

Dell Xcelerator™ User's Guide

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Notes, Notices, and Cautions



NOTE: A NOTE indicates important information that helps you make better use of your computer.



NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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Overview

The Dell Xcelerator™ is an internal, USB 2.0, bus-powered device that increases the speed and performance of your system when performing tasks such as creating a DVD or formatting files for a Portable Media Player (e.g., PSP, IPOD, etc.).

Features

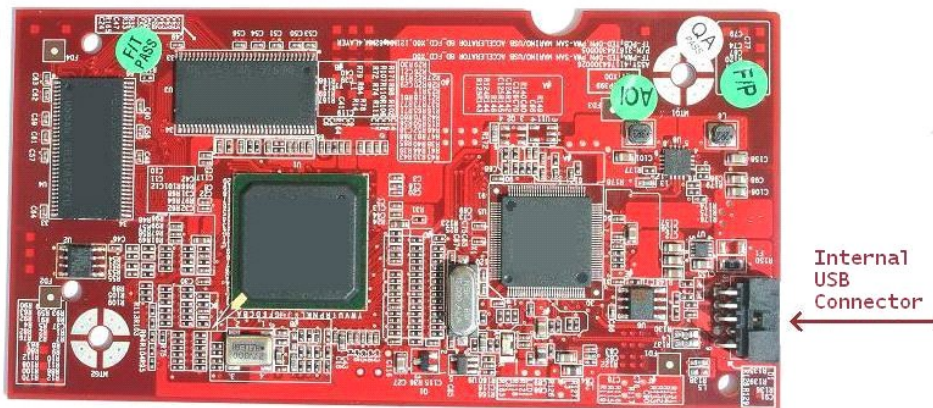
The Dell Xcelerator™ provides the following features:

1. Relieve the PC from CPU intensive activities so that DVD burning and video sharing can be done as background tasks.
 2. Perform hardware transcoding of MPEG-2 video to MPEG-4.
 3. Transcode High Definition MPEG-2 video clips to MPEG-2 or MPEG-4 standard definition video.
 4. Transrate MPEG-2 video clips to a lower bit rate to fit onto a DVD, CD, or other media.
 5. Works under Windows XP and Windows Vista
 6. Supports both 32 and 64 bit systems
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Input and Output Connectors

There are no *external* connections on this device. The USB connector on the board supports an internal USB cable.

Board Image



The only connector on the board is a 10-pin header. The internal USB cable plugs into this connector.

Software

The Dell Xcelerator™ is supported by the following software:

1. Sonic Creator v.10
1. Dell Xcelerator™ for Portable Devices v1.0

Drivers use standard Microsoft DirectShow® property sets. The drivers can be found on the *Dell Resource* CD. An Install Shield is provided to make installation simple. Store the Resource CD that comes with your system in a safe place in case you need to *reinstall* the software.

Platform Requirements

- 1 Microsoft Windows XP or Vista OS
 - 1 Minimum 256 MB RAM, 512 MB Recommended
 - 1 1.8 GHz Processor, 400 MHz Front Side Bus
 - 1 DirectX® 9.1 or higher
 - 1 Internal USB connector on motherboard (10-pin header)
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Getting Help

If you need additional help or require information that is not included in this guide, visit the Dell Support website support.dell.com or call 1-800-BUY-DELL

Warranty Information

See your Dell system warranty information for service and repair options available for your Dell Xcelerator™ product.

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Operation

Operation Details

The Dell Xcelerator™ card provides hardware acceleration for various software applications (Sonic Creator v10 and Dell Xcelerator™ for Portable Devices). For more information on how to use the Dell Xcelerator™ card under Sonic Creator, see the Sonic Creator documentation. For more information on how to use the Dell Xcelerator™ card under Dell Xcelerator™ for Portable Devices, see the Dell Xcelerator™ for Portable Devices documentation.

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Regulatory

FCC Notice

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. 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**.

This device complies with **Part 15 of the FCC Rules**. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference.
- 1 This device must accept any interference received, including interference that may cause undesired operation.



NOTE: The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one of more of the following measures:

- 1 Reorient the receiving antenna.
- 1 Relocate the system with respect to the receiver.
- 1 Move the system away from the receiver.
- 1 Plug the system into a different outlet so that the system equipment and the receiver are on different branch circuits.

If necessary, consult a representative of Dell Inc. or an experienced radio/television technician for additional suggestions.

The following information is provided on the device or devices covered in this document in compliance with FCC regulations:

Model Name Dell Xcelerator™
Model Number XN264
Company Name MITAC Computer Shunde Limited
Company Address No 1, Shunda Rd., LunJiao Town, Shunde District, Foshan City, Guangdong, China

Dell™ products are designed, tested, and classified for their intended electromagnetic environment. These electromagnetic environment classifications generally refer to the following harmonized definitions:

- 1 **Class A** is typically for business environments. Class B products may also be utilized in a Class A environment.
- 1 **Class B** is typically for residential environments. Class A products should not be utilized in a Class B environment.

Information Technology Equipment (ITE), including peripherals, expansion cards, printers, input/output (I/O) devices, monitors, and so on, that are integrated into or connected to the system should match the electromagnetic environment classification of the computer system.



Notice: Use only shielded cables for connecting peripherals to any Dell™ device to reduce the possibility of interference with radio communications services. Using shielded cables ensures that you maintain the appropriate EMC classification for the intended environment. If you prefer, you can order a cable from Dell™ on the World Wide Web at www.dell.com

Dell has determined that this product is a Class B harmonized product.

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Safety Instructions



Caution: Important Safety Instructions

- 1 **Read Instructions** — Read all the safety and operating instructions before operating your Dell Xcelerator™ to help ensure your own personal safety and to protect your product from potential damage.
 - 1 **Retain Instructions**— Retain all the safety and operating instructions for future reference.
 - 1 **Heed Warnings** — Adhere to all warnings on the product and the operating instructions.
 - 1 **Grounding** — For continued protection against risk of electric shock and fire, this accessory should be installed/connected only to the products, such as a computer, equipped with a three-wire grounding plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace the obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
 - 1 **Lightning** — For added protection and to prevent damage due to lightning and power-line surges, unplug the host system, such as a computer, from the wall power outlet and disconnect the antenna or cable system. Unplug the host system from the wall power outlet when left unattended or unused for long periods of time.
 - 1 Never insert anything metallic into the openings. Doing so may create the danger of electric shock.
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Environmental Notices

Waste Electrical and Electronic Equipment (WEEE) Directive



In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling. For information on how to recycle this product responsibly in your country, please visit: www.euro.dell.com/recycling.

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Setup Instructions

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Hardware Installation



CAUTION: Shut down your computer and unplug the power cord to prevent any personal or equipment damage.



NOTE: The Dell Xcelerator™ hardware comes pre-installed into the system. The following steps should only be done if a problem occurs with the device.

Verify that the Dell Xcelerator™ is installed.

1. Follow instructions in the manual for removing the cover from the chassis.
2. The Dell Xcelerator™ hardware is installed in a drive bay inside the chassis (see picture below).
3. Verify that the board is installed.



Connecting the Dell Xcelerator™ device

1. Verify that there is a cable that connects the Dell Xcelerator™ board to the motherboard.
 2. Verify that this cable is firmly installed into each connector.
 3. Reinstall the cover back onto the chassis.
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Driver Installation

If the driver and the hardware are not installed or if you need to reinstall them, perform the following steps:

1. With Windows® running on your computer, insert the *Dell Resource* CD into your CD/DVD drive.
 2. If the *Dell Resource* CD window does not open automatically, double click on My Computer on your desktop and then double click on the CD/DVD drive containing the *Dell Resource* CD.
 3. Follow the instructions provided by the *Dell Resource* CD to locate the driver package for your Dell Xcelerator™ card.
 4. Once you have located the package, select the Lumanate **setup.exe** to unzip the drivers on to the hard drive and install the drivers.
 5. At the **Setup Complete** screen, select **Yes** and click **Finish** to restart your system.
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Specifications

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General

Dell Model Name	Dell Xcelerator™
Dell Part Number	XN264 (1-800-WWW-Dell)
Manufacturer	MITAC Computer Shunde Limited
Connection type	Internal USB (no external I/O)
Computer interface type	USB 2.0

Video Specifications

 **NOTE:** The formats below refer to video files; the Dell Xcelerator™ is not an output device.

Video Input Formats Supported	MPEG-2 (MP/ML), MPEG-2 (MP/HL)
Supported Input Resolutions [SD]:	NTSC: 720x480; PAL: 720x576
Supported Input Resolutions [HD]:	HDTV: 1080-30i, 720-30p, 720-60p
Video Output Formats Supported	MPEG-2 (MP/ML); MPEG-4 (SP, ASP)
Supported Output Resolutions [SD]:	NTSC: 720x480, 320x240, 368x208 PAL: 720x576, 320x288; 320x240, 368x208

Mechanical Specifications

Cable Crosstalk	< -35 dB
ESD	> 8KV (recoverable)
Operating Temperature	0° to 55°C
Operating Humidity	5 to 80% non-condensing
Storage Temperature	-20 to 70°C
Storage Humidity	5 to 85% non-condensing

USB Cable Specifications

Length	0.35 meter
Connectors	10-pin MOLEX
Signal Wires	28 AWG
Power/Ground Wires	28 AWG
Dell Part Number	YT545 (1-800-WWW-Dell)

Power

Input Voltage (Current)	+5V (0.45A)
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NOTE: This voltage is supplied from the USB Bus Connector.

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Troubleshooting

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Reinstalling the Hardware Driver

To reinstall the Dell Xcelerator™ driver, follow these steps:

1. Ensure that the Dell Xcelerator™ is connected to the computer.
2. With Windows® running on your computer, insert the *Dell Resource* CD into your CD/DVD-ROM drive.
3. If the *Dell Resource* CD window does not open automatically, double click on My Computer on your desktop and then double click on the CD/DVD drive containing the *Dell Resource* CD.
4. Follow the instructions provided by the *Dell Resource* CD to locate the video driver package for your Dell Xcelerator™ card.
5. Once you have located the package, select the Lumanate **setup.exe** to unzip the drivers on to the hard drive and install the drivers.
6. At the **Setup Complete** screen, select **Yes** and click **Finish** to restart your system.

Common Problems and Solutions

 **NOTE:** It is very important that the USB cable provided with this device is used.

Hardware Detection		
Problem	Cause	Solution
Hardware not detected by Windows operating system.	The Dell Xcelerator™ is not connected properly.	Remove and reinsert the USB cable into the computer.
	Drivers are not installed or are damaged.	Drivers are not properly loaded. Run setup.exe from the <i>Dell Resource</i> CD.
	The Dell Xcelerator™ device may be defective.	Run the Dell Xcelerator™ Diagnostics program and follow the on-screen prompts. If the diagnostics completes with a PASS, the device is OK. If the test completes with a FAIL, write down the error message and contact Dell Tech Support at 1-800-624-9896.
Performance Issues		
Problem	Cause	Solution
Slow transcode/transrate performance.	The Dell Xcelerator™ board may not be installed.	Ensure that the Dell Xcelerator™ card is installed in the computer.
	Drivers are not installed or are damaged.	Drivers are not properly loaded. Run setup.exe from the <i>Dell Resource</i> CD.
	The Dell Xcelerator™ device may be defective.	Run the Dell Xcelerator™ Diagnostics program and follow the on-screen prompts. If the diagnostics completes with a PASS, the device is OK. If the test completes with a FAIL, write down the error message and contact Dell Tech Support at 1-800-624-9896.
	The Dell Xcelerator device is not being used by the application.	There are some functions that the application will choose to run in SW and not use the Dell Xcelerator card. This is normal.

Diagnostics

The user diagnostics program can be used to determine if the hardware and driver are working properly. The user diagnostics application is located in:

For Vista 32-bit: C:\Program Files\Lumanate\LazerUsb

For Vista 64-bit: C:\Program Files (x86)\Lumanate\LazerUsb

Double-click on the application file (xlrtdiag.exe). This will bring up the Dell Xcelerator™ User Interface. To run the diagnostics, click on the "Run" button. The software will run a number of tests on the device and will report back the status. If the device is OK, a PASS message will be displayed. If the device FAILS the test, contact Dell technical support.

Getting Help

If the troubleshooting procedures in this document do not resolve the problem, please contact Dell Inc. for technical assistance by visiting the Dell Support Website at support.dell.com or calling 1-800-BUY-DELL.

