



Computer Setup (F10) Utility Guide

HP Business Desktops
dx5150 model

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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.

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Computer Setup (F10) Utility Guide

HP Business Desktops

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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 or disable Quick Power-On Self Test, which is faster than a full boot but does not run all of the diagnostic tests run during a full boot.
- Enter the Asset Tag or property identification number assigned by the company to this computer.
- Establish a supervisor password that controls access to Computer Setup (F10) Utility and the settings described in this section.
- To 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).

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 and hold the **F10** key until you enter Computer Setup.



If you do not press the **F10** key at the appropriate time, you must restart the computer and press and hold the **F10** key again to access the utility.

3. The Computer Setup Utility screen is divided into menu headings and actions.

Eight menu headings appear on the Computer Setup Utility screen:

- System Information
- Standard CMOS Features
- Advanced BIOS Features
- Advanced Chipset Features
- Integrated Peripherals
- Power Management Setup
- PnP/PCI Configurations
- PC Health Status

Five action choices are listed on the Computer Setup Utility screen:

- Load Optimized Defaults
- Set Supervisor Password
- Set User Password
- Save & Exit Setup
- Exit Without Saving

Use the arrow keys to select the appropriate heading, then press **Enter**. Use the arrow (up and down) keys to select the option you want, then press **Enter**. To return to the previous screen, press **Esc**.


4. To apply and save changes, press **F10** or select **Save & Exit Setup** on the Computer Setup Utility screen and press **Enter**.

If you have made changes that you do not want applied, select **Exit Without Saving** and press **Enter**.



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

Computer Setup

Heading	Option	Description
System Information	Displays	Product Name
		Processor Type
		Cache Size
		Memory Size
		System ROM
		Integrated MAC
		UUID
		System Serial # Asset Tracking Number
Standard CMOS Features	Date (mm:dd:yy)	Allows you to set system date.
	Time (hh:mm:ss)	Allows you to set system time.
	Support for specific Computer Setup options may vary depending on the hardware configuration.	

Computer Setup (Continued)

Heading	Option	Description
Standard CMOS Features (continued)	IDE Channel 0 Master IDE Channel 0 Slave	For each, allows you to: <ul style="list-style-type: none"> • detect IDE HDD size and head on selected channel • set IDE on selected channel to: <ul style="list-style-type: none"> • None • Auto • Manual • set access mode on selected channel to: <ul style="list-style-type: none"> • CHS • LBA • Large • Auto • view <ul style="list-style-type: none"> • Capacity • Cylinder • Head • Precomp • Landing Zone • Sector



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

Computer Setup (Continued)

Heading	Option	Description
Standard CMOS Features (continued)	SATA Channel 1 Master SATA Channel 2 Master	For each, allows you to: <ul style="list-style-type: none"> • run HDD self-test for selected channel <ul style="list-style-type: none"> • SMART Status Check <ul style="list-style-type: none"> – Target Disk – SMART – SMART Status Check • HDD Short Self-Test <ul style="list-style-type: none"> – Target Disk – Estimated Test Time – Start Test • HDD Extended Self-Test <ul style="list-style-type: none"> – Target Disk – Estimated Test Time – Start Test • detect IDE HDD size and head on selected channel • set extended IDE drive on selected channel to: <ul style="list-style-type: none"> • None • Auto • set access mode on selected channel to <ul style="list-style-type: none"> • Large • Auto • view <ul style="list-style-type: none"> • Capacity • Cylinder • Head • Precomp • Landing Zone • Sector
	Drive A	Allows you to set Drive A to None or 1.44, 3.5 in.



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


Computer Setup (Continued)

Heading	Option	Description
Standard CMOS Features (continued)	Halt On	Allows you to set at: <ul style="list-style-type: none"> • All Errors • No Errors • All but Keyboard • All but Diskette • All but Diskette/Keyboard
	POST Delay	Allows you to set a POST delay to: <ul style="list-style-type: none"> • 0 seconds • 5 seconds • 10 seconds • 15 seconds • 30 seconds
Advanced BIOS Features	Removable Device Boot Seq.	Allows you to specify the order in which attached devices (such as an FDD, an LS120, or a Zip Drive) are checked for a bootable operating system image.
	Hard Disk Boot Seq.	Allows you to specify the order of attached hard drive devices (such as USB HDD storage, USB2 DriveKey, or USB flash media). The first drive in the order has priority in the boot sequence and is recognized as drive C (if any devices are attached).
	Optical Drive Boot Seq.	Allows you to specify the order in which attached optical drives (including USB ODD) are checked for a bootable operating system image.



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

Computer Setup (Continued)

Heading	Option	Description
Advanced BIOS Features (continued)	Network Boot Seq.	Allows you to specify the order in which network devices (including UP NIC cards) are checked for a bootable operating system image.
	Quick Power On Self Test	Disables/enables the system to skip certain tests while booting. Enabling this feature decreases the time required to boot the system.
	F9 Boot Menu	Disables/enables Boot Menu
	First Boot Device Second Boot Device Third Boot Device Fourth Boot Device	Allows you to specify which devices will boot first, second, third, and fourth, or to disable any of the four: <ul style="list-style-type: none"> • Removable • Hard Disk • CDROM • Network • Disabled  MS-DOS drive lettering assignments may not apply after a non-MS-DOS operating system has started.
	Boot Up NumLock Status	Allows you to set the default NumLock status off or on.
	Security Option	Allows you to set the security option to Setup or Always.
	APIC Mode	Disables/enables the APIC mode.
	MPS Version Control for OS	Allows you to set the MPS table version to: <ul style="list-style-type: none"> • 1.1 • 1.4



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

Computer Setup (Continued)

Heading	Option	Description
	HDD S.M.A.R.T. Capability	Disables/enables HDD Self-Monitoring Analysis and Reporting Technology.
Advanced BIOS Features (continued)	ASF Support	Disables/enables Alert Standard Format capability on BIOS.
	BIOS Write Protection	Disables/enables BIOS upgrading.
Advanced Chipset Features	PCIB Prefetch	Disables/enables PCIB prefetch.
	GFX Multi Function Mode	Disables/enables Internal Graphics Multifunction Mode.
	UMA Frame Buffer Size	Allows you to set the size of the UMA frame buffer to: <ul style="list-style-type: none"> • 16 MB • 32 MB • 64 MB • 128 MB • Auto (HP-recommended setting based on available memory)
	Video Display Devices	Allows you to select onboard video output type to: <ul style="list-style-type: none"> • Auto • CRT Only • DFP Only • CRT Force, DFP Auto
	Init Display First	Allows you to set the primary VGA source to Onboard or PCIe.
	SurroundView	Disables/enables SurroundView feature (only if PCIe graphics add-on card is ATI).
	Auto Detect PCI Clk	Disables/enables PCI clock auto detection.
	Spread Spectrum	Disables/enables clock spread spectrum.



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

Computer Setup (Continued)

Heading	Option	Description
Integrated Peripherals	South OnChip PCI Device	Allows you to: <ul style="list-style-type: none"> • disable/enable Onchip IDE Controller • set Onboard AC97 Audio to auto or disable it • set Onboard Chip SATA to: <ul style="list-style-type: none"> • SATA Disabled • IDE Controller (non-RAID) • RAID Controller • enable/disable: <ul style="list-style-type: none"> • Onboard LAN • Onboard LAN Boot ROM
	OnChip USB Controller	Disables/enables the USB controller.
	USB Legacy Support	Disables/enables USB legacy support function.
	Front Panel USB Port	Disables/enables the front panel USB ports.
	Onboard FDC Controller	Disables/enables onboard FDC controller.
	Onboard Serial Port	Allows you to set onboard serial port configuration to: <ul style="list-style-type: none"> • Disabled • 3F8/IRQ4 • 2F8/IRQ3 • 3E8/IRQ4 • 2E8/IRQ3



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

Computer Setup (Continued)

Heading	Option	Description
Integrated Peripherals (continued)	Onboard Parallel Port	Allows you to select setting for onboard parallel port: <ul style="list-style-type: none"> • Disabled • 378/IRQ7 • 278/IRQ5 • 3BC/IRQ7
	Parallel Port Mode	Allows you to select parallel port mode: <ul style="list-style-type: none"> • Standard • SPP • EPP1.7 • EPP1.9 • ECP • ECP+EPP
	ECP Mode Use DMA	If Parallel Port Mode is set to ECP or ECP+EPP, allows you to set the ECP Mode Use DMA to 1 or 3.



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

Computer Setup (Continued)

Heading	Option	Description
Power Management Setup	ACPI Function	Enables/disables ACPI functions. Changing this item can make the existing OS unusable.
	ACPI Suspend Type	Allows you to set type of ACPI suspend.
	MODEM Use IRQ	Allows you to select IRQ for MODEM to use. Select NA to disable external MODEM wake-up function. <ul style="list-style-type: none"> • NA • 3 • 4 • 5 • 7 • 9 • 10 • 11
	After AC Power Loss	Allows you to select system power loss behavior: <ul style="list-style-type: none"> • On • Off • Last State
	PowerOn by PCI Card	Disables/enables capability of powering on by PCI card.
	AMD Cool'n'Quiet	Allows you to set the AMD Cool'n'Quiet to auto or to disable it.
	RTC Alarm Resume	Disables/enables RTC alarm.
	Date (of Month)	If RTC Alarm Resume is enabled, allows you to select the day of the month for resumption of RTC alarm.



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


Computer Setup (Continued)

Heading	Option	Description
Power Management Setup (continued)	Resume Time (hh:mm:ss)	If RTC Alarm Resume is enabled, allows you to select what time the RTC alarm will resume.
PnP/PCI Configuration	Reset Configuration Data	Disables/enables automatic reconfiguration. Default is Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup, if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the OS cannot boot.
	Resources Controlled By	<p>Allows you to select whether resources are controlled automatically or manually:</p> <ul style="list-style-type: none"> • Auto (ESCD–Extended Storage Configuration Data) • Manual <p>BIOS can automatically configure all the bootable and Plug-and-Play-compatible devices. If you choose Auto, you cannot select IRQ, DMA and memory base address fields, since BIOS automatically assigns them.</p>




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

Computer Setup (Continued)

Heading	Option	Description
PnP/PCI Configuration (continued)	IRQ Resources <ul style="list-style-type: none"> • IRQ-3 assigned to • IRQ-4 assigned to • IRQ-5 assigned to • IRQ-7 assigned to • IRQ-10 assigned to • IRQ-11 assigned to • IRQ-14 assigned to • IRQ-15 assigned to 	When resources are controlled manually, allows you to assign each system interrupt a type, depending on the type of device using the interrupt. Legacy ISA for devices compliant with the original PC AT bus specification, PCI/ISA PnP for devices compliant with the Plug and Play standard whether designed for PCI or ISA bus architecture.
	Assign IRQ for VGA	Disables/enables capability of assigning IRQ for VGA.
	Assign IRQ for USB	Disables/enables capability of assigning IRQ for USB.
PC Health Status	System Information	Lists: <ul style="list-style-type: none"> • CPU Temperature • System Temperature • CPU Fan Speed • System Fan Speed
	System Fan Fail Check	Disables/enables detection of fan failure during POST.
	Fan Control	Sets fan speed control to auto or disables it.
Load Optimized Defaults		Allows you to reset Computer Setup to factory defaults.
Set Supervisor Password		Allows you to establish a password to control access to Computer Setup.
Set User Password		Allows you to establish a password to control access to the computer.
 Support for specific Computer Setup options may vary depending on the hardware configuration.		

Computer Setup (Continued)

Heading	Option	Description
Save & Exit Setup		Allows you to save current settings and exit Computer Setup.
Exit Without Saving		Allows you to exit Computer Setup without saving changes.
	Support for specific Computer Setup options may vary depending on the hardware configuration.	

Recovering the Configuration Settings

Recovering the configuration settings established in the Computer Setup (F10) Utility requires that you first back up the settings before a recovery is needed.

The CMOS Save/Load utility ROMPAQ can be found at <http://www.hp.com> under the support and drivers for the HP Business Desktop dx5150. Download the ROMPAQ files into a folder on a removable storage device. 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.

Backing up the CMOS

1. Make sure the computer to be backed up is turned on. Connect the removable storage to the computer.
2. In Windows, click **Start > Run**, type **CMD**, and click **OK** to open a DOS command window.
3. Type **N:\folder\BIOS.exe SAVE:ABC001.DAT** (where *N* is the drive letter of the removable storage) to save the CMOS setting to the removable storage device.

Restoring the CMOS

1. Make sure the target computer is turned on. Connect the removable storage to the target computer.
2. In Windows, click **Start > Run**, type **CMD**, and click **OK**. to open a DOS command window.
3. Type **N:\folder\BIOS.exe LOAD:ABC001.DAT** (where *N* is the drive letter of the removable storage) to load the custom CMOS setting onto the target system.