# Installing Timesys Linux demonstrations on popular embedded dev kits

Demo Installation Guide for USB flash drive / SD card / microSD card

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## timesys %

### Introduction

#### Goal

This guide is designed to help you download and deploy a Timesys-built demonstration image onto various popular embedded development kits.

#### Prerequisites

This guide is intended for use with Microsoft® Windows® based hosts.

You will need the following for the exercises in this tutorial:

Windows XP/Vista® PC	Host machine with SP3 and >250 MB free HD space
USB flash drive, SD card or microSD card	Media minimum GB requirements are dependent upon the size of the demo image
microSD card adapter (if applicable)	A device to read and write data to the microSD card
Development Kit	Hardware platform to run Linux demo
Demo image	Download a demo image from <u>http://www.timesys.com/embedded-linux/demo-images</u>

#### **Additional Information / Assumptions**

Your demonstration image downloaded from the Timesys website (<u>http://www.timesys.com/embedded-linux/demo-images</u>) contains all necessary files to boot and run Linux and the various graphical demo applications on one of the applicable kits listed, below:

- Boundary Devices Nitrogen6X board with LCD touchscreen
- Freescale i.MX6 based SABRE Lite platform
- Freescale i.MX 6 based SABRE-SDP
- Freescale Vybrid TWR-VG65S10 with LCD touchscreen
- GizmoSphere Gizmo Explorer Kit
- TI Sitara AM335x SK (Starter Kit) with LCD touchscreen

#### **Preparing the Hardware**

The following steps will lead you through the process of transferring the demo image you downloaded to your USB flash drive, SD card or microSD card.

- 1. Insert your media (USB flash drive, SD card or microSD card) directly into your computer.
- Download the Timesys-recommended image installer (*Win32DiskImager*) via the download link located on the Timesys demo images web page at <u>http://www.timesys.com/embedded-linux/demo-images</u>.



IMPORTANT NOTE: Be sure to back up any files on your media (USB flash drive, SD card or microSD card) before running Win32DiskImager as it replaces everything on the media.

- 3. Using Windows Explorer, determine the drive mapped to the media (USB flash drive, SD card or microSD card). Typically, the media Drive will appear as a Removable Disk with a specific drive letter (i.e., H:).
- Using Start->Run or by double-clicking on "Win32DiskImager.exe," run the Win32DiskImager application from the location where you unzipped it (Figure 1). NOTE: If you are running Windows Vista or newer, you should right-click on Win32DiskImager, and "Run as administrator" (Figure 2).

Open File - Security Warning				
The purchase the trun the trun the trun the trun the trunch set of the trun the trun the trunch set of the trun the trunch set of the trun	ublisher could not be verified. Are you sure you want to s software?			
	Name: Win32DiskImager.exe			
	Publisher: Unknown Publisher			
	Type: Application			
	From: C:\Documents and Settings\timesys\Desktop\win3			
✓ Alway	<u>R</u> un <u>Cancel</u> ays ask before opening this file			
8	This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust. How can I decide what software to run?			

Figure 1. Running Win32DiskImager with Windows<sup>©</sup> XP

Name			Date modified	Туре	Size
GPL-2			4/19/2009 11:21 AM	File	18 KB
LGPL-2.1			4/19/2009 11:22 AM	1 File	26 KB
🚳 mingwm10.dll		1	12/27/2007 9:23 AM	Application Extens	16 KB
🚳 QtCore4.dll		2	2/26/2009 6:43 AM	Application Extens	2,677 KB
🚳 QtGui4.dll		2	2/26/2009 1:23 AM	Application Extens	11,180 KB
README		4	4/28/2009 3:45 AM	Text Document	2 KB
📚 Win32DiskImager	0		ben		3 KB
	۲	Ru	n as administrator		
		Sca	an for Viruses		

Figure 2. Starting Win32DiskImager with admin privileges (Windows<sup>©</sup> Vista or newer)

5. Once Win32DiskImager runs, set the Image File location to point to the demo image file that you have downloaded. Pick the appropriate device drive id for the media (USB flash drive, SD card or microSD card) as shown in Figure 3.

**NOTE:** The location of your image file as well as the location of your media (USB flash drive, SD card or microSD card) will differ from that shown in the example below.

Demo Image File	Drive ID for the media you're using
👒 Win32 Disk Imager	
Image File	Device
C:/Documents and Settings/time	esys/Desktop/single_vga.img 📄 📄 🔨 🔊
Progress	
Cano	cel Read Write Exit

Figure 3. Flashing .img file on a USB flash drive, SD card or microSD card

6. Click "Write." The process should take just few seconds to complete.



IMPORTANT NOTE: Incorrect selection of your media device (USB flash drive, SD card or microSD card) could result in corruption of other data devices attached to your computer.

7. Safely remove the media (USB flash drive, SD card or microSD card) from your Windows host. There should be a "Safely Remove" icon in the system tray near the clock. Click on this icon, and select your media Drive. A message will prompt you when it is safe to remove the media.

#### Launch the Demo

To launch the demo:

- 1. Make sure your development board is in the powered off state.
- 2. Insert the media (USB flash drive, SD card or microSD card) into the development kit.
- 3. Power up the board.