

Illustrated Parts & Service Map

HP Compaq 6000 Pro All-In One Business PC



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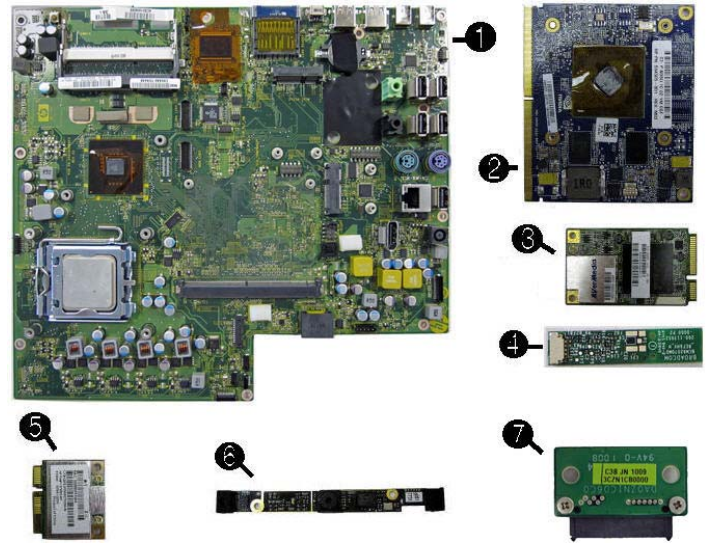
Key Specifications

Processor Type	Intel® Pentium dual core, Intel Core™2 Duo, Intel Celeron® dual core
RAM Type	DDR3-SDRAM DIMMs, PC2-10600 (1333 MHz) non-ECC
Maximum RAM Supported	8 GB
Expansion Slots	<ul style="list-style-type: none"> (1) full-height mini PCIe x1 (1) half-height mini PCIe x1 (1) MXM 3.0 graphics slot
Graphics Adapter	Integrated Intel Graphics Media Accelerator 4500; MXM graphics
Chipset	Intel Q43 Express
Drive Support	<ul style="list-style-type: none"> (1) 5.25-inch Slimline (1) 3.5-inch or 2.5-inch
I/O Interfaces	(2) side USB ports, (5) rear USB ports, DisplayPort monitor output, RJ-45 network connection, 1394 port, PS/2 keyboard and mouse ports, stereo audio line output; with optional TV tuner: (2) coax jacks, IR Emitter (Blaster) output (optional)
Operating Systems	<ul style="list-style-type: none"> Windows 7 Windows Vista Windows XP Novell SuSE Linux Enterprise Desktop 11 FreeDOS

Spare Parts

Mass Storage Devices (bracket not spared, reuse existing bracket)

8X DVD-ROM drive	637998-001
8X DVD±RW SuperMulti DL drive	619238-001
4X DVD±RW SuperMulti DL drive	619239-001
8X DVD±RW SuperMulti DL drive, LightScribe, HF	615944-001
8X DVD±RW SuperMulti DL drive, non-LightScribe	657959-001
1 TB hard drive	621418-001
500 GB hard drive	621421-001
320 GB hard drive	621420-001
250 GB hard drive	621419-001
80 GB solid-state drive	607817-001



Standard and Optional Boards

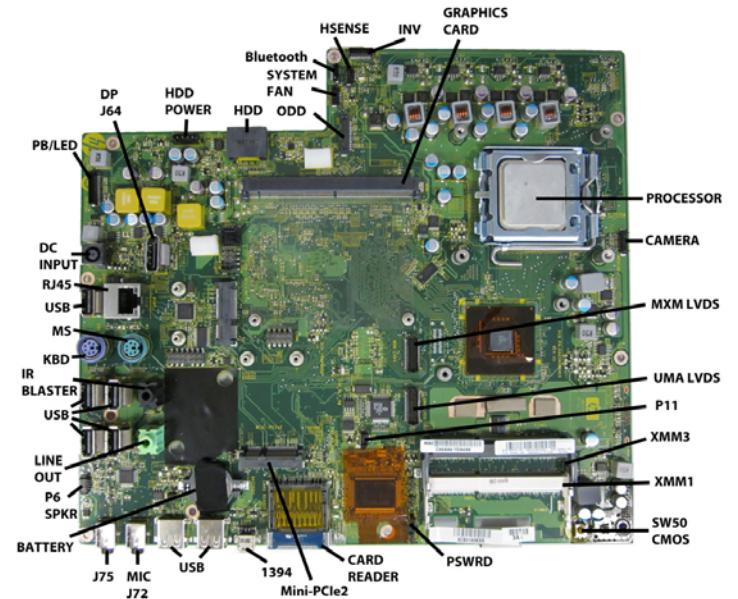
System boards with thermal grease, alcohol pad, and CPU socket cover		
1	System board	607818-001
2	Graphics card, G210, 512 MB	621426-001
*	Graphics card, HD5570, 1 GB	628380-001
*	Graphics card, GFX, 1 GB	652164-001
3	HP TV tuner	613990-001
*	TV tuner module for use in the Asia-Pacific region	621424-001
*	TV tuner module for use in Hong Kong and the People's Republic of China	621423-001
4	Bluetooth module	617047-001
5	WLAN module (802.11b/g/n)	593897-001
*	WLAN module (802.11a/b/g/n), 2x2	652165-001
6	Webcam module	625254-001
7	Optical drive board	643153-001
*	Brightness board	643152-001
*	Hood sensor board	643154-001
Memory modules (PC3-10600)		
*	2 GB	593895-001
*	4 GB	593896-001
Intel Core2 Duo processors with alcohol pad and thermal grease:		
	E8600, 6-MB cache, 3.33 GHz	497732-001
	E8500, 6-MB cache, 3.16 GHz	466170-001
	E8400, 6-MB cache, 3.00 GHz	466169-001
	E7600, 3-MB cache, 3.06 GHz	573954-001
	E7500, 3-MB cache, 2.93 GHz	531988-001
Intel Pentium processors with alcohol pad and thermal grease:		
	E6700, 2-MB cache, 3.20 GHz	418950-001
	E6600, 2-MB cache, 3.06 GHz	602070-001
	E6500, 2-MB cache, 2.93 GHz	586748-001
	E5500, 2-MB cache, 2.80 GHz	613035-001
	E5400, 2-MB cache, 2.70 GHz	586743-001
Intel Celeron processor with alcohol pad and thermal grease:		
	E3300, 1-MB cache, 2.50 GHz	585886-001

* Not shown

Keyboards (not illustrated)

USB	590271-xx1		
USB, blue	658321-xx1		
PS/2	611374-xx1		
PS/2, blue	665887-xx1		
Wireless	611376-xx3		
Wireless, blue	647446-xx1		
USB, Smartcard	613463-xx3		
USB, Washable	613125-xx1		
USB, mini	611375-xx3		
Brazilian Portuguese	-201	LA Spanish	-161
French Canadian	-121	People's Republic of China	-AA1
International	-371	Taiwanese	-AB1
International English	-AR1	Thai	-281
Japanese	-291	U.S.	-001
Korean (Hangul)	-AD1	U.K.	-031

System Board



System Board Connectors and Jumpers (component location may vary)

DP, J64	DisplayPort connector	PSWRD	System password header
HDD POWER	Hard drive power connector	CARD READER	Media card reader connector
HDD	Hard drive connector	1394	1394 port
ODD	Optical drive connector	USB	USB connectors
SYSTEM FAN	System fan connector	MIC, J72	Microphone connector
Bluetooth	Bluetooth module connector	J75	Headphone jack
HSENSE	Hood sensor connector	BATTERY	RTC battery socket
INV	Inverter board connector	P6, SPKR	Speaker jack
GRAPHICS CARD	Graphics card connector	LINE OUT	Headphone jack
PROCESSOR	CPU	USB	USB connectors
CAMERA	Webcam connector	IR BLASTER	IR extended connector
MXM LVDS	MXM display connector	KBD	PS/2 keyboard connector
UMA LVDS	UMA display connector	MS	PS/2 mouse connector
P11	Auxiliary audio connector	USB	USB connector
XMM1	Memory socket 1	RJ-45	Network connector
XMM3	Memory socket 2	DC INPUT	AC adapter connector
SW50, CMOS	CMOS password header	PB/LED	Power button/LED connector

Common POST Error Messages

Screen Message	Probable Cause	Recommended Action
101-Option ROM Error	System ROM or expansion board option ROM checksum.	<ol style="list-style-type: none"> 1. Verify ROM, reflash if required 2. Remove any recently added cards to see if problem remains. 3. Clear CMOS. If message disappears, may be problem with card. 4. Replace system board
103-System Board Failure	DMA or timers	<ol style="list-style-type: none"> 1. Clear CMOS memory. 2. Remove expansion boards. 3. Replace system board.
164-Memory Size Error	Memory amount has changed since the last boot (memory added or removed).	Press the F1 key to save the memory changes.
164-Memory Size Error	Incorrect memory configuration	<ol style="list-style-type: none"> 1. Run Setup (F10). 2. Make sure memory module(s) installed properly. 3. If third-party memory added, test using HP-only memory.
201-Memory Size Error	RSM failure	<ol style="list-style-type: none"> 1. Ensure memory modules are correctly installed. 2. Verify proper module type. 3. Remove and replace identified faulty memory module(s). 4. If error persists after replacing modules, replace system board.
214-DIMM Configuration Warning	Populated DIMM configuration is not optimized	Rearrange the DIMMs so that each channel has the same amount of memory.
301-, 304-Keyboard error	Keyboard failure.	<ol style="list-style-type: none"> 1. Reconnect keyboard with system turned off. 2. Check keyboard connection or keys. 3. Check connector for bent or missing pins. 4. Replace keyboard. 5. If 304, possible system board problem.
511-Display Adapter Failure	CPU Fan no Detected.	<ol style="list-style-type: none"> 1. Reseat CPU fan. 2. Reseat fan cable. 3. Replace CPU fan.
1801-Microcode Patch Error	Processor not supported by ROM BIOS.	<ol style="list-style-type: none"> 1. Upgrade BIOS to proper version. 2. Change the processor.
1801-Microcode Patch Error	Processor is not supported by ROM BIOS.	<ol style="list-style-type: none"> 1. Upgrade ROM proper version. 2. Change the processor.



Miscellaneous Parts

1	Heat sink (thermal module), MXM graphics	not spared
*	Heat sink (thermal module), UMA graphics	not spared
2	Display panel, 21.5-inch, non-glare, AUO (includes cable and inverter; does not include bezel)	633225-001
*	Display panel, 21.5-inch, CMO (includes cable and inverter; does not include bezel)	657230-001
*	Display panel, 21.5-inch, SMG (includes cable and inverter; does not include bezel)	657231-001
3	Speaker, left	644382-001
3	Speaker, right	644383-001
4	Stand	643141-001
5	Port cover	643148-001
6	Rear I/O cover	643160-001
7	Fan/blower	644381-001
*	Small fan/blower	733734-001
*	Bezel, display	662912-001
*	Front bezel, computer	679217-001
*	Optical drive bezel	654297-001
*	Stand cover	643144-001
*	Hard drive cover	643142-001
*	Memory cover	643143-001
*	Postponement door (part of rear cover)	643156-001
*	Tape, used to ground the WLAN antenna	643147-001
*	Power control assembly	643151-001
*	Rear cover	643155-001
*	Power supply, 150W, external	618019-001
*	Power supply, 180W, external	618020-001
*	Remote control for use in North America	642086-001
*	Remote control for use in the Asia/Pacific and Latin American regions	642181-001
*	Mouse, USB, Jack Black	570580-001
*	Mouse, PS/2, optical	609250-001
*	Mouse, optical, Carbon	444740-001
*	Mouse, USB, optical, Portia	621416-001
*	Mouse, wireless, includes dongle	621417-001
*	Mouse, washable	619580-001

*Not shown

Cables (not illustrated)

Power button cable	643145-001
Optical drive eject/brightness cable	643146-001
Hood sensor cable	643149-001
Camera to MPCA cable	643150-001
Display cable	643157-001
Inverter power cable	643158-001
Optical drive SATA cable	643159-001
Bluetooth/USB cable	643161-001
Hard drive SATA cable	658144-001
DisplayPort (DP) to HDMI adapter	617450-001

Computer Setup.

Heading	Option/Description
File	System Information - Lists the following main system specifications: <ul style="list-style-type: none"> Product name SKU number (some models) Processor type/speed/stepping Memory size/speed/ no. channels Integrated MAC Address System BIOS 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 select a drive containing a new BIOS.
	Replicated Setup-Save to Removable Media & Restore from Removable Media
	Default Setup: <ul style="list-style-type: none"> Save Current Settings as Default Restore Factory Settings as Default
	Apply Defaults and Exit - Applies the selected default settings and clears any established passwords.
	Ignore Changes and Exit - Exits setup without applying or saving any changes.
	Save Changes and Exit - Saves changes to system configuration or default settings and exits Computer Setup.
Storage	Device Configuration - Lists all installed BIOS-controlled storage devices. <ul style="list-style-type: none"> Hard Disk - size, model, firmware, serial number, connector color, SMART, emulation type Emulation type - None, Hard disk Translation Mode
	Storage Options: Removable Media Boot, SATA Emulation.
	DPS Self-Test - Lets you execute self-tests on DPS-capable ATA hard drives.
	Boot Order - Allows you to specify boot order or order of attached hard drives. <ul style="list-style-type: none"> Shortcut to Temporarily Override Boot Order
Security	Setup Password - Allows you to set and enable setup (Administrator) password.
	Power-On Password - Allows you to set and enable power-on password.
	Password Options - When any password exists allows you to lock legacy resources, enable/disable network server mode, specify password requirement for warm boot, and allows you to enable/disable Setup Browse Mode, enable/disable Stringent Password, set up password prompt on F9, F11, & F12.
	Device Security (some models) - Enables/disables audio, network controllers, embedded security devices., SATA0-1, 1394 and Media Reader.
	USB Security - Allows you to enable/disable groups of or individual USB ports. Front USB Ports 11,12, Rear USB Ports 1,3,8,9,10. Accessory ports 2,4,6,7.
	Slot Security - Allows you to enable/disable any PCI Express x16 or x1 slot.
	Network Service Boot - Enables/disables boot from OS on a network server.
	System IDs - Allows you to set Asset tag, ownership tag, chassis serial number/ UUID, and keyboard locale setting.
	DriveLock Security-Lets you assign/modify hard drive p/w for added security.
	System Security (some models) - Allows you to enable/disable: <ul style="list-style-type: none"> Data Execution Prevention Protected Audio Video Path (PAVP) (some models) Virtualization Technology(some models) Virtualization Technology Directed I/O (some models) Trusted Execution Technology I/O Embedded Security Device Support OS management of Embedded Security Device (some models) Button Retask Password Protection Power Button Consumer IR Power Button Optical Drive Eject Button
	Master Boot Record Security - Allows you to save or restore master boot record.
	Setup Security Level - Provides method to allow users limited access to change specified setup options without knowing Setup password.
Power	OS Power Management - Lets you enable/disable Runtime Power Management, Idle Power Savings, ACPI S3 Hard Disk Reset, ACPI S3 PS2 Mouse Wakeup, USB Wake on Device Insertion, Unique Sleep State Blink Rates.
	Hardware Power Management-Lets you enable/disable SATA bus power management and S5 maximum power savings.
	Thermal - Allows you to control minimum permitted fan idle speed.
Advanced	Power-On Options - Allows you to set: <ul style="list-style-type: none"> POST mode-QuickBoot, FullBoot, Clear Memory, FullBoot every x days POST messages - Enable/disable F9 prompt - Enable/disable F10 prompt - Enable/disable F11 prompt - Enable/disable F12 prompt - Enable/disable Factory Recovery Boot Support - Enable/disable Option ROM prompt - Enable/disable Remote wakeup boot source - Remote server/local hard drive After Power Loss - Off/on/previous state POST Delay - None, 5, 10, 15, or 20 seconds Limit CPUID Value to 3 Bypass F1 Prompt on Configuration Changes
	Execute Memory Test -Restarts computer and executes POST memory test.
	BIOS Power-On - Allows you to set the computer to turn on at a preset time.
	PCI Devices - Lists installed PCI devices with their IRQ settings and allows you to reconfigure IRQ or disable devices.
	Bus Options (some models) - Allows you to enable/disable PCI SERR# Generation and PCI VGA palette snooping.
	Device Options - Allows you to set: <ul style="list-style-type: none"> Num Lock State at Power-On (on/off) S5 Wake on LAN (enable/disable) Multi-Processor (enable/disable) Internal Speaker (some models) NIC Option ROM Download (PXE, Disable, iSCSI)
	Management Devices - Only displayed in the Advanced Menu when the BIOS detects multiple management options. 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.
	Management Operations - Allows you to set: <ul style="list-style-type: none"> MEBx Setup Prompt (enable/disable) Unprovision AMT on next boot. SOL Terminal Emulation Mode SOL Local Keyboard (enable/disable)