

Computer Setup (F10) Utility Guide

Business PCs

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Computer Setup (F10) Utility Guide

Business PCs

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About This Book

This guide provides instructions on how to use Computer Setup. This tool is used to reconfigure and modify computer default settings when new hardware is installed and for maintenance purposes.

- △ **WARNING!** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.
- △ **CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.
- 📝 **NOTE:** Text set off in this manner provides important supplemental information.

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Computer Setup (F10) Utility

Computer Setup (F10) Utilities

Use Computer Setup (F10) Utility to do the following:

- Change factory default settings.
- Set the system date and time.
- Set, view, change, or verify the system configuration, including settings for processor, graphics, memory, audio, storage, communications, and input devices.
- Modify the boot order of bootable devices such as hard drives, diskette drives, optical drives, or USB flash media devices.
- Enable Quick Boot, which is faster than Full Boot but does not run all of the diagnostic tests run during a Full Boot. You can set the system to:
 - always Quick Boot (default);
 - periodically Full Boot (from every 1 to 30 days); or
 - always Full Boot.
- Select Post Messages Enabled or Disabled to change the display status of Power-On Self-Test (POST) messages. Post Messages Disabled suppresses most POST messages, such as memory count, product name, and other non-error text messages. If a POST error occurs, the error is displayed regardless of the mode selected. To manually switch to Post Messages Enabled during POST, press any key (except [F1](#) through [F12](#)).
- Establish an Ownership Tag, the text of which is displayed each time the system is turned on or restarted.
- Enter the Asset Tag or property identification number assigned by the company to this computer.
- Enable the power-on password prompt during system restarts (warm boots) as well as during power-on.
- Establish a setup password that controls access to the Computer Setup (F10) Utility and the settings described in this section.
- Secure integrated I/O functionality, including the serial, USB, or parallel ports, audio, or embedded NIC, so that they cannot be used until they are unsecured.
- Enable or disable removable media boot ability.
- Enable or disable legacy diskette write ability (when supported by hardware).

- Solve system configuration errors detected but not automatically fixed during the Power-On Self-Test (POST).
- Replicate the system setup by saving system configuration information on diskette and restoring it on one or more computers.
- Execute self-tests on a specified ATA hard drive (when supported by drive).
- Enable or disable DriveLock security (when supported by drive).

Using Computer Setup (F10) Utilities

Computer Setup can be accessed only by turning the computer on or restarting the system. To access the Computer Setup Utilities menu, complete the following steps:

1. Turn on or restart the computer. If you are in Microsoft Windows, click **Start > Shut Down > Restart**.
2. As soon as the computer is turned on, press **F10** when the monitor light turns green to enter Computer Setup. Press **Enter** to bypass the title screen, if necessary.

 **NOTE:** If you do not press **F10** at the appropriate time, you must restart the computer and again press **F10** when the monitor light turns green to access the utility.

3. Select your language from the list and press **Enter**.
4. A choice of five headings appears in the Computer Setup Utilities menu: File, Storage, Security, Power, and Advanced.
5. Use the arrow (left and right) keys to select the appropriate heading. Use the arrow (up and down) keys to select the option you want, then press **Enter**. To return to the Computer Setup Utilities menu, press **Esc**.
6. To apply and save changes, select **File > Save Changes and Exit**.
 - If you have made changes that you do not want applied, select **Ignore Changes and Exit**.
 - To reset to factory settings or previously saved default settings (some models), select **Apply Defaults and Exit**. This option will restore the original factory system defaults.

 **CAUTION:** Do NOT turn the computer power OFF while the BIOS is saving the Computer Setup (F10) changes because the CMOS could become corrupted. It is safe to turn off the computer only after exiting the F10 Setup screen.

Table 1 Computer Setup (F10) Utility

Heading	Table
File	Table 2 Computer Setup—File on page 3
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Security	Table 4 Computer Setup—Security on page 6
Power	Table 5 Computer Setup—Power on page 10
Advanced	Table 6 Computer Setup—Advanced (for advanced users) on page 11

Computer Setup—File

 **NOTE:** Support for specific Computer Setup options may vary depending on the hardware configuration.

Table 2 Computer Setup—File

Option	Description
System Information	Lists: <ul style="list-style-type: none">• Product name• SKU number (some models)• Processor type/speed/stepping• Cache size (L1/L2) (dual core processors have this listed twice)• Installed memory size/speed, number of channels (single or dual) (if applicable)• Integrated MAC address for embedded, enabled NIC (if applicable)• System BIOS (includes family name and version)• Chassis serial number• Asset tracking number• ME firmware version• Management mode
About	Displays copyright notice.
Set Time and Date	Allows you to set system time and date.
Flash System ROM	Allows you to update the system ROM with a BIOS image file located on a USB flash media device or CD-ROM.
Replicated Setup	Save to Removable Media <p>Saves system configuration, including CMOS, to a formatted 1.44-MB diskette, a USB flash media device, or a diskette-like device (a storage device set to emulate a diskette drive).</p> Restore from Removable Media <p>Restores system configuration from a diskette, a USB flash media device, or a diskette-like device.</p>
Default Setup	Save Current Settings as Default <p>Saves the current system configuration settings as the default.</p> Restore Factory Settings as Default <p>Restores the factory system configuration settings as the default.</p>
Apply Defaults and Exit	Applies the currently selected default settings and clears any established passwords.
Ignore Changes and Exit	Exits Computer Setup without applying or saving any changes.
Save Changes and Exit	Saves changes to system configuration or default settings and exits Computer Setup.

Computer Setup—Storage

 **NOTE:** Support for specific Computer Setup options may vary depending on the hardware configuration.

Table 3 Computer Setup—Storage

Option	Description
Device Configuration	<p>Lists all installed BIOS-controlled storage devices.</p> <p>When a device is selected, detailed information and options are displayed. The following options may be presented:</p> <p>Diskette Type (Legacy Diskettes only)</p> <p>Identifies the highest capacity media type accepted by the diskette drive. Options are 3.5" 1.44 MB and 5.25" 1.2 MB.</p> <p>Drive Emulation</p> <p>Allows you to select a drive emulation type for a certain storage device. (For example, a Zip drive can be made bootable by selecting diskette emulation.)</p> <p>Emulation Type</p> <p>ATAPI Zip drive:</p> <ul style="list-style-type: none">• None (treated as Other).• Diskette (treated as diskette drive). <p>Legacy Diskette: No emulation options available.</p> <p>CD-ROM: No emulation options available.</p> <p>ATAPI LS-120:</p> <ul style="list-style-type: none">• None (treated as Other).• Diskette (treated as diskette drive). <p>Hard Disk:</p> <ul style="list-style-type: none">• None (prevents BIOS data accesses and disables it as a boot device).• Hard Disk (treated as hard disk). <p>Multisector Transfers (ATA disks only)</p> <p>Specifies how many sectors are transferred per multi-sector PIO operation. Options (subject to device capabilities) are Disabled, 8, and 16.</p> <p>Translation Mode (ATA disks only)</p> <p>Lets you select the translation mode to be used for the device. This enables the BIOS to access disks partitioned and formatted on other systems and may be necessary for users of older versions of UNIX (e.g., SCO UNIX version 3.2). Options are Automatic, Bit-Shift, LBA Assisted, User, and None.</p> <p>CAUTION: Ordinarily, the translation mode selected automatically by the BIOS should not be changed. If the selected translation mode is not compatible with the translation mode that was active when the disk was partitioned and formatted, the data on the disk will be inaccessible.</p> <p>Translation Parameters (ATA disks only)</p> <p>NOTE: This feature appears only when User translation mode is selected.</p>

Table 3 Computer Setup—Storage (continued)

	<p>Allows you to specify the parameters (logical cylinders, heads, and sectors per track) used by the BIOS to translate disk I/O requests (from the operating system or an application) into terms the hard drive can accept. Logical cylinders may not exceed 1024. The number of heads may not exceed 256. The number of sectors per track may not exceed 63. These fields are only visible and changeable when the drive translation mode is set to User.</p> <p>SATA Default Values</p> <p>Allows you to specify the default values for the Multisector Transfers, Transfer Mode, and Translation Mode for ATA devices.</p>
Storage Options	<p>Removable Media Boot</p> <p>Enables/disables ability to boot the system from removable media.</p> <p>Legacy Diskette Write</p> <p>Enables/disables ability to write data to legacy diskettes.</p> <p>NOTE: After saving changes to Removable Media Write, the computer will restart. Manually turn the computer off then on.</p> <p>SATA Emulation</p> <p>Allows you to choose how the SATA controller and devices are accessed by the operating system. There are three supported options: IDE, RAID, and AHCI.</p> <p>IDE - This is the most backwards-compatible setting of the three options. Operating systems usually do not require additional driver support in IDE mode.</p> <p>RAID - Allows DOS and boot access to RAID volumes. Use this mode with the RAID device driver loaded in the operating system to take advantage of RAID features.</p> <p>AHCI (default option) - Allows operating systems with AHCI device drivers loaded to take advantage of more advanced features of the SATA controller.</p> <p>NOTE: The RAID/AHCI device driver must be installed prior to attempting to boot from a RAID/AHCI volume. If you attempt to boot from a RAID/AHCI volume without the required device driver installed, the system will crash (blue screen). RAID volumes may become corrupted if they are booted to after disabling RAID. Refer to the <i>Advanced Host Controller Interface (AHCI) and Redundant Array of Independent Disks (RAID) on HP Compaq dc7900 Business PCs</i> white paper at http://www.hp.com for more information.</p> <p>NOTE: RAID is not available on USDT systems.</p> <p>Max eSATA Speed</p> <p>Allows you to choose 1.5 Gbps or 3.0 Gbps as the maximum eSATA speed. By default, the speed is limited to 1.5 Gbps for maximum reliability.</p> <p>CAUTION: Consult your eSATA drive and cable manufacturer before enabling 3.0 Gbps speed. Some drive and cable combinations may not run reliably at 3.0 Gbps.</p> <p>NOTE: eSATA is not available on USDT systems.</p>

Table 3 Computer Setup—Storage (continued)

DPS Self-Test	<p>Allows you to execute self-tests on ATA hard drives capable of performing the Drive Protection System (DPS) self-tests.</p> <p>NOTE: This selection will only appear when at least one drive capable of performing the DPS self-tests is attached to the system.</p>
Boot Order	<p>Allows you to:</p> <ul style="list-style-type: none">Specify the order in which attached devices (such as a USB flash media device, diskette drive, hard drive, optical drive, or network interface card) are checked for a bootable operating system image. Each device on the list may be individually excluded from or included for consideration as a bootable operating system source.Specify the order of attached hard drives. The first hard drive in the order will have priority in the boot sequence and will be recognized as drive C (if any devices are attached). <p>NOTE: MS-DOS drive lettering assignments may not apply after a non-MS-DOS operating system has started.</p> <p>Shortcut to Temporarily Override Boot Order</p> <p>To boot one time from a device other than the default device specified in Boot Order, restart the computer and press F9 when the monitor light turns green. After POST is completed, a list of bootable devices is displayed. Use the arrow keys to select the preferred bootable device and press Enter. The computer then boots from the selected non-default device for this one time.</p>

Computer Setup—Security

 **NOTE:** Support for specific Computer Setup options may vary depending on the hardware configuration.

Table 4 Computer Setup—Security

Option	Description
Setup Password	<p>Allows you to set and enable a setup (administrator) password.</p> <p>NOTE: If the setup password is set, it is required to change Computer Setup options, flash the ROM, and make changes to certain plug and play settings under Windows.</p> <p>See the <i>Desktop Management Guide</i> for more information.</p>
Power-On Password	<p>Allows you to set and enable a power-on password. The power-on password prompt appears after a power cycle. If the user does not enter the correct power-on password, the unit will not boot.</p> <p>NOTE: This password does not appear on warm boots, such as Ctrl+Alt+Delete or Restart from Windows, unless enabled in Password Options (see below).</p> <p>See the <i>Desktop Management Guide</i> for more information.</p>
Password Options	<p>Allows you to:</p> <p>(This selection appears only if a power-on password or setup password is set.)</p> <ul style="list-style-type: none">Lock legacy resources (appears if a setup password is set)Enable/disable network server mode (appears if a power-on password is set)Specify whether the password is required for warm boot (Ctrl+Alt+Delete) (appears if a power-on password is set)Enable/Disable Setup Browse Mode (appears if a setup password is set) (allows viewing, but not changing, the F10 Setup Options without entering setup password)Enable/disable Stringent Password (appears if a power-on password is set), which when enabled bypasses the onboard password jumper to disable the power-on password.

Table 4 Computer Setup—Security (continued)

	See the <i>Desktop Management Guide</i> for more information.
Smart Cover (some models)	<p>Allows you to:</p> <ul style="list-style-type: none">• Lock/unlock the Cover Lock.• Set the Cover Removal Sensor to Disable/Notify User/Setup Password. <p>NOTE: <i>Notify User</i> alerts the user that the sensor has detected that the cover has been removed. <i>Setup Password</i> requires that the setup password be entered to boot the computer if the sensor detects that the cover has been removed.</p> <p>This feature is supported on some models only. See the <i>Desktop Management Guide</i> for more information.</p>
Device Security	<p>Allows you to set Device Available/Device Hidden for:</p> <ul style="list-style-type: none">• Serial ports• Parallel port• System audio• Network controllers (some models)• Legacy diskette• Embedded security device (some models)• SATA0• SATA1 (some models)• SATA2 (some models)• SATA3 (some models)• eSATA (some models)
USB Security	<p>Allows you to set Device Available/Device Hidden for:</p> <ul style="list-style-type: none">• Front USB Ports<ul style="list-style-type: none">◦ USB Port 3◦ USB Port 4◦ USB Port 5◦ USB Port 6• Rear USB Ports<ul style="list-style-type: none">◦ USB Port 7◦ USB Port 8◦ USB Port 9◦ USB Port 10

Table 4 Computer Setup—Security (continued)

	<ul style="list-style-type: none">◦ USB Port 11◦ USB Port 12● Internal USB Ports<ul style="list-style-type: none">◦ USB Port 1◦ USB Port 2
Network Service Boot	Enables/disables the computer's ability to boot from an operating system installed on a network server. (Feature available on NIC models only; the network controller must be either a PCI expansion card or embedded on the system board.)
System IDs	Allows you to set: <ul style="list-style-type: none">● Asset tag (18-byte identifier), a property identification number assigned by the company to the computer.● Ownership tag (80-byte identifier) displayed during POST.● Chassis serial number or Universal Unique Identifier (UUID) number. The UUID can only be updated if the current chassis serial number is invalid. (These ID numbers are normally set in the factory and are used to uniquely identify the system.)● Keyboard locale setting (for example, English or German) for System ID entry.
DriveLock Security	Allows you to assign or modify a master or user password for hard drives. When this feature is enabled, the user is prompted to provide one of the DriveLock passwords during POST. If neither is successfully entered, the hard drive will remain inaccessible until one of the passwords is successfully provided during a subsequent cold-boot sequence. NOTE: This selection will only appear when at least one drive that supports the DriveLock feature is attached to the system. See the <i>Desktop Management Guide</i> for more information.
System Security (some models: these options are hardware dependent)	Data Execution Prevention (some models) (enable/disable) - Helps prevent operating system security breaches. PAVP (Some models) (disabled/min/max) - PAVP enables the Protected Audio Video Path in the Chipset. This may allow viewing of some protected high definition content that would otherwise be prohibited from playback. Selecting Max will assign 96 Megabytes of system memory exclusively to PAVP. Virtualization Technology (some models) (enable/disable) - Controls the virtualization features of the processor. Changing this setting requires turning the computer off and then back on. Virtualization Technology Directed I/O (some models) (enable/disable) - Controls virtualization DMA remapping features of the chipset. Changing this setting requires turning the computer off and then back on. Trusted Execution Technology (some models) (enable/disable) - Controls the underlying processor and chipset features needed to support a virtual appliance. Changing this setting requires turning the computer off and then back on. To enable this feature you must enable the following features: <ul style="list-style-type: none">● Embedded Security Device Support● Virtualization Technology● Virtualization Technology Directed I/O Embedded Security Device Support (some models) (enable/disable) - Permits activation and deactivation of the Embedded Security Device. Changing this setting requires turning the computer off and then back on.

Table 4 Computer Setup—Security (continued)

NOTE: To configure the Embedded Security Device, a Setup password must be set.

- Reset to Factory Settings (some models) (Do not reset/Reset) - Resetting to factory defaults will erase all security keys. Changing this setting requires turning the computer off and then back on.

CAUTION: The embedded security device is a critical component of many security schemes. Erasing the security keys will prevent access to data protected by the Embedded Security Device. Choosing Reset to Factory Settings may result in significant data loss.

- Power-on authentication support (some models) (enable/disable) - Controls the power-on password authentication scheme that utilizes the Embedded Security Device. Changing this setting requires turning the computer off and then back on.
- Reset authentication credentials (some models) (Do not reset/Reset) - Selecting Reset disables the power-on authentication support and clears the authentication information from the Embedded Security Device. Changing this setting requires turning the computer off and then back on.

OS management of Embedded Security Device (some models) (enable/disable) - This option allows the user to limit operating system control of the Embedded Security Device. Changing this setting requires turning the computer off and then back on. This option allows the user to limit OS control of the Embedded Security Device.

- Reset of Embedded Security Device through OS (some models) (enable/disable) - This option allows the user to limit the operating system ability to request a Reset to Factory Settings of the Embedded Security Device. Changing this setting requires turning the computer off and then back on.

NOTE: To enable this option, a Setup password must be set.

Smart Card BIOS Password Support (some models) (enable/disable) - Allows the user to enable/disable the Smart Card to be used in place of the Setup and Power-On Passwords. This setting requires additional initialization within ProtectTools® before this option will take effect.

Setup Security Level

Provides a method to allow end-users limited access to change specified setup options, without having to know the Setup Password.

This feature allows the administrator the flexibility to protect changes to essential setup options, while allowing the user to view system settings and configure nonessential options. The administrator specifies access rights to individual setup options on a case-by-case basis via the Setup Security Level menu. By default, all setup options are assigned Setup Password, indicating the user must enter the correct Setup Password during POST to make changes to any of the options. The administrator may set individual items to None, indicating the user can make changes to the specified options when setup has been accessed with invalid passwords. The choice, None, is replaced by Power-On Password if a Power-On Password is enabled.

NOTE: Setup Browse Mode must be set to Enable in order for the user to enter Setup without knowing the setup password.

Computer Setup—Power

 **NOTE:** Support for specific Computer Setup options may vary depending on the hardware configuration.

Table 5 Computer Setup—Power

Option	Description
OS Power Management	<ul style="list-style-type: none">• Runtime Power Management— Enable/Disable. Allows certain operating systems to reduce processor voltage and frequency when the current software load does not require the full capabilities of the processor.• Idle Power Savings—Extended/Normal. Allows certain operating systems to decrease the processors power consumption when the processor is idle.• ACPI S3 Hard Disk Reset—Enabling this causes the BIOS to ensure hard disks are ready to accept commands after resuming from S3 before returning control to the operating system.• ACPI S3 PS2 Mouse Wakeup—Enables or disables waking from S3 due to PS2 mouse activity.• USB Wake on Device Insertion (some models)—Allows system to wake from Standby on USB device insertion.• Unique Sleep State Blink Rates—Enable/Disable. This feature is designed to provide a visual indication of what sleep state the system is in. Each sleep state has a unique blink pattern.<ul style="list-style-type: none">◦ S0 = Solid green LED.◦ S3 = 3 blinks at 1Hz (50% duty cycle) followed by a pause of 2 seconds (green LED) — repeated cycles of 3 blinks and a pause.◦ S4 = 4 blinks at 1Hz (50% duty cycle) followed by a pause of 2 seconds (green LED) — repeated cycles of 4 blinks and a pause.◦ S5 = LED is off.<p>NOTE: If this feature is disabled, S4 and S5 both have the LED off. S1 (no longer supported) and S3 use 1 blink per second.</p>
Hardware Power Management	SATA power management enables or disables SATA bus and/or device power management.
Thermal	Fan idle mode—This bar graph controls the minimum permitted fan speed. <p>NOTE: This setting only changes the minimum fan speed. The fans are still automatically controlled.</p>

Computer Setup—Advanced

 **NOTE:** Support for specific Computer Setup options may vary depending on the hardware configuration.

Table 6 Computer Setup—Advanced (for advanced users)

Option	Heading
Power-On Options	<p>Allows you to set:</p> <ul style="list-style-type: none">• POST mode (QuickBoot, Clear Memory, FullBoot, or FullBoot Every x Days).<ul style="list-style-type: none">◦ QuickBoot = Do not clear memory or perform a memory test.◦ FullBoot = Memory test (count) on cold boot. Clears memory on all boots.◦ Clear Memory = No memory count on cold boot. Clears memory on all boots.◦ FullBoot Every x Days = Memory count on 1st cold boot on or after the xth day. No more memory counts until 1st cold boot on or after x days. Clears memory on all boots.• POST messages (enable/disable).• F9 prompt (hidden/displayed). Enabling this feature will display the text F9 = Boot Menu during POST. Disabling this feature prevents the text from being displayed. However, pressing F9 will still access the Shortcut Boot [Order] Menu screen. See Storage > Boot Order for more information.• F10 prompt (hidden/displayed). Enabling this feature will display the text F10 = Setup during POST. Disabling this feature prevents the text from being displayed. However, pressing F10 will still access the Setup screen.• F11 prompt (hidden/displayed). Setting this feature to displayed will display the text F11 = Recovery during POST. Hiding the feature prevents the text from being displayed. However, pressing F11 will still attempt to boot to the HP Backup and Recovery partition. See Factory Recovery Boot Support for more information.• F12 prompt (hidden/displayed). Enabling this feature will display the text F12 = Network during POST. Disabling this feature prevents the text from being displayed. However, pressing F12 will still force the system to attempt booting from the network.• Factory Recovery Boot Support (enable/disable). Enabling this feature will cause an additional prompt, F11 = Recovery, to be displayed during POST on systems with HP Backup and Recovery software installed and configured with a recovery partition on the boot hard drive. Pressing F11 causes the system to boot to the recovery partition and launch HP Backup and Recovery. The F11 = Recovery prompt can be hidden with the F11 prompt (hidden/displayed) option (see above).• Option ROM prompt (enable/disable). Enabling this feature will cause the system to display a message before loading option ROMs. (This feature is supported on some models only.)• WOL After Power Loss (enable/disable). Enabling this option will cause the system to power-up momentarily after a power loss in order to enable the Wake On LAN (WOL) feature.• Remote wakeup boot source (remote server/local hard drive).• After Power Loss (off/on/previous state): Setting this option to:<ul style="list-style-type: none">◦ Off—causes the computer to remain powered off when power is restored.◦ On—causes the computer to power on automatically as soon as power is restored.

Table 6 Computer Setup—Advanced (for advanced users) (continued)

	<ul style="list-style-type: none">◦ On—allows you to power on the computer using a power strip switch, if the computer is connected to an electric power strip.◦ Previous state—causes the computer to power on automatically as soon as power is restored, if it was on when power was lost. <p>NOTE: If you turn off power to the computer using the switch on a power strip, you will not be able to use the suspend/sleep feature or the Remote Management features.</p> <ul style="list-style-type: none">• POST Delay (None, 5, 10 15, or 20 seconds). Enabling this feature will add a user-specified delay to the POST process. This delay is sometimes needed for hard disks on some PCI cards that spin up very slowly, so slowly that they are not ready to boot by the time POST is finished. The POST delay also gives you more time to select F10 to enter Computer (F10) Setup.• Limit CPUID Maximum Value to 3. Restricts the number of CPUID functions reported by the microprocessor. Enable this feature if booting to Windows NT.
Execute Memory Test (some models)	Restarts the computer and executes the POST memory test.
BIOS Power-On	Allows you to set the computer to turn on automatically at a time you specify.
Onboard Devices	Allows you to set resources for or disable onboard system devices (diskette controller, serial port, or parallel port).
PCI Devices	<ul style="list-style-type: none">• Lists currently installed PCI devices and their IRQ settings.• Allows you to reconfigure IRQ settings for these devices or to disable them entirely. These settings have no effect under an ACPI-based operating system.
PCI VGA Configuration	Displayed only if there are multiple PCI video adapters in the system. Allows you to specify which VGA controller will be the “boot” or primary VGA controller. NOTE: In order to see this entry, you must enable Integrated Video (Advanced > Device Options) and Save Changes and Exit.
Bus Options	On some models, allows you to enable or disable: <ul style="list-style-type: none">• PCI SERR# Generation.• PCI VGA palette snooping, which sets the VGA palette snooping bit in PCI configuration space; only needed when more than one graphics controller is installed.
Device Options	Allows you to set: <ul style="list-style-type: none">• Printer mode (Bi-Directional, EPP + ECP, Output Only).• Num Lock state at power-on (off/on).• S5 Wake on LAN (enable/disable).<ul style="list-style-type: none">◦ To disable Wake on LAN during the off state (S5), use the arrow (left and right) keys to select the Advanced > Device Options menu and set the S5 Wake on LAN feature to Disable. This obtains the lowest power consumption available on the computer during S5. It does not affect the ability of the computer to Wake on LAN from suspend or hibernation, but will prevent it from waking from S5 via the network. It does not affect operation of the network connection while the computer is on.◦ If a network connection is not required, completely disable the network controller (NIC) by using the arrow (left and right) keys to select the Security > Device Security menu. Set the Network Controller option to Device Hidden. This prevents the network controller from being used by the operating system and reduces the power used by the computer in S5.• Processor cache (enable/disable).

Table 6 Computer Setup—Advanced (for advanced users) (continued)

	<ul style="list-style-type: none">• Integrated Video (enable/disable). Allows you to use integrated video and PCI Up Solution video at the same time (available on some models only). <p>NOTE: After Integrated Video is enabled and changes saved, a new menu item appears under Advanced to allow you to select the primary VGA controller video device.</p> <p>Inserting a PCI Express video card automatically disables Integrated Video. When PCI Express video is on, Integrated Video must remain disabled.</p>
	<ul style="list-style-type: none">• Multi-Processor (enable/disable). This option may be used to disable multi-processor support under the OS.• Internal speaker (some models) (does not affect external speakers).• Monitor Tracking (enable/disable). Allows BIOS to save monitor asset information.• NIC PXE Option ROM Download (enable/disable). The BIOS contains an embedded NIC option ROM to allow the unit to boot through the network to a PXE server. This is typically used to download a corporate image to a hard drive. The NIC option ROM takes up memory space below 1MB commonly referred to as DOS Compatibility Hole (DCH) space. This space is limited. This F10 option will allow users to disable the downloading of this embedded NIC option ROM thus giving more DCH space for additional PCI cards which may need option ROM space. The default will be to have the NIC option-ROM-enabled.
Management Devices	<p>The Management Devices menu will only be displayed in the Advanced menu when the BIOS detects multiple management options.</p> <p>This option is for installed NIC cards that support ASF or DASH. Use the Management Devices menu to select if the BIOS management operations will be through the embedded solution or one of the installed NIC cards.</p>
Management Operations	<p>Allows you to set:</p> <ul style="list-style-type: none">• MEBx Setup Prompt (enable/disable). Enabling this feature displays the CTRL+P prompt during POST. Disabling this feature prevents the prompt from being displayed. However, pressing Ctrl+P still accesses the utility used to configure manageability settings. <p>The CTRL+P function activates the MEBx Setup menu. If the Setup Password is configured, the user will be prompted to correctly enter it before being allowed to enter the MEBx Setup. If the password is entered incorrectly three times, the MEBx Setup will not be activated.</p> <ul style="list-style-type: none">• Remote Help Prompt (enable/disable). Enabling this feature displays the CTRL+ALT+F1 prompt during POST. Disabling this feature prevents the prompt from being displayed. However, pressing Ctrl+Alt+F1 still accesses the utility used to attempt to connect to remote help server or services.• Remote Help Lockout (enable/disable). Allows the user/administrator to lock out access to Remote Help. If enabled, the Ctrl+Alt+F1 key sequence will not be acknowledged by the BIOS.• Remote Help Connection Timeout (5, 10, 15, 20, 30, 40, 50, 60, 120, 180, 240 seconds). Allows the user/administrator is set a time limit for Remote Help to establish contact with a remote server when initiated.• SOL Character Echo (enable/disable). Some remote consoles print remotely-entered characters which can cause the characters to appear twice (once when entered remotely and once when echoed back from local client video). This option allows the administrator to have the SOL terminal emulator suppress echoing remotely-entered characters to the local video display.• SOL Terminal Emulation Mode (enable/disable). Selects between VT100 and ANSI SOL terminal emulation. SOL terminal emulation mode is only activated during remote AMT redirection operations. The emulation options allow administrators to select which mode works best with their console.• SOL Keyboard (enable/disable). Disable or enable client keyboard during SOL sessions. Some remote remediation may involve having the local client boot a remote image provided by an administrator. This option determines if the BIOS will keep the local keyboard enabled or

Table 6 Computer Setup—Advanced (for advanced users) (continued)

disabled for possible local client interaction. If the local keyboard is disabled, all keyboard input is only accepted from the remote source.

Recovering the Configuration Settings

This method of recovery requires that you first perform the **Save to Removable Media** command with the Computer Setup (F10) Utility before **Restore** is needed. (See [Save to Removable Media on page 3](#) in the Computer Setup—File table.)

 **NOTE:** It is recommended that you save any modified computer configuration settings to a diskette, a USB flash media device, or a diskette-like device (a storage device set to emulate a diskette drive) and save the diskette or device for possible future use.

To restore the configuration, insert the diskette, USB flash media device, or other storage media emulating a diskette with the saved configuration and perform the **Restore from Removable Media** command with the Computer Setup (F10) Utility. (See [Restore from Removable Media on page 3](#) in the Computer Setup—File table.)