# Lava Parallel-PCI 3.3V Installation Manual





Rev. B00

## Windows Hardware and Driver Installation

- 1. Before opening the casing of your computer, make sure that all power is off.
- 2. Locate an unused 3.3 volt PCI slot and insert the Parallel-PCI 3.3V card into it. Ensure that the card is well seated.
- **NOTE:** 3.3 volt PCI slots are mirror images of 5.0 volt PCI slots. When installing the Parallel-PCI 3.3V, orient its bracket to the outboard edge of the motherboard.
- 3. Screw the metal bracket of the Parallel-PCI 3.3V card to your PC's casing and replace the machine's cover.
- 4. Connect your parallel (printer) cable to the port on the Parallel-PCI card and turn the PC on.



- 5. When Windows starts, it will find a Parallel-PCI 3.3V Controller and will ask you for a driver for this device. When prompted, insert the installation diskette into your floppy drive. After copying the necessary files from the diskette, Windows may restart your PC in order to complete the installation of the Parallel-PCI 3.3V card. Any Plug and Play printers attached to the Parallel-PCI 3.3V will now also be detected and installed. Windows XP may display a message to the effect that the drivers are not digitally signed. This warning can be ignored.
- 6. The Parallel-PCI 3.3V card will appear in Control Panel|System|Device Manager under Ports, as a listing similar to the one below. If required, settings may be customized by clicking on the Parallel-PCI 3.3V listing and then clicking Properties. Please note that changes to default settings may be required by users connecting the Parallel-PCI 3.3V card to a non-printer peripheral (see reverse). Users connecting a printer should use default settings.



## <u>Connecting a non-printer device</u> (e.g. external drive or parallel scanner) to the Parallel-PCI 3.3V</u>

In Windows 95/98/ME (not Windows 2000/XP) some parallel port devices require parallel ports that use standard (legacy) ISA LPT addresses (0278h or 0378h). Because the Parallel-PCI 3.3V card is a fully compliant PCI device, its default address (Input/Output Range) is beyond the standard range of ISA I/O addresses. In order to connect such a peripheral to the Parallel-PCI 3.3V card, the I/O address range of the card must therefore be changed manually. This section describes how this is done.

1. Open Control Panel|System|Device Manager and find the Parallel-PCI listing under Ports. Click Properties, and proceed to the Resources tab. The following screen will appear (Note: the Input/Output Range and Interrupt of your particular configuration may differ from the one below).

Lava Parallel PCI (LPT2) Properties 🛛 🖬 🖾
General Driver Resources
Lava Parallel PCI (LPT2)
Resource settings:
Resource type Setting
Interrupt Request 10
Setting based on: Basic configuration 0000
Etrange Setting
Conflicting device list:
No conflicts.
OK Cancel

2. Remove the check mark from the Use Automatic Settings box.

Note: In some cases Windows will give an error message to the effect that "Windows cannot modify this resource" at this point. If you are unable to access the settings for changing system resources, reboot the system in Safe Mode to make changes to resource settings. (To enter Safe Mode, press the F8 key while the system is rebooting.)

3. Double-click on the words Input/Output Range. The following screen will appear:

Edit Input/Output Range	ŶX
Enter the input/output range you would like to set for this device.	
You may either enter a specific range and the nearest valid range will be automatically selected, or you may select a range using the up and down arrows.	
Value: 6000 - 6007	
Unknown	
OK Cance	

4. Use the up/down arrows to scroll to one of the following range settings, or type them in manually:

0278 – 027F	0378 – 037F	0338 - 033F
0238 – 023F	02B8 – 02BF	

- 5. After one of these has been entered, click OK. Windows will verify whether you would like to force this particular configuration rather than the automatic one that it had previously chosen. Click Yes.
- 6. Verify that there are no conflicts with addresses being used by other devices already in your PC. If no conflicts are found, restart Windows.

#### Using Zip Drives with the Parallel-PCI 3.3V

NOTE: The default input/output range for the Parallel-PCI 3.3V card works with Zip Drives using new lomegaware software. The instructions "Connecting a non-printer device" given above apply to Zip Drive users using old versions of lomegaware.

For best results with Windows 2000 and XP, we recommend downloading the latest "lomegaware" from lomega.

Additional instructions on optimizing Zip Drive performance with the Parallel-PCI 3.3V can be found at www.lavalink.com.

#### **Release Notes:**

- A. This documentation describes the installation of the Parallel-PCI 3.3V card on a Windows95/98/Me/2000/XP PC. Instructions and software for DOS, Windows 3.x, and Windows NT 4.0 may be found in the NT4.0 subdirectory of the Parallel-PCI 3.3V card Installation diskette. Instructions for Linux installation are available at www.lavalink.com.
- B. Because the Parallel-PCI 3.3V card uses PCI (not ISA) I/O address ranges, it will never be seen by your BIOS at boot-up as a standard parallel port (occupying 0278h or 0378h) even if the address has been changed in Windows using the above procedure. This is normal, and does not indicate a fault in your Parallel-PCI 3.3V card.
- C. The Parallel-PCI 3.3V card will not work at address 0278h or 0378h if it is installed in a PCI slot that is behind a PCI-to-PCI bridge. If you have trouble installing the Parallel-PCI 3.3V card, try seating it in a different slot.
- D. In standard installations of Windows 2000/XP, the I/O address cannot be changed to a legacy address.
- E. Some devices (like external CD writers) default to "word mode" (ie: 16-bit data transfer) for fastest performance. Such devices need to operate in "byte mode" (8-bit data transfer) to work with the Parallel-PCI 3.3V. Look in your device software for a "byte mode" setting, and enable it.

#### Lava Technical Support

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#### Lava Computer MFG Inc.



This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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