

# **Release Notes** CY3280-BK1 Universal CapSense<sup>®</sup> Controller Basic Kit 1

Release Date: May 8, 2012

Thank you for your interest in the CY3280-BK1 Universal CapSense<sup>®</sup> Controller (UCC) Basic Kit 1. This document lists installation requirements, software and hardware updates, limitations, and known issues with the kit.

### System Requirements and Recommendations

| Hardware/Operating System Requirements          | Minimum      | Recommended  |
|-------------------------------------------------|--------------|--------------|
| Processor speed                                 | 1 GHz        | 2 GHz        |
| RAM                                             | 1 GB         | 2 GB         |
| Free hard drive space                           | 800 MB       | 1 GB         |
| Screen resolution                               | 1024×768     | 1280×1024    |
| CD/DVD drive                                    | $\checkmark$ | $\checkmark$ |
| USB                                             | Full Speed   | 2.0 Hi-Speed |
| Windows XP (SP2 or higher), Vista, or Windows 7 | ✓            | ✓            |
| Software Prerequisites                          | Minimum      | Recommended  |
| Microsoft Internet Explorer                     | 7            | Latest       |
| Adobe Reader (for PDF documents)                | 6            | 9+           |
| Windows Installer                               | 3.1          |              |
| .NET Framework                                  | 2.0 SP1      |              |
| PSoC Programmer                                 | 3.12         | Latest*      |
| PSoC Designer                                   | 5.1 SP1      | Latest*      |

\*Go to http://www.cypress.com/go/CY3280-BK1 for the latest downloads of software, code examples, and documentation.

### Installation

To install, insert the kit CD/DVD into your PC's DVD-ROM drive. If the installer does not start automatically, run *cyautorun.exe* in the root directory of the CD/DVD. Follow the installation instructions.

### Kit Revision – Rev. \*B

In this revision, the code examples, user guide, quick start guide, and kit CD are updated to support the latest version of PSoC Designer.

#### **Limitations and Known Issues**

 CY3215 ICE-Cube debugger does not work with CY3280-20x34 and CY3280-21x34 UCC boards. The debugging section is not populated in revision \*B of the kit.

**Workaround:** Assemble termination section and RJ45 connector (P1). The required termination and connector section for the CY3280-21x34 UCC board is illustrated in the schematic in Figure 1. A similar termination is also required for the CY3280-20x34 UCC board.



## Figure 1. OCD Termination Schematic

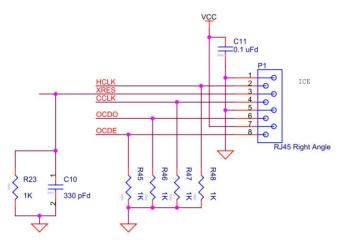
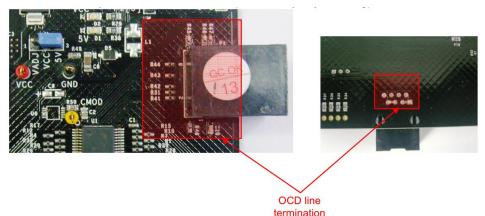


Figure 2 details the reworks required on the current board. The image on the left shows the six components that can be loaded on the available footprint; the image on the right shows the population of two components on the connector pins.

| No. | Qty. | Reference           | Part                                           | Manufacturer            | Mfr. Part No.    | Comment                                 |
|-----|------|---------------------|------------------------------------------------|-------------------------|------------------|-----------------------------------------|
| 1   | 1    | P1                  | CONN RJ45 8-8 MOD JACK<br>UNSHIELD RIGHT ANGLE | AMP Division of<br>TYCO | 557785-1         | Populate on provided<br>footprint       |
| 2   | 4    | R45,R46,<br>R47,R48 | RES 1.0K OHM 1/16W 5% 0402<br>SMD              | Yageo<br>Corporation    | RC0402JR-071KL   | Populate on provided<br>footprint       |
| 3   | 1    | C10                 | CAP 330PF 100V CERAMIC<br>X7R 0603             | Panasonic - ECG         | ECJ-1VB2A331K    | Populate on provided<br>footprint       |
| 4   | 1    | C11                 | CAP CER 330PF 100V 5% X7R<br>0603              | Kemet                   | C0603C331J1RACTU | Populate on Pin 5 and 7 of connector P1 |
| 5   | 1    | R23                 | RES 1.0KOHM 1/16W<br>3300PPM 5%0603            | Panasonic - ECG         | ERA-V33J102V     | Populate on Pin 1 and 3 of connector P2 |

### Figure 2. Board Reworded with OCD Termination



- On the CY3280-20x34 and CY3280-21x34 boards, pin 3 of the ISSP connector J3 has the wrong label on the PCB silk screen – 'XRES' instead of 'XRES/INT'.
- The two digitally controlled potentiometers U3 and U6 on both the UCC baseboards have inter-operability issues; U6 is not populated on this version of the kit to contain this issue.



- When powering the CY3240-I2USB Bridge with an external power source (using the J3 connector), you may experience excess heating with the MAX3378 level shifter. To avoid heating, connect the CY3240-I2USB Bridge to the USB connector when applying external power.
- If the CY3240-I2USB Bridge is set to operate in self-powered mode and it does not operate correctly, when the PC starts, disconnect and then reconnect the CY3240-I2USB Bridge.
- The R15 and R19 markup on the board's top layer silkscreen is reversed. Exercise caution if any rework is planned on these components.

### **Documentation**

Kit documents are located in the following location:

<Install\_Directory>:\Cypress\CY3280-BK1\<version>\Documentation

Documents include:

CY3280-BK1 - User Guide.pdf

CY3280-BK1 - Quick Start Guide.pdf

### Silicon Errata

The latest versions of the silicon errata are available at http://www.cypress.com/psoc.

## **Technical Support**

For assistance, go to http://www.cypress.com/go/support or contact our customer support at +1(800) 541-4736 Ext. 8 (in the USA), or +1 (408) 943-2600 Ext. 8 (International).

### **Additional Information**

- For more information about PSoC Designer functionality and releases, review the user guide and release notes on the PSoC Designer web page: http://www.cypress.com/go/psocdesigner
- For more information about PSoC Programmer, supported hardware, and COM layer, visit the PSoC Programmer web page: http://www.cypress.com/go/psocprogrammer
- For a list of trainings on PSoC Designer, visit http://www.cypress.com/go/psocdesignertraining



Cypress Semiconductor 198 Champion Court San Jose, CA 95134-1709 Phone(USA): 800.858.1810 Phone (Intnl): 408.943.2600 http:// www.cypress.com

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