

Alienware X51

Owner's Manual

Regulatory model: D05S
Regulatory type: D05S001

Notes, Cautions, and Warnings



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



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



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

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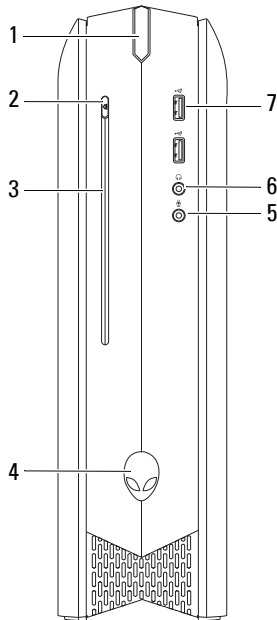
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About Your Computer

Front View

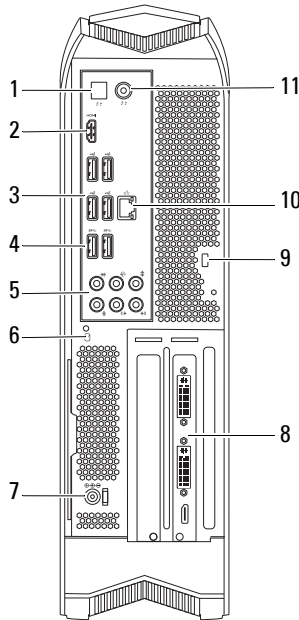


- | | | | |
|---|------------------------|---|----------------------------|
| 1 | power button | 2 | optical-drive eject button |
| 3 | optical drive | 4 | rotatable AlienHead |
| 5 | microphone connector | 6 | headphone connector |
| 7 | USB 2.0 connectors (2) | | |



NOTE: Your Alienware X51 computer supports dual orientation. You can place your computer vertically or horizontally. The rotatable AlienHead allows you to change the direction of the AlienHead depending on the orientation of your computer.

Back View




- | | | | |
|----|--------------------------|----|--------------------------------------|
| 1 | optical S/PDIF connector | 2 | HDMI connector |
| 3 | USB 2.0 connectors (4) | 4 | USB 3.0 connectors (2) |
| 5 | audio connectors (6) | 6 | hard-drive activity light |
| 7 | AC-adaptor connector | 8 | discrete graphics card |
| 9 | security-cable slot | 10 | network connector and network lights |
| 11 | coaxial S/PDIF connector | | |


Specifications

For more information on specifications of your computer, see support.dell.com/manuals.


Before You Begin

Turn Off Your Computer and Connected Devices

 **CAUTION:** To avoid losing data, save and close all open files and exit all open programs before you turn off your computer.

- 1 Save and close all open files and exit all open programs.
- 2 Click Start  and click Shut Down.


Microsoft Windows shuts down and then the computer turns off.

 **NOTE:** If you are using a different operating system, see the documentation of your operating system for shut-down instructions.


- 3 Disconnect your computer and all attached devices from their electrical outlets.
- 4 Disconnect all telephone cables, network cables, and attached devices from your computer.
- 5 Press and hold the power button, while the computer is unplugged, to ground the system board.


Safety Instructions

Use the following safety guidelines to protect your computer from potential damage and ensure your personal safety.


 **WARNING:** Before you begin, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at dell.com/regulatory_compliance.

 **CAUTION:** To avoid damaging the computer, ensure that the work surface is flat and clean.


 **CAUTION:** Only a certified service technician is authorized to remove the computer cover and access any of the components inside the computer. See the safety instructions for complete information about safety precautions and protecting against electrostatic discharge.

 **CAUTION:** When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs or thumb-screws that you must disengage before disconnecting the cable. When disconnecting cables, keep them evenly aligned to avoid bending any connector pins. When connecting cables, ensure that the connectors and ports are correctly oriented and aligned.

 **CAUTION:** To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

 **NOTE:** Ensure that you remove the security cable from the security-cable slot, if applicable.

Working Inside Your Computer

 **CAUTION:** Only a certified service technician is authorized to remove the computer cover and access any of the components inside the computer. See the safety instructions for complete information about safety precautions and protecting against electrostatic discharge.

For information on removing and replacing the internal component of your computer, contact Alienware. See "Contacting Alienware" on page 21.

System Setup

Overview

Use the system setup to:

- get information about the hardware installed in your computer, such as the amount of RAM, the size of the hard drive, and so on
- change the system configuration information
- set or change a user-selectable option, such as the user password, type of hard drive installed, enabling or disabling base devices, and so on



NOTE: Before you change system setup, it is recommended that you note the system-setup screen information for future reference.

Entering System Setup

- 1 Turn on (or restart) your computer.
- 2 During POST, when the DELL logo is displayed, watch for the F2 prompt to appear and then press <F2> immediately.




NOTE: The F2 prompt indicates that the keyboard has initialized. This prompt can appear very quickly, so you must watch for it, and then press <F2>. If you press <F2> before the F2 prompt, this keystroke is lost. If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft Windows desktop. Then, turn off your computer and try again. See "Turn Off Your Computer and Connected Devices" on page 7.

System Setup Screens

The system setup screen displays current or changeable configuration information for your computer. Information on the screen is divided into three areas: the **setup item**, active **help screen**, and **key functions**.

<p>Setup Item — This field appears on the left side of the system setup window. The field is a scrollable list containing features that define the configuration of your computer, including installed hardware, power conservation, and security features. Scroll up and down the list with the up- and down-arrow keys. As an option is highlighted, the Help Screen displays more information about that option and available settings.</p>	<p>Help Screen — This field appears on the right side of the system setup window and contains information about each option listed in the Setup Item. In this field you can view information about your computer and make changes to your current settings. Press the up-arrow and down-arrow keys to highlight an option. Press <Enter> to make that selection active and return to the Setup Item.</p> <p>NOTE: Not all settings listed in the Setup Item are changeable.</p>
<p>Key Functions — This field appears below the Help Screen and lists keys and their functions within the active system setup field.</p>	

System Setup Options

 **NOTE:** Depending on your computer and installed devices, the items listed in this section may appear, or may not appear exactly as listed.

Main

BIOS Information

Product Information

Build Date	Displays the BIOS release date.
Product Name	Displays the product name.
BIOS Version	Displays the BIOS version number.
Set Service Tag	Allows you to enter the service tag of your computer.
Asset Tag	Displays the asset tag of the computer.

Memory Information

Total Memory	Displays the total memory of the computer.
Memory Available	Displays the amount of memory available on the computer.
Memory Technology	Displays the type of memory technology used.
Memory Speed	Displays the memory speed.

CPU Information

Processor ID	Displays the processor identification code.
CPU Speed	Displays the processor speed.
Cache L2	Displays the processor L2 cache size.
Cache L3	Displays the processor L3 cache size.

Advanced — Standard CMOS Features

System Date (mm:dd:yy)	Displays current date.
System Time (hh:mm:ss)	Displays the current time.
Device Information	
SATA Port1	Displays the SATA 1 drive integrated in the computer.
SATA Port2	Displays the SATA 2 drive integrated in the computer.
SATA Port3	Displays the SATA 3 drive integrated in the computer.
Wait for 'F1' If Errors	If enabled, the system will HALT during boot to display system errors.

Advanced — Advanced BIOS Features

Bootup Num-Lock	Select power-on state for num-lock.
OptionROM Display Screen	Allows you to display or hide the RAID Option ROM screen during POST.

Advanced — CPU Configuration

Hyper-threading Technology	If disabled only one thread per enabled core is active.
XD Bit Capability	Enable XD Bit Capability to allow the processor to distinguish between the bits of code that can be executed and the ones that cannot be executed.
Intel(R) SpeedStep tech	If enabled, the processor clock speed and core voltage are adjusted dynamically based on the processor load.
Intel(R) C-State tech	Allows you to enable the number of cores in each processor package. Options 1-5.

Advanced — Integrated Devices

USB Controller	Allows you to enable or disable the integrated USB controller.
HD Audio	Allows you to enable or disable the integrated audio controller.
Onboard LAN Controller	Allows you to enable or disable the onboard LAN controller.
Launch PXE OpROM	Allows you to enable or disable the boot option for legacy network devices.
PCH SATA Configuration	
SATA Mode	Displays the SATA mode.

Advanced — Power Management Setup

Suspend Mode	Sets the energy-saving mode of the ACPI function.
AC Recovery	Sets what action the computer takes when power is restored.
Auto Power On	Allows the computer to start up at a certain time.
Auto Power On Date	Allows you to set RTC Wake Up Date.
Auto Power On Hour	Allows you to set RTC Wake Up Hour.
Auto Power On Minute	Allows you to set RTC Wake Up Minute.
Auto Power On Second	Allows you to set RTC Wake Up Second.

Security

Supervisor Password:	Allows you to change the supervisor password.
User Password:	Allows you to change the user password. You cannot use the user password to enter the BIOS setup, during POST.
Set Supervisor Password	Allows you to set a supervisor password.
Set User Password	Allows you to set a supervisor password.

Boot

Set Boot Priority	
1st Boot Device	Displays the first boot device. Default: USB floppy-drive.
2nd Boot Device	Displays the second boot device. Default: USB hard-drive.
3rd Boot Device	Displays the third boot device. Default: USB optical-drive.
4th Boot Device	Displays the fourth boot device. Default: hard-drive.
5th Boot Device	Displays the fifth boot device. Default: optical-drive.
6th Boot Device	Displays the sixth boot device. Default: network boot.
7th Boot Device	Displays the seventh boot device. Default: UEFI.
Hard Disk Drive BBS Priorities	Sets the hard drive boot priority. The items displayed are dynamically updated according to the hard drives detected.
USB Disk BBS Drive Priorities	Sets the USB drive boot priority.
CD/DVD ROM Drive BBS Priorities	Sets the CD/DVD drive boot priority.

Exit

Provides options to Save Changes and Reset, Discard Changes and Reset, and Restore Defaults.

Boot Sequence

This feature allows you to change the boot sequence for devices.

Boot Options

- **Diskette Drive** — The computer attempts to boot from the floppy disk drive. If no operating system is on the drive, the computer generates an error message.
- **Hard Drive** — The computer attempts to boot from the primary hard drive. If no operating system is on the drive, the computer generates an error message.
- **CD/DVD/CD-RW Drive** — The computer attempts to boot from the optical drive. If no disc is in the drive, or if the disc is not bootable, the computer generates an error message.
- **USB Storage Device** — Insert the memory device into a USB connector and restart the computer. When **F12 Boot Options** appears in the lower-right corner of the screen, press <F12>. The BIOS detects the device and adds the USB flash option to the boot menu.



NOTE: To boot to a USB device, the device must be bootable. To ensure that your device is bootable, check the device documentation.

- **Network** — The computer attempts to boot from the network. If no operating system is found on the network, the computer generates an error message.

Changing Boot Sequence for the Current Boot

You can use this feature to change the current boot sequence, for example, to boot from the optical drive to run Dell Diagnostics from the *Drivers and Utilities* disc. The previous boot sequence is restored at the next boot.

- 1 If you are booting from a USB device, connect the USB device to a USB connector.
- 2 Turn on (or restart) your computer.
- 3 When **F2 Setup**, **F12 Boot Options** appears in the lower-right corner of the screen, press <F12>.



NOTE: If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft Windows desktop. Then shut down your computer and try again.

The **Boot Device Menu** appears, listing all available boot devices.

- 4 On the **Boot Device Menu** choose the device you want to boot from.
For example, if you are booting to a USB memory key, highlight **USB Storage Device** and press <Enter>.

Changing Boot Sequence for Future Boots

- 1 Enter system setup. See "Entering System Setup" on page 11.
- 2 Use the arrow keys to highlight the **Boot** menu option and press <Enter> to access the menu.



NOTE: Write down your current boot sequence in case you want to restore it.

- 3 Press the up- and down-arrow keys to move through the list of devices.
- 4 Press plus (+) or minus (-) to change the boot priority of the device.

Flashing the BIOS

The BIOS may require flashing when an update is available or when replacing the system board. To flash the BIOS:

- 1 Turn on the computer.
- 2 Go to support.dell.com/support/downloads.
- 3 Locate the BIOS update file for your computer:



NOTE: The Service Tag for your computer is located on a label at the back of your computer.

If you have your computer's Service Tag:

- a Click **Enter a Tag**.
- b Enter your computer's Service Tag in the **Enter a service tag:** field, click **Go**, and proceed to step 4.

If you do not have your computer's Service Tag:


- a Click **Select Model**.
- b Select the type of product in the **Select Your Product Family** list.
- c Select the product brand in the **Select Your Product Line** list.
- d Select the product model number in the **Select Your Product Model** list.



NOTE: If you have selected a different model and want to start over again, click **Start Over** on the top right of the menu.

- e Click **Confirm**.
- 4 A list of results appears on the screen. Click **BIOS**.
- 5 Click **Download Now** to download the latest BIOS file.
The **File Download** window appears.
- 6 Click **Save** to save the file on your desktop. The file downloads to your desktop.
- 7 Click **Close** if the **Download Complete** window appears.
The file icon appears on your desktop and is titled the same as the downloaded BIOS update file.
- 8 Double-click the file icon on the desktop and follow the instructions on the screen.

Contacting Alienware

 **NOTE:** Dell provides several online and telephone-based support and service options for your Alienware computer. These services may vary by country and product and may not be available in your area.

To contact Dell for sales, technical support, or customer service issues:

- 1 Go to dell.com/contactdell.
- 2 Select your region, country, or language.
- 3 Select the segment for contact.
- 4 Select the appropriate service or support link based on your need.
- 5 Choose the method of contacting Dell that is convenient for you.

If you are in the United States, call 1-800-ALIENWARE for help on your Alienware computer.

Websites

For the latest information, FAQ's, and solutions to most common issues, see support.dell.com/Alienware.