

PinPort Installation Guide



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System design verification relies on models which represent the chips which make up the system. These chips come from various sources, and in many cases, models are not available from the chip manufacturer. Using the PinPort solution, the designer can "fill in" where models for chips are not available by using the actual chip as a replacement for the model.

The PinPort solution is a hardware interface that is connected to your computer through an SCSI interface along with a software PLI that works in conjunction with Verilog, OVI compliant simulators.

System Requirements:

To use the PinPort Simulator/Hardware Interface you will need the following:

Hardware:

A PC with Celeron, PentiumII, PentiumIII, Pentium4, Xenon processor (1 or 2 processors supported) with a CD-ROM

A SCSI adapter (Adaptec 2930 or better recommended) installed with appropriate SCSI cable and terminator

Software:

- OS: Win95, Win98, WinNT4.0, Win2K, WinME
- WinASPI (SCSI control software) installed
- A Verilog, OVI compliant simulator with full PLI support.

For questions about Sun systems or Unix, contact Exsent.

Getting Ready to Install

Unpack the PinPort shipping box and check the contents against the packing list. You will also need to have available your PinPort "key" files that are supplied separately.

Before you begin the PinPort installation, be sure that you have an SCSI adaptor installed in your system with WinASPI software installed. You will also need an SCSI cable to connect to the PinPort hardware and, if no other SCSI hardware is installed in your system, an SCSI terminator.

Hardware Installation

To install the PinPort software, follow the procedure below.

1. Power down your system.
2. Select an SCSI device number for the PinPort that doesn't conflict with other SCSI devices in the system. Use a small flat-head screw driver to rotate the SCSI device number switch on the back panel of the PinPort box. Move the switch until the small arrow points to the number you want to use. Avoid device number 7 as it is usually assigned to the SCSI host adapter card.
3. Connect the power supply to the PinPort, and plug the power supply into a power outlet.
4. Connect an SCSI cable from the computer's SCSI adapter to the PinPort.
5. Install a SCSI terminator at the end of the SCSI string of devices.

Note: You should always power down the system when connecting or disconnecting any SCSI devices. It is usually advisable to power on the SCSI device before the computer.

Software Setup

Follow the procedure below to install and set up the PinPort software.

1. Start your computer, and turn on the PinPort device.
2. Insert the PinPort CD into the host computer.
3. When the system indicates that new hardware is found, follow instructions on the screen to browse to the PinPort CD and install PinPort device inf file. You may need to restart your system to complete the device installation.
4. Run the Setup program supplied on the PinPort CD. This copies these additional PinPort directories and files to the directory
C:\Program Files\exsent\pinport:

pinport.dll - the PinPort software PLI interface file

keys - directory for "key" files

verilog - directory for the Verilog diagnostic and utility files

doc - directory for document files in the PDF format

inf - directory for the exsent.inf Windows installation file

license - directory for document files in the PDF format

perl - directory for perl script files

You can also simply drag the \exsent directory from the Exsent CD to the C:\Program Files directory, or a directory of your choosing.

5. Copy the PinPort "key" directory files that are supplied separately into the c:\Program Files\exsent\pinport\keys directory. The "key" files are contained in a key folder. This key folder's name is matched to the product ID number of the PinPort hardware and unique "key" folder and files are required for each PinPort device installed the system.
6. Determine the location of the ModelSim.ini file that you wish to use.
7. Using a plain text editor like NotePad, open the ModelSim.ini file and locate the area that has two commented lines which should look similar to this:

; List of dynamically loaded objects for Verilog PLI applications

```
; Veriuser=veriuser.sl
```

After those lines add the following line:

```
Veriuser=C:/Program Files/exsent/pinport/pinport.dll
```

This assumes that the location of the exsent folder is C:\Program Files. If the location is different, then this line in the ModelSim.ini file should reflect the correct path to the pinport.dll file. Some combinations of simulators and operating systems might require quotation marks around the file name and path. Alternately, avoid having a space between works in the path name, (such as ../Program files/..), or use the alternate name for such a folder, (such as ../progra~1/..). The preceding examples assume a "/" for the path delimiter. In some simulator setups, the "\" might also be used.

After you've added the line, save and close the file.

Test the Installation

1. Launch the ModelSim simulator application.
2. In the ModelSim main window, (command line), type:
path\vlog test_01.v
3. Type: vsim test_01
4. Type: run -a
5. You should see the main window scroll through a number of tests, which will check the communication with the PinPort device. These tests will result in a message being printed to the screen at the end such as TESTS PASSED. If you do not see this message, go to troubleshooting section.

Troubleshooting

If the PinPort test didn't work, check the following.

1. Be sure your Pinport is properly installed in the system.

To check the installation, you can browse to the Control Panel>System>Device Manager. You should see "Other Devices", or "Unknown Devices" and, in one of these folders you should see the PinPort device.

If you don't see the PinPort device, check that it PinPort box is connected to the power supply and that it is turned on.

Check that the SCSI cable and, if necessary, SCSI terminator are properly installed.

Check that the SCSI device number doesn't conflict with other devices in the system.

Be sure the WinASPI software is correctly installed and running.

2. Be sure you have a valid "key" file.

Each "key" folder and it files are matched to a specific PinPort. The characters of the foldername should match the serial number on the PinPort box.

The "key" files are date encoded. If the license date has expired, the PinPort will not function.

If the key files are modified or changed in any way, either during transmission or through editing, it may no longer work.

3. Check that the software configuration is correct:

Be sure the pinport.dll file is installed in the <PATH>\exsent\pinport directory. Note the full path to the file.

Check that the ModelSim.ini file includes a line with the correct path to the pinport.dll file.

For addition information or help, contact Exsent at:

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