

Illustrated Parts & Service Map

HP Pro 3335/3385 Microtower Business PC



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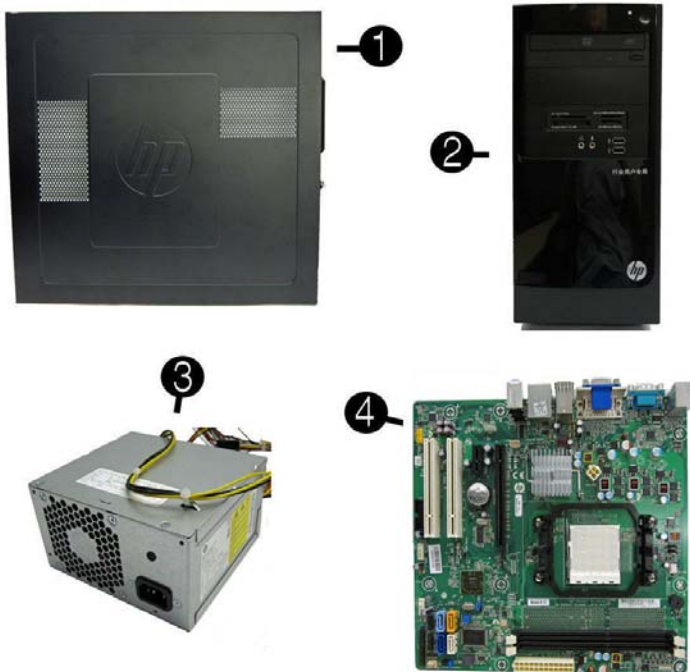
1st Edition October 2011.



Key Specifications

Processor Type	AMD Phenom II, Athlon II, Sempron
RAM Type	PC3-10600 DDR3 (1066/1333 MHz), non-ECC
Maximum RAM	16 GB
Expansion Slots	<ul style="list-style-type: none"> • (1) PCIe-x16 • (1) PCIe-x1 • (2) PCI
Chipset	AMD RS880
Graphics Adapter	ATI Radeon HD 4200 Integrated Graphics
Bays	<ul style="list-style-type: none"> • (2) external 5.25-inch • (2) internal 3.5-inch
I/O Interfaces	Front: (2) USB 2.0, headphone Rear: (6) USB 2.0, DVI-D, VGA, PS/2 keyboard and mouse, audio in, audio out, RJ-45, serial
Preinstalled Operating Systems	<ul style="list-style-type: none"> • Windows® 7 (Professional 32/64, Ultimate 64, Home Premium 64, Home Basic 64) • FreeDos • RedFlag Linux

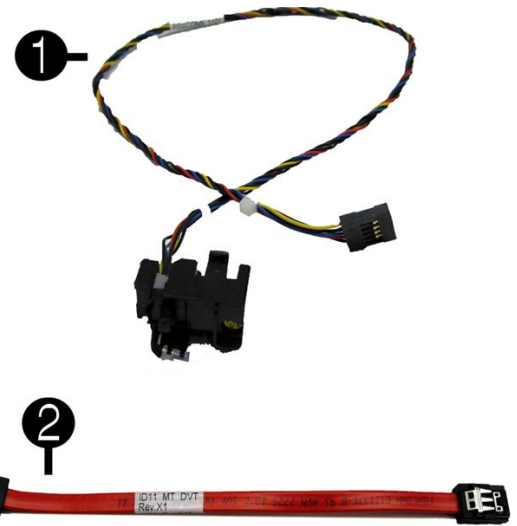
Spare Parts



System Unit

1	Access panel	657104-001
2	Front bezel for use in the People's Republic of China	670439-AA1
*	Front bezel	668571-001
3	Power supply, 300W	656721-001
*	Power supply, 250W, PFC	508466-001
System boards with thermal grease, alcohol pad, and CPU socket cover		
4	System board for use in 3335/3385 models	663101-001

* Not shown



Cables

1	Power switch/LED assembly	657105-001
2	SATA cable, 165 mm	657102-001
*	SATA cable, 370 mm	656833-001
*	Adapter, DVI to VGA, HF	657401-001
*	DMS-59 to Dual VGA cable	463023-001
*	PATA to SATA power adapter	449283-001

*Not shown

Mass Storage Devices (not illustrated)

16X SATA DVD±RW drive	581600-001
DVD-ROM drive	581599-001
Blu-ray BD-RW SuperMulti DL Drive	617030-001
Bezel, optical drive	657852-001
1 TB, 7200 rpm hard drive, 6G	636930-001
750 GB, 7200 rpm hard drive, 6G	639363-001
500 GB, 7200 rpm hard drive, 6G	636929-001
250 GB, 7200 rpm hard drive, 6G	636927-001



Miscellaneous Parts

1	Chassis fan	657103-001
2	Fan sink for use in models with Intel processors	667727-001
3	Front USB and I/O assembly	668572-001
*	Speaker with rubber rivets	666885-001
*	Card reader, 15-in-1	657099-001
*	Card reader, bezel blank	657853-001
*	Card reader, bezel	657854-001
*	Mouse, PS2, optical, black	537748-001
*	Mouse, USB, laser, black	570580-001
*	Mouse, USB, optical, black	537749-001
*	Rubber feet	530593-001
*	Serial port kit	638815-001
*	Printer port kit	638817-001
*	USB powered speakers	636917-001

*Not shown

Standard and Optional Boards

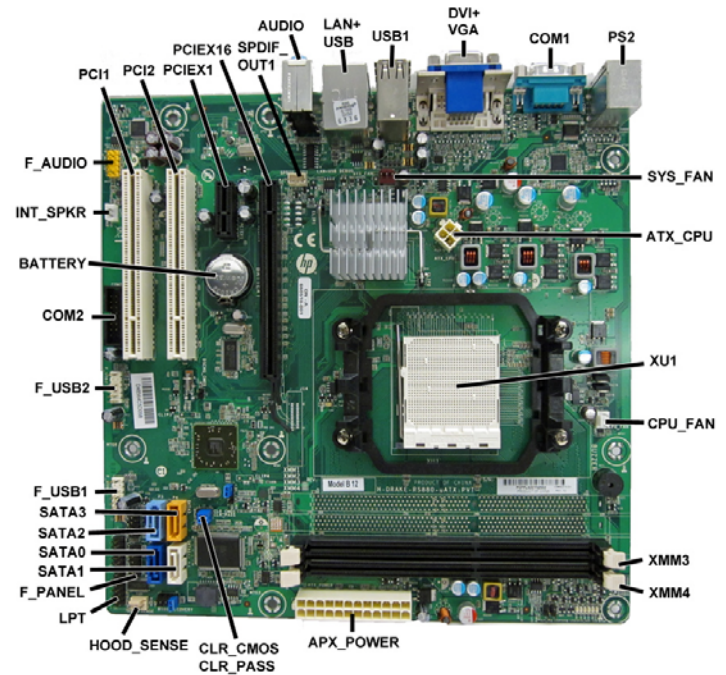
Memory modules (PC3-10600, CL9)		
*	1 GB	635802-001
*	2 GB	635803-001
*	4 GB	585157-001
Other boards		
*	ATI Radeon HD 6350 512-MB graphics adapter	637995-001
*	ATI Radeon HD 6450 512-MB graphics adapter	637996-001
*	ATI Radeon HD 6450 1-GB graphics adapter, PCIe x16	666330-001
*	nVidia Quadro NVS300 PCIe x16 graphics card, 512 MB, PCIe x16	632486-001
*	nVidia Quadro NVS300 PCIe x16 graphics card, 512 MB, PCIe x1	632827-001
*	nVidia GeForce GT405 512-MB graphics adapter	657108-001
*	Intel Gigabit NIC, includes bracket	490367-001
AMD Athlon II X2 processors (for use in model 3305; include thermal material)		
*	X2 B30, dual core, 2-MB L2 cache, 3.6 GHz	666886-001
*	X2 B28, dual core, 2-MB L2 cache, 3.4 GHz	647014-001
*	X2 B26, dual core, 2-MB L2 cache, 3.2 GHz	611193-001
*	X2 250, dual core, 1-MB L2 cache, 3.0 GHz	666887-001
*	X2 220, dual core, 2-MB L2 cache, 2.8 GHz	611192-001
AMD Phenom II processors (for use in model 3305; include thermal material)		
*	X4 B99, quad core, 2-MB L2 cache, 3.4 GHz	647012-001
*	X4 B97, quad core, 2-MB L2 cache, 3.2 GHz	619789-001
*	X4 B95, quad core, 2-MB L2 cache, 3.2 GHz	585156-001
*	X3 B77, tri core, 1.5-MB L2 cache, 3.2 GHz	619788-001
*	X3 B75, tri core, 1.5-MB L2 cache, 3.0 GHz	585154-001
*	X2 B60, dual core, 1-MB L2 cache, 3.5 GHz	666888-001
*	X2 B59, dual core, 1-MB L2 cache, 3.4 GHz	647013-001
*	X2 B57, dual core, 1-MB L2 cache, 3.2 GHz	621428-001
AMD Sempron processors (for use in model 3305; include thermal material)		
*	X2 190, single core, 1-MB L2 cache, 2.5GHz,	666889-001

* Not shown

Diagnostic LEDs

LED	Color	LED Activity	State/Message
Power	Green	On	Computer on
Power	Green	1 blink every 2 seconds	Normal Suspend Mode
Power	Red	1 blink every second followed by a 2 second pause	CPU thermal shutdown
Power	Red	3 blinks, 1 blink every second followed by a 2 second pause	Processor not installed
Power	Red	4 blinks, 1 blink every second followed by a 2 second pause	Power failure (power supply overload)
Power	Red	5 blinks, 1 blink every second followed by a 2 second pause	Pre-video memory error
Power	Red	6 blinks, 1 blink every second followed by a 2 second pause	Pre-video graphics error
Power	Red	7 blinks, 1 blink every second followed by a 2 second pause	System board failure (ROM)
Power	Red	8 blinks, 1 blink every second followed by a 2 second pause	Invalid ROM based on Checksum
Power	Red	9 blinks, 1 blink every second followed by a 2 second pause	System powers on but is unable to boot
Power	Red	10 blinks, 1 blink every second followed by a 2 second pause	Bad option card
Power	Red	11 blinks, 1 blink every second followed by a 2 second pause	Current processor does not support a feature previously enabled.
none	none	System does not power on and LEDs are not flashing	System unable to power on

System Board



System Board Connectors and Jumpers (component location may vary)

PCI1	PCI expansion slot	ATX_POWER	Main power connector
PCI2	PCI expansion slot	CLR_CMOS	CMOS header
PCIEX1	PCIe x1 expansion slot	CLR_PASS	Password header
PCIEX16	PCIe X16 expansion slot	HOOD_SENSE	Hood sensor connector
SPDIF_OUT1	S/PDIF audio connector	LPT	Parallel port connector
AUDIO	Audio connectors	F_PANEL	Front panel connector
LAN+USB	LAN + USB connector	SATA1	2nd hard drive
USB1	USB connectors	SATA0	1st hard drive
DVI+VGA	DVI and monitor ports	SATA2	1st optical drive
COM1	Serial connector	SATA3	2nd optical drive
PS2	Legacy keyboard and mouse connectors	F_USB1	1st USB connector
SYS_FAN	Fan connector	F_USB2	2nd USB connector
ATX_CPU	CPU power connector	COM2	Serial port connector
XU1	Processor socket	BATTERY	RTC battery socket
CPU_FAN	Heat sink fan connector	INT_SPRK	Speaker connector
XMM3	Memory socket - Channel A	F_AUDIO	Front audio connector
XMM4	Memory socket - Channel B		

Common POST Error Messages

Screen Message	Probable Cause	Recommended Action
101-Option ROM Error	1. System ROM checksum error. 2. Expansion board option ROM checksum	1. Verify ROM, reflash if required 2. Remove suspected card, reboot 3. Clear CMOS memory, reboot 4. Replace system board
103-System Board Failure	DMA, timers	1. Clear CMOS memory. 2. Remove expansion boards. 3. Replace system board.
164-Memory Size Error and 201-Memory Error	Incorrect memory configuration	1. Run Setup (F10). 2. Check DIMMs for proper seating, type, and HP compatibility. 3. Remove DIMMs singularly and reboot to isolate faulty DIMM. 4. 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.	Check keyboard connection or keys. Check connector for bent or missing pins. Replace keyboard. If 304, possible system board problem.
501-Display Adapter Failure	Graphics display controller.	1. Reseat graphics card. 2. Clear CMOS. 3. Check monitor connection. 4. Replace graphics card.
1720-SMART Hard Drive Detects Imminent Failure	Hard drive is about to fail.	1. Determine if hard drive is giving correct error message. Enter Computer Setup and run the Drive Protection System test under Storage > DPS Self-test . 2. Apply hard drive firmware patch if applicable. 3. Back up contents and replace hard drive.

Password Security

Establishing a Setup or Power-On password:

- Turn on or restart the computer.
- As soon as the computer turns on, press the **Esc** key while “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen.
- Press the **F10** key to enter Computer Setup.
- To establish Setup password, select **Security > Setup Password** and follow the instructions.
- or -
To establish a Power-On password, select **Security > Power-On Password** and follow the instructions on the screen
- Before exiting, click **File > Save Changes and Exit**.

Changing a Setup or Power-On password:

- Turn on or restart the computer.
- To change the Setup password, go to step 2.
To change the Power-on password, go to step 3.
- As soon as the computer turns on:
- Press the **Esc** key while “Press the ESC key for Startup Menu” message is displayed.
- Press the **F10** key to enter Computer Setup.
 - When the key icon appears, type your current password, a slash (/) or alternate delimiter character, your new password, another slash (/) or alternate delimiter character, and your new password again as shown:
current password/new password/new password.
NOTE: Type the new password carefully since the characters do not appear on the screen.
 - Press **Enter**.

The new password will take effect the next time the computer is restarted.

Deleting a Power-On or Setup password

- Turn on or restart the computer.
To delete the Setup password, go to step 2.
To delete the Power-On password, go to step 3.
- As soon as the computer turns on:
- Press the **Esc** key while “Press the ESC key for Startup Menu” message is displayed.
- Press the **F10** key to enter Computer Setup.
- When the key icon appears, type your current password followed by a slash (/) or alternate delimiter character as shown. Example: *currentpassword/*
- Press **Enter**.

Clearing CMOS

- Turn off the computer and disconnect the power cord from the power outlet.
- Remove the access panel.
- On the system board, locate the CLR_CMOS header.
- Remove the jumper from pins 2 and 3.
- Place the jumper on pins 1 or 2.
- Replace the jumper on pins 2 and 3.
- Replace the chassis access panel and reconnect the power cord.
- Turn on the computer and allow it to start.

Clearing Passwords

- Turn off the computer and disconnect the power cord from the power outlet.
- Remove the access panel.
- On the system board, locate the CLR_PASS header.
- Remove the jumper from pins 2 and 3.
- Place the jumper on pins 1 or 2.
- Replace the jumper on pins 2 and 3.
- Replace the chassis access panel and reconnect the power cord.
- Turn on the computer and allow it to start.

System Setup and Boot

Access the Setup Utility during the computer boot sequence by pressing the **Esc** key while “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen, and then pressing the **F10** key. If you do not press **Esc** at the appropriate time, you must restart the computer and again press **Esc** when the monitor light turns green to access the utility.

Computer Setup Menu

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 Cache size (L1/L2/L3) Installed memory size/speed/chan Integrated MAC Address System BIOS Chassis serial number
	About - Displays copyright notice.
	Set Time and Date - Allows you to set system time and date.
	Apply Defaults and Exit - Applies the selected default settings and clears any established passwords.
	Ignore Changes and Exit - Exits Computer setup without saving 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. The following options are available: <ul style="list-style-type: none"> CD-ROM - Let you view model, firmware version, serial number Hard Disk - Let you view drive size, model, firmware version, serial number. Also lets you set Emulation Type (hard disk or n one).
	Storage Options - Allows you to set SATA Emulation - IDE or AHCI.
	DPS Self-Test - Allows you to execute self-tests on ATA hard drives.
	Boot Order - Allows you to specify boot order. <ul style="list-style-type: none"> Shortcut to Temporarily Override Boot Order
	Security
Security	Setup Password - Allows you to set and enable the setup (Admin) 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 Setup Browse Mode, set password prompt, enable/disable network server mode, specify password requirement for warm boot, and set stringent passwords.
	Device Security - Allows you to set Device Available/Device Hidden for: embedded security devices, serial and parallel ports, system audio, network controller, and SATA ports.
	USB Security - Allows you to set Device Available/Device Hidden for front, rear, and internal USB ports.
	Slot Security - Allows you to disable any PCI or PCI Express slot.
	Network Boot - Enables/disables boot from OS (NIC models only).
	System IDs - Allows you to set Product name, serial number, UUID, SKU number, family name, asset tag, feature byte, build ID, keyboard locale setting for system ID entry.
	System Security (some models) - Allows you to enable/disable: <ul style="list-style-type: none"> Data Execution Prevention (enable/disable) Virtualization Technology (VTx/VTd) (enable/disable) Intel TXT (LT) (enable/disable) Embedded Security Device Support (enable/disable) OS management of Embedded Security Device (enable/disable) Reset of Embedded Security Device through OS (enable/disable)
	DriveLock Security - Allows you to assign or modify a master or user password for hard drives.
Power	OS Power Management (some models) - Allows you to enable/disable Run-time Power Management, Idle Power Savings, Unique Sleep State Blink Rates.
	Hardware Power Management - Allows you to enable/disable SATA bus power management, S5 maximum power savings, and S5 Wake On LAN.
	Thermal - Allows you to view CPU and system fan speeds.
Advanced	Power-On Options - Allows you to set: <ul style="list-style-type: none"> POST messages - Enable/disable After Power Loss - Off/on/previous state POST Delay - None, 5, 10, 15, or 20 seconds
	BIOS Power-On - Allows you to set the computer to turn on at a preset time.
	Bus Options (some models) - Allows you to enable/disable PCI SERR# Generation and PCI VGA palette snooping.
	Onboard Devices - Allows you to set resources for or disable onboard system devices (serial port or parallel port).
	Device Options - Allows you to set: <ul style="list-style-type: none"> Printer mode - Bi-Directional, EPP + ECP, Output Only) Num Lock State at Power-on - off/on Integrated Video - enable/disable Multi-Processor - enable/disable Hyper-threading - enable/disable NIC PXE Option ROM Download - enable/disable
	VGA Configuration - Displayed only if there are multiple PCI video adapters in the system. Allows you to specify which VGA controller will be the “boot” or primary VGA controller.
AMT Configuration - Allows you to set: <ul style="list-style-type: none"> AMT-enable/disable functions of the embedded Management Engine (ME) such as Active Management Technology (AMT). Unconfigure AMT/ME-unconfigure any provisioned management settings for AMT. Watchdog Timer-set amount of time for a operating system and BIOS watchdog alert to be sent if the timers are not deactivated. 	