

Support & More Resources

CY3215-DK Development Kit (Emulator)

For simple programming a MiniProg is included in the CY3214-PSoCEvalUSB kit. For full emulation you can attach an ICE-Cube to the PSoCEvalUSB board. (The ICE-Cube is available in the CY3215-DK.)



ICE-Cube
(available in CY3215-DK)

Powering the board (9-12V)

The PSoCEvalUSB board can be powered by any of the following methods:

- 1) Separate power supply: recommend Digkey Part T461-P5P-ND.
- 2) USB: if connected to bus powered hub then not to exceed 100mA, if connected to self powered hub or PC then not to exceed 500mA (consult USB 2.0 spec to determine exact power restrictions).
- 3) ICE-Cube: not to exceed 100mA.

Visit www.cypress.com/psoc for PSoC support.

Online Support

For knowledgebase articles, customer forums, and online application support, visit www.cypress.com/support.

PSoC Device Selector Guide

Application Note AN2209, the PSoC Device Selector Guide, is a useful tool for determining exactly which PSoC device you should use for a specific project.

Development Tools Selector Guide

The PSoC Development Tools Selector Guide includes a complete catalog and description of all the development tools that support PSoC devices.

Tele-Training

Tele-training courses can help you move quickly up the PSoC learning curve. Each training includes example projects. To register for the live training taught by PSoC factory experts or to download a pre-recorded class, visit www.cypress.com/support/training.cfm.

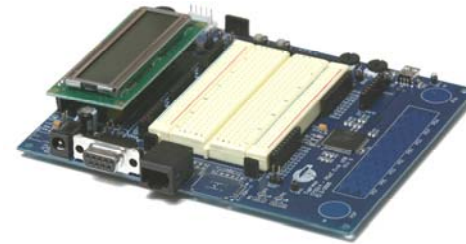
Application Notes

Hundreds of PSoC Application Notes are available at www.cypress.com. Many Application Notes include PSoC Designer or PSoC Express Projects for additional support.

Web: www.cypress.com
Support: www.cypress.com/support/
US: 800.669.0557 Intl: 425.787.4814



CY3214-PSoCEvalUSB Getting Started Guide

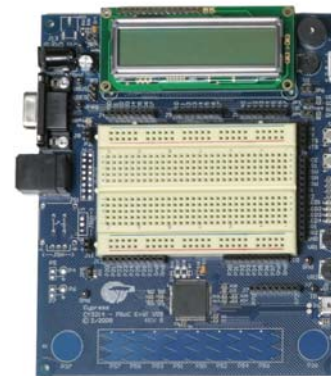


Getting Started:

1. Verify Kit Contents
2. Install PSoC Designer
3. Install PSoC Programmer
4. Run Example Project

Step 1: Verify Kit Contents

LCD Module



PSoCEvalUSB board



MiniProg
programming
unit

KIT CONTENTS

- PSoCEvalUSB board
- LCD Module
- MiniProg programming unit
- USB cable
- Jumper wire pack
- PSoC Designer CD-ROM

Not Pictured:

- PSoC Support CD-ROM
- Getting Started Guide



USB cable



Jumper wire pack



PSoC Designer CD-ROM

Step 2 & 3: Install Software

Install PSoC Designer and then PSoC Programmer from the included CD-ROM. For assistance refer to *PSoC Designer: Integrated Development Environment User Guide*, available on the CD-ROM.

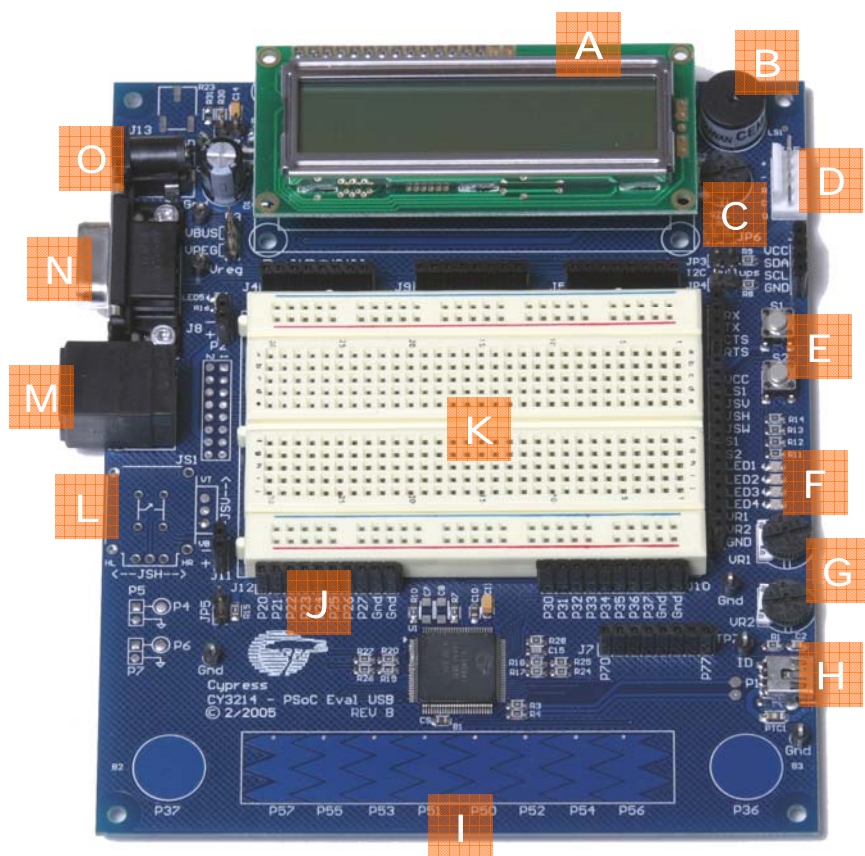
Download the latest version and updates of PSoC Designer and PSoC Programmer at www.cypress.com/psoc (Design Resources >> Software & Drivers).

Step 4: Run Example Project

Included in this kit is a second CD with example projects.

For each example project, first read the accompanying application note, then download and unzip the PSoC Designer Project file to your PC. Finally, read any unzipped *readme.txt* files and run the “.soc” file in PSoC Designer.

PSoCEvalUSB Board Details



Jumpers:

JP7: Add jumper to regulate connected power supply (J13) to 3.3V instead of 5V (LCD doesn't work at 3.3V).
 VBUS: Add jumper to power board via USB instead of from regulated power supply (J13).
 VREG: Add jumper to power board from regulated power supply (J13). Kit is shipped with jumper added.
 JP3 & JP4: Add jumper to enable external pull-up resistors for I2C bus (P1[5] and P1[7]).
 J8 & J11: Connect with jumper wire to bread board for convenient access to the power supply.

Various

LCD:

16x2 Dot Matrix LCD.
 Hitachi 44780 compatible module.



Loudspeaker (LS1):

Magnetic buzzer accessible via LS1. CEM-1206S. (Active high, set drive to strong, drive high).



Contrast Potentiometer (R2):

Controls LCD contrast.



ISSP Connector (J15):

In-System Serial Programmer (ISSP) connector. Connect MiniProg for programming.



Buttons (S1 and S2):

SPST-NO push-button switches. (Set drive to pull down, drive low).



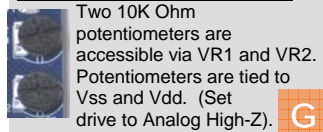
LEDs (LED1-4):

Four LEDs are accessible via headers LED1-4. LEDs are illuminated by connecting the signal to Vss. (Active low, set drive to strong, drive low).



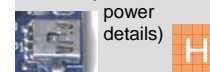
Potentiometers (VR1 and VR2):

Two 10K Ohm potentiometers are accessible via VR1 and VR2. Potentiometers are tied to Vss and Vdd. (Set drive to Analog High-Z).



USB connector (P1):

Mini USB type B connector. (See back for power details)



CapSense buttons & slider:

Port 5 can be used in the interpolation of a CapSense slider; P3[6] and P3[7] can be used to implement CapSense buttons.



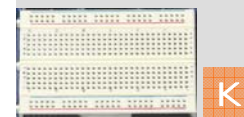
Pin Access:

CY8C24x94 GPIO are accessible via clearly labeled headers.



Breadboard:

Use with jumper wires to connect to on board resources.



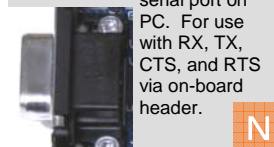
ICE-Cube Connector (J14):

Connects to blue cat 5e cable for use with ICE-Cube (available in the CY3215-DK)



Legacy DB9 Connector (J1):

Connect serial cable (not included) to DB9 connector and serial port on PC. For use with RX, TX, CTS, and RTS via on-board header.



Joystick (JS1):

Unpopulated joystick footprint. Can be populated with Digikey part 252A103B60NB-ND. JSV (vertical pot value), JSH (horizontal pot value), and JSW (switch) are accessible via header on-board.



Power Supply Connector (J13):

Connect to a 9-12V power supply to supply power to the board. (Recommend Digikey Part T461-P5P-ND.)

