CY8CKIT-042-BLE-A Bluetooth® Low Energy Pioneer Kit Release Notes

Release Date: May 23, 2018

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

Kit Contents

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

- BLE Pioneer Baseboard preloaded with CY8CKIT-143A PSoC® 4 BLE 256KB Module
- CY5677 CySmart BLE 4.2 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 (3V CR2032)

Software and Tools

The code examples shipped with this kit require PSoC Creator™ 4.2 or later. This is available with the kit installer or on the PSoC Creator webpage (http://www.cypress.com/psoccreator).

PSoC Programmer 3.27.1 or later and KitProg v2.20 or later are required to program the PSoC 4 BLE device on the PSoC 4 BLE Pioneer Kit. PSoC Creator installer or the kit installer automatically installs PSoC Programmer and KitProg drivers.

The CySmart 1.3 desktop application and CySmart mobile application are required to evaluate the example projects with BLE. The CySmart iOS and Android apps are available for download on the App Store™ and Google Play™ store respectively.

Code Examples and Kit Collateral

The CY8CKIT-042-BLE-A webpage (www.cypress.com/CY8CKIT-042-BLE-A) includes the kit installation packages, DVD image (ISO), and setup files (EXE) to install the code examples, documents, and hardware files of this kit.

Installation

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

Kit Revision

This is revision *B of the CY8CKIT-042-BLE-A Bluetooth Low Energy Pioneer Kit installer. In this revision, the CY5677 CySmart BLE 4.2 USB Dongle (PRoC Dongle) is replaced by CY5677 CySmart BLE 4.2 USB Dongle (PSoC 4 BLE Dongle).

Limitations and Known Issues

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 µA. 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 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 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 PSoC Creator™, see the PSoC Creator 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-A Kit\<version>\Documentation

Documents include:

- *CY8CKIT-042-BLE-A_Kit_Guide.pdf*
- *CY8CKIT-042-BLE-A_Quick_Start_Guide.pdf*
- *CY8CKIT-042-BLE-A_Release_Notes.pdf*

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

After opening PSoC Creator, on the Start Page, select **Start** > **Kits** > **CY8CKIT-042-BLE-A** for links to the kit documentation on the right panel. Expand **CY8CKIT-042-BLE-A** for kit code examples.

Additional tool and device documentation is available in **Help** > **Documentation**.

Technical Support

For assistance, go to www.cypress.com/support or contact our customer support at +1 (800) 541-4736 Ext. 3 (in the USA), or +1 (408) 943-2600 Ext. 3 (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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