

WinROM

User's Guide



Revision 1.0
Updated July, 2015

Contents

1. Introduction	1
1.1. Definitions	1
1.2. Required Equipment.....	1
1.3. Supported TI Devices	1
2. Installing WinROM	2
2.1. Running the Setup Program	2
3. Using WinROM	4
3.1. Launching WinROM	4
3.2. Writing a single byte	6
3.3. Saving the EEPROM content to a File	7
3.1. Loading the EEPROM content from a file	8

Preliminary

1. Introduction

WinROM is a Windows based GUI allowing users to program the content of a configuration EEPROM that may be connected to different TI PCI/PCIe based devices.

1.1. Definitions

- GUI – Graphical User Interface
- PC – Personal Computer
- PCI – Peripheral Component Interconnect Bus
- PCIe – PCI Express Bus

1.2. Required Equipment

The following is required in order to use WinROM

- PC running Windows XP™ or above (32-bits or 64-bits OS).
- Microsoft's .NET framework 2.0
- A board having one of the supported TI devices

1.3. Supported TI Devices

- PCI122x
- PCI145x
- PCI1x10
- PCI1x20
- PCI4x10
- PCI4x5x
- PCI7x10
- PCI7x21
- PCI x515
- PCIxx12
- PCIxx20
- TSB12LV23
- TSB12LV26
- TSB12LV27
- TSB43AB21
- TSB43AB22
- TSB43AB23
- TSB82AA2
- TUSB7340
- XIO2001
- XIO3130

2. Installing WinROM

2.1. Running the Setup Program

Extract the setup program on a directory of your choice. Run the "WinROM 3.1.exe" file and let the wizard guide you through the installation process.



Figure 1 - WinROM Setup Wizard

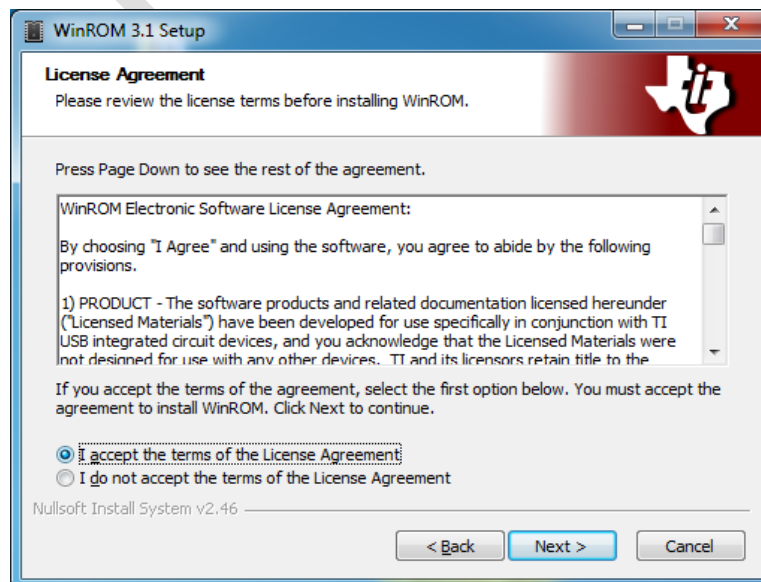


Figure 2 - WinROM License Agreement

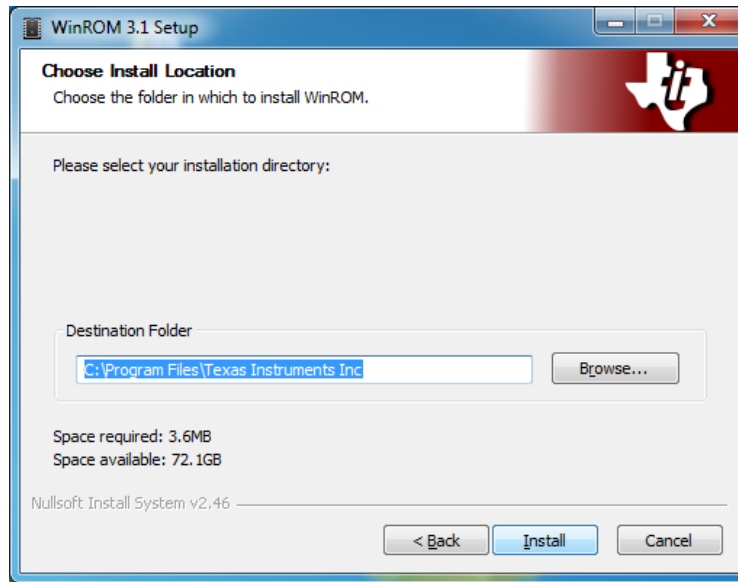


Figure 3 - WinROM Destination Folder

Click "Finish" when the wizard indicates that the EEPROM Burner software installation has been completed.



Figure 4 - Software Installation completed

3. Using WinROM

3.1. Launching WinROM

Upon detecting a compatible device connected on the system, the program will automatically show the device selection window with all supported devices as shown below. Please select any of the supported device instances by double-clicking the corresponding icon.

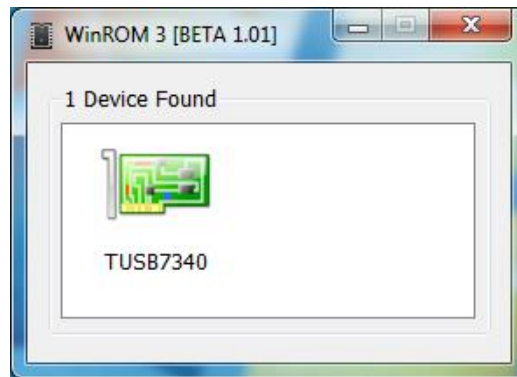


Figure 5 - Device Selection Window

If no supported device is detected, a warning prompt will appear informing the user that no attached device was found.

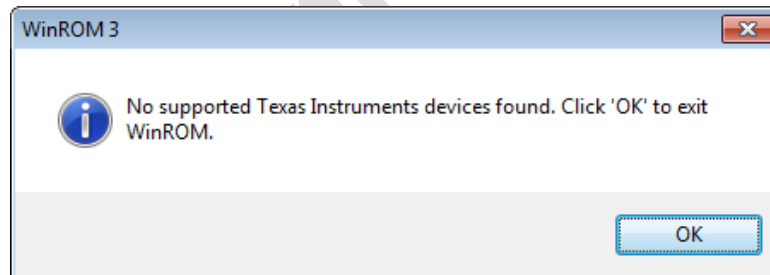


Figure 6- No supported devices found prompt

Furthermore, if a supported device is detected but it is determined no external EEPROM is connected; the program shows the device with a warning icon, indicating such scenario.

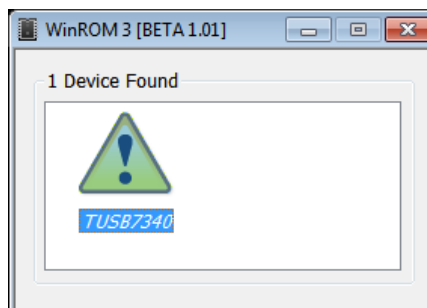


Figure 7 - Supported Device without external EEPROM detected.

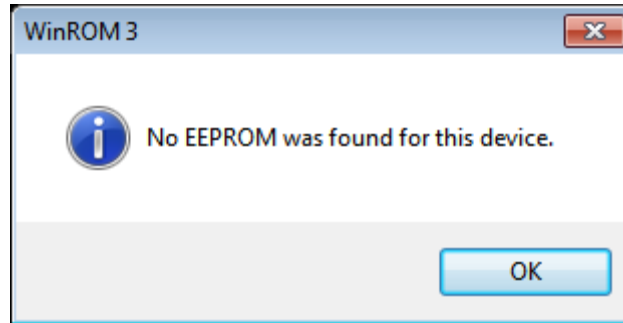


Figure 8 - No EEPROM found prompt.

Finally, the main window will show up displaying a list with the current content of the attached EEPROM

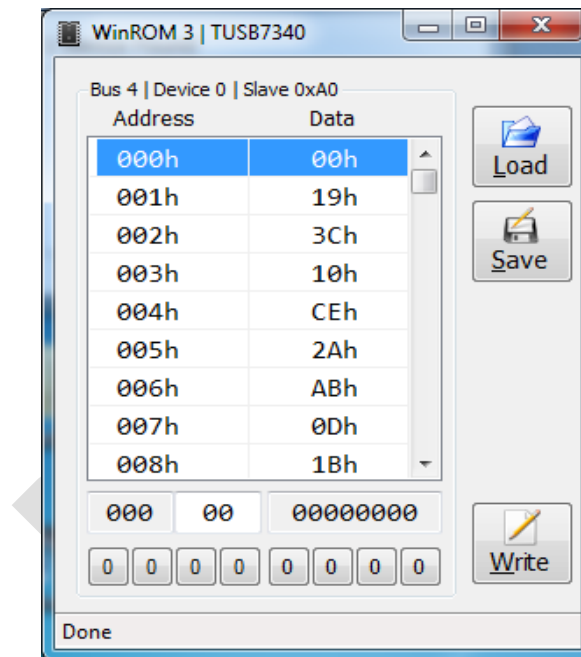


Figure 9 - Main Window

3.2. Writing a single byte

First select the EEPROM address by simply clicking on the list's row containing the address to be written.

Then enter the data either by clicking on the individual bit buttons on the bottom, or typing the hexadecimal value in the text box which is available just above the individual bit buttons. Please note that non-hexadecimal values will not be accepted.

Finally click the "Write" button to perform the operation.

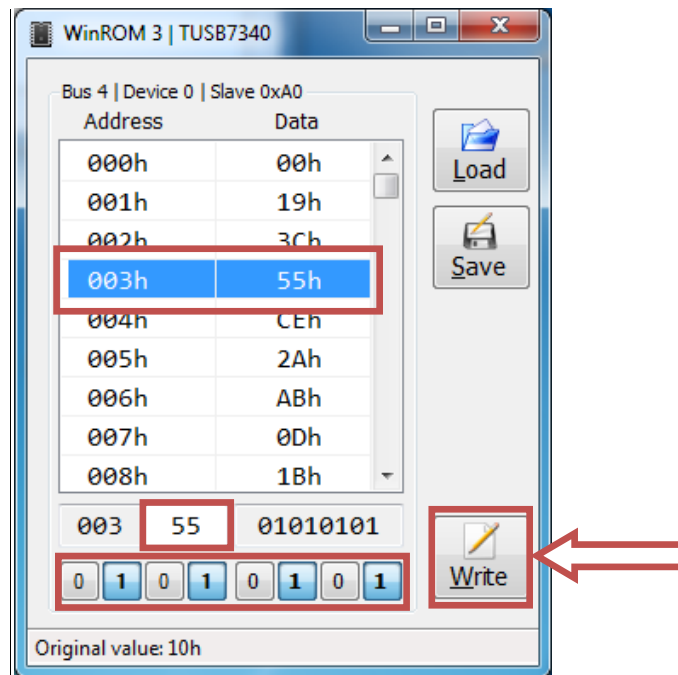


Figure 11 - Write a Single Byte

3.3. Saving the EEPROM content to a File

By clicking the “Save” button WinROM will generate a file containing the current contents of the EEPROM.

This file can be useful to back up the existing data before performing any changes to the existing device configuration as well as a template to program multiple devices with custom data.

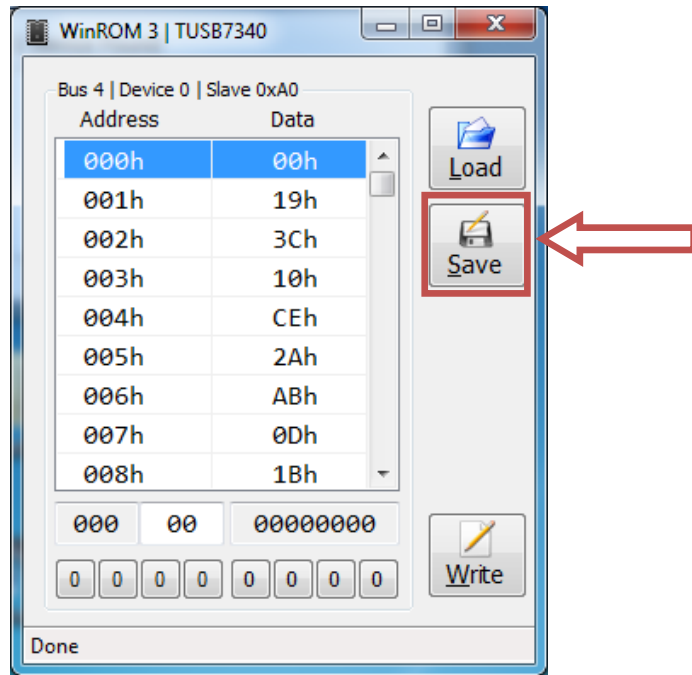


Figure 11 - Saving EEPROM Data to a File

The data file is a simple tab-delimited text file that is formatted as follows:

(HEX EEPROM ADDRESS) tab (HEX EEPROM DATA)

Data File Format Notes:

- The data can be presented in any logical order.
- Parsing of the data file will stop on the first blank line.
- Lines beginning with an apostrophe (') will not be parsed.
- Both the address and the data must be represented in hexadecimal.
- No hexadecimal notation (“0x” or “h”) is required

3.1. Loading the EEPROM content from a file

Clicking the “Load” button will prompt the user to provide a formatted data file, which content will be automatically flashed into the EEPROM.

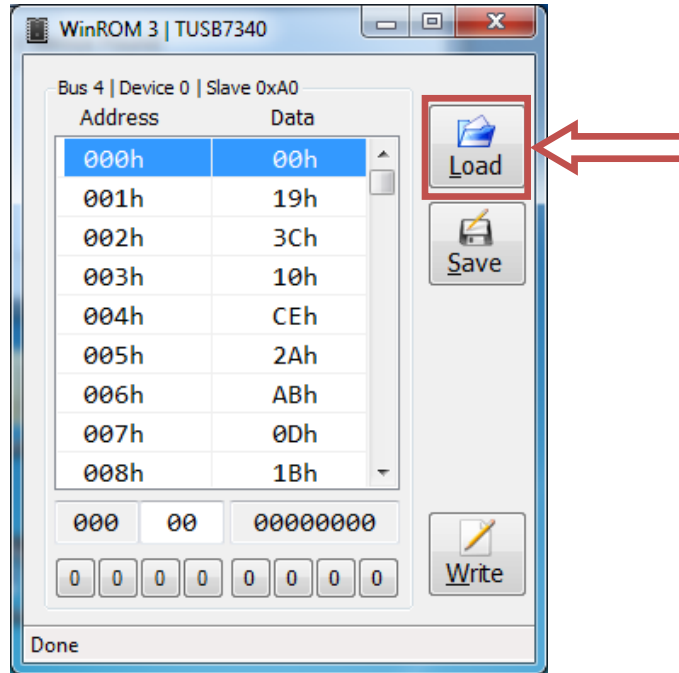


Figure 10 - Writing Data to the EEPROM from a File