



Z i L O G

## Technical Note

# Using the ZDSII Integrated Flash Loader Utility

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## General Overview

Every eZ80<sup>®</sup> Development Module features the ZDSII Integrated Flash Loader utility. This small software application resides in the protected boot sector of the system Flash memory, and is responsible for programming the onboard Flash memory with a Flash-based user application.

When building applications for the eZ80<sup>®</sup> Development Platform, a user can instruct ZDSII to produce an output `.hex` file to Flash memory. This `.hex` file can then be downloaded into the development system via the ZDSII Integrated Flash Loader utility.

## Flashing the LED Demo

The following steps help the user to create the `leddemoflash.hex` file, which is programmed into the eZ80<sup>®</sup> device's internal Flash memory using the ZDSII Integrated Flash Loader utility. Please refer to the ZiLOG Developer Studio II—eZ80 User Manual (UM0144) for detailed information regarding the generation of hex files for various embedded system memory models.

1. Launch ZDSII by navigating from the **Start** menu to **Programs** → **ZDSII-eZ80** → **ZDSII-eZ80**.
2. From the **File** menu in ZDSII, choose **Open Project**. Navigate to the following filepath:  
`c:\Program Files\Zilog\ez80ZDSII\samples\ez80xxx\xxxLEDSample\LedDemo`  
**Note:** The XXX's in the above path reference the specific microcontroller device contained in this kit.
3. Select the `leddemoflash.pro` project and click **Open**. A list of source files appears in the Workspace panel.
4. From the **Build** menu in ZDSII, select **Rebuild All** to build the Flash LED demo file, `leddemoflash.hex`.
5. Select **Flash Loader** from the **Tools** menu. The **Flash Loader** dialog box appears.
6. Enter the filepath and `.hex` filename to be flashed in the **File** field of the **Flash Loader** dialog box, or click on the **Browse** button (...) to navigate to the `leddemoflash.hex` file.
7. For the eZ80F9x devices, select the **Internal Flash** target in the **Flash Options** field of the **Flash Loader** dialog box. The eZ80L92 and eZ80190 devices require a two-step process, as follows:

- a. Select the external Flash target in the **Flash Options** field of the **Flash Loader** dialog box.
- b. From the list of Flash devices, select **Micron MT28F008B3**.
8. Check the **Erase Flash before Burning** checkbox.
9. Click the **Fast Burn** button.
10. Close the **Flash Loader** dialog box.
11. Reset the target by pressing the Reset switch on the eZ80<sup>®</sup> Development Platform.

The LED program is now burned into Flash memory and executing.



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