Illustrated Parts & Service Map
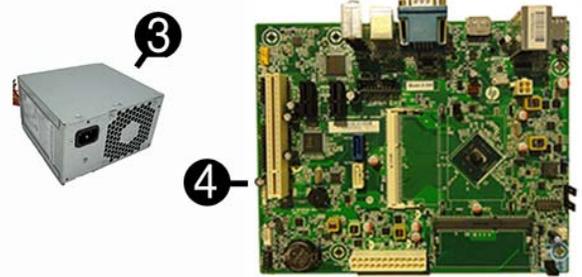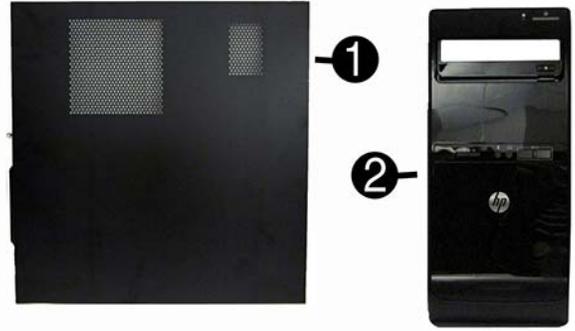
HP 200 G1 Microtower

Key specifications

Processor type	Intel Pentium or Celeron
RAM type	PC3L-12800 DDR3L (1600 MHz) SODIMM
Maximum RAM	8 GB
Expansion slots	(2) PCIe x1, (1) PCI
Chipset	Integrated with processor
Graphics adapter	Integrated Intel HD
I/O Interfaces	Front: (2) USB 2.0 ports; microphone in; headphone out Rear: (2) USB 2.0, VGA, DisplayPort, RJ-45, Serial Port (COM), PS/2 keyboard, PS/2 mouse, audio line out, audio line in, microphone in
Preinstalled operating systems	• Windows 8.1 • Windows 7 • FreeDos 2.0 • Ubuntu Linux

Spare parts
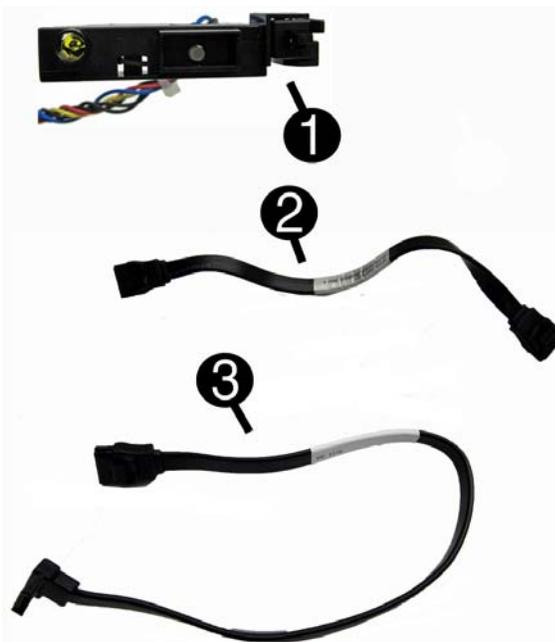
Cables

1	Power switch/LED assembly with cable	667850-001
2	SATA cable, 165 mm, 2 straight ends	660146-001
3	SATA cable, 254 mm, 1 straight end, 1 right angled end	667854-001
*	SATA cable, hard drive, 254 mm, 2 straight ends	660147-001

Not illustrated

Memory and storage (not illustrated)

Memory modules (PC3L-12800, 1666-MHz, SODIMM)

*	2 GB	689372-001
*	4 GB	689373-001

Mass storage devices

*	SuperMulti DVD±RW drive	690418-001
*	16X SATA DVD-ROM drive	581599-001
*	1 TB hard drive	667719-001
*	500 GB hard drive	667720-001

System unit

1	Access panel	674373-001
2	Front bezel	751588-001

Power supplies

3	Power supply, 180W, APFC	751590-001
*	Power supply, 180W, Energy Star 6	751589-001

System boards with processor (include thermal material)

4	Intel Pentium J2950 processor without Windows 8	776903-001
4	Intel Pentium J2950 processor with Windows 8.1 Standard	776903-501
4	Intel Pentium J2950 processor with Windows 8.1 Professional	776903-601
4	Intel Pentium J2850 processor without Windows 8	755525-001
4	Intel Pentium J2850 processor with Windows 8.1 Standard	755525-501
4	Intel Pentium J2850 processor with Windows 8.1 Professional	755525-601
4	Intel Celeron J1900 processor without Windows 8	776904-001
4	Intel Celeron J1900 processor with Windows 8.1 Standard	776904-501
4	Intel Celeron J1900 processor with Windows 8.1 Professional	776904-601
4	Intel Celeron J1850 processor without Windows 8	755526-001
4	Intel Celeron J1850 processor with Windows 8.1 Standard	755526-501
4	Intel Celeron J1850 processor with Windows 8.1 Professional	755526-601
4	Intel Celeron J1800 processor without Windows 8	776905-001
4	Intel Celeron J1800 processor with Windows 8.1 Standard	776905-501
4	Intel Celeron J1800 processor with Windows 8.1 Professional	776905-601
4	Intel Celeron J1750 processor without Windows 8	755527-001
4	Intel Celeron J1750 processor with Windows 8.1 Standard	755527-501
4	Intel Celeron J1750 processor with Windows 8.1 Professional	755527-601

Not illustrated

Miscellaneous parts

1	Front USB and I/O assembly	667853-001
2	Speaker	751593-001
*	Universal USB wired optical mouse	719901-001
*	HP USB wired optical mouse	723313-001

Not illustrated

Keyboards (not illustrated)

USB, wired Windows 8 keyboard, blue*	537924-xx1
USB, HP Essential**	729339-xx1
USB, wired Windows 8***	709695-xx1
HP USB, wired with volume control	723314-xx1

People's Republic of China	-AA1	South Korea	-KDx
French Canadian	-12x	Taiwanese	-ABx
International English	-L3x	Thai	-28x
LA Spanish	-16x	United States	-00x

*-161 only
**-001, -AA1, -281, -AB1 only
***-L31, -KD1, -121 only

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 of 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.

Password security

Establishing a Setup or Power-On password:

1. Turn on or restart the computer.

2. 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.

3. Press the **F10** key to enter Computer Setup.

4. 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

5. Before exiting, click **File > Save Changes and Exit**.

Changing a Setup or Power-on password:

1. 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.

2. To change the Setup password, 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.

3. 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.

4. Press **Enter**.

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

Deleting a Setup or Power-on password

1. 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.

2. To change the Setup password, 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.

3. When the key icon appears, type your current password followed by a slash (/) or alternate delimiter character as shown. Example: currentpassword/

4. Press **Enter**.

Clearing CMOS

1. Turn off the computer and disconnect the power cord from the power outlet.

2. Remove the access panel.

3. On the system board, locate the CLR_CMOS header.

4. Remove the jumper from pins 2 and 3.

5. Place the jumper on pins 1 or 2.

6. Replace the jumper on pins 2 and 3.

7. Replace the chassis access panel and reconnect the power cord.

8. Turn on the computer and allow it to start.

Clearing passwords

1. Turn off the computer and disconnect the power cord from the power outlet.

2. Remove the access panel.

3. On the system board, locate the CLR_PASS header.

4. Remove the jumper from pins 2 and 3.

5. Place the jumper on pins 1 or 2.

6. Replace the jumper on pins 2 and 3.

7. Replace the chassis access panel and reconnect the power cord.

8. 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: • Manufacturer • Product name • SKU number • Serial number • Asset tag • Born on date • System board ID • Product configuration ID • System board CT number • BIOS revision • BIOS date • Processor type/speed • Installed memory size
	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: • CD-ROM - Let you view model, firmware version, serial number • Hard Disk - Let you view drive size, model, firmware version, serial number.
	Storage Options - Allows you to set SATA Emulation, IDE or AHCI.
	DPS Self-test - Allows you to execute self tests on hard drives.
	Boot Order - Allows you to specify boot order among EFI and legacy boot sources. • Shortcut to Temporarily Override Boot Order
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.
	Device Security - Allows you to set Device Available/Device Hidden for: system audio, network controller, and SATA ports.
	USB Security - no supported.
	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: • Virtualization Technology (VTx/VTd) (enable/disable)
	Secure Boot Configuration (Windows 8 only) - Lets you enable/disable legacy support, secure boot, and configure key management and fast boot.
Power	Hardware Power Management - Allows you to enable/disable SATA power management and S5 Wake On LAN.
	Thermal - Allows you to view CPU fan speed and enable/disable CPU fan check.
Advanced	Power-On Options - Allows you to set: • 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.
	Device Options - Allows you to set: • Num Lock State at Power-on - off/on • Internal speaker - enable/disable • NIC PXE Option - enable/disable • Multi-Processor - not supported • Hyper threading - enable/disable • Processor Frequency Multiplier

Diagnostic LEDs

LED	Color	LED activity	State/message
Power	White	On	Computer on
Power	White	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)

PCI	PCI expansion slot	CLR_CMOS	CMOS header
PCI_EX1_1	PCIe x1 expansion slot	XMM1	Memory socket – Channel A
PCI_EX1_2	PCIe x2 expansion slot	ATX_POWER	Main power connector
AUDIO	Audio connector	BAT	RTC battery socket
KB_MS	Keyboard and mouse PS/2 connectors	F_PANEL	Power switch connector
VGA+COM1	Monitor connector/serial port	F_USB2	Front I/O assembly USB connector
DP	DisplayPort connector	SATA1	Optical drive data connector
RJ45_USB	Network connector/USB ports	LPT	Parallel port
USB 3.0	USB 3.0 connector	SATA0	Hard drive data connector
CPU_PWR	CPU power connector	COM2	Second serial port connector
XMM2	Memory socket – Channel B	INT_SPKR	Speaker connector
CPU_FAN	Processor fan connector	F_AUDIO	Front I/O assembly audio connector
CLR_PASS	Password header		