

# Illustrated Parts & Service Map

## HP Pro 3000/3080 Business PC Microtower Chassis



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### Key Specifications

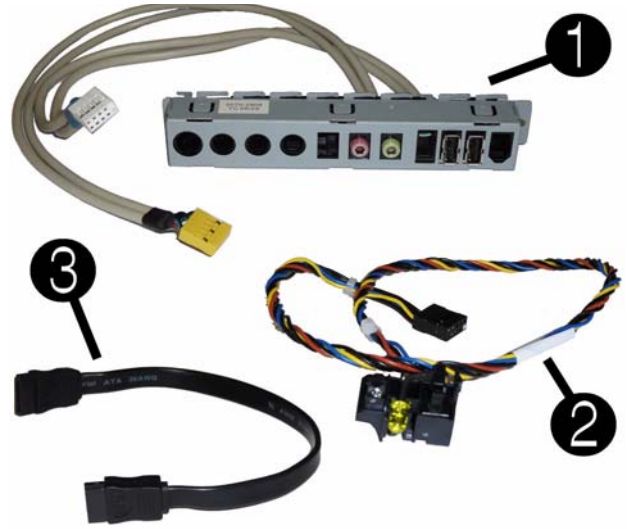
Processor Type	Intel® Core™ 2 Duo and Core™ 2 Quad, Intel Pentium®, Intel Celeron®
RAM Type	DDR3-SDRAM DIMMs, PC2-10600 (1333 MHz) non-ECC
Maximum RAM Supported	8 GB
Expansion Slots	<ul style="list-style-type: none"> <li>(2) PCI 2.3</li> <li>(1) PCIe-x16</li> <li>(1) PCIe-x1</li> </ul>
Graphics Adapter	Intel Graphics Media Accelerator X4500HD with DX10 support
Chipset	Intel G45S Express
Drive Support	<ul style="list-style-type: none"> <li>(2) external 5.25-inch optical disk drives</li> <li>(1) external 3.5-inch drive (for optional media reader or Pocket Media drive)</li> <li>(2) internal 3.5-inch hard disk drives</li> </ul>
I/O Interfaces	Front: (2) USB 2.0 ports, headphone output, microphone jack Rear: (6) USB 2.0 ports, serial port, parallel port, PS/2 mouse and keyboard ports, RJ-45 network interface, DVI-D and VGA video interfaces, microphone jack, audio in/out jacks
Operating Systems	<ul style="list-style-type: none"> <li>Windows 7</li> <li>Windows Vista</li> <li>Windows XP Professional, Windows XP Home</li> <li>SuSE Linux Enterprise Desktop 11</li> <li>FreeDOS</li> <li>Red Flag Linux</li> </ul>

### Spare Parts



### System Unit

1	Access panel	586372-001
2	Power supply, 300W, NPFC	463318-001
*	Power supply, 300W, 85% (APJ only)	575437-001
*	Power supply, 300W, PFC	508467-001
*	Power supply, 250W, PFC	508466-001
3	Chassis	not spared
4	Front bezel for use in HP Pro 3000	591599-001
*	Front bezel for use in HP Pro 3080	591606-001
*	5.25-inch bezel blank	536306-001
*	3.5-inch bezel blank	583094-001



### Cables

1	Front I/O assembly	508463-001
2	Power switch/LED assembly	592504-001
3	SATA cable, 8.66-inch (22-cm), 2 straight ends	591600-001
*	SATA cable, 17.5 inch, 2 straight ends	592503-001
*	SATA cable, 7-inch, 2 straight ends	592505-001
*	SATA power dongle, 4 inch	449283-001
*	DMS-59 to dual DVI cable	463024-001
*	RJ-11 modem cable	198220-005

\*Not shown

### Keyboards (not illustrated)

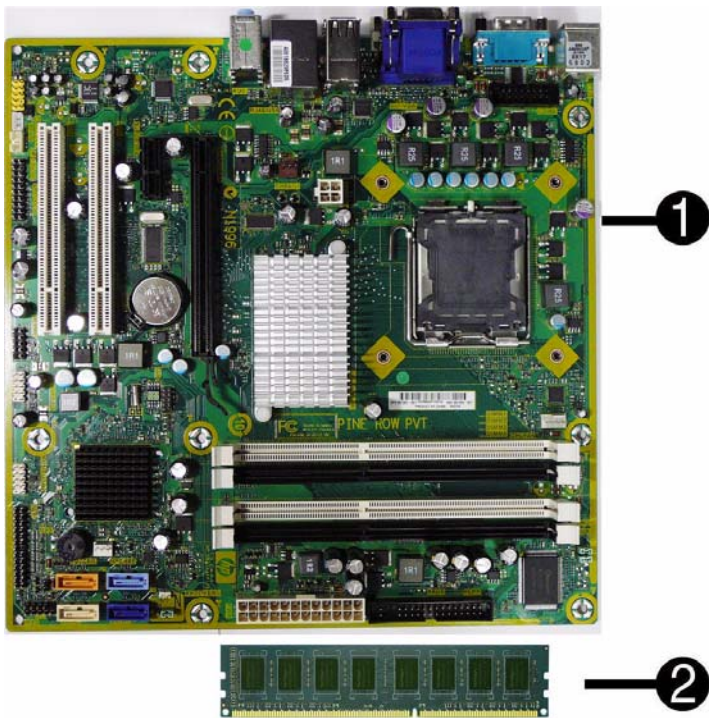
PS/2, Basic	537745-xxx	
USB, Standard	537746-xxx	
USB SmartCard	537747-xxx	
USB, Mini[e]	535873-xxx	
USB, low cost	537924-xxx	
Washable[f]	577495-xxx	
Adriatic[a][c][d]	-BL1 Japanese[a]	-291
Arabic[b][c][d]	-171 LA Spanish[a]	-161
Belgian[d]	-181 Korean[a]	-KD1
BHCSY[b][d]	-B41 Norwegian[d]	-091
Czech[d]	-221 Portuguese[d]	-131
Danish[d]	-081 Romanian[b][d]	-271
Finnish[d]	-351 Russian[d]	-251
French[d]	-051 S. Chinese[a]	-AA1
French Arabic[d]	-DE1 Slovakian[d]	-231
French Canadian[a][e][f]	-121 Spanish[d]	-071
German[d]	-041 Swedish[d]	-101
Greek[d]	-151 Swiss[d]	-111
Hebrew[b][d]	-BB1 Taiwanese[a]	-AB1
Hong Kong[a][b][c]	-AC1 Thailand[a]	-281
Hungarian[d]	-211 Turkish[d]	-141
Iceland[a][d]	-DD1 U.K.[d]	-031
International English	-L31 United States[a][e][f]	-001
Italian[d]	-061	

[a] not for 537924-xxx  
[b] not for 537924-xxx  
[c] not for 537746-xxx

[d] not for 537745-xxx  
[e] 535873-xxx only for -001, -121, -161  
[f] 577495-xxx only for -001, -121

### Mass Storage Devices (not illustrated)

Blu-ray Disc ROM with SuperMulti DVD±R/RW DL Drive	581601-001
DVD±RW and CD-RW SuperMulti DL Combo Drive with LightScribe	581600-001
DVD-ROM drive	581599-001
500-GB SATA hard drive,	586720-001
320-GB hard drive	586969-001
250-GB SATA hard drive	586719-001
320-GB external USB hard drive	591387-001
160-GB SATA hard drive	586718-001



**Miscellaneous Parts**

1	Chassis fan	438741-001
2	Internal speaker	463316-001
3	Heatsink with alcohol pad and factory-applied thermal grease	592506-001
*	Media card reader	480032-001
*	Hood sensor	534484-001
*	USB powered speakers	571536-001
*	Printer port	497727-001
*	Backplate, heat sink	486446-001
*	Foot kit	530593-001
*	Serial port	530599-001
*	Mouse, USB	537749-001
*	Mouse, optical	537748-001
*	Mouse, laser	570580-001
*	Antenna, 802.11	583345-001
*	Rear I/O cover	592507-001

\*Not shown

**Standard and Optional Boards**

System boards with thermal grease, alcohol pad, and CPU socket cover

1	System board	587302-001
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Memory modules (PC3-10600, CL9)

2	1 GB	576109-001
*	2 GB	576110-001
*	4 GB (4 x 1-GB DIMM)	576109-001

Other boards

*	Agere International 56K LSI v92 modem, includes bracket	490689-001
*	ATI Radeon HD4350 (RV710) PCIe x16 graphics card, 512 MB	578368-001
*	ATI Radeon HD4550 (RV710) PCIe x16 graphics card, 256 MB	538051-001
*	ATI Radeon HD4550 (RV710) PCIe x16 graphics card, 512 MB	584217-001
*	ATI Radeon HD4650 (RV730) PCIe x16 graphics card, 1 GB, 15 month warranty, EMEA only	578174-001
*	GeForce GT205 512-MB PCIe graphics card (for use in China only)	589145-001
*	GeForce GT315 512-MB PCIe graphics card (for use in China only)	589146-001
*	GeForce GT230 1.5-GB PCIe graphics card	586381-001
*	GeForce GT230 1.5-GB PCIe graphics card (APJ only)	590812-001
*	GeForce GT210 512-MB PCIe graphics card	586382-001
*	802.11b/g/n WLAN PCIe adapter	538048-001
*	Intel Gigabit NIC, includes bracket	490367-001
*	Serial/parallel port PCI adapter	321722-001
*	HP FireWire IEEE 1394 PCI card, FH	585468-001

**Intel Celeron Processors with alcohol pad and thermal grease:**

E3300, 1-MB cache, 2.50 GHz	585886-001
E3200, 1-MB cache, 2.40 GHz	585885-001
E1500, 512-KB cache, 2.20 GHz	516899-001
450, 512-KB cache, 2.20 GHz	508256-001
440, 512-KB cache, 2.00 GHz	449166-001

**Intel Core2 Quad Processors with alcohol pad and thermal grease:**

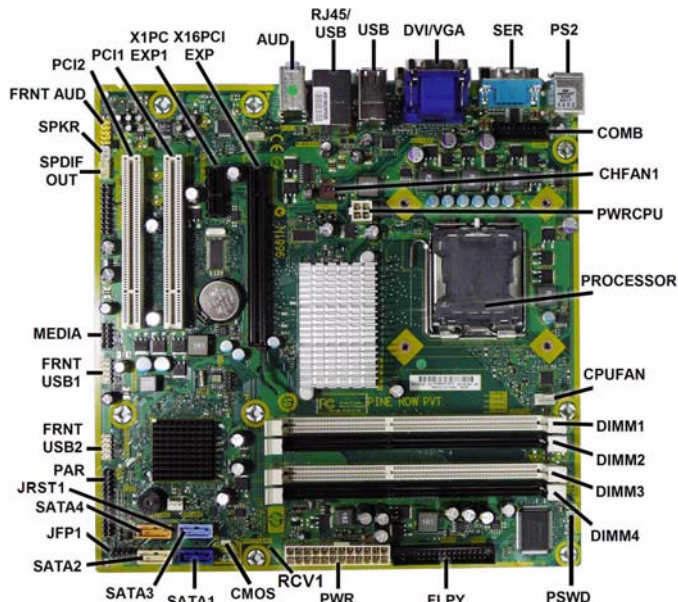
Q9650, 12-MB cache, 3.00 GHz	497734-001
Q9550, 12-MB cache, 2.83 GHz	465758-001
Q9400, 6-MB cache, 2.66 GHz	497733-001
Q8400, 4-MB cache, 2.66 GHz	573955-001
Q8300, 4-MB cache, 2.5 GHz	583005-001 516901-001

**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	583006-001 531988-001
E6500, 2-MB cache, 2.93 GHz	586748-001
E6300, 2-MB cache, 2.80 GHz	580748-001
E5400, 2-MB cache, 2.70 GHz	586743-001
E5300, 2-MB cache, 2.60 GHz	586747-001

\* Not shown

**System Board**



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

PCI1	PCI slot 1	PSWD	Password header
PCI2	PCI slot 2	FLPY	Floppy drive connector
X1PCEXP1	PCIe X1, slot 1	PWR	Main power connector
X16PCIEXP	PCIe X16 connector	RCV1	Recovery header
AUD	Double stack audio connector	CMOS	CMOS header
RJ45/USB	Stacked RJ-45/USB connectors	SATA1	Primary SATA hard drive
DVI/VGA	Stacked DVI/VGA connector	SATA2	1st SATA optical drive
USB	USB connector	SATA3	2nd SATA optical drive
SER	Serial port	SATA4	2nd SATA hard drive
PS2	PS/2 connectors	JFP1	Power switch connector
COMB	2nd media reader connector	JRST1	Reset header
CHFAN1	System fan connector	PAR	Parallel port connector
PWRCPU	CPU power connector	FRNT_USB2	2nd USB connector
PROCESSOR	Processor slot	FRNT_USB1	1st USB connector
CPUFAN	CPU/heat sink fan connector	MEDIA	Media card reader connector
DIMM1	Memory socket 1	SPDIF_OUT	Digital line-in/line-out audio connector
DIMM2	Memory socket 2	SPKR	Speaker connector
DIMM3	Memory socket 3	FRNT_AUD	Front panel connector
DIMM4	Memory socket 4		

## 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

Heading	Option / Description	
Main	System Information Lists the following main system specifications: <ul style="list-style-type: none"> <li>Product Name</li> <li>SKU Number</li> <li>Processor Type</li> <li>Processor Speed</li> <li>CPUID/PatchID</li> <li>Cache Size</li> <li>Memory Size</li> <li>Integrated MAC</li> <li>System BIOS</li> <li>Chassis Serial Number</li> <li>Asset Tag Number</li> <li>UUID</li> </ul>	
	Set Time and Date Allows you to set system time and date.	
	SATA Port 1 SATA Port 2 SATA Port 3 SATA Port 4 Allows or displays the following for each SATA Port: <ul style="list-style-type: none"> <li>Port Configuration — Disable/enable SATA Port</li> <li>Run HDD self-test for selected channel: SMART Status Check, HDD Short Self-Test, HDD Extended Self-Test</li> <li>View vendor, size, and firmware</li> </ul>	
	SATA Emulation Allows you to choose how the SATA controller and devices are accessed by the operating system. The following options are available: IDE, RAID, AHCI.	
	Onboard FDC Controller Disables/enables the diskette drive controller.	
	Drive A View only.	
	Halt On Allows you to set POST error behavior to: all errors, no errors, all but keyboard.	
	POST Delay Allows you to set POST delay to 0, 5, 10, 15, or 30 seconds	
	Advanced	Execute Disable Bit Disables/enables hardware DEP function.
		Init Display First Allows you to set primary display device to PCI slot, OnChip VGA, or PCIe.
MAX DVMT Allocation Allows you to specify the DVMT/system memory allocated for video memory to: 128MB, 256MB, Max.		
Onboard HD Audio Allows you to disable/enable onboard HD audio.		
OnChip USB Controller Disables/enables the universal host controller interface for USB (Universal Serial Bus).		
USB Legacy Support Disable/enable (USB keyboard, mouse, and flash media).		
Onboard LAN Disable/enable onboard LAN controller.		
Onboard LAN Boot ROM Disable/enable the boot ROM of the onboard LAN chip.		
Onboard Serial Port 1 Allows you to select: Disabled, 3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, or 2E8/IRQ3.		
PCI Device SERR# Disables/enables SERR#.		
Boot	F9 Boot Menu Disables/enables F9 Boot Menu.	
	F10 Setup Prompt Disable/enable F10 Setup prompt on the logo screen.	
	F11 Recovery Disables/enables F11 Recovery and provides the option of showing the F11 Recovery prompt message on the logo screen. Choose from the following: Disabled, Enabled no prompt, Enabled and prompt.	
	F12 Boot from LAN Prompt Disables/enables the F12 Boot from LAN prompt message on the logo screen.	
	Hard Disk Boot Seq. Allows you to specify the order of attached hard drive devices (USB HDD or USB flash media). The first attached drive in the order has priority and is recognized as drive C.	
	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.	
	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.	
	First, Second, Third, and Fourth Boot Device Allows you to specify which devices will boot in which sequence or to disable any of the four: removable, CDROM, hard disk, or network.	
	Set Supervisor Password Allows you to establish a password to enter Computer Setup	
	BIOS Write Protection Disables/enables BIOS upgrading.	
Power	After AC Power Loss Allows you to select system power loss behavior: Off, On, Last State.	
	Wake on PCI Device from S5 Disables/enables waking up from S5 by PCI device.	
	RTC Resume Alarm Disables/enables RTC (real-time clock) alarm.	

PC Health	Chassis Opened Warning	Allows you to disable/enable the chassis intrusion function and clear the intrusion warning: Disabled, Enabled, Clear.
	System Fan Fail Check	Disables/enables detection of system fan during POST.
	Smart Fan Function	Disables/enables Smart Fan functionality. Enabling optimizes fan control for best acoustic behavior.
	Current CPU Temperature	View only
	Current System Temp	View only
	Current CPU Fan Speed	View only
	Current System Fan Speed	View only
Exit	Save and Exit Setup	Allows you to save current settings and exit Computer Setup.
	Discard Changes and Exit	Allows you to exit Computer Setup without saving changes.
	Load Optimized defaults	Allows you to reset Computer Setup to factory defaults.

### POST Audible Codes

Beeps	Meaning	Recommended Action
1 short beep and 1 long beep followed by a three second pause	Bad memory or memory configuration error.	Check that the memory modules have been installed correctly and that proper modules are used.
2 short beeps and 1 long beep followed by a three second pause	No graphics card installed or graphics card initialization failed.	For systems with a graphics card: <ol style="list-style-type: none"> <li>Reseat the graphics card. Power on the system.</li> <li>Replace the graphics card.</li> <li>Replace the system board.</li> </ol> For systems with integrated graphics, replace the system board.
3 short beeps and 1 long beep followed by a three second pause	CPU configuration error or invalid CPU detected before graphics card initialized.	<ol style="list-style-type: none"> <li>Upgrade the BIOS to proper version.</li> <li>Change the processor.</li> </ol>
1 short beep followed by a one second pause	No optical drive found.	<ol style="list-style-type: none"> <li>Check cable connections.</li> <li>Run the Computer Setup utility and ensure the device port is enabled.</li> </ol>
2 short beeps followed by a three second pause	No CD found.	<ol style="list-style-type: none"> <li>Check the type of drive that you are using and use the correct media type.</li> <li>Replace the CD with a new one.</li> </ol>
3 short beeps followed by a three second pause	Flashing not ready (missing utility or BIOS image file, etc.)	Upgrade the BIOS to proper version.
4 short beeps followed by a three second pause	Flashing operation has failed (checksum error, corrupted image, etc.)	<ol style="list-style-type: none"> <li>Verify the correct ROM.</li> <li>Flash the ROM if needed.</li> <li>If an expansion board was recently added, remove it to see if the problem remains.</li> <li>Clear CMOS.</li> <li>If the message disappears, there may be a problem with the expansion card.</li> <li>Replace the system board.</li> </ol>
5 short beeps followed by a three second pause	BIOS recovery was successful	No action required.

## Password Security

### Resetting the password jumper

- Shut down the operating system properly, then turn off the computer and any external devices, and disconnect the power cord from the power outlet.
- With the power cord disconnected, press the power button again to drain the system of any residual power.
- Remove the access panel.
- Locate the header and jumper labeled **PSWD**.
- Remove the jumper.
- Plug in the computer and turn on power.
- When you see the HP logo screen, turn off the computer. This clears the current passwords.
- Replace the jumper to its original position.
- Replace the access panel.
- reconnect external equipment.
- Plug in the computer and turn on power. Allow the operating system to start.

### Resetting the CMOS jumper

- Turn off the computer and any external devices, and disconnect the power cord from the power outlet. The power must be disconnected from the system to clear CMOS.
- Disconnect the keyboard, monitor, and any other external equipment connected to the computer.
- Remove the access panel.
- Locate the header and jumper labeled **CMOS**.
- Remove the CMOS jumper from pins 1 and 2 and put the jumper on pins 2 and 3. This clears CMOS.
- Put the jumper back on pins 1 and 2.
- Replace the access panel.
- Reconnect the external equipment.
- Plug in the computer and turn on power.

NOTE: Use Computer Setup to reset any special system setups along with the date and time.