

Introduction

The Adept programming software contains the USB device drivers required to program the iCEman65 evaluation kit board. The ICEUTIL.EXE utility is a command-line driven application to directly program in iCE65 device or the SPI serial Flash attached to it.

This document describes how to install the Adept programming software and ICEUTIL utility on a Windows-based computer.

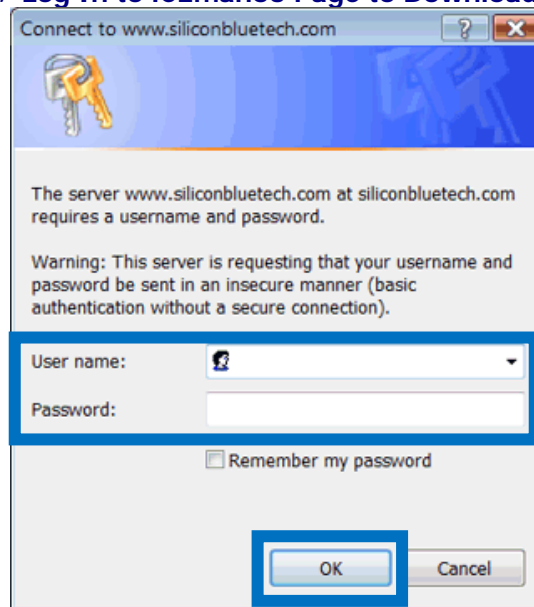
Download the Latest Version of Adept to Your Computer

The Adept programming software is available for download from the SiliconBlue iCEman65 web page, at the link provided below.

- Adept Programming Software
www.siliconbluetech.com/iCEman65/downloads/Adept.msi

The iCEman65 web site may require you to log in to gain access to the file, as shown in Figure 1. Use the User Name and Password provided on the Getting Started instructions included with the iCEman65 kit. Click OK.

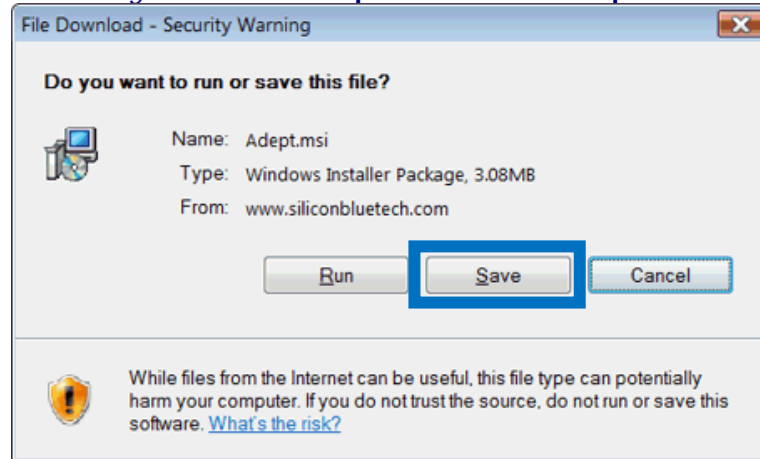
Figure 1: Log In to iCEman65 Page to Download Software



Adept Programming Software Installation

Save the Adept .msi file to your computer, as shown in [Figure 2](#).

Figure 2: Save Adept.msi to Your Computer



Installing Adept

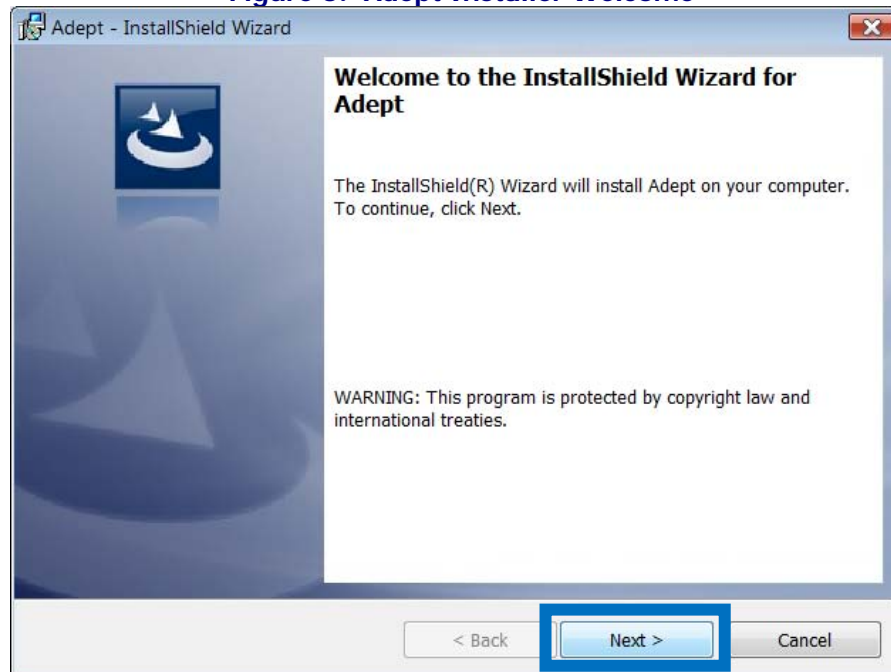


If using Windows Vista Home Premium, you must turn off [User Account Control](#) before attempting to install the Adept software.

Locate the Adept .msi installation software that you saved onto your computer. Either double-click on the file name or place the cursor over the file name, right-click, and choose **Install**.

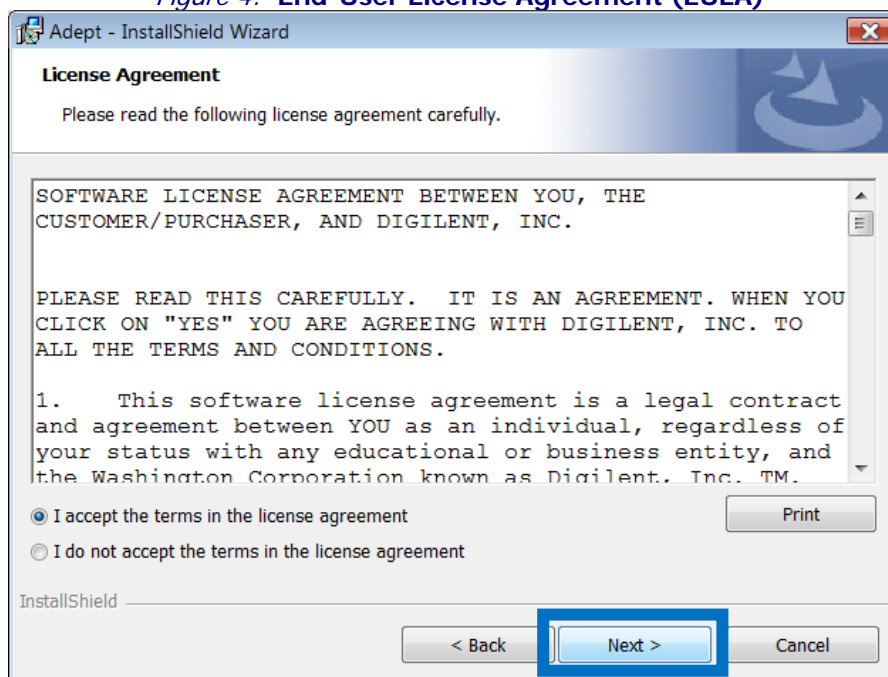
The Adept installer welcome screen appears, as shown in [Figure 3](#). Click Next.

Figure 3: Adept Installer Welcome



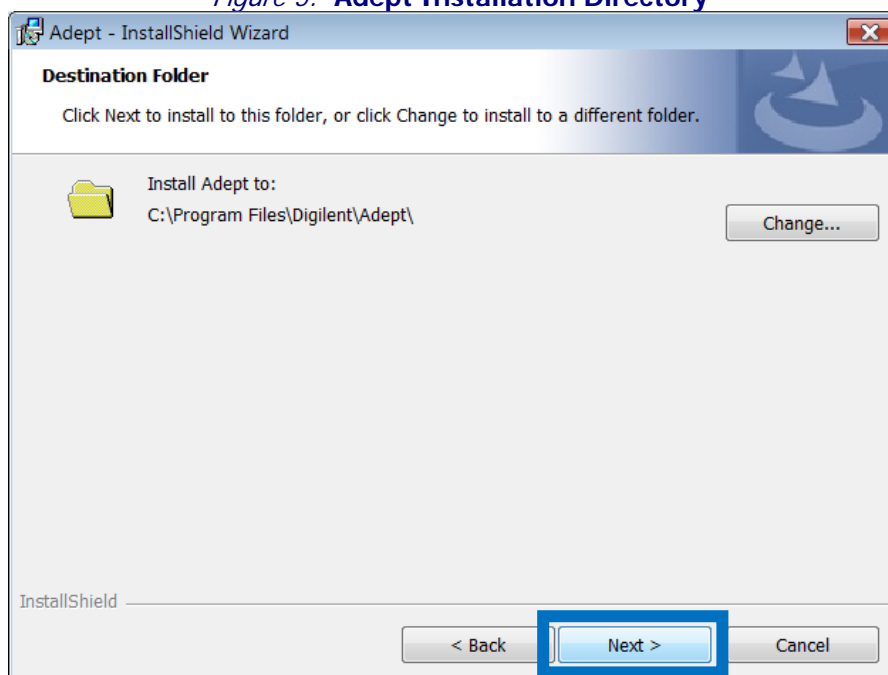
To continue with the installation, select I accept the terms in the license agreement, then click Next, as shown in Figure 4.

Figure 4: End-User License Agreement (EULA)



Select the Adept installation directory, as shown in Figure 5. Click Next to continue.

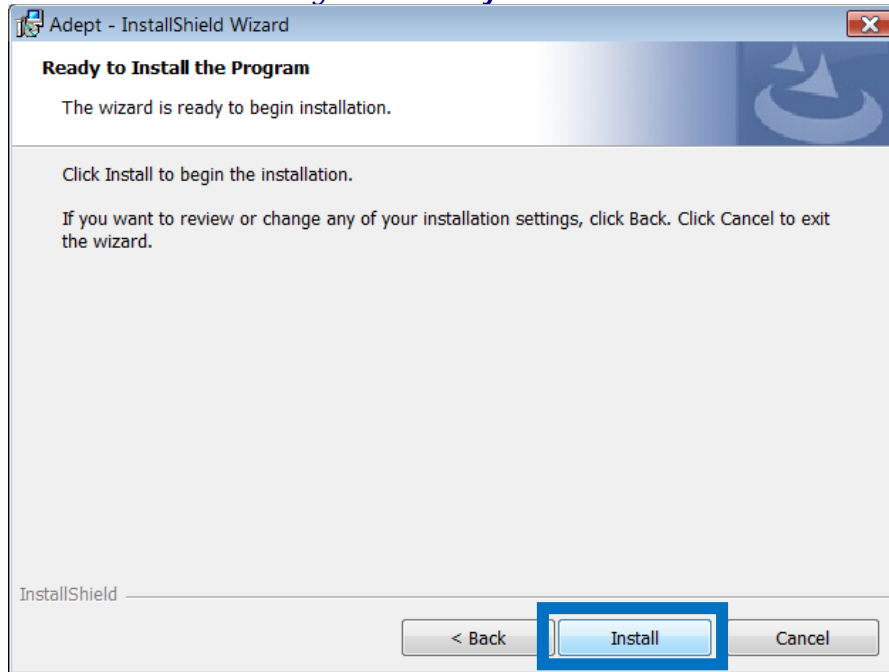
Figure 5: Adept Installation Directory



Adept Programming Software Installation

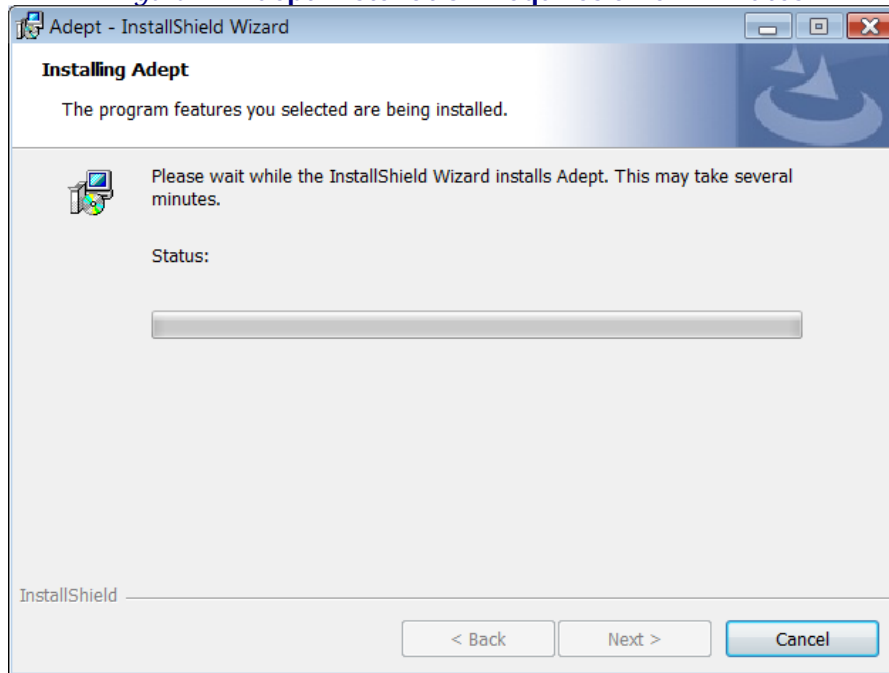
The Adept software is ready for installation, as shown in [Figure 6](#). Click **Install**.

Figure 6: Ready to Install



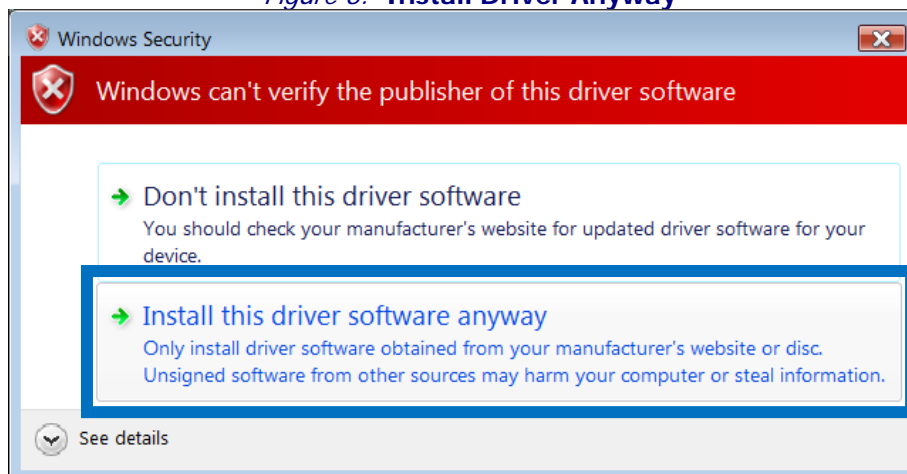
This next step can take awhile, as indicated in [Figure 7](#). The computer is not stalled. If you are running Windows Vista, you will be asked for permission to continue.

Figure 7: Adept Installation Requires a Few Minutes



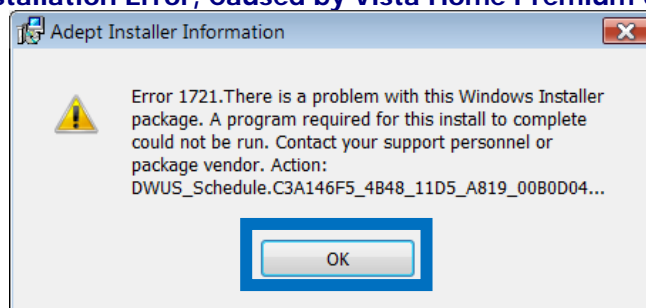
Presently, the Adept drivers are not digitally signed. Click **Install this driver software anyway**, as shown in [Figure 8](#).

Figure 8: Install Driver Anyway



If using Windows Vista Home Premium, and if User Account Control is still turned on, you may encounter the error message shown in [Figure 9](#). If you do, click **OK** and then first uninstall the Adept software. Then, [turn off User Account Control](#) (starting with [Figure 12](#)) before attempting to re-install the software.

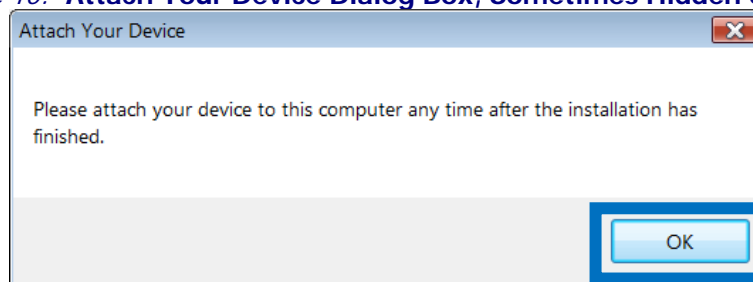
Figure 9: Adept Installation Error, Caused by Vista Home Premium User Account Control



The dialog box, shown [Figure 10](#), indicates that the drivers are ready for use. Click **OK**.

On Windows Vista, this dialog box may appear behind the following panel. Reveal it by pressing **Alt-Tab**.

Figure 10: Attach Your Device Dialog Box, Sometimes Hidden on Vista

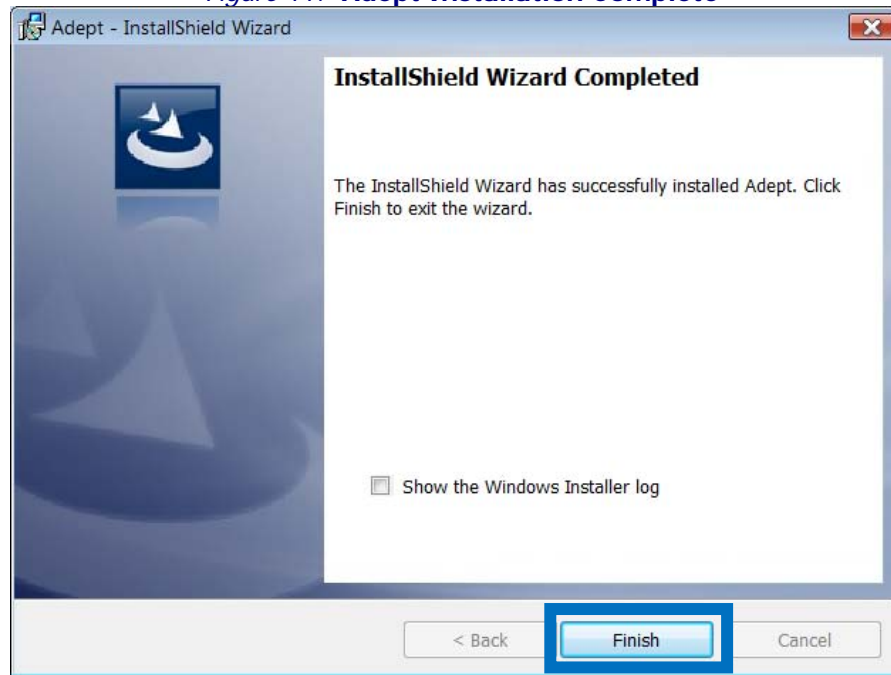


Adept Programming Software Installation

To complete the Adept software installation, click **Finish** as shown in [Figure 11](#).

If Finish button is not available: On Windows Vista, it may appear that the installation is hanging. You will see the final installation panel, shown in [Figure 11](#), but the **Finish** button will not be lit. Press **Alt-Tab** to reveal the previous “[Attach Your Device](#)” dialog window, shown in [Figure 10](#).

Figure 11: Adept Installation Complete

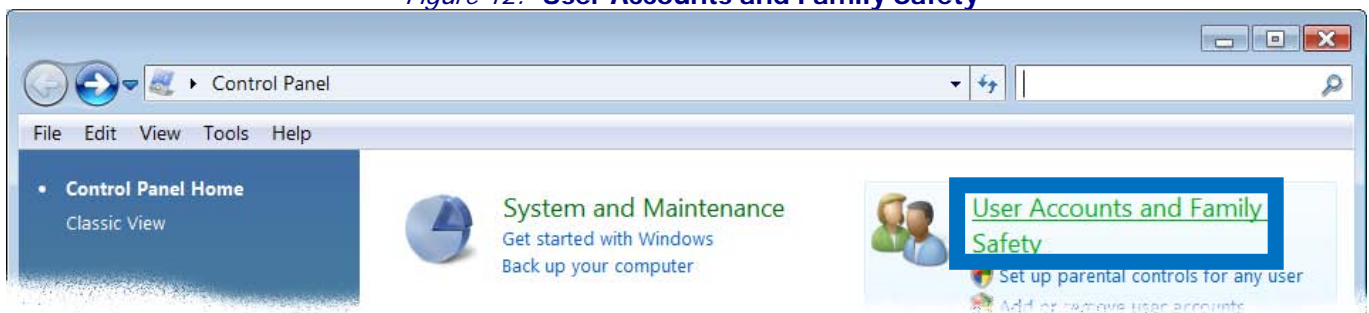


Windows Vista Home Premium: Disabling User Account Control

The Adept installation software modifies registry entries protected by the Windows Vista Home Premium User Account control. This must be disabled before you can successfully install the Adept software.

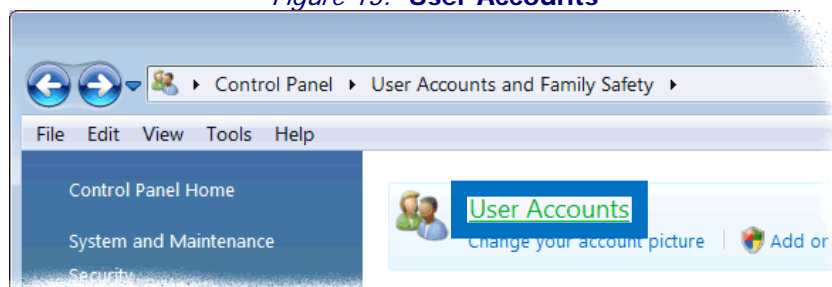
- Click Start → Control Panel.
- Click User Accounts and Family Safety, as shown in [Figure 12](#).

Figure 12: User Accounts and Family Safety



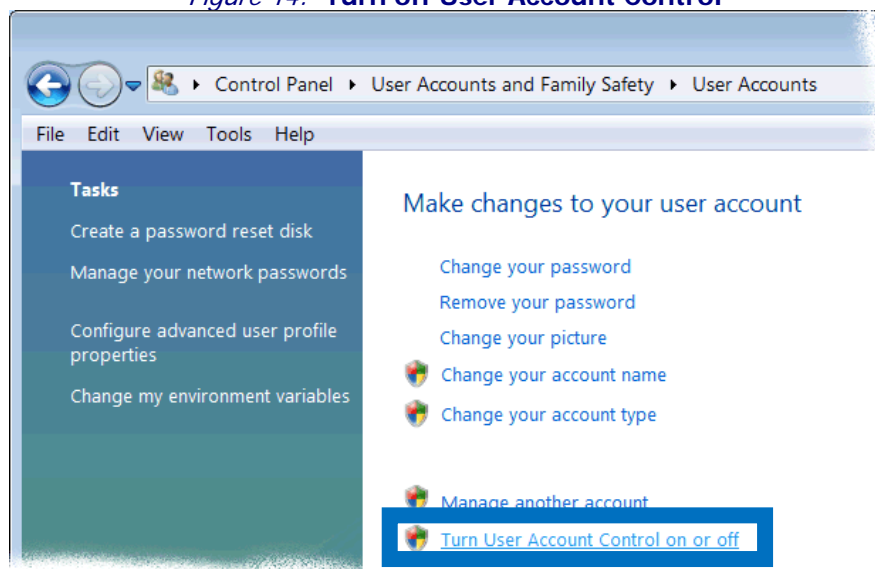
- Click User Accounts, as shown in [Figure 13](#).

Figure 13: User Accounts



- Click Turn User Account Control on or off, as shown in Figure 14.

Figure 14: Turn off User Account Control



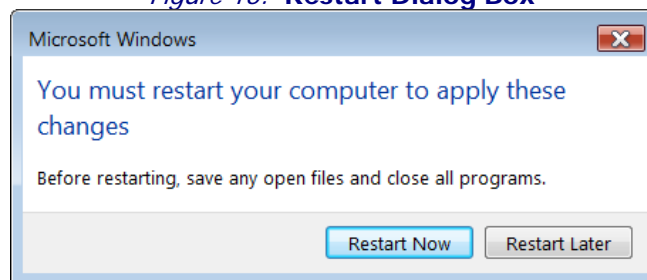
Uncheck Use User Account Control (UAC), as shown in Figure 15. If the box is already unchecked, then the User Account Control (UAC) is already disabled so click Cancel. Otherwise click OK.

Figure 15: Uncheck User Account Control (UAC)



You must restart your computer before the User Account Control is fully disabled, as shown in Figure 16. You can decide to postpone restarting your computer until you have saved critical data.

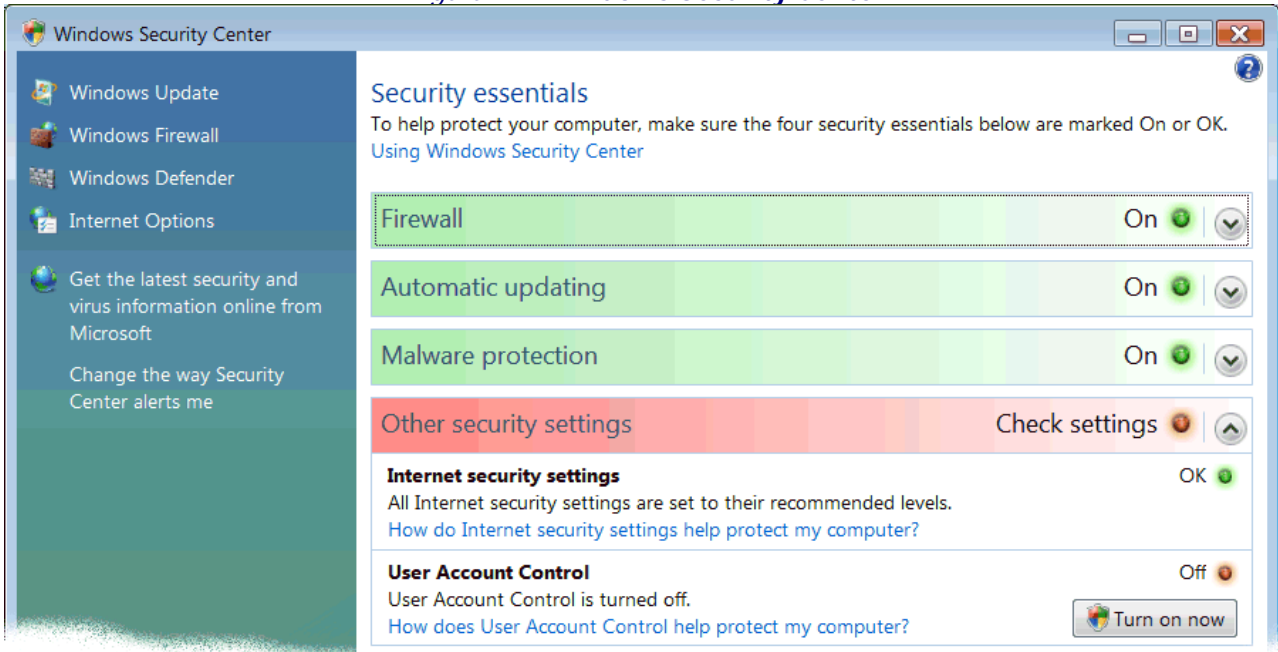
Figure 16: Restart Dialog Box



Adept Programming Software Installation

The Windows Security Center, shown in [Figure 17](#), also notifies you that User Account Control is disabled. DO NOT turn it back on until you have restarted your computer and installed the Adept software.

Figure 17: Windows Security Center



Downloading ICEUTIL Utility

The Adept programming software is available for download from the SiliconBlue iCEman65 web page, at the link provided below.

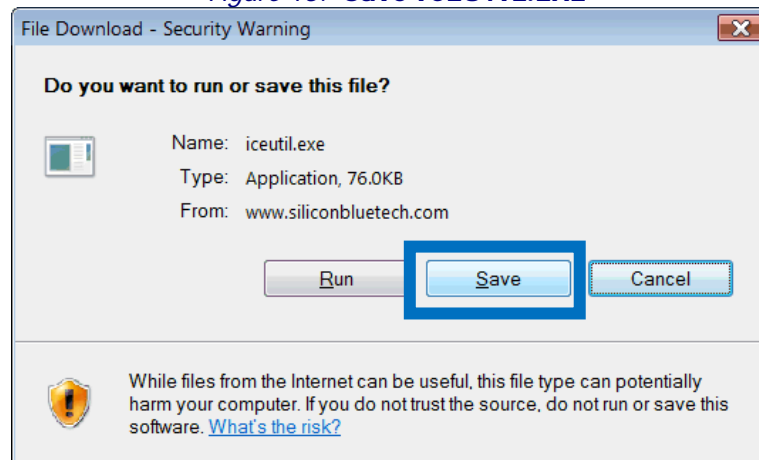
■ ICEUTIL Utility

www.siliconbluetech.com/iCEman65/downloads/iceutil.exe

The iCEman65 web site may require you to log in to gain access to the file, as shown in [Figure 1](#). Use the User Name and Password provided on the Getting Started instructions included with the iCEman65 kit. Click OK.

As shown in [Figure 18](#), click Save and save the ICEUTIL.EXE utility to a directory on your local computer. Copy the utility to the active project directory or keep the utility in a single location and add this location to the PATH environment variable.

Figure 18: Save ICEUTIL.EXE



Invoking ICEUTIL

The ICEUTIL utility is a command-line driven application. Open a DOS- or command-window to invoke ICEUTIL.

- Click Start
- Enter “cmd” in the Start/Search field, as shown in Figure 19.

Figure 19: Open DOS/Command Window



Change to a directory that contains the ICEUTIL utility or to the current project directory. Figure 20 provides an example ICEUTIL session.

Figure 20: ICEUTIL Command

```
C:\mytest>i ceutil -help
iCEman65 Serial programming utility, Rev 1.3
This program is used to program SPI flash roms or the iCE65 chip.
It can also be used to read back the contents of the SPI flash roms

i ceutil [opt1] [opt2] [...]

Options:
-d <devname> specify name of SPI interface device to use
-m <memtype> specify target device type
-w <filename> write device with contents of specified file
-r <filename> write specified file with contents read from flash
-id          print the id code from the flash device
-v          verify device contents after write
-a <address> specify starting address to write/read
-l <length> specify number of bytes to read
-E          erase the flash memory device
-NE        don't perform any erase before write
-fb        read/write files in binary format
-fi        read/write files in Intel hex format
-fh        read/write files in raw hex format
-s <freq>  set SPI clock speed
```

The ICEUTIL utility can also be used as part of a .BAT batch file.

ICEUTIL Use Examples

The following examples erase, programs, and verify a design loaded into the ST Micro/Numonyx M25P80 SPI serial PROM on the iCEman65 Evaluation Kit board. One example uses the raw hexadecimal form. The other uses the Intel hexadecimal format.

Program ST Micro/Numonyx M25P80 PROM with Raw Hex Bitstream

```
i ceutil -d iCEman65 -m m25p80 -fh -w <project_name>_bi tmap. hex -v
```

Program ST Micro/Numonyx M25P80 PROM with Intel Hex Bitstream

```
i ceutil -d iCEman65 -m m25p80 -fi -w <project_name>_bi tmap_i nt. hex -v
```



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