# Zilog Z8 Encore! XP<sup>®</sup> F0822 Series Flash MCU Evaluation Kit

**Quick Start Guide** 

QS002507-1207

## Introduction

This Quick Start Guide helps you to get started with the Z8 Encore! XP<sup>®</sup> F0822 Series Flash MCU Evaluation Kit, and provides instructions on setting up and using the tools to start building designs and applications.

# **Kit Contents**

The kit contents of the Z8 Encore! XP F0822 Series Flash MCU include the following:

#### Hardware

The hardware included in Z8 Encore! XP F0822 Series Flash MCU Evaluation kit are as follows:

- Z8 Encore! XP F0822 Series Flash MCU evaluation board
- Smart Cable for PC to Z8 Encore! XP F0822 Series Flash evaluation board (DB9 to sixpin male)
- Universal Power supply

#### Software (on CD-ROM)

The following software are included with the Z8 Encore! XP F0822 Series Flash MCU Evaluation kit:

- Zilog Development Studio II (ZDS II) Z8 Encore! Integrated Development Environment (IDE) with ANSI C-Compiler
- Sample code
- Acrobat Reader install program
- Document browser

#### **Documentation**

The following documents are included in the Z8 Encore! XP F0822 Series Flash MCU Evaluation kit:

- Registration Card
- Z8 Encore! XP technical documentation (on CD-ROM)
  - ZDS II IDE User Manual

# **z**ilog<sup>°</sup>

- Evaluation Kit User Manual
- Programmer's Reference Sheet
- eZ8 CPU User Manual
- Product Specification
- Product Briefs
- Application Notes
- Flyers
- Product Line Card

# **Supported Host Environments**

The following system configurations are required on the host PC:

- Microsoft Windows<sup>®</sup> XP SP1, Windows 2000 SP3, Windows NT 4.0 SP6, Windows 98 SE
- Pentium II/233 MHz processor or higher up to Pentium IV, 2.8 GHz
- 96 MB RAM or more
- 25 MB hard disk space or more
- Super VGA video adapter
- CD-ROM drive for software installation
- One or more RS-232 communication ports

# Setting up the Evaluation Board

The PC communicates with the Z8 Encore! XP F0822 Series Flash MCU evaluation board using the serial port of the PC. A Z8 Encore! Smart Cable converts the RS-232 signals into the 3.3 V bidirectional open-drain signal needed to communicate with the On-Chip Debugger of the eZ8.



**Caution:** *Always use a grounding strap to prevent damage resulting from electrostatic discharge (ESD).* 

Follow the steps below to setup the Z8 Encore! XP F0822 Series Flash MCU evaluation board:

- 1. Connect the serial port of the PC to the Z8 Encore! Smart Cable DB-9 connector.
- 2. Connect the Z8 Encore! Smart Cable to the Z8 Encore! XP F0822 Series Flash MCU evaluation board pin header P2.
- 3. Connect the power supply to the evaluation board at J1 (see Figure 1).

**Note:** Depending up on which build of this kit you receive, it may contain either a universal power supply containing two or four location-specific plug configurations or a 110 V AC wall plug that cannot be modified.



Figure 1. Evaluation Board External Connections

#### **Connecting the Universal Power Supply**

There are two methods of connecting the universal power supply: the plug configurations method or the Hewlett Packard power cord method.

#### **Plug Configuration Method**

zilog

The universal power supply kit features several different plug configurations in one box and the power supply itself in another. The power supply ships with a slide-out plate that must be removed to insert the location-specific plug configurations.

- 1. Remove the slide-out plate.
- 2. Select the plug configuration specific to the power requirements of your locale and insert it into the slot that remains after removing the slide-out plate.

- 3. Slide the new plug configuration into the slot until it snaps into place.
- 4. Plug the power supply into an electrical outlet.

#### Hewlett Packard Power Cord Method

Follow the steps below to connect the Universal power supply by the Hewlett Packard power cord method:

- 1. Attach a power cord (purchased separately) featuring an AC plug at one end and a Hewlett Packard socket on the other end to the Hewlett Packard power cord receptacle at the plug end of the power supply.
- 2. Plug the power supply into an electrical outlet.

## Installing the ZDS II Z8 Encore! Software

Follow the steps below to install the ZDS II software:

- Insert the ZDS II CD into the CD-ROM drive of the host PC. The CD launches DemoShield automatically and provides a menu to install the product and documentation. Select INSTALL PRODUCTS followed by INSTALL ZDS II to display the Installation Wizard (see Figure 2).

**Note:** Software versions displayed in the figure is for reference only. You may have an updated version.





zilog

- 2. Click Next to continue with the installation. The License Agreement appears.
- 3. Click **Yes** to accept the agreement and proceed with the installation.
- 4. After selecting **Yes**, the Choose Destination Location screen appears. Follow the directions on the screen and choose whether to install ZDS II in the default location or in some other folder. Click **Next**.
- 5. The Select Program folder screen appears. Follow the directions on the screen and click **Next**.
- 6. After selecting **Next**, the **Register Your Software** screen appears. Follow the on-screen instructions to complete registration.
- 7. If you elected not to register at this time, a reminder screen appears after installation asking you to register the product online at <u>www.zilog.com</u>. To register at a later time the registration link to the internet site is found in the ZDS II Help menu.
- When the installation is complete, the following directory is installed on the host PC, presuming all installation settings remain at their defaults:
  C:\Program Files\ZiLOG\ZDSII\_<product>\_<version number>.

## **Getting Started Using ZDS II**

zilog

Follow the steps below to open and use an existing project:

- 1. Connect the Evaluation board to the host PC's serial communications port using the Smart Cable.
- 2. Apply power to the Evaluation board.
- 3. Run the ZDS II Software. By default, the ZDS II program is located in the **Start** menu under:

```
\text{Start} \rightarrow \text{Programs} \rightarrow \text{ZDS II}_{\text{product}}^{\text{version number}} II <product><version number>.
```

4. Select **Open Project** from the **File** menu. The **Open Project** dialog box appears. See Figure 3.

Open Project	1		? ×
Look <u>i</u> n:	😋 system32	• <b>E</b>	
🗋 Adobe	🚞 drmon	🚞 ras	🚞 Wbem
CertSrv	🚞 Hummbird	🚞 Repl	🚞 wins
Color	🚞 Macromed	🚞 Res09	🔳 graphics.p
📄 config	🧰 mui	🚞 Setup	
🛛 🚞 Crescendo	o 🧰 Ntme	🚞 ShellExt	
📄 dhep	🚞 os2	🚞 spool	
📄 drivers	🚞 QuickTime	🚞 viewers	
•			Þ
File <u>n</u> ame:	<u> </u>		<u>O</u> pen
Files of <u>type</u> :	Project Files (*.pro)	•	Cancel

#### Figure 3. Open Project Dialog Box (Reference Only)

- 5. Browse to the samples directory: c:\Program Files\ZiLOG\ZDSII <product> <version number>\Samples\.
- 6. Select **Samples**. The samples folder appears (See Figure 4).

Open Project			? ×
Look jn:	🔄 Samples	<b>–</b>	
Display="block-transform: 28F08xx_"	ledBlink		
File <u>n</u> ame: Files of <u>t</u> ype:	Project Files (*.pro)	<b>.</b>	<u>O</u> pen Cancel

#### Figure 4. Sample Directory (Reference Only)

7. Select the Z8F08xx\_ledBlink folder and then the src folder to access the project file containing ledBlink.pro (See Figure 5).

zilog

Open Project ?X
Look in: 🔄 🚾 🔽 💽 🔛 📰 🖽
ledblink.pro
File name: Open
Files of type: Project Files (*.pro)

Figure 5. src Folder (Reference Only)

8. Select the ledblink.pro file. The initial ZDS II program screen opens (See Figure 6).



Figure 6. ZDS II Opening Screen (Reference Only)

zilog

Figure 7. ZDS II Active Screen The three LEDs begin blinking in sequence. If the LEDs do not blink, start over from Step 3.

# Z8 Encore! XP<sup>®</sup> F0822 Series Flash MCU Evaluation Kit

9. Click the **Rebuild All** icon and then the **Reset** icon to connect and download the code to the Evaluation board

- 10. Click **Go** to start the program. The screen changes as displayed in Figure 7.
- Go Icon





Rebuild

All Icon

Reset Icon



# zilog

# Warning: DO NOT USE IN LIFE SUPPORT

### LIFE SUPPORT POLICY

ZILOG'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE PRESIDENT AND GENERAL COUNSEL OF ZILOG CORPORATION.

#### As used herein

Life support devices or systems are devices which (a) are intended for surgical implant into the body, or (b) support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in a significant injury to the user. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system or to affect its safety or effectiveness.

#### **Document Disclaimer**

©2007 by Zilog, Inc. All rights reserved. Information in this publication concerning the devices, applications, or technology described is intended to suggest possible uses and may be superseded. ZILOG, INC. DOES NOT ASSUME LIABILITY FOR OR PROVIDE A REPRESENTATION OF ACCURACY OF THE INFORMATION, DEVICES, OR TECHNOLOGY DESCRIBED IN THIS DOCUMENT. ZILOG ALSO DOES NOT ASSUME LIABILITY FOR INTELLECTUAL PROPERTY INFRINGEMENT RELATED IN ANY MANNER TO USE OF INFORMATION, DEVICES, OR TECHNOLOGY DESCRIBED HEREIN OR OTHERWISE. The information contained within this document has been verified according to the general principles of electrical and mechanical engineering.

Z8, Z8 Encore!, Z8 Encore! XP, Z8 Encore! MC, Crimzon, eZ80, and ZNEO are trademarks or registered trademarks of Zilog, Inc. All other product or service names are the property of their respective owners.