

C8051F850 BLDC MOTOR REFERENCE DESIGN QUICK-START GUIDE



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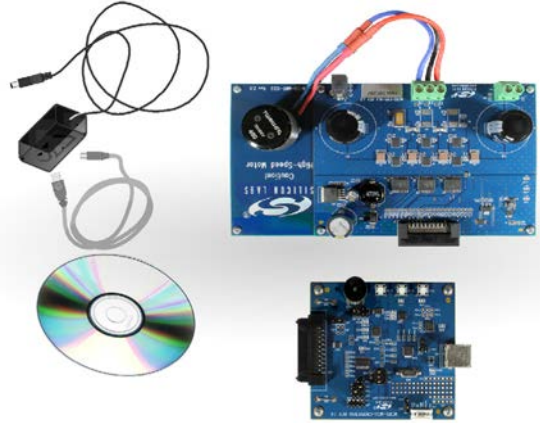
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Mailing Address:
400 W. Cesar Chavez
Austin, TX 78701

The C8051F850 BLDC Motor Reference Design comes with an MCU board, Powertrain Board, BLDC motor, and all cables and power supplies needed to evaluate the reference design and develop code.

- MCU Board: MCRD-MCU-C8051F850 with the motor control firmware preprogrammed into the MCU
- Powertrain Board: MCRD-PWR-NLV-F85X
- BLDC Motor: Turnigy 450 Series 3800 kV Brushless Outrunner Helicopter Motor
- Motor Mount Board
- 8-bit MCU Kit CD
- 12 V, 5 A Universal Input Power Adapter



Note: This Development Kit includes a **Product Serial Number** that expands the 2 kB code-limited evaluation version of the Keil tools to a full version with no code limit. Registration instructions can be found in "AN104: Integrating Keil 8051 Tools into the Silicon Labs IDE". This Keil tools upgrade process is not required to complete the steps listed in this document.

A. Install Software

1 Insert the CD included in the kit to start installing the F850 BLDC Reference Design Kit software. The latest version of the installer can also be found on the Silicon Labs web site: <http://www.silabs.com/8bit-software>

OR

4 Select "Kit Specific Installation" to activate the Kit Selection installation dialog.

5 Select the "F850_BLDC_RD" kit option and click "Install" to install the Spinner application, BLDC motor firmware, and BLDC hardware design guide tool.

2 Select "Install Development Tools" from the introduction window to install the development tools required for the F850 BLDC Reference Design kit.

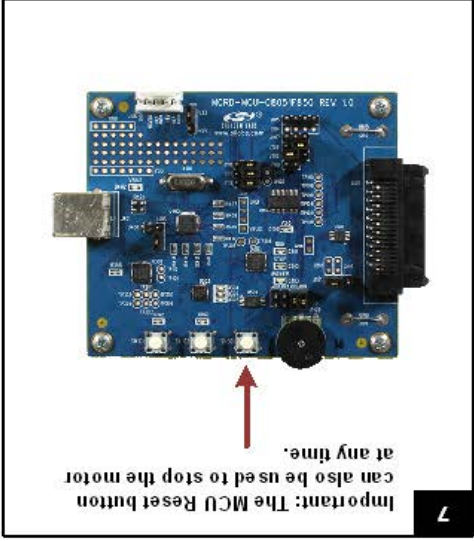
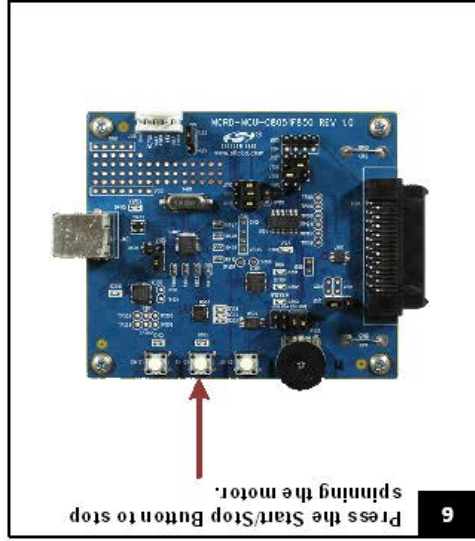
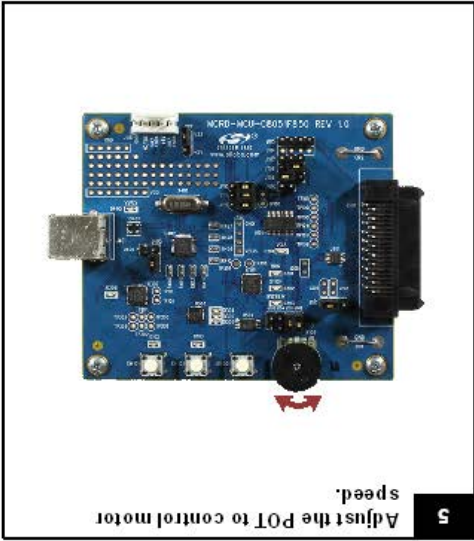
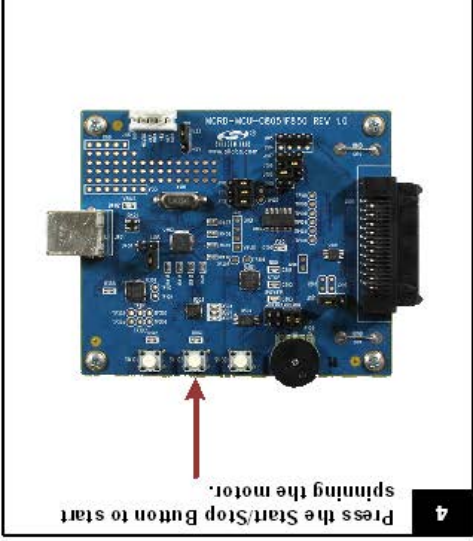
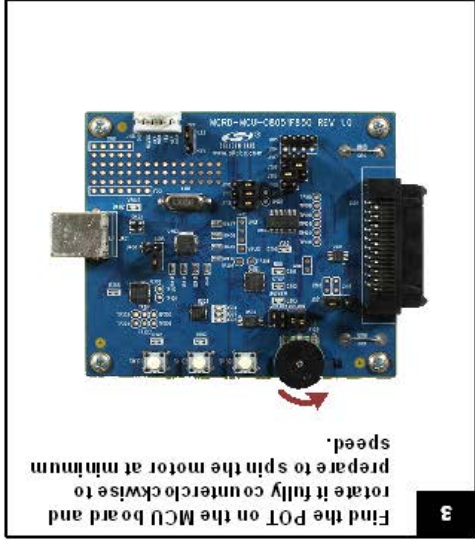
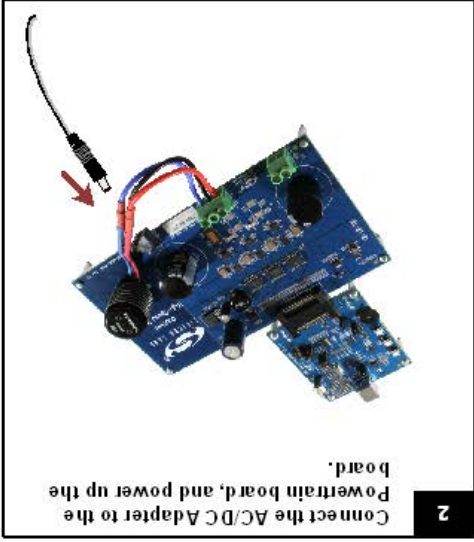
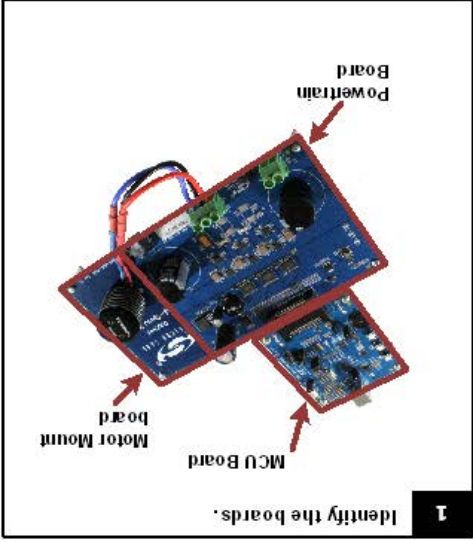
3 Click "Next" and follow the installation steps to install all the software, drivers, and documentation.

6 Go to the Silicon Labs web site to register the compiler toolchain (an unlimited version of the Keil PK51 Professional Developer's Kit).

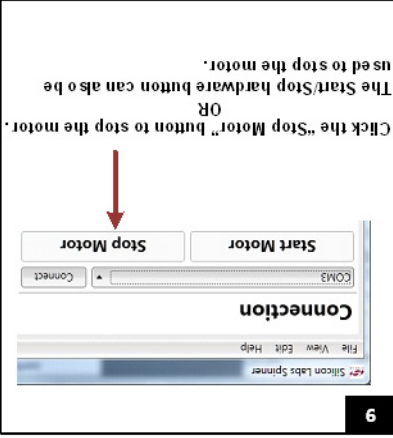
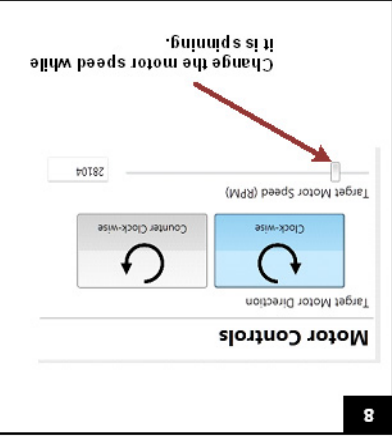
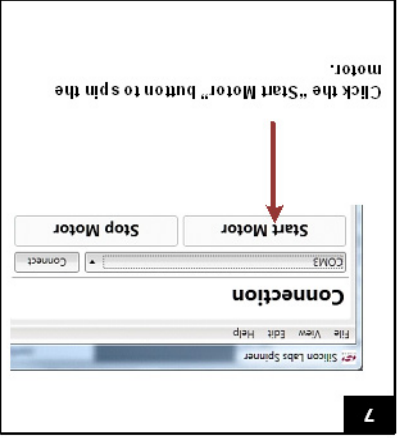
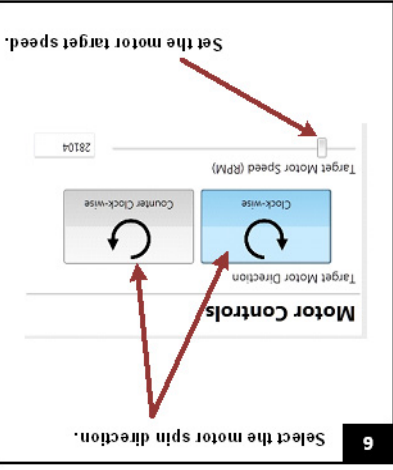
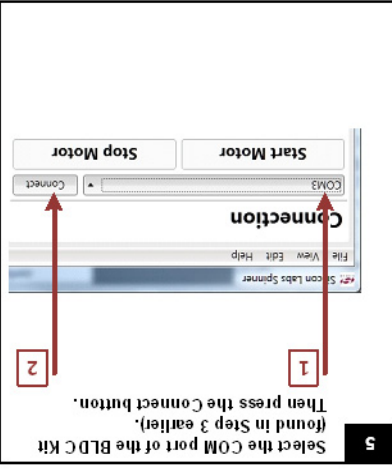
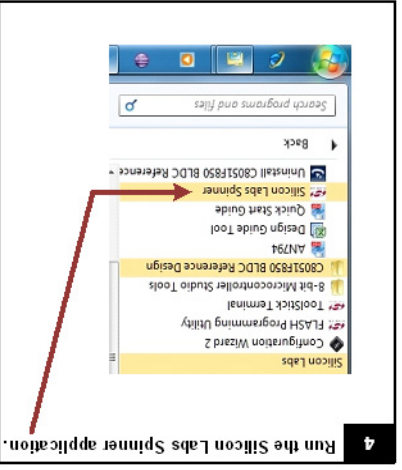
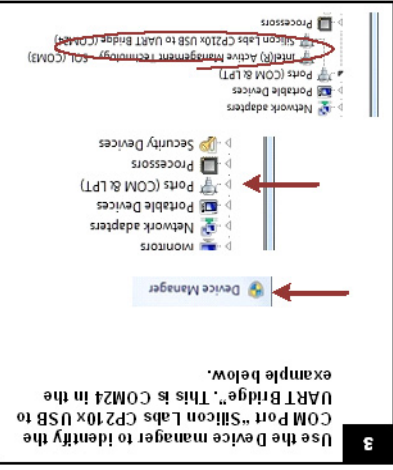
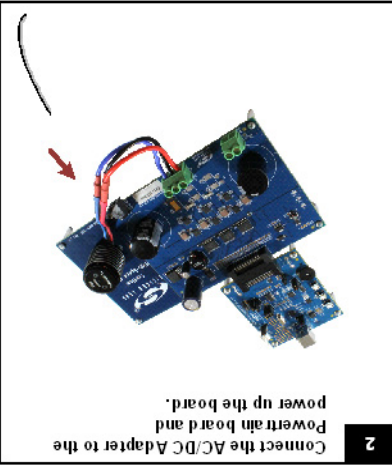
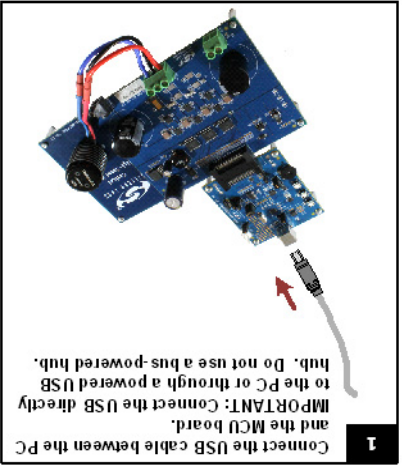
NEW
Now includes an unlimited Keil® PK51 Professional Developer's Kit! Register your product and receive the key to unlock your PK51 tools.

Register Now!

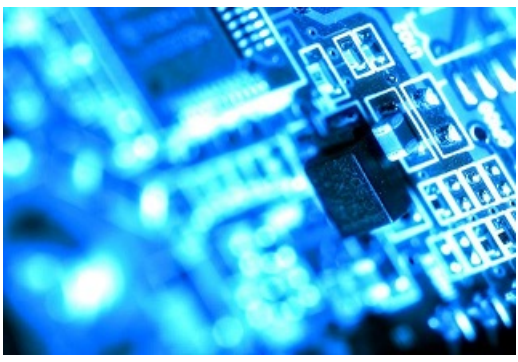
B. Stand-Alone Operation



C. PC Controlled Operation



D. Additional Support



Where to Find Support

Application Notes: www.silabs.com/bit-appnotes
 MCU KnowledgeBase: www.silabs.com→Support→Knowledge Base
 User's Forums: forum.silabs.com
 Contact an Applications Engineer: www.silabs.com→Support→Contact Technical Support