



# Z8 Encore!<sup>®</sup> Z8F642 MCU Evaluation Kit

QS002802-0703

**Quick Start Guide**

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## Introduction

This guide acquaints users with the Z8 Encore!<sup>®</sup> Z8F642 MCU Evaluation Kit, and gives instructions on setting up and using the tools to start building designs and applications.

## Kit Contents

### Hardware

- Z8 Encore!<sup>®</sup> Z8F642 evaluation board
- Smart Cable for PC to Z8 Encore!<sup>®</sup> evaluation board (DB9 to six-pin male)
- Universal power supply

### Software (on CD-ROM)

- ZDS II- Encore!<sup>®</sup> IDE with ANSI C-Compiler
- Sample code
- Acrobat Reader install program
- Document browser

### Documentation

- Registration Card
- Z8 Encore!<sup>®</sup> technical documentation (on CD-ROM)
  - Evaluation Kit User Manual
  - ZDS II - IDE User Manual
  - eZ8 CPU User Manual
  - Product Specification
  - Product Brief
  - Application notes
  - Flyers
  - Product Line Card
  - Programmer's Reference Sheet



## 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 Encore!® Z8F642 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 female connector.
2. Connect the Z8 Encore!® Smart Cable to the Z8F642 MCU evaluation board pin header P2.
3. Connect the power supply to the evaluation board at J1, then to an electrical outlet (Figure 1).

## Connecting the Power Supply

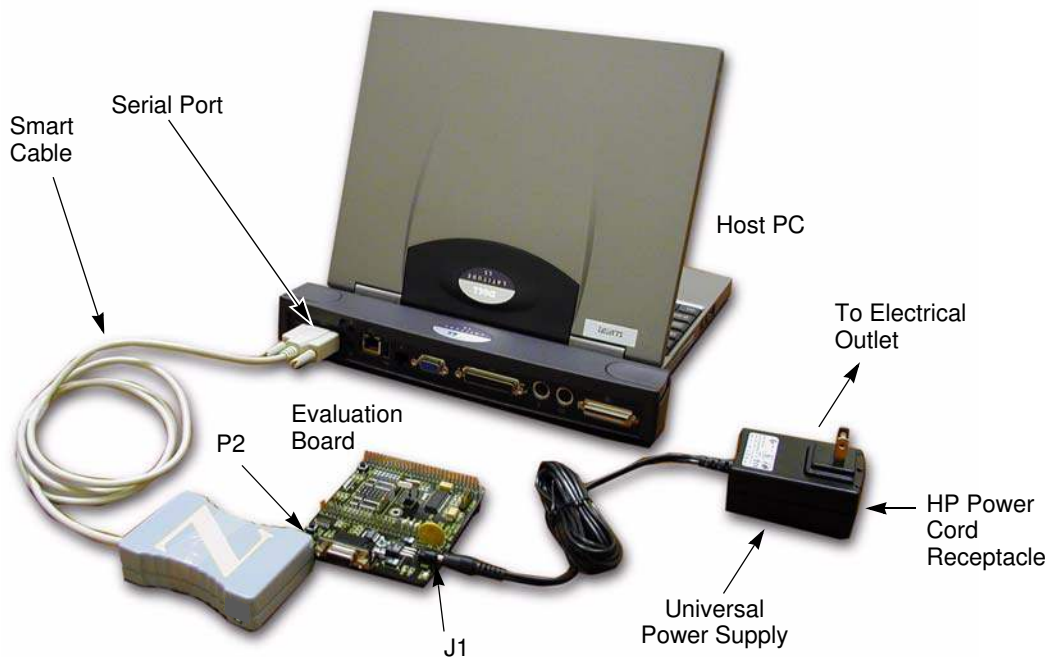
There are two methods of connecting the universal power supply: the plug configurations method or the Hewlett Packard power cord method.

### Plug Configuration Method

The universal power supply kit features four 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.



**Figure 1. Evaluation Board External Connections**

### 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.

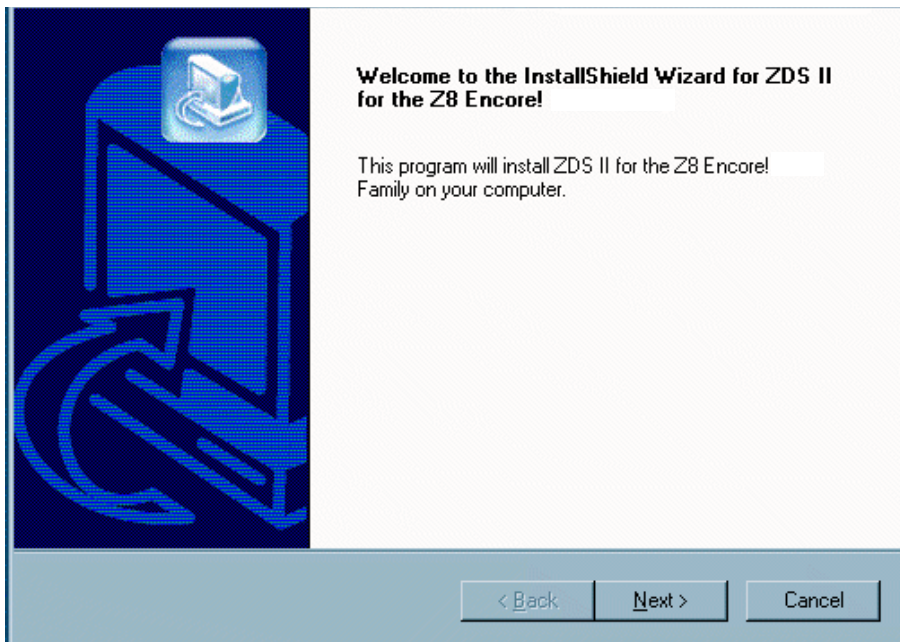
### Installing the ZDS II Z8 Encore!® Software

Perform the following steps to install the software tools:

1. Load 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. Selecting INSTALL PRODUCTS followed by INSTALL ZDS II displays the Installation Wizard (Figure 2).

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



**Figure 2. Installation Wizard (Reference Only)**

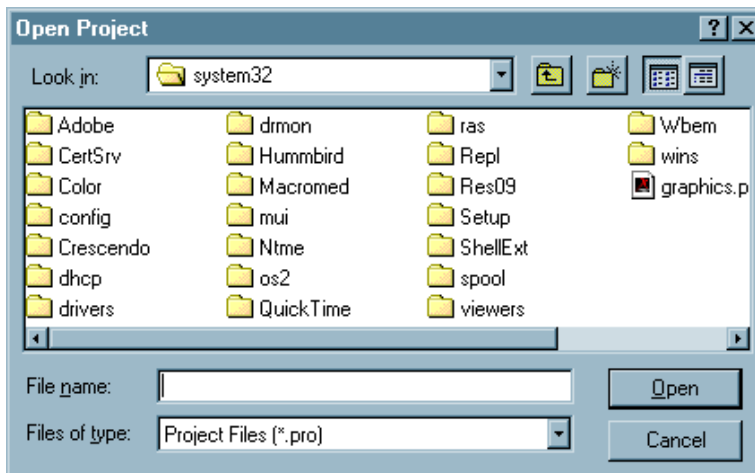
2. Click Next> to continue with the installation. The License Agreement appears.
3. Select Yes to accept the agreement and proceed with the installation.
4. After selecting Yes, the Choose Destination Location screen appears. Follow the directions on the screen and choose whether to install ZDS II in the default location or in some other folder. Click 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 reminder screen appears asking you to register the product online at [www.zilog.com](http://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/ZDSII\_<product>\_<version number>.

## Getting Started Using ZDS II

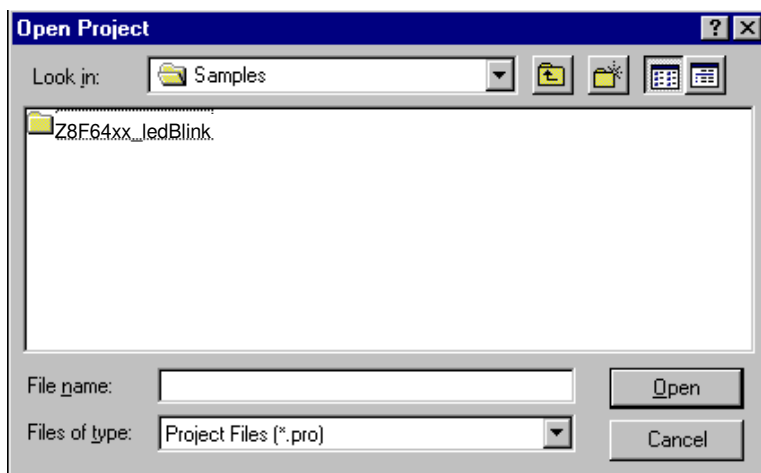
Perform the following procedure to open an existing project.

1. Connect the Evaluation board to the host PC's serial communications port using the Smart Cable.
2. Apply power to the Evaluation board.
3. Run the ZDS II Software (Start > Programs > ZDS II\_<product>\_<version number>ZDS II\_<product><version number>).
4. Select Open Project from the File menu. The Open Project dialog box appears. See Figure 3 (example only).



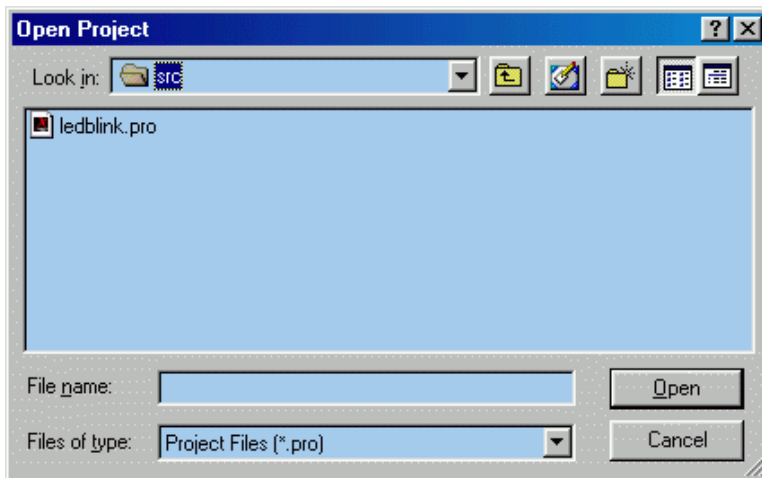
**Figure 3. Open Project Dialog Box**

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



**Figure 4. Sample Directory**

6. Select the Z8F64xx\_ledBlink folder and then the src folder to access the project file containing ledBlink.pro. (Figure 5).



**Figure 5. src Folder**

7. Select the ledblink.pro file and click open. The initial ZDS II program screen opens (Figure 6).

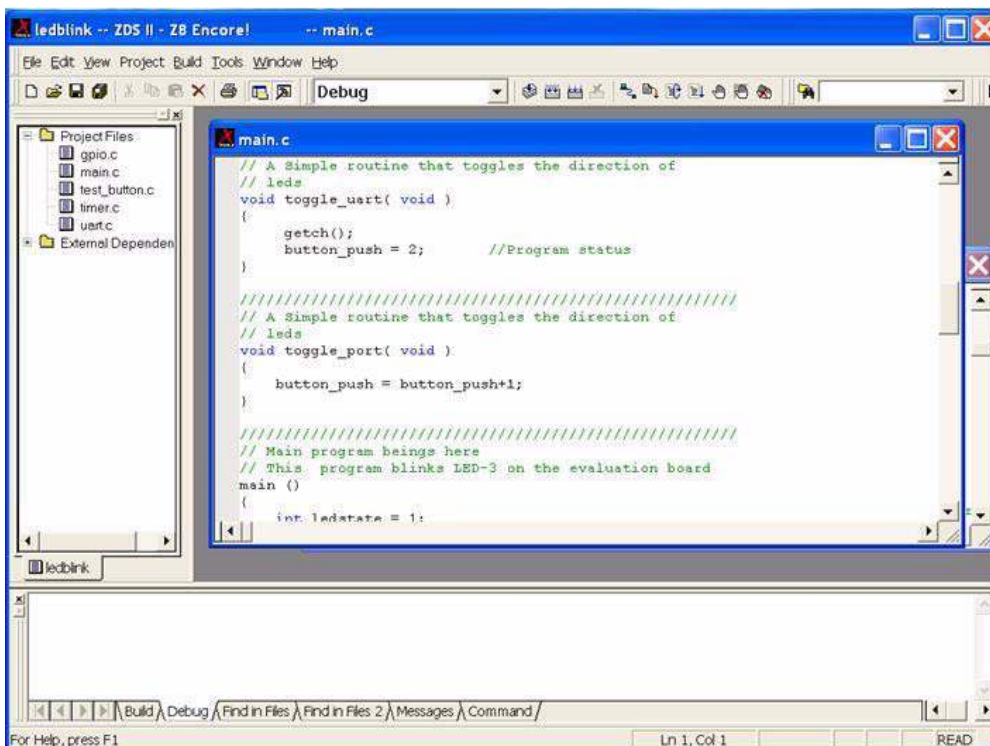


Figure 6. ZDS II Opening Screen

8. Click on the Rebuild All icon to build the project. Wait for the build to complete.
9. Click on the Reset icon to connect and download the code to the Evaluation board.
10. Click on Go to start the program. The screen changes as illustrated in Figure 7.



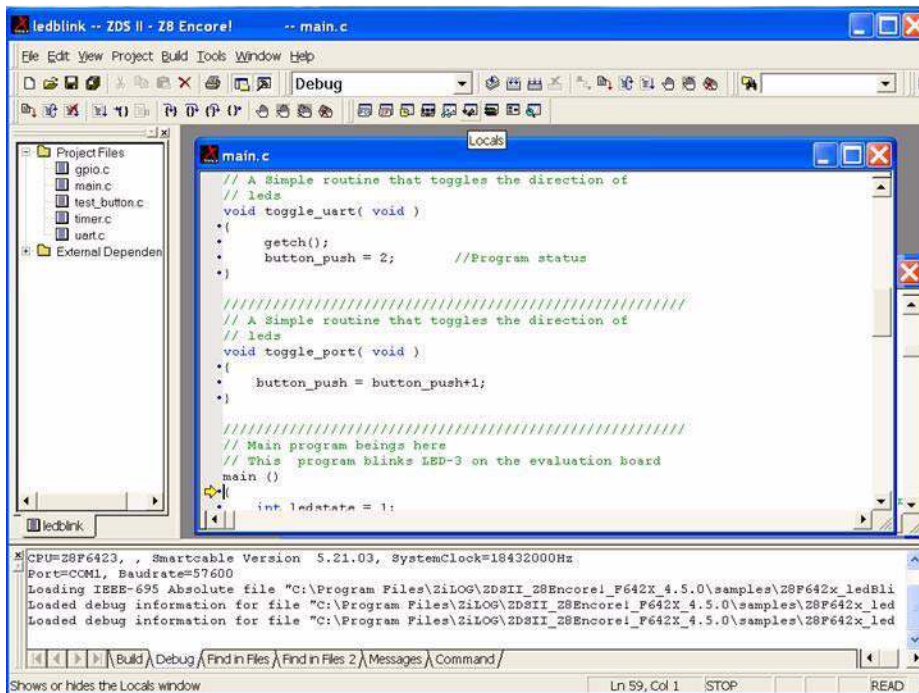


Figure 7. ZDS II Active Screen

11. Press the test push button to change the sequence of the LEDs to blink in the opposite direction.

The three LEDs begin blinking in sequence. If the LEDs do not blink, start over from Step 3.





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**ZiLOG Worldwide Headquarters**

532 Race Street  
San Jose, CA 95126  
Telephone: 408.558.8500  
Fax: 408.558.8300  
[www.ZiLOG.com](http://www.ZiLOG.com)

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