

**JTAGjet**

**series**

SIGNUM SYSTEMS CORPORATION

---

**USB 2.0 Driver for JTAGjet and ADM51**

# Installation Instructions

**SIGNUM**  
SYSTEMS

## COPYRIGHT NOTICE

Copyright (c) 2016 by Signum Systems Corporation, an IAR Systems company. All rights are reserved worldwide. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior written permission of Signum Systems.

## DISCLAIMER

Signum Systems makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Also, Signum Systems reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of Signum Systems to notify any person or organization of such revision or changes.

## WARRANTY

Signum Systems warrants to the original purchaser that this product is free of defects in material and workmanship and performs to applicable published Signum Systems specifications for a period of TWELVE MONTHS from the date of shipment. If defective, the product must be returned to Signum Systems, prepaid, within the warranty period, and it will be repaired or replaced (at our option) at no charge. Equipment or parts which have been subject to misuse, abuse, alteration, neglect, accident, unauthorized installation or repair are not covered by warranty. This warranty is in lieu of any other warranty expressed or implied. **IN NO EVENT SHALL SIGNUM SYSTEMS BE LIABLE FOR CONSEQUENTIAL DAMAGES OF ANY KIND.** It is up to the purchaser to determine the reliability and suitability of this product for his particular application.

**SIGNUM**  
S Y S T E M S

**IAR**  
SYSTEMS

1211 FLYNN RD., UNIT #104  
CAMARILLO, CA 93012, U.S.A.  
PHONE 805 • 383 • 3682  
WWW.SIGNUM.COM

# Table of Contents

<b>Introduction</b>	<b>1</b>
<b>Windows 7 and Vista (32-bit and 64-bit)</b>	<b>2</b>
<b>Windows XP (32-bit and 64-bit)</b>	<b>5</b>
<b>Windows 2000</b>	<b>7</b>
<b>Windows 98SE and ME</b>	<b>8</b>

**USB**

**driver**

## Introduction

*This booklet describes the process of installing the Signum Systems JTAGjet and ADM51 emulators with a USB 2.0 High Speed port.*

**T**hank you for using the Signum Systems emulators. With a communication port fully compatible with the high-throughput USB 2.0 specification, Signum in-circuit emulators enable you to develop embedded microprocessor based systems faster and more reliably. Please follow the guidelines in this manual to get the JTAGjet or ADM51 emulator up and working in no time, and enjoy the speed, dependability, and convenience of Signum embedded development tools.

**Note:** Whenever the remainder of this booklet refers to the JTAGjet emulator, the text is fully applicable to the ADM51 emulator as well.

The emulator installation process should begin with determining the version of the Windows OS running on your computer. This manual details installation procedures for

- Windows 7 and Vista (32-bit and 64-bit)
- Windows XP (32-bit and 64-bit)
- Windows 2000
- Windows 98SE and Windows ME

For technical assistance and for more information about Signum's USB-based products, visit us at [www.signum.com](http://www.signum.com).

## System Requirements

- PC-compatible computer with a USB host controller. (The USB 2.0 controller is recommended due to its efficiency.)
- Windows XP, 2000, ME or 98SE operating system.

**Note 1:** USB drivers for the JTAGjet emulator, SigUSB.sys, sigUSB64.sys and SigUSB98.sys, as well as the driver information files SigUSB.inf and SigUSB64.inf are found on the installation CD in the CD root and \Drivers\USB folders. During the installation process, these files are copied over to the \Drivers subfolder of your installation folder. When prompted by the “Found New Hardware Wizard” to specify the location of the USB driver, select any

**Note 2:** To get the best performance from your JTAGjet with USB 2.0 interface, make sure that your PC has at least one USB 2.0 port.

Working with USB 1.10 will be 40 times slower than with USB 2.0 and may feel uncomfortable during debugging.

If your computer does not have a USB 2.0 port—many older PCs came with USB 1.10—please make sure to upgrade it by buying either a USB 2.0 PCI card (for desktops) or USB 2.0 PCMCIA card (for notebooks). These cards are available at any PC retailer for less than \$50.

## Windows 7 and Vista (32-bit and 64-bit)

- ▶ To install the JTAGjet emulator on an MS Windows 7 or MS Windows Vista system:
  1. Make sure that no JTAGjet or ADM51 emulator is connected to a USB port.
  2. Install the software that came with your emulator. The installation package installs the USB driver automatically.
  3. If the USB driver has not been previously installed on your system, the dialog box in Figure 1 appears. (If the USB driver has previously been installed—for instance, when updating the software—Windows omits the dialog box.)

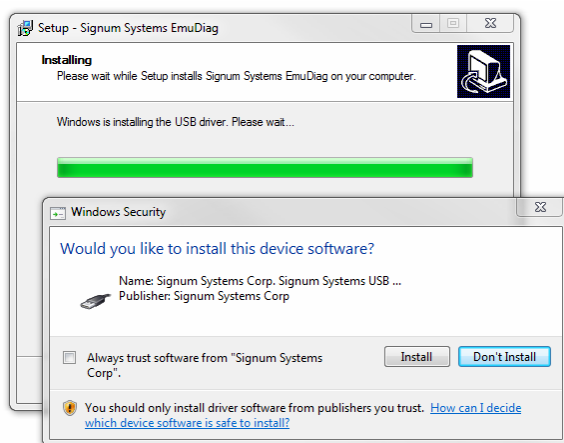


FIGURE 1 Windows 7 and Vista requesting permission to install the USB driver for the first time.

4. Click the Install button to install the driver. Wait for the process to complete—it may take a while.
5. When the installation has finished, you can connect the emulator to the USB port.

## Manual Installation on Windows 7 and Vista

- ▶ To manually install the JTAGjet emulator on an MS Windows 7 and Vista systems:
1. Plug the USB cable connected to your host computer into the USB connector of the JTAGjet emulator.
  2. The dialog box in Figure 2 appears.

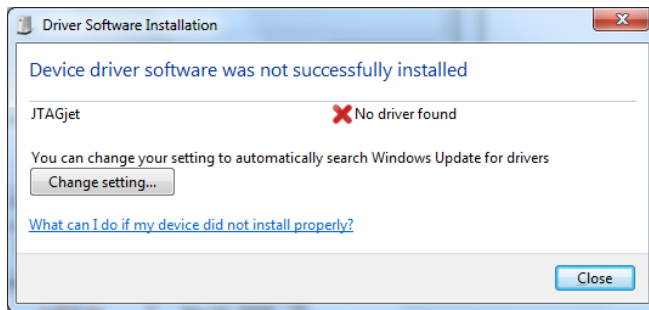


FIGURE 2 Windows 7 and Vista response to connecting the JTAGjet to the computer via a USB cable.

Press the Close button. (As the dialog box's Change Setting option limits the driver search area to Windows Update, the driver needs to be installed manually.) Press the Close button.

3. Open the Windows Device Manager. (One of the easiest ways is to click on the Start button, choose Control Panel, and in the System and Security window, click on the Device Manager link located under the System.)

4. In Other Devices, right-click on the JTAGjet entry and select Update Driver. Choose “Browse my computer for driver software” to install the driver manually (Figure 3).

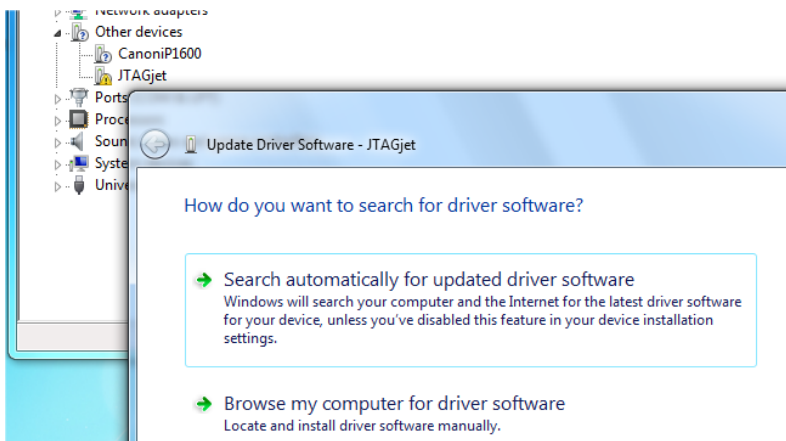


FIGURE 3 Updating the USB driver. Select “Browse my computer for driver software.”

5. Browse to the Drivers\USB subfolder of the folder where you installed the Signum software (Figure 4).

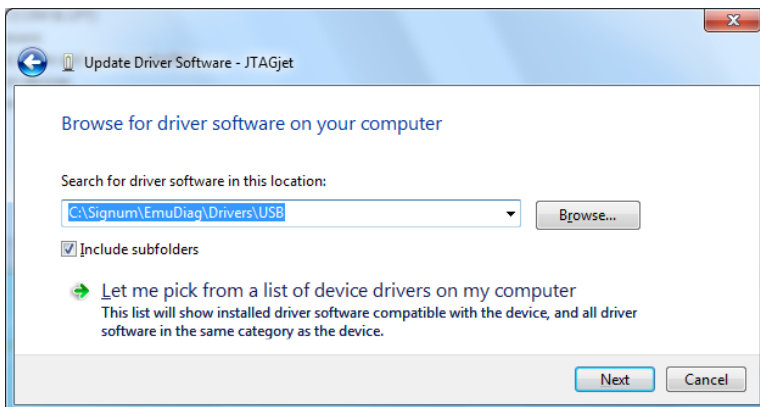


FIGURE 4 Finding the USB driver. In this example, the driver that came with the EmuDiag utility is going to be installed.

6. Press the Install button (Figure 5)

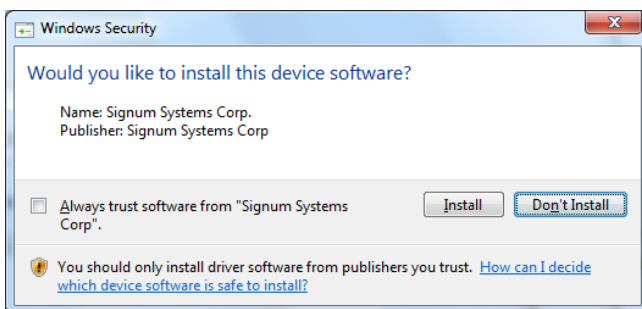


FIGURE 5

7. After Windows has completed installing the driver, close the confirmations dialog (Figure 5)

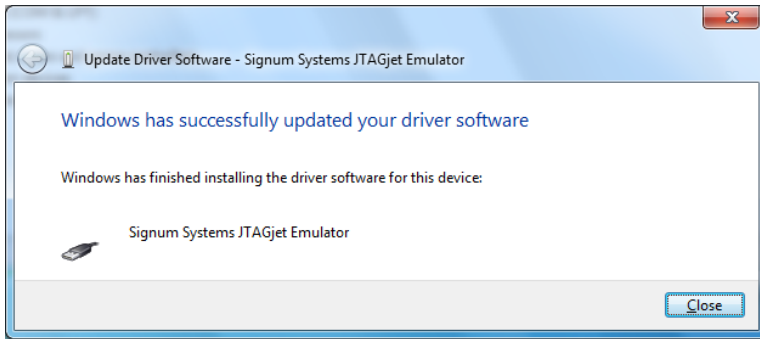


FIGURE 6

## Windows XP (32-bit and 64-bit)

- ▶ To install the JTAGjet emulator on an MS Windows XP system:
  1. Plug the USB cable connected to your host computer into the USB connector of the JTAGjet emulator.
  2. Windows XP recognizes the emulator as “JTAGjet” and the “Found New Hardware Wizard” dialog box appears. Select the “Install from a list or specific location” option and click “Next,” as shown in Figure 7.



FIGURE 7 The “Found New Hardware Wizard” opening dialog box.

3. Select the “Search for the best driver in these locations” and “Include this location in the search” options. Uncheck all other check boxes. Use the “Browse” button to navigate to the folder with the USB drivers, and then click “Next.”



4. The “Found New Hardware Wizard” informs you that it is about to install the “Signum Systems JTAGjet Emulator.” If the operating system warns you that the driver for the device failed the Windows Logo test, please press the “Continue Anyway” button and proceed with the installation.
5. The “Found New Hardware Wizard” starts copying the driver files to the appropriate system folders.
6. When Windows XP notifies you that it has completed installing the drivers for the “Signum Systems JTAGjet Emulator”, click “Finish.”

*Note: Older versions of the USB driver install Signum emulators in the “Universal Serial Bus controllers” device category. If you cannot see “Signum Systems JTAGjet Emulator,” then verify installation by expanding “Universal Serial Bus controllers.”*

## Verifying Proper Installation on Windows XP (32-bit and 64-bit)


- ▶ To verify that the JTAGjet emulator has been correctly installed on an MS Windows XP system:
  1. Right click on the “My Computer” desktop icon. (“My Computer” is also available from the Start Menu.) Select “Properties.”
  2. The “System Properties” window appears. Select the “Hardware” tab.
  3. Click the “Device Manager” button. The “Device Manager” dialog box opens.
  4. Click on the  symbol next to “Signum Systems USB Emulators” to expand the Device Manager list. Verify that the list contains “Signum Systems JTAGjet Emulator” or “Signum Systems ADM51 Emulator” (Figure 8).



FIGURE 8 Properly installed JTAGjet emulator listed in Device Manager.

## Windows 2000

- ▶ To install the JTAGjet emulator on an MS Windows 2000 system:
  1. Plug the USB cable connected to your host computer into the USB connector of the JTAGjet emulator.
  2. Windows 2000 recognizes the device as “JTAGjet” and opens the “Found New Hardware Wizard” dialog box. Click “Next.”
  3. Select the “Search for a suitable driver for my device” option and click “Next,” as shown in Figure 9.



FIGURE 9 Installing the JTAGjet emulator under Windows 2000.

4. Select “Specify a location” and uncheck all other check boxes. Click “Next.”
5. The “Found New Hardware Wizard” dialog box appears. Use the “Browse” button to navigate to the folder with the USB drivers. The selected folder name appears in the “Copy manufacturer’s files from” text box. Click “OK” to close the “Found New Hardware Wizard” dialog box.
6. When the “Found New Hardware Wizard” reports finding a driver for the “JTAGjet” device, click “Next.”
7. Windows XP notifies you that it has completed installing the drivers for the “Signum Systems JTAGjet Emulator”. Click “Finish.”

## Verifying Proper Installation on Windows 2000

- ▶ To verify that the JTAGjet emulator has been correctly installed on your MS Windows 2000 system:
  1. Right-click on the “My Computer” desktop icon and select “Properties.”

## SIGNUM SYSTEMS

1 7 0

2. The “System Properties” window appears. “Hardware” tab.
3. Click the “Device Manager” button.

*Note: Older versions of the USB driver install Signum emulators in the “Universal Serial Bus controllers” device category. If you cannot see “Signum Systems JTAGjet Emulator,” then verify installation by expanding “Universal Serial Bus controllers.”*

Select the


4. Click on the  symbol next to “Signum Systems USB Emulators” to expand the Device Manager list. Verify that the list contains “Signum Systems JTAGjet Emulator” or “Signum Systems ADM51 Emulator” (Figure 10).



FIGURE 10 Properly installed JTAGjet and emulator listed in Device Manager.

## Windows 98SE and ME


- ▶ To install the JTAGjet emulator on a Windows 98SE or Windows ME system:
1. Plug the USB cable connected to your host computer into the USB connector of the JTAGjet emulator.
  2. Windows 98 recognizes the device as “JTAGjet” or “USB 2.0 Device” and displays the “Add New Hardware Wizard” dialog box. Click “Next.”
  3. Select the “Search for the best driver for your device” option and click “Next,” as shown in Figure 11.

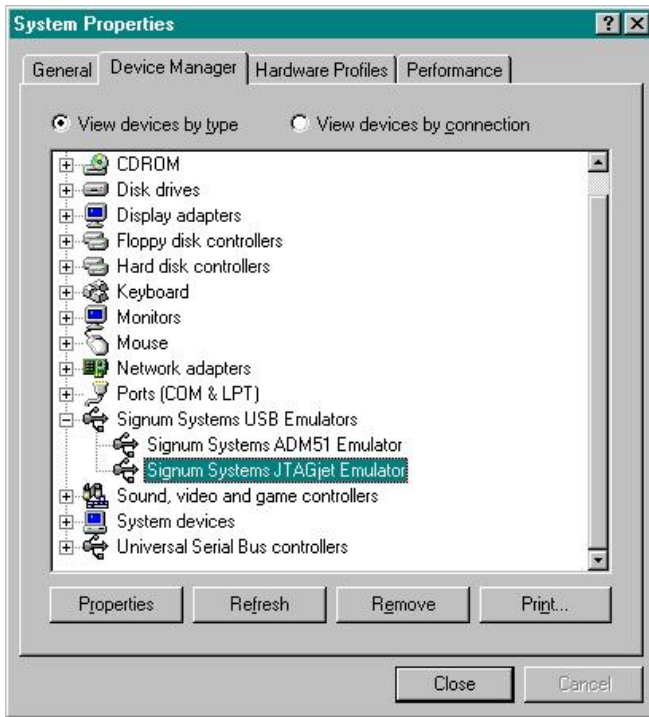


FIGURE 11 Beginning a search for the USB driver.

4. Select “Specify a location” and uncheck all other check boxes. Use the “Browse” button to navigate to the folder with the driver files, and then click “Next.”
5. The “Add New Hardware Wizard” informs you that it is about to install the “Signum Systems JTAGjet Emulator.” Click “Next.”
6. When Windows 98 notifies you that it has completed installing the drivers for the “Signum Systems JTAGjet Emulator,” click “Finish.”

## Verifying Proper Installation on Windows 98 and ME

- ▶ To verify that the JTAGjet emulator has been correctly installed on an MS Windows 98 or ME system:
  1. Right-click on the “My Computer” desktop icon and select “Properties.”
  2. The “System Properties” window appears. Select the “Device Manager” tab.
  3. Click on the  symbol next to “Signum Systems USB Emulators” to expand the Device Manager list. Verify that the list contains “Signum Systems JTAGjet Emulator” or “Signum Systems ADM51 Emulator” (Figure 12).



*Note: Older versions of the USB driver install Signum emulators in the "Universal Serial Bus controllers" device category. If you cannot see "Signum Systems JTAGjet Emulator," then verify installation by expanding "Universal Serial Bus controllers."*

FIGURE 12 Properly installed JTAGjet emulator listed in Device Manager.

□