Z8 Encore!™ Flash Microcontroller

Development Kit

QS002201-0303

Quick Start Guide

Introduction

This guide acquaints users with the Z8 Encore!™ Development Kit, and gives instructions on setting up and using the tools to start building designs and applications.

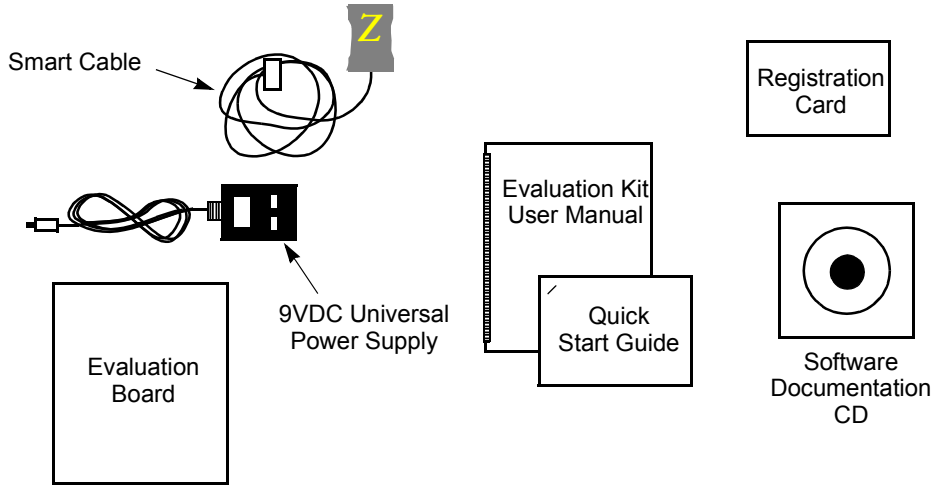

Figure 1. Z8 Encore! Development Kit Contents

Kit Contents

The Z8 Encore! Flash Microcontroller Development Kit contains the following (Figure 1)

Hardware

- Z8 Encore! Evaluation board
- Smart cable for PC to Z8 Encore! evaluation board (DB9 to six-pin male)
- 9VDC universal power supply

Software (on CD-ROM)

- ZDS II- Z8 Encore! IDE with ANSI C-Compiler
- Sample code
- Device driver software

- Acrobat Reader install program
- Document browser

Documentation

- Development Kit User Manual
- Programmer's Reference Sheet
- Registration Card
- Z8 Encore! technical documentation (on CD-ROM)
  - ZDS II - IDE User Manual
  - eZ8 CPU User Manual
  - Product Specification
  - Product Briefs
  - Application Notes
  - Flyers
  - Product Line Card

Supported Host Environments

- Win98 Second Edition, WinNT 4.0 Service Pack 6, Win2000 Service Pack 3, WinXP Service Pack 1
- PentiumII/233MHz processor or higher up to Pentium IV, 2.8 GHz
- 96MB RAM or more
- 25MB 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! Flash Microcontroller Evaluation board using the serial port of the PC. A Z8 Encore! Smart Cable converts the RS-232 signals into the 3.3V 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).

1. Connect the serial port of the PC to the Z8 Encore! Smart Cable DB-9 femaale connector.
2. Connect the S8 Encore! Smart Cable to the Z8 Encore! Flash Microconroller evaluation board pin header P4.
3. Connect the 9VDC universal power supply to the evaluation board, then to an electrical outlet (Figure 2).

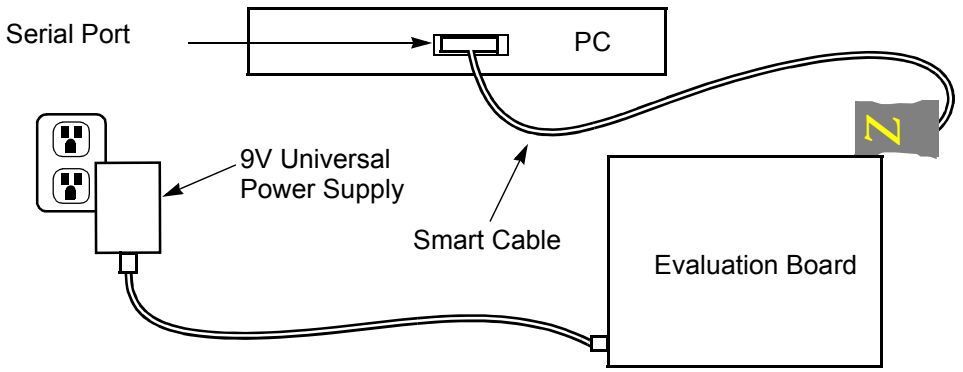

Figure 2. Evaluation Board External Connections

Changing the Universal 9VDC Power Supply Plug Configurations

The universal 9VDC power supply features three different plug configurations, highlighted by the circle in Figure 3, the power supply itself and a tool that aids in removing one plug configuration to insert another.

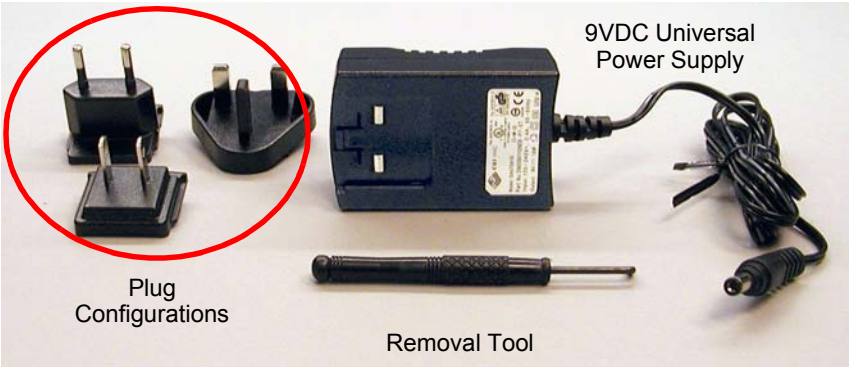

Figure 3. 9VDC Universal Power Supply Components

To substitute one plug configuration for another, follow these steps:

1. Using the removal tool, place it in the round hole at the top of the current plug configuration.
2. Press down to disengage the keeper tab and push the plug configuration out of its slot.
3. Select the plug configuration of choice for your location, and insert it into the slot left by the previous plug configuration.
4. Push the new plug configuration down until it snaps into place (Figure 4).

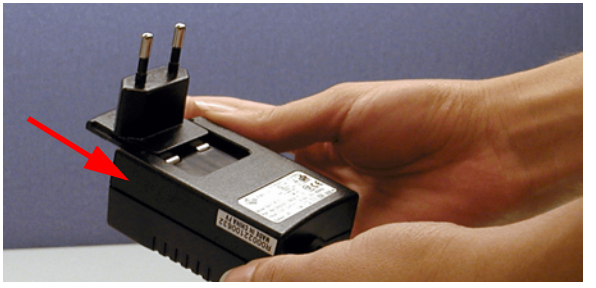

Figure 4. Inserting a New Plug Configuration

Installing the ZDS II Z8 Encore! Software

Perform the following steps to install the software tools:

1. Load the ZDS II-Z8 Encore Flash Microcontroller 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. Selecting INSTALL PRODUCTS followed by INSTALL ZDS II displays the Installation Wizard (Figure 5).

Note: Software versions illustrated in the following figures are for reference only. You may have an updated version.

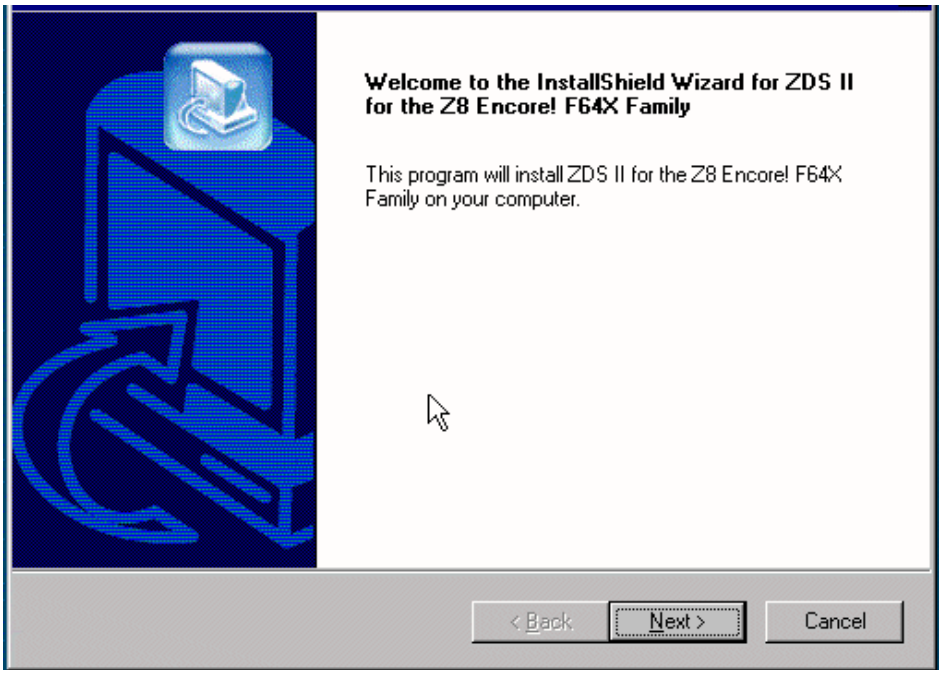

Figure 5. Installation Wizard (Reference Only)

2. Click Next> to continue with the installation. The License Agreement appears.
3. Select Yes to accept the agreement and proceed with the installation.
4. After selecting Yes, the Choose Destiation 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 on Next>.

5. The Select Program folder screen appears. Follow the directions on the screen and click on Next>.
6. After selecting Next>, the Register Your Software screen appears. Follow the instructions contained on the screen to complete registration..
7. When the installation is complete, a nag screen appears asking you to register the procuct online at www.zilog.com. To register at a later time the registration link to the internet site is found in the ZDS II Help menu.
8. The following directory is installed on the host PC, assuming all installation settings remain at their defaults:
   `C:/Program Files/ZiLOG/ZDS II_Z8_Encore! F64X_4.2.0.`

Getting Started

Using ZDS II

Perform the following procedure to open an existing project.

1. Connect the Evaluation board to the host PC's serial communications port using the Smart Cable.
2. Apply 9VDC power to the Evaluation board.
3. Run the ZDS II Software (`Start` > `Programs` > `ZDS II-Z8 Encore! F64X_4.2.0>ZDS II-28 Encore! F64X_4.2.0.`
4. Select Open Project from the File menu. The Open Project dialog box appears. See Figure 6.

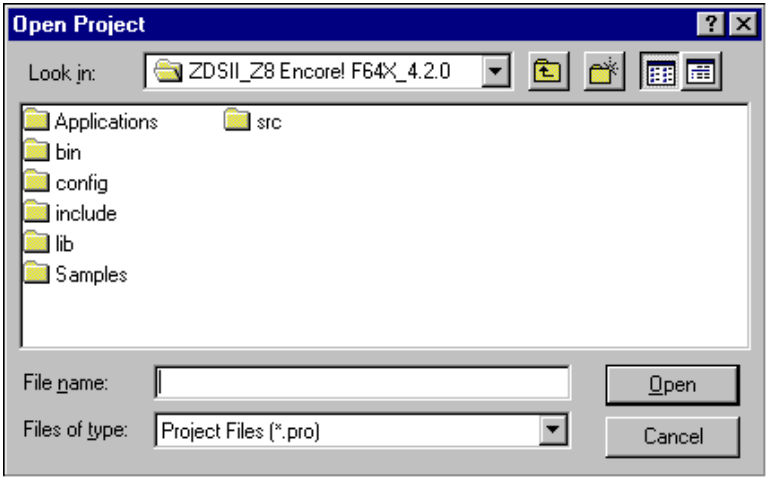

Figure 6. Open Project Dialog Box

5. Select samples. The samples folder appears (Figure 7).

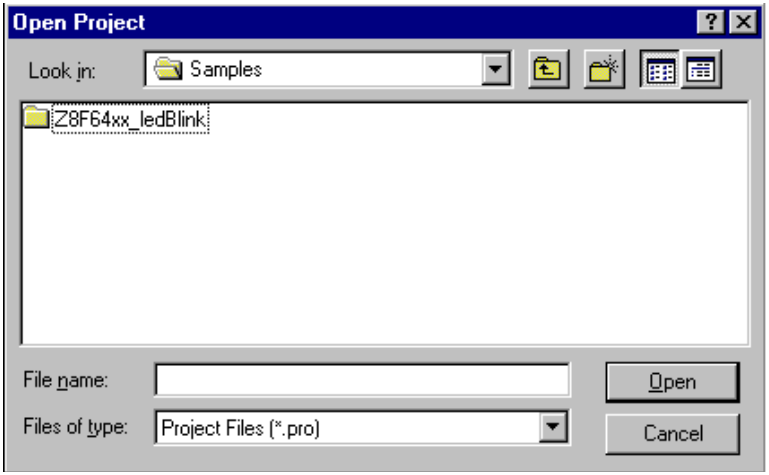

Figure 7. Sample Directory

6. Select the Z8F64xx_ledBlink folder and then the src folder to access the project file containing ledBlink.pro. (Figure 8).

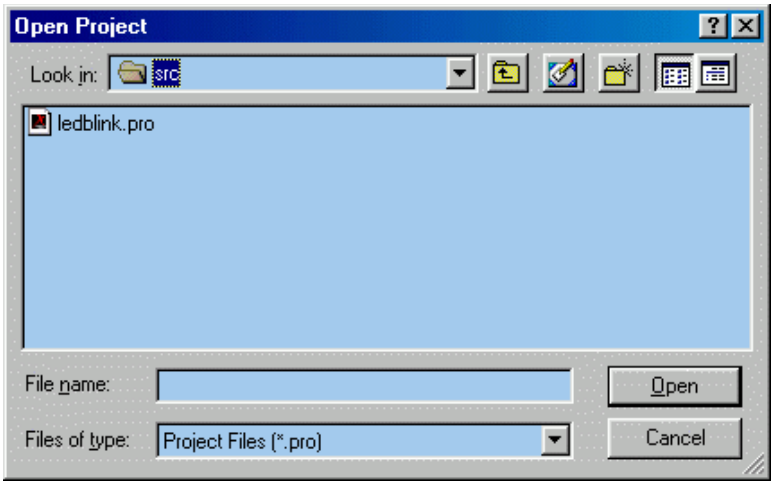

Figure 8. src Folder

7. Select the ledblink.pro file. The initial ZDS II program screen opens (Figure 9).

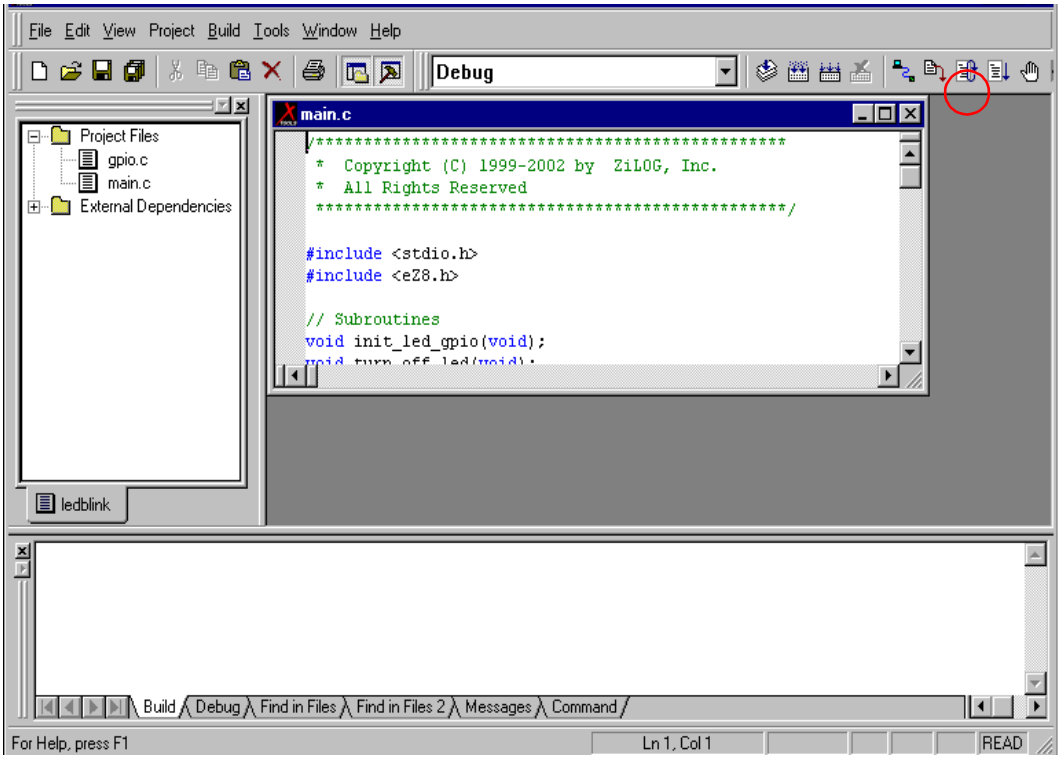

Figure 9. ZDS II Opening Screen

8. Click on the Rebuild All and then the Reset icon to connect and download the code to the Evaluation board.


Reset Icon

9. Click on Go to start the program.


Go Icon

This publication is subject to replacement by a later edition. To determine whether a later edition exists, or to request copies of publications, contact:

ZiLOG Worldwide Headquarters
532 Race Street
San Jose, CA 95126
Telephone: 408.558.8500
Fax: 408.558.8300
www.ZiLOG.com

Document Disclaimer