

Illustrated Parts & Service Map

HP ProDesk 202 G1 Microtower



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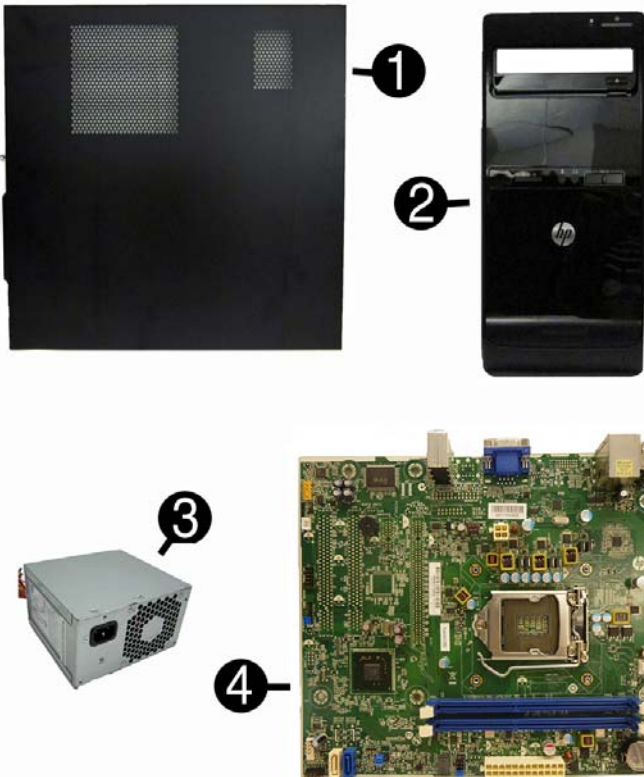
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Key Specifications

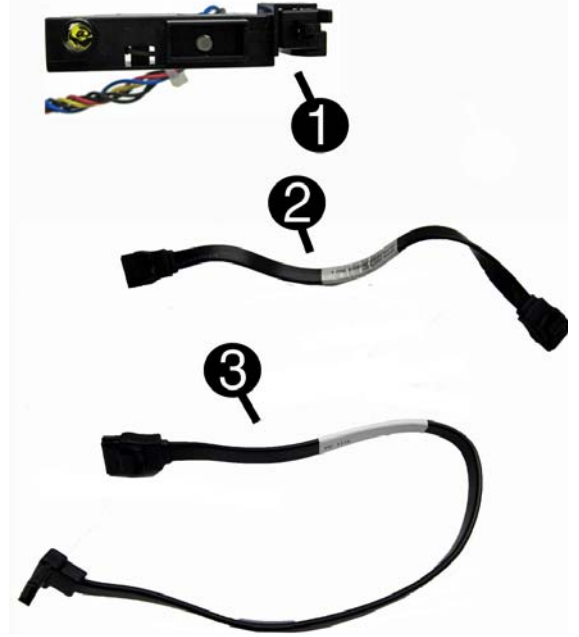
Processor Type	Intel, Pentium or Celeron
RAM Type	PC3-12800 DDR3 (1600 MHz) UDIMM
Maximum RAM	8 GB
Expansion Slots	none
Chipset	Intel H61 Express
Graphics Adapter	Integrated Intel HD
I/O Interfaces	Front: (2) USB 2.0 ports; microphone in; headphone out Rear: (4) USB 2.0 ports; (1) RJ-45 network connector; 3.5mm audio in/out jacks; microphone in
Preinstalled Operating Systems	<ul style="list-style-type: none"> Windows 8 Windows 7 FreeDOS 2.0

Spare Parts



System Unit		
1	Access panel	674373-001
2	Front bezel	751588-001
Power supplies		
3	Power supply, 180W, standard	752239-001
*	Power supply, 180W, APFC	751590-001
*	Power supply, 180W, Energy Star 6	751589-001
*	Power supply, 300W (for use only in India)	689005-001
System boards with thermal material		
4	System board for use in models without Windows 8	747825-001
*	System board for use in models with Windows 8 Standard	747825-501
*	System board for use in models with Windows 8 Professional	747825-601

* Not illustrated



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, Storage, Processors (not illustrated)

Memory modules		
*	2 GB	671612-001
*	4 GB	671613-001
Processors (include thermal material)		
*	Intel Core i5 3340, 3.1 GHz, 6-MB L3 cache, 77W	751592-001
*	Intel Core i3 3240, 3.4 GHz, 3-MB L3 cache, 55W	688951-001
*	Intel Pentium G2030, 3.0 GHz, 3-MB L3 cache, 55W	728681-001
*	Intel Celeron G1610, 2.6 GHz, 2-MB L3 cache, 55W	715893-001
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



Miscellaneous Parts

1	Fan sink	751587-001
2	Front USB and I/O assembly	667853-001
3	Speaker	751593-001
*	Keyboard, unbranded, Katydid, English	709695-L31
*	Keyboard, unbranded, Katydid, South Korea	709695-KD1
*	Keyboard, USB, HP Essential, People's Republic of China	729339-AA1
*	Keyboard, USB, HP Essential, Taiwan	729339-AB1
*	Keyboard, USB, HP Essential, Thailand	729339-281
*	Keyboard, USB, Canberra	723314-AA1
*	Unbranded, Portia	719901-001
*	Mouse, USB, optical	723313-001

*Not illustrated

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"> 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: <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.
	Storage Options - Allows you to set SATA Emulation, IDE or AHCI.
	Boot Order - Allows you to specify boot order. <ul style="list-style-type: none"> 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 - Allows you to set Device Available/Device Hidden for front, rear, and accessory 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)
	Secure Boot Configuration (Windows 8 only) - Lets you enable/disable legacy support, secure boot, and configure key management and fast boot.
	Power
Thermal - Allows you to view CPU fan speed and enable/disable CPU fan check.	
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.
	Device Options - Allows you to set: <ul style="list-style-type: none"> Num Lock State at Power-on - off/on Internal speaker - enable/disable NIC PXE Option - enable/disable Multi-Processor - enable/disable 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

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.

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.
 - 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.
 - 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

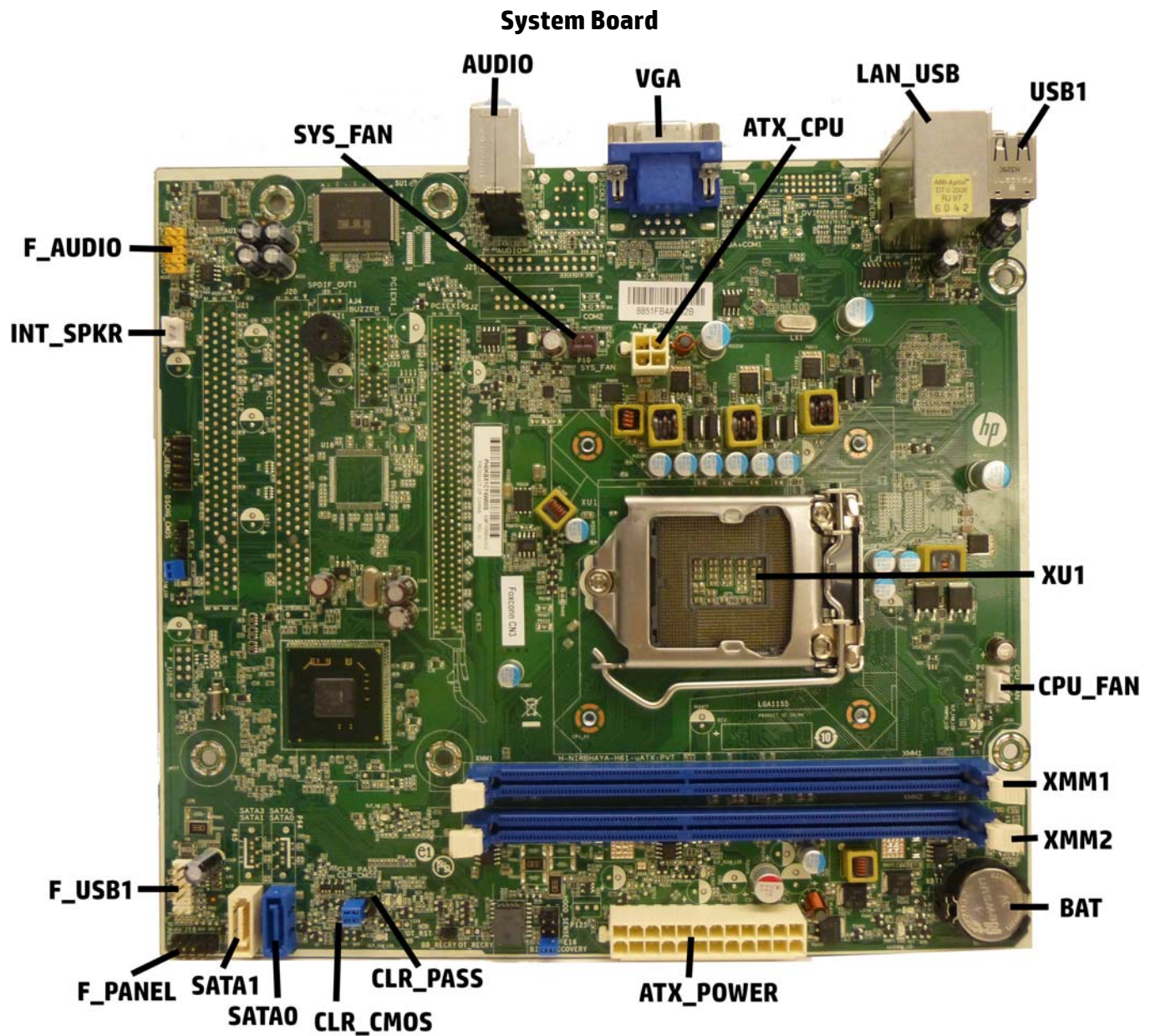
- Turn on or restart the computer. To delete the Setup password, go to step 2. To delete the Power-On password, go to step 3.
- To change the Setup password, as soon as the computer turns on:
 - Press the **Esc** key while “Press the ESC key for Startup Menu” message is displayed.
 - Press the **F10** key to enter Computer Setup.
- 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 Board Connectors and Jumpers (component location may vary)

AUDIO	Audio connectors	ATX_POWER	Main power connector
VGA	Monitor connector	CLR_PASS	Password header
ATX_CPU	CPU power connector	CLR_CMOS	CMOS header
LAN_USB	Network connector/USB ports	SATA0	Hard drive data connector
USB1	USB connectors	SATA1	Optical drive data connector
XU1	Processor socket	F_PANEL	Power switch connector
CPU_FAN	Processor fan connector	F_USB1	Front I/O assembly USB connector
XMM1	Memory socket - Channel B	INT_SPKR	Speaker connector
XMM2	Memory socket - Channel A	F_PANEL	Front I/O assembly audio connector
BAT	RTC battery socket		