CY5670 CySmart USB Dongle, CY8CKIT-142 PSoC 4 BLE Module, and CY5671 PProC BLE Module (available in kits with date-code 1443~1501) are preprogrammed with a prerelease version of firmware. Both the BLE dongle and modules need to be updated with a newer version of firmware. Refer to the “Programming and Debugging BLE Device” section in the kit’s user guide for firmware programming instructions.
- The onboard RGB LED requires a supply voltage of 3.3 V or greater to function correctly. Using this kit with a coin cell (3 V) will affect the RGB LED operation.
- The onboard F-RAM™ (FM24V10-G) requires a 3-V CR2032 coin cell or DC voltage in the range of 2.0 V–3.6 V to function correctly. If the BLE Pioneer Kit voltage is set to 5 V or 1.9 V, then F-RAM will not be functional.
- For limitations and known issues with the PSoC 4 BLE silicon, see the [PSoC 4 BLE datasheet](#).
- For limitations and known issues with the PProC BLE silicon, see the [PProC BLE datasheet](#).
- For limitations and known issues with PSoC Creator™, see the [PSoC Creator 3.3 release notes](#).
- For limitations and known issues with the CySmart Central Emulation Tool, see the [CySmart Central Emulation Tool release notes](#).

Documentation

The kit documents are located in the `Documentation` folder in the installation directory. The default location for the kit documents is:

```
<Install_Directory>\CY8CKIT-042-BLE Kit\<version>\Documentation
```

Documents include:

- *CY8CKIT-042-BLE_Kit_Guide.pdf*
- *CY8CKIT-042-BLE_Quick_Start_Guide.pdf*
- *CY8CKIT-042-BLE_Release_Notes.pdf*

After opening PSoC Creator, view the documentation in **Help > Documentation**.

The default location for PSoC Creator documents is:

```
<Install_Directory>\PSoC Creator\<version>\PSoC Creator\Documentation
```

The default location for PSoC Programmer documents is:



<Install_Directory>\Programmer\Documents

Technical Support

For assistance, go to www.cypress.com/support or contact our customer support at +1 (800) 541-4736 Ext. 2 (in the USA), or +1 (408) 943-2600 Ext. 2 (International).

Additional Information

- For more information on the CySmart Central Emulation Tool and supported hardware, visit www.cypress.com/cysmart
- For more information about PSoC Creator functionality and releases, visit the PSoC Creator web page: www.cypress.com/psoccreator
- For more information about PSoC Programmer and supported hardware, visit the PSoC Programmer web page: www.cypress.com/psocprogrammer
- For a list of trainings on PSoC Creator, visit www.cypress.com/go/creatorstart/creatortraining



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