

Advance™ Accelerator Board Installation Guide

Thank you for purchasing an *Advance* accelerator board from ClearSpeed Technology.

Before installing we recommend that you read through this *Installation Guide* to ensure that the installation goes smoothly.

We also recommend that the board is installed by a competent IT professional. If you are unsure about any aspect of the installation, please seek expert advice.

Package contents

The *Advance* accelerator board package contains:

- The *Advance* accelerator board.
- A disposable antistatic wrist strap.
- A replacement short mounting bracket.
- This *Installation Guide*.

This guide gives you pre-installation advice and explains how to install the board.

Before you start

To install the board, you need a system with:

- A suitable PCI-X slot. Please note that card guides or retaining clips are required for the full-length PCI-X board. For best performance we recommend using a 133 MHz PCI-X slot.
- Minimum airflow across the heatsinks of 200 LFM or 1 m/s.

Software installation

Before you install the board you must first install the drivers and the diagnostic tools.

All the software and the latest list of supported platforms are available from the ClearSpeed customer support web site:

<http://support.clearspeed.com/downloads/>

The software installation instructions can be found on the documents page:

<http://support.clearspeed.com/documents/>

Board-handling procedures



Caution!

The board can be damaged by static electricity. Observe these precautions for handling electrostatic sensitive devices.

Static electricity can severely damage this equipment. Handle the board and any other device in your system with extreme care and avoid unnecessary contact with the system components on the main board.

When installing the board it is important that you observe the following:

- Only remove the board from the antistatic packaging when you are ready to install it.
- Always make sure you have the enclosed wrist strap connected to the chassis before removing the board from its antistatic packaging.
- Always hold the board by its edges and avoid touching its circuitry.
- Always work on a correctly grounded antistatic surface to avoid possible damage to the board from static discharge.
- Always have the power supply switched off and unplugged when working with the computer system.
- Whenever you remove the card from your computer, please make sure that:
 - a. You always have the antistatic wrist strap on;
 - b. You always put the board back in its packaging.
- Do not let your clothing touch any electronic parts.

ClearSpeed Technology assumes no responsibility for any damage or injury that results from failure to follow these instructions or from failure to observe safety precautions.

Installation Instructions



Caution: If at all possible avoid using a riser card. Although PCI riser cards are commonly used, they will generally violate PCI specifications for the length of signal traces. For more information see the *Advance Accelerator Board User Guide*.

You may need to refer to the manufacturer's instructions to help you to:

- Open the computer system
- Identify the PCI-X slots

You may need to replace the mounting bracket on the board with the short bracket supplied, if this is appropriate to your system.

To install the board, follow these procedures:

1. Make sure the system and all other peripheral devices connected to it have been powered down and unplugged.
2. Ensure that the system is securely grounded.
3. Opening the system-unit cover.
4. Tighten the adhesive side of the wrist strap firmly around your wrist to ensure good contact with your skin.
5. Identify a suitable PCI-X slot. Usually the slot type and speed are printed next to the slot, for example, "pcix-133". If you are unsure about which is the PCI-X slot, consult the motherboard manual to help you identify it.
6. Release the locking mechanism (screw or clip) and the bracket. Refer to the manufacturer's instructions, if necessary.
7. Align the board above the slot then press down firmly until it is completely seated in the slot.

DO NOT FORCE THE BOARD INTO THE SLOT.

8. Ensure that neither the board, or any of the components on it, can come into contact with any metallic part of the system.
9. Secure the board to the chassis by engaging the locking mechanism. Replace the system cover.
10. Power up the system. Note that the LEDs on the board may flash as the board is configured but should then remain off. If the LEDs are illuminated or flashing after the system has booted, refer to the *Advance Accelerator Board User Guide* for troubleshooting information.
11. Run the diagnostics tests as described in the software installation instructions.

Note: There are no user-configurable switch or jumper options. Changes to the existing configuration may impair operation of the board.

Please retain both the outer package and all internal packaging in case you need to return the board.

Troubleshooting

If you experience problems during installation and need further clarification, refer to the *Advance Accelerator Board User Guide* for more information. The User Guide is available from the ClearSpeed customer support site:

<http://support.clearspeed.com/documents/>

FCC compliance

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.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Any modifications made to this device that are not approved by ClearSpeed Technology plc., may void the authority granted to the user by the FCC to operate this equipment.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Export regulations

This product is classified as dual-use (ECCN 4A003c) and is subject to the customs and export control laws and regulations of the United States and United Kingdom, and may also be subject to the customs and export laws and regulations of the country in which the product is manufactured and/or received. Customer agrees to abide by those laws and regulations. Further, under US law, the product may not be sold, leased or otherwise transferred to restricted end-users or to restricted countries. In addition, the product may not be sold, leased or otherwise transferred to restricted end-users or to restricted countries. In addition, the product may not be sold, leased or otherwise transferred to, or utilized by an end-user engaged in activities related to weapons of mass destruction, including without limitation, activities related to the design, development, production or use of nuclear weapons, materials, or facilities, missiles or the support of missile projects, and chemical or biological weapons.

This product is protected by the following UK patents: 2341770, 2348980, 2348984, 2348974, 2348973, 2348971, 2391093, 2394815, 2390506 or international equivalents. Other patents pending.

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