Illustrated Parts & Service Map

HP 600B MT PC

Key Specifications

Processor Type	Intel: G540T, G540T-HE, G640T, G640T-HE, Core i3-2120T, Core i3-2120T-HE
RAM Type	Up to 8GB PC3-10600 UDIMM Memory , single channel (2 UDIMM slots with up to a 4 GB UDIMM in each slot)
Maximum RAM Supported	8GB
Expansion Slots	N/A
Graphics Adapter	Integrated Graphics Intel PCH
Chipset	Intel H61
Drive Support	(1) external 5.25-inch (1) internal 5.25 –inch
I/O Interfaces	Rear: (4) USB2.0 port, (1) RJ-45, (1) VGA & DVI-D, (1) Line-in, Line-out, Mic-in, DC-In jack, Front: (1) 6 in 1 Card reader Combo, (2) USB port, (1) Headphone, Mic-phone
Operating Systems	Preinstalled Genuine Windows 7 Professional 32/ 64* Genuine Windows 7 Home Basic 64* Genuine Windows 7 Starter 32* FreeDOS

Spare Parts

System Unit

1	Front bezel	697948-001
2	Chassis + Access panel	N/A

Cables

|		
1	Front I/O assembly	661355-001
2	Power switch/LED assembly	N/A
3	SATA hard drive cable with latch, 10 inch (254 mm)	645577-001
	SATA ODD drive cable with latch, 10 inch (254 mm)	645577-001
4	SATA ODD & HDD Power cable	N/A

*Not shown

Keyboards (not illustrated)

KBD USB Red Katydid		539130-xxx	
Adriatic - Serbia(HR-SL-US)	-B41	Africa - English	-L31
Africa - French/ France	-051	Africa (Portuguese)	-131
Belgium (French/Dutch)	-181	Bulgaria Bulgarian Localization	-261
Czech Rep/Slovakia-Czech/Slovak Loc	-CG1	Denmark (Danish)	-081
Germany	-041	Greece	-151
Hungary	-211	Israel	-BB1
Italy	-061	Netherlands	-L31
Norway	-091	Poland	-L31
Portugal	-131	Romania	-271
Russia	-251	Saudi Arabia/Emirates	-171
Spain	-071	Sweden/Finland (English)	-101
Switzerland (Multilingual)	-111	Turkey	-141
Ukraine	-251	United Kingdom	-031

Mass Storage Devices (not illustrated)

|	
DVD 16X SMD nonLS JB ECO	575781-800
HDD, 3.5", 1TB, SGT Pharaoh EC0	519601-002
HDD, 3.5", 1TB, Hit Jupiter EC0	588600-001
HDD, 3.5", 1TB, Samsung F3 EC0	588581-001
HDD, 3.5", 1TB, WD XL500M EC0	599689-002
HDD, 3.5", 1TB, SGT Pharaoh EC0	519601-003
HDD, 3.5", 1TB, Hit Jupiter EC0	588600-001
HDD, 3.5", 1TB, Hit Jupiter EC0	588600-002
HDD, 3.5", 1TB, Samsung F3 EC0	588581-002
HDD, 3.5", 1TB, Samsung F3 6Gbs EC0	633987-001
HDD, 3.5", 1TB, Hit Jupiter 6Gbs EC0	647467-001
HDD, 3.5", 1TB, SGT Pharaoh 6Gbs EC0	633982-002
HDD, 3.5", 1TB, WD XL500M 6Gbs EC0	634607-002
HDD, 3.5", 1TB, SGT Pharaoh 6Gbs EC0	633982-002
HDD, 3.5", 1TB, SGT Grenada 6Gbs EC0, 512e	662621-001
HDD, 3.5", 1TB, Hit Mars 6Gbs EC0, 512e	661699-001
HDD, 3.5", 1TB, SGT Pharaoh 6Gbs EC0	684222-001
HDD, 3.5", 1TB, SGT Grenada 6Gbs EC0, 512e	688677-001
HDD, 3.5", 1TB, WD XL1000s 6Gbs EC0, 512e	691790-001
HDD, 3.5", 2TB, Hit Jupiter K EC0	589382-001
HDD, 3.5", 2TB, Hit Mariner EC0	644126-001
HDD, 3.5", 2TB, SGT Grenada 6Gbs EC0, 512e	662623-001
HDD, 3.5", 2TB, Hit Mars 6Gbs EC0 512e	661702-001
HDD, 3.5", 500GB, SGT Pharaoh EC0	519600-002
HDD, 3.5", 500GB, Hit Jupiter EC0	588599-001
HDD, 3.5", 500GB, Samsung F3 EC0	588579-001
HDD, 3.5", 500GB, WD XL500S	599687-002

HDD, 3.5", 500GB, SGT Pharaoh EC0	519600-003
HDD, 3.5", 500GB, Hit Jupiter EC0	588599-001
HDD, 3.5", 500GB, Hit Jupiter EC0	588599-002
HDD, 3.5", 500GB, Samsung F3 EC0	588579-002
HDD, 3.5", 500GB, WD XL500S, EC0	649944-001
HDD, 3.5", 500GB, Samsung F3 6Gbs EC0	633986-001
HDD, 3.5", 500GB, Hit Jupiter 6Gbs EC0	647466-001
HDD, 3.5", 500GB, SGT Pharaoh 6Gb/s EC0	633980-002
HDD, 3.5", 500GB, WD XL500S 6Gbs EC0	634605-002
HDD, 3.5", 500GB, SGT Pharaoh 6Gb/s EC0	633980-002
HDD, 3.5", 500GB, SGT Pharaoh 6Gb/s EC0,512e	680207-001
HDD, 3.5", 500GB, Hit Mars 6Gbs EC0, 512e	661697-001
HDD, 3.5", 500GB, SGT Pharaoh 6Gb/s EC0,512e,RTL	680921-001
HDD, 3.5", 500GB, WD XL500A 6Gbs EC0	634605-003
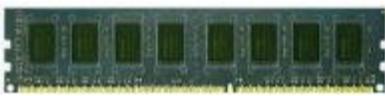
Standard Boards

System boards	.
1 System board	.683037-001
Memory modules (PC3-10600)	.
2 1 GB	.497156-D88
* 2 GB	.497157-D88
* 4 GB	.497158-D88

System Board
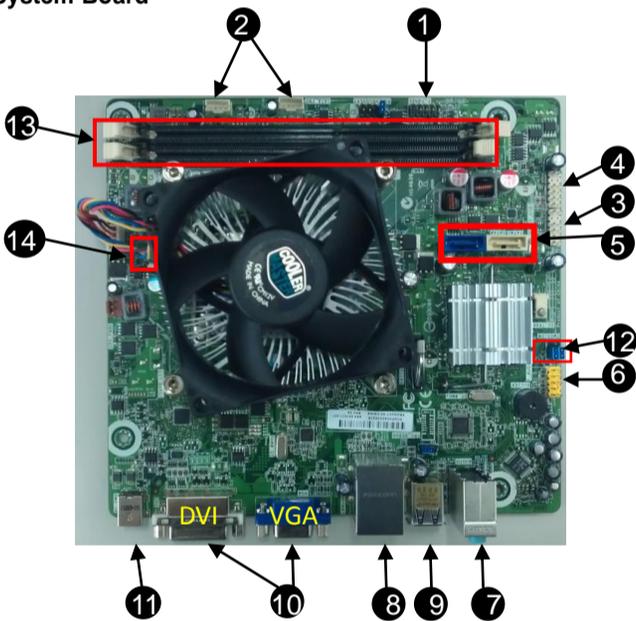
System Board Connectors and Jumpers (component location may vary)

1	Front Panel header
2	SATA Power transfer connector
3	Front Dual-USB header
4	Front Single-USB header
5	SATA connectors
6	Front Audio connector
7	Audio ports
8	Lan and Dual-USB ports
9	Dual-USB ports
10	VGA and DVI ports
11	DC_IN port
12	Clear COMS and Password
13	DDR3 DIMM
14	APU Fan header

Computer Setup

Basic system information regarding system information, setup, power management, hardware, and passwords is maintained in the Setup Utility held in the system ROM. The Setup Utility is accessed by pressing the F10 key when prompted (on screen) to do so during the boot sequence. If the screen prompt opportunity is missed, a restart will be necessary...

Computer Setup Menu

File	System Information	Product Name
		SKU Number
		Processor Type/Speed/Stepping
		Cache Size (L1/L2)
		Memory Size
		Channel A
		Integrated MAC
		System BIOS
		Chassis Serial Number
		Asset Tag (These items will be shown when FBYTE support.)
	About	About
	Set Time and Date	Set Time and Date
		Time (hh:mm)
		Date (mm/dd/yyyy)
	Apply Defaults and Exit	Apply Defaults and Exit.
	Ignore Changes and Exit	Ignore Changes and Exit
	Save Changes and Exit	Save Changes and Exit
Storage	Device Configuration	Hard Disk
		SATA0
		Size/Model/Firmware/Serial Number
		USB
		Size/Model
		CD-ROM
		SATA1
		Model/Firmware/Serial Number
		Diskette (Displayed when connect a USB floppy)
	Storage Options	SATA Emulation
	DPS Self-test	DPS Self-test
	Boot Order (When no device connected)	UEFI Boot Sources
		USB Floppy/CD
		USB Hard Drive
		Legacy Boot Sources
		USB Floppy/CD
		Hard Drive
		Network Controller
	Boot Order (When related device connected)	UEFI Boot Sources
		SATA hard drive (model name/Windows Boot Manager)
		USB Floppy/CD
		USB Hard Drive
		ATAPI CD-ROM
		Legacy Boot Sources
		ATAPI CD-ROM
		USB Floppy/CD
		Hard Drive
		SATA0
		USB device (the related strings will be shown)
		Network Controller
Security	Setup Password	Old Password:
		New Password:
		Confirm Password:
	Power-On Password	Old Password:
		New Password:
		Confirm Password:
	Device Security	(Show supported devices only)
		System Audio
		Network Controller
		SATA0
		SATA1
	USB Security	Front USB Ports (This item is shown when front panel is connected.)
		USB Port # … (This item is shown when front panel is connected.)
		Rear USB Ports
		USB Port # …
		Internal USB Ports
		USB Port # …
	Network Boot	Network Boot

Security	System IDs	(Non-CTRL-A mode: Read-only, CTRL-A mode: Read-write)
		Product Name/Serial Number/UUID/SKU Number/Family Name
		Asset Tag (This item will be shown when FBYTE support.)
		Feature Byte/Build ID
		Keyboard
	System Security	Data Execution Prevention
		Virtualization Technology
Power	Hardware Power Management	SATA Power Management
		S5 Maximum Power Savings
		S5 Wake on LAN
	Thermal	CPU Fan Speed
		CPU Fan Check (accessible via <CTRL-A> key)
Advanced	Power-On Options	POST Messages
		After Power Loss
		POST Delay (in seconds)
	BIOS Power-On	Sunday/Monday/Tuesday/Wednesday /Thursday/Friday/Saturday
		Time (hh:mm)
	Bus Options	PCI SERR# Generation
		PCI VGA Palette Snooping
	Device Options	Num Lock State at Power-On
		NIC PXE Option ROM Download

POST Error Messages

· Time & Date Not Set.
   Press<F1> to continue boot.
· 511-CPU fan not detected.
   Press<F1>to continue boot.
· Keyboard Error.
   Without press any key, PC will continue boot.
· 1720-SMART Hard Drive detects imminent failure. Failing Drive: SATA# Failing
   Attribute: #.
   Press<F1>to continue boot.
· ERROR: No boot disk has been detected or the disk has failed.
   When no boot device was detected or all detected devices failed to boot, the
   BIOS will display the above message and stop.
· (ERROR: Unsupported CPU installed.
   Press<F1> within 5 seconds and continue boot.

POST Audible Codes

Pattern	Meaning	Recommended Action
3 times: Once every second, followed by a two second pause.	Unsupported CPU installed.	1. Upgrade the BIOS to proper version. 2. Change the processor.
4 times: Once every second, followed by a two second pause. Beeps stop after fifth iteration but LEDs flashes continue until problem is solved.	Power supply failure.	Check if the Power supply is work well.
5 times: Once every second, followed by a two second pause. Beeps stop after fifth iteration but LEDs flashes continue until problem is solved.	Pre-video memory error.	Check if the memory modules have been installed correctly and that proper modules are used.
6 times: Once every second, followed by a two second pause. Beeps stop after fifth iteration but LEDs flashes continue until problem is solved.	Pre-video graphics error.	For systems with a graphics card: 1. Reseat the graphics card. Power on the system. 2. Replace the graphics card. 3. Replace the system board. For systems with integrated graphics, replace the system board.
7 times: Once every second, followed by a two second pause. Beeps stop after fifth iteration but LEDs flashes continue until problem is solved.	System board failure.	Check if the board HW is OK.
8 times: Once every second. Beeps and LED flashes stop after first iteration.	Invalid ROM image detected.	Upgrade the BIOS with proper version.

Resetting the password jumper

1. Shut down the operating system properly, then turn off the computer and any external devices, and disconnect the power cord from the power outlet.
2. With the power cord disconnected, press the power button again to drain the system of any residual power.
3. Remove the access panel.
4. Locate the header and jumper.
5. On systems with 3-pin jumpers, remove the jumper from pins 1 and 2. Place the jumper on pins 2 and 3. On systems with 2-pin jumpers, remove the jumper from pins 1 and 2.
6. Replace the access panel.
7. Reconnect the external equipment.
8. Plug in and turn on power. Allow the operating system to start. This clears the current passwords and disables the password features.
9. To establish new passwords, repeat steps 1 - 4, replace the password jumper on pins 1 and 2, then repeat steps 6 - 8. Establish new passwords in Computer Setup.

Clearing and Resetting the CMOS

To provide a jumper to trigger reloading of all BIOS Setup default values. Once the jumper is detected as connected or activated, the BIOS will reset all modifiable BIOS Setup fields to their default values except for the system date, system time, Setup password and Power-On password fields. In addition, display the following message:
   "Default BIOS settings have been loaded."
1. Turn off the computer and any external devices, and disconnect the power cord from The power outlet.
2. Disconnect the keyboard, monitor, and any other external equipment connected to the computer.
3. Remove the access panel.
4. Locate the header and jumper.
   CAUTION: Make sure you have disconnected the AC power cord from the wall outlet. Clearing the CMOS while power is connected can damage the system board.
5. Remove the jumper from pins 1 and 2. Place the jumper on pins 2 and 3.
6. Place the jumper back on pins 1 and 2.
7. Replace the access panel.
8. Reconnect the external equipment.
9. Plug in and turn on power.
NOTE: You will receive POST error messages after clearing CMOS and rebooting advising you that configuration changes have occurred. Use Computer Setup to reset any special system setups along with the date and time.

Hewlett-Packard Vision Diagnostics

The Hewlett-Packard Vision Diagnostics utility allows you to view information about the hardware configuration of the computer and perform hardware diagnostic tests on the subsystems of the computer. The utility simplifies the process of effectively identifying, diagnosing, and isolating hardware issues.
Use HP Vision Diagnostics to determine if all the devices installed on the computer are recognized by the system and functioning properly.
To access HP Vision Diagnostics, you must create a Recovery Disc Set then boot to the CD containing the utility. It can also be downloaded from http://www.hp.com and either burned to CD or installed to a USB flash drive.

Downloading the Latest Version of HP Vision Diagnostics

1. Go to http://www.hp.com.
2. Click the Software & Drivers link.
3. Select Download drivers and software (and firmware).
4. Enter your product name in the text box and press the Enter key.
5. Select your specific computer model.
6. Select your OS.
7. Click the Diagnostic link.
8. Click the Hewlett-Packard Vision Diagnostics link.
9. Click the Download button.
NOTE: The download includes instructions on how to create the bootable CD.

Microsoft System Restore

If you have a problem that might be due to software that was installed on your computer, use System Restore to return the computer to a previous restore point. You can also set restore points manually.
NOTE: Always use this System Restore procedure before you use the System Recovery program.
NOTE: Some features might not be available on systems that are shipped without a version of Microsoft Windows.
To start a System Restore:
1. Close all open programs.
2. Click the **Start** button, right-click **Computer**, and then click **Properties**.
3. Click **System protection**, **System Restore**, click **Next**, and then follow the on-screen instructions.
To add restore points manually:
1. Close all open programs.
2. Click the **Start** button, right-click **Computer**, click **Properties**, and then click **System protection**.
3. Under **Protection Settings**, select the disk for which you want to create a restore point.
4. Click **Create**, and then follow the on-screen instructions.

System Recovery

System Recovery completely erases and reformats the hard disk drive, deleting all data files you have created, and then reinstalls the operating system, programs, and drivers. However, you must reinstall any software that was not installed on the computer at the factory. This includes software that came on media included in the computer accessory box, and any software programs installed after purchase.
You must choose one of the following methods to perform a System Recovery:
* Recovery Image. Run the System Recovery from a recovery image stored on your hard disk drive. The recovery image is a file that contains a copy of the original factory-shipped software.
   NOTE: The recovery image uses a portion of the hard disk drive that cannot be used for data storage.
* Recovery Discs. Run the System Recovery from a set of recovery discs that you create from files stored on your hard disk drive or purchased separately.

System Recovery Options

You should attempt a System Recovery in the following order:
1. Through the hard disk drive, from the Windows Start menu.
2. Through the hard disk drive, by pressing the F11 key on the keyboard during system startup.
3. Through recovery discs that you create.
4. Through recovery discs purchased from HP Support.

System Recovery from the Windows Start Menu

CAUTION: System Recovery deletes all data and programs you created or installed. Back up any important data to a removable disc.

If the computer is working and Windows is responding, use these steps to perform a System Recovery.
1. Turn off the computer.
2. Disconnect all peripheral devices from the computer except the monitor, keyboard, and mouse.
3. Turn on the computer.
4. Click the **Start** button, click **All Programs**, click **Recovery Manager**, and then click **Recovery Manager**. If prompted, click **Yes** to allow the program to continue.
5. Under **I need help immediately**, click **System Recovery**.
6. Select **Yes**, and then click **Next**. The computer restarts.
NOTE: If the system does not detect a recovery partition, it prompts you to insert a recovery disc. Insert the disc, select **Yes**, and then click **Next** to restart the computer and run Recovery Manager from the recovery disc. Insert the remaining recovery discs when prompted.
7. When the computer restarts, once again you see the Recovery Manager welcome screen. Under **I need help immediately**, click **System Recovery**. If you are prompted to back up your files, and you have not done so, select **Back up your files first (recommended)**, and then click **Next**. Otherwise, select **Recover without backing up your files**, and then click **Next**.
8. System Recovery begins. After System Recovery is complete, click **Finish** to restart the computer.
9. Complete the registration process, and wait until you see the desktop.
10. Turn off the computer, reconnect all peripheral devices, and turn the computer back on.

System Recovery at System Startup

CAUTION: System Recovery deletes all data and programs you created or installed. Back up any important data to a removable disc.

If Windows is not responding, but the computer is working, follow these steps to perform a System Recovery.
1. Turn off the computer. If necessary, press and hold the On button until the computer turns off.
2. Disconnect all peripheral devices from the computer, except the monitor, keyboard, and mouse.
3. Press the On button to turn on the computer.
4. As soon as you see the initial company logo screen appear, repeatedly press the **F11** key on the keyboard until the Windows is Loading Files… message appears on the screen.
5. Under **I need help immediately**, click **System Recovery**.
6. If you are prompted to back up your files, and you have not done so, select **Back up your files first (recommended)**, and then click **Next**. Otherwise, select **Recover without backing up your files**, and then click **Next**.
7. System Recovery begins. After System Recovery is complete, click **Finish** to restart the computer.
8. Complete the registration process, and wait until you see the desktop.
9. Turn off the computer, reconnect all peripheral devices, and turn the computer back on.

System Recovery from Recovery Discs

CAUTION: System Recovery deletes all data and programs you created or installed. Back up any important data to a removable disc.

To perform a System Recovery using recovery discs:
1. If the computer is working, create a backup DVD containing all the data files you want to save, and then remove the backup disc from the drive tray.
2. Insert recovery disc #1 into the DVD drive tray, and close the tray.
3. If the computer works, click the **Start** button, click the Arrow button next to **Shut Down**, and then click **Shut Down**. Or, if the computer is not responding, press and hold the On button for approximately 5 seconds, or until the computer turns off.
4. Disconnect all peripheral devices from the computer except the monitor, keyboard, and mouse.
5. Press the On button to turn on the computer. If you are prompted to choose between running System Recovery from disc or from hard drive, select **Run program from disc**, and then click **Next**.
6. Under **I need help immediately**, click **Factory Reset**.
7. If you are prompted to back up your files, and you have not done so, select **Back up your files first (recommended)**, and then click **Next**. Otherwise, select **Recover without backing up your files**, and then click **Next**.
8. If you are prompted to insert the next recovery disc, do so.
9. When the Recovery Manager is finished, remove all recovery discs from the system.
10. Click **Finish** to restart the computer.