


Illustrated Parts & Service Map

HP Pro 3005/3085 Business PC Microtower Chassis



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Document Number 600835-001. 1st Edition November 2009.



Key Specifications

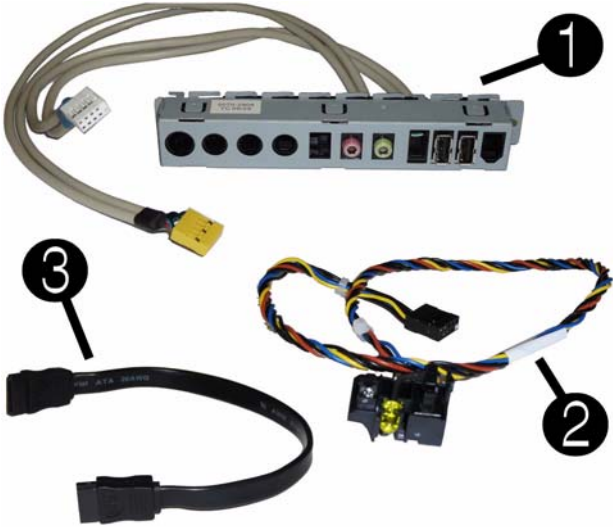
Processor Type	AMD Phenom™ II X3/X4 multi-core, AMD Athlon™ II X2/ X3/X4 multi-core, AMD Sempron™
RAM Type	DDR3-SDRAM DIMMs, PC2-10600 (1333 MHz) non-ECC
Maximum RAM Supported	8 GB
Expansion Slots	<ul style="list-style-type: none">• (2) PCI 2.3• (1) PCIe-x1• (1) PCIe-x16
Graphics Adapter	NVIDIA GeForce 9100 graphics controller with DX10 support
Chipset	NVIDIA MCP780V
Drive Support	<ul style="list-style-type: none">• (2) external 5.25-inch optical disk drives• (1) external 3.5-inch drive (for optional media reader or Pocket Media drive)• (2) internal 3.5-inch hard disk drives
I/O Interfaces	Front: (2) USB 2.0 ports, headphone output, microphone jack Rear: (6) USB 2.0 ports, serial port, parallel port, PS2 key-board and mouse, RJ-45 network interface, DVI-D and VGA video interfaces, microphone jack, audio in/out jacks
Operating Systems	<ul style="list-style-type: none">• Windows 7• Windows Vista• Windows XP Professional, Windows XP Home• SuSE Linux Enterprise Desktop 11• FreeDOS• Red Flag Linux

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 3005	591599-001
*	Front bezel for use in HP Pro 3085	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	508464-001
3	SATA cable, 8.66-inch (22-cm), 2 straight ends	591600-001
*	SATA hard drive cable with latch, 6.5 inch	448670-001
*	SATA power dongle, 4 inch	449283-001
*	DMS-59 to dual DVI	463024-001

*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[g]	577495-xxx

Adriatic[f]	-BL1	Italian[d]	-061
Arabic[b][c][d]	-171	Japanese[a]	-291
Belgian[d]	-181	Korean	-KD1
BHCSY[b][d]	-B41	Norwegian[d]	-091
Czech[d]	-221	Portuguese[d]	-131
Danish[d]	-081	Romanian[d]	-271
Finnish[d]	-351	Russian[d]	-251
French[b][d]	-051	S. Chinese[a]	-AA1
French Arabic[d]	-DE1	Slovakian[d]	-231
French Canadian[a]	-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	-AC1	Thailand[a]	-281
Hungarian[d]	-211	Turkish[d]	-141
Iceland[a][c][d]	-DD1	U.K.[d]	-031
International English	-L31	United States[a]	-001

[a] not for 537924-xxx
[b] not for 537747-xxx
[c] not for 537746-xxx
[d] not for 537745-xxx

[e] 535873-xxx only for -201, -AA1, L31
[f] 537747-xxx only
[g] 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
250 GB SATA hard drive	586719-001
250-GB external USB hard drive	586383-001
160 GB SATA hard drive	586718-001



Standard and Optional Boards

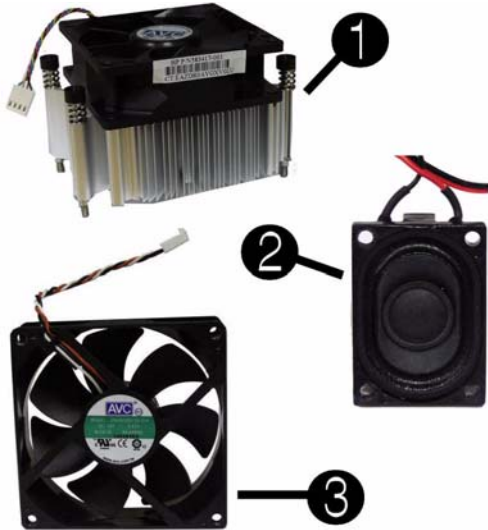
System boards with thermal grease, alcohol pad, and CPU socket cover		
1	System board	591598-001
Memory modules (PC3-10600, CL9)		
2	1 GB	576109-001
*	2 GB	576110-001
*	4 GB	585157-001
Other boards		
*	Agere International 56K LSI v92 modem, includes bracket	490689-001
*	ATI Radeon HD4350 (RV710) PCIe 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
*	HP FireWire IEEE 1394 PCI card, FH	515182-001
*	Serial/parallel port PCI adapter	321722-001

AMD Athlon II X2 processors with alcohol pad and thermal grease:		
*	X4 630, quad core, 2-MB L2 cache, 2.8 GHz	586735-001
*	X4 620, quad core, 2-MB L2 cache, 2.6 GHz	586734-001
*	X3 435, quad core, 2-MB L2 cache, 2.9 GHz	586733-001
*	X3 425, quad core, 2-MB L2 cache, 2.7 GHz	586732-001
*	X2 250, dual core, 2-MB L2 cache, 3.0 GHz	584221-001
*	X2 245, dual core, 2-MB L2 cache, 2.9 GHz	586731-001
*	X2 240, dual core, 2-MB L2 cache, 2.8 GHz	584222-001
*	X2 215, dual core, 2-MB L2 cache, 2.75 GHz	586730-001

AMD Phenom II processors with alcohol pad and thermal grease:		
*	X4 945, quad core, 2-MB L2 cache, 3.0 GHz	586741-001
*	X4 925, quad core, 2-MB L2 cache, 2.8 GHz (6-MB L3 cache)	584219-001
*	X4 820, quad core, 2-MB L2 cache, 2.8 GHz (4-MB L3 cache)	586739-001
*	X4 805, quad core, 2-MB L2 cache, 2.5 GHz	585156-001
*	X3 720, triple core, 1.5-MB L2 cache, 2.8 GHz	581073-001
*	X2 550, dual core, 1-MB L2 cache, 3.1 GHz	580749-001
*	X2 545, dual core, 1-MB L2 cache, 3.0 GHz	584220-001

AMD Sempron processors with alcohol pad and thermal grease:		
*	140, single core, 1-MB L2 cache, 2.7 GHz	590132-001

* Not shown

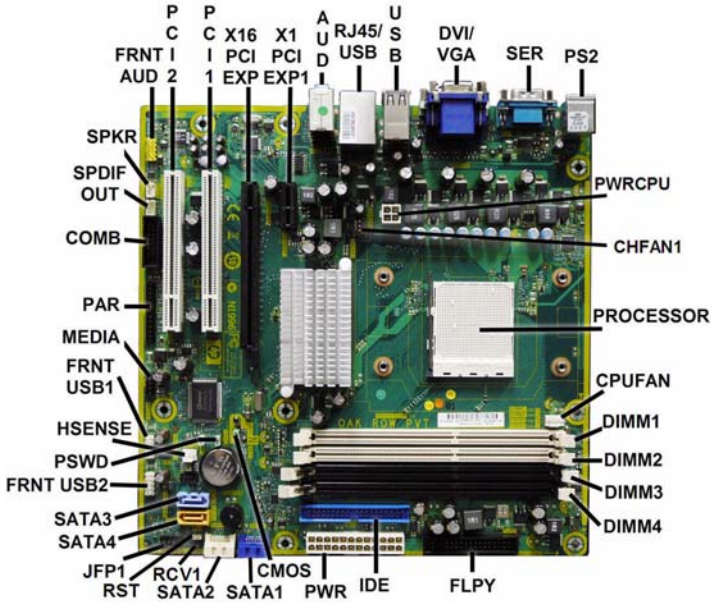


Miscellaneous Parts

1	Heatsink with alcohol pad and factory-applied thermal grease	591601-001
2	Chassis fan	438741-001
3	Internal speaker	463316-001
*	Media card reader	480032-001
*	Hood sensor	534484-001
*	PCI slot cover	580507-001
*	USB powered speakers	571536-001
*	Serial port	530599-001
*	Printer port	465339-001
*	Foot kit	530593-001
*	Mouse, optical	537748-001
*	Mouse, laser	570580-001
*	Rear I/O cover	592507-001

*Not shown

System Board



System Board Connectors and Jumpers (component location may vary)			
FRNT_AUD	Front panel connector	FLPY	Floppy drive connector
PCI2	PCI slot 2	IDE	IDE connector
PCI1	PCI slot 1	PWR	Main power connector
X16PCEXP	PCIe X16 connector	CMOS	CMOS jumper
X1PCIEXP1	PCIe X1, slot 1	SATA1	1st SATA optical drive
AUD	Double stack audio connector	SATA2	1st SATA hard drive
RJ45/USB	Stacked RJ-45/USB connectors	JFP1	Power switch connector
DVI/VGA	Stacked DVI/VGA connector	SATA3	2nd SATA optical drive
USB	USB connector	SATA4	2nd SATA hard drive
SER	Serial port	FRNT_USB2	2nd USB connector
PS2	PS/2 connectors	PSWD	Password header
PWRCPU	CPU power connector	HSENSE	Hood sensor connector
CHFAN1	System fan connector	FRNT_USB1	1st USB connector
PROCESSOR	Processor slot	MEDIA	Media card reader connector
CPUFAN	CPU/heat sink fan connector	PAR	Parallel port connector
DIMM1	Memory socket 1	COMB	2nd media reader connector
DIMM2	Memory socket 2	SPDIF OUT	Digital line-in/line-out audio connector
DIMM3	Memory socket 3	SPKR	Speaker connector
DIMM4	Memory socket 4		

POST Audible Codes

Beeps	Meaning	Recommended Action
1 short beep and 1 long beep followed by a three second pause	Bad memory or memory configura-tion 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: 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.
3 short beeps and 1 long beep followed by a three second pause	CPU configuration error or invalid CPU detected before graphics card initial-ized.	1. Upgrade the BIOS to proper ver-sion. 2. Change the processor.
1 short beep followed by a one second pause	No optical drive found.	1. Check cable connections. 2. Run the Computer Setup utility and ensure the device port is enabled.
2 short beeps followed by a three second pause	No CD found.	1. Check the type of drive that you are using and use the correct media type. 2. Replace the CD with a new one.
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.)	1. Verify the correct ROM. 2. Flash the ROM if needed. 3. If an expansion board was recently added, remove it to see if the prob-lem remains. 4. Clear CMOS. 5. If the message disappears, there may be a problem with the expansion card. 6. Replace the system board.
5 short beeps followed by a three second pause	BIOS recovery was successful	No action required.

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 Infor-mation	Lists the following main system specifications: <ul style="list-style-type: none">• Product Name• SKU Number• Processor Type• Processor Speed• CPUID/PatchID• Cache Size• Memory Size• Integrated MAC• System BIOS• Chassis Serial Number• Asset Tag Number• UUID
	Set Time and Date	Allows you to set system time and date.
	SATA Port 1 SATA Port 2 SATA Port 3 SATA Port 4	For each allows you to: <ul style="list-style-type: none">• Run HDD self-test for selected channel: SMART Status Check, Short Self-Test, Extended Self-Test• View vendor, size, and firmware
	SATA Con-troller	Allows you to disable/enable the SATA Controller.
	PATA Master	For each, if PATA is used, allows you to:
	PATA Slave	<ul style="list-style-type: none">• Run SMART self-test for selected channel: SMART Sta-tus Check, Short Self-Test, Extended Self-Test• Auto-detect HDD size and head• Set PATA Master/Slave device details on selected channel to None, Auto, Manual• Set access mode on selected channel to CHS, LBA, Large, Auto• View Firmware, Capacity, Cylinder, Head, Precomp, Landing Zone, Sector
	PATA Con-troller	Allows you to disable/enable the PATA Controller.
	Onboard FDC Controller	Disable/enable the diskette drive controller.
	Drive A	Allows you to set to None or 1.4M, 3.5 in.
	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	AMD NX Function	Allows you to disable/enable the processor's No Execute Fea-ture.
	Init Display First	Allows you to set primary display device to PCI slot, OnChip VGA, or PCIeX.
	iGPU Frame Buffer Size	Allows you to specify the onboard VGA shared memory size to Auto, 64MB, 128MB, 256MB.
	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.
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 oper-ating system image.
	Network Boot Seq.	Allows you to specify the order in which network devices (including UP NIC cards) are checked for a bootable operat-ing 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 Warn-ing	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 Sys-tem Temp	View only
	Current CPU Fan Speed	View only
	Current Sys-tem 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 Opti-mized defaults	Allows you to reset Computer Setup to factory defaults.

Password Security

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 labeled **PSWD**.
5. Remove the jumper.
6. Plug in the computer and turn on power.
7. When you see the HP logo screen, turn off the computer. This clears the current passwords.
8. Replace the jumper to its original position.
9. Replace the access panel.
- 10.reconnect external equipment.
- 11.Plug in the computer and turn on power. Allow the operating system to start.

Resetting the CMOS jumper

1. 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.
 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 labeled **CMOS**.
 5. Remove the CMOS jumper from pins 1 and 2 and put the jumper on pins 2 and 3. This clears CMOS.
 6. Put the jumper back on pins 1 and 2.
 7. Replace the access panel.
 8. Reconnect the external equipment.
 9. Plug in the computer and turn on power.
- NOTE: Use Computer Setup to reset any special system setups along with the date and time.