Illustrated Parts & Service Map
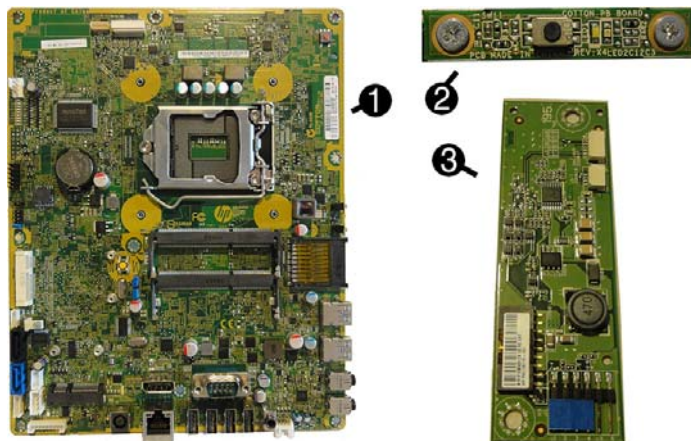
HP ProOne 400 G1 All-in-One Business PC

Key Specifications

Processor Type	Intel® 4th Generation Pentium®, Core™ i3, i5, i7
RAM Type	Non-ECC, DDR3 SDRAM, 1600 MHz, SODIMM, 2 slots
Maximum RAM	16 GB
Expansion Slot	(1) Mini PCIe half-length (used by wireless LAN module)
Chipset	Intel H81 Express
Bays	• (1) 3.5" internal; Supports one - 3.5" hard drive or one - 2.5" hard drive (HDD/SSD/SED/SSHD) • (1) 5.25" external; Slim Line Optical Drive
I/O Interfaces	Side: (2) USB 3.0 ports, including (1) fast charging port; (1) microphone; (1) headphone; (1) SD card reader (optional) Rear: (4) USB 2.0 ports; (1) DisplayPort video port; (1) RJ-45 Gigabit Ethernet network connector; (1) RS-232 serial port; (1) 3.5mm stereo line out jack
Display	19.5" diagonal TN widescreen WLED backlit anti-glare LCD (non-touch)
Operating Systems	• Windows 8.1 • Windows 7 • FreeDOS • Novell SUSE Linux Enterprise Desktop 11

Spare Parts
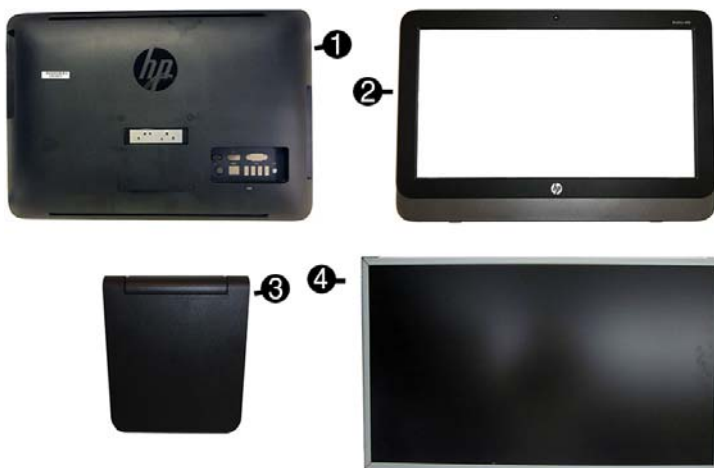
System Unit

1	Rear cover	754737-001
2	Front bezel	754736-001
3	Stand assembly	754741-001
4	Display panel, WLED	754735-001
*	Power supply, 120W	740243-001

Not shown

Cables (not illustrated)

*	Power button board cable	754083-001
*	Backlight cable	755426-001
*	Optical drive connector and cables	754081-001
*	Hard drive connector and cables	754082-001
*	Converter board cable	754080-001
*	LVDS (display) cable	754079-001
*	Webcam cable	754084-001
*	Adapter, DisplayPort to VGA	603250-001
*	Adapter, DisplayPort to DVI	662723-001
*	Adapter, DisplayPort to HDMI	617450-001
*	DisplayPort cable	487562-001

Standard and Optional Boards

System Boards

1	System board for use in models without Windows 8	737339-001
*	System board for use in models with Windows Standard	737339-501
*	System board for use in models with Windows Professional	737339-601
*	System board for use in NetClone models	757991-001
2	Power button board	754087-001
3	Converter board	754089-001
*	Webcam	763215-001
*	HP WLAN 802.11 a/b/g/n + Bluetooth 4.0	697316-001
*	HP WLAN 802.11 a/g/n, for use only in Indonesia	750147-001
*	HP WLAN 802.11 a/b/g/n, 2x2	717382-001

Memory Modules

*	8-GB	689374-001
*	4-GB	689373-001
*	2-GB	689372-001

Processors (include thermal material)

|		
*	Intel Core i7 4770T processor, 2.5 GHz, 8-MB L3 cache, 45W	758446-001
*	Intel Core i7 4765T processor, 2.0 GHz, 8-MB L3 cache, 35W	754000-001
*	Intel Core i5 4670T processor, 2.3 GHz, 6-MB L3 cache, 45W	753999-001
*	Intel Core i5 4570T processor, 2.9 GHz, 4-MB L3 cache, 35W	753998-001
*	Intel Core i3 4330T processor, 3.0 GHz, 4-MB L3 cache, 35W	753995-001
*	Intel Core i3 4130T processor, 2.9 GHz, 3-MB L3 cache, 35W	757416-001
*	Intel Pentium G3420T processor, 2.7 GHz, 3-MB L3 cache, 35W	753997-001
*	Intel Pentium G3220T processor, 2.6 GHz, 3-MB L3 cache, 35W	753996-001
*	Intel Celeron G1820T processor, 2.4 GHz, 2-MB L3 cache, 35W	753994-001

Not shown

Keyboards (not illustrated)

USB	**724720-xx1**
Wireless with mouse and dongle	**730323-xx1**
Wireless keyboard and dongle*	**724722-201**
Washable**	**700510-xx1**
Smart card, CCID	**701671-xx1**

Arabic	–17x	Japanese	–29x
F Arabic	–DE1	LA Spanish	–16x
BHCSY	–B41	Norwegian	–09x
Belgian	–18x	People's Republic of China	–AAx
Brazilian Portuguese	–20x	Portuguese	–13x
Bulgaria	–26x	Romanian	–27x
Czech and Slovakian	–22x	Russian	–25x
Danish	–08x	Slovenian	–23x
French	–05x	South Korea	–KDx
French Canadian	–12x	Spanish	–07x
German	–04x	Swedish	–10x
Greek	–15x	Swiss	–11x
Hebrew	–BBx	Taiwanese	–ABx
Hungarian	–21x	Thai	–28x
India	–D61	Turkish	–14x
International	–37x	U.S.	–00x
International English	–L3x	U.K.	–03x
Italian	–06x		

* only for Brazil   *** -001, -121, -161, -201 only*
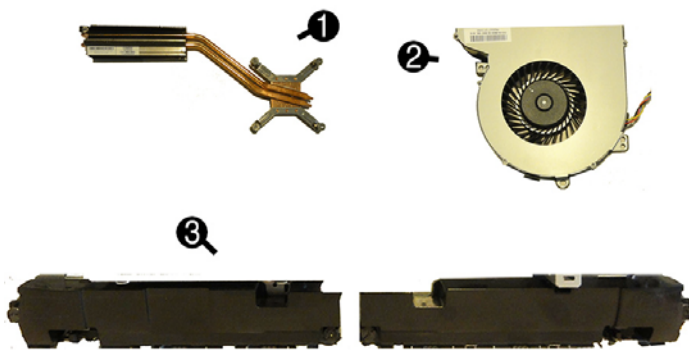
Miscellaneous Parts

1	Heat sink	754085-001
2	Fan/blower	754086-001
3	Speakers (left and right)	754090-001
*	HP Ultraslim Keyed Cable Lock	703372-001
*	Hard drive removable frame carrier	732060-001
*	Card reader cover (for use in models without a card reader)	754075-001
*	Hard drive carrier, 2.5-inch to 3.5-inch	703597-001
*	Mouse, washable	724795-001
*	Mouse, wireless	674317-001
*	Mouse, USB, optical	674316-001
*	Mouse, USB, laser	674318-001
*	Webcam cover for models without a webcam	754074-001
*	Antenna kit	754088-001

Not shown

Mass Storage Devices (not illustrated)

Optical drives:

Blu-ray writer (BD-RE) drive	719157-001
DVD-ROM drive	608394-001
DVD±RW drive	657958-001
Optical drive bezel (for use in models without an optical drive)	754073-001

Hard drives/solid-state drives (SSDs):

2 TB, 7200 rpm hard drive	616608-001
1 TB, 7200 rpm hard drive	621418-001
1 TB, 7200 rpm, hard drive, 2.5-inch, SSHD	724937-001
500 GB, 7200 rpm hard drive, 2.5-inch	686217-001
500 GB, 7200 rpm, hard drive, 2.5-inch, SSHD	724938-001
500 GB, 7200 rpm hard drive, 2.5-inch, SATA-6G	754078-001
320 GB, 7200 rpm hard drive, 2.5-inch	639135-001
320 GB, 7200 rpm hard drive, 2.5-inch, SATA-6G	754077-001
256 GB solid-state drive (SSD), self-encrypting (SED)	680020-001
180 GB solid-state drive (SSD), SATA 6.0, MLC	754076-001
180 GB solid-state drive (SSD), SATA 6.0	696622-001
128 GB solid-state drive (SSD)	728559-001
128 GB solid-state drive (SSD), Self-encrypting Drive (SED), SATA 6.0	746140-001
120 GB solid-state drive (SSD), SATA 6.0, MLC	756459-001
Hard drive removable frame carrier	732060-001
Adapter, 2.5" to 3.5" hard drive	703597-001

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	2 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	11 blinks, 1 blink every second followed by a 2 second pause	Current processor does not support a feature previously enabled.
Power	Red	12 blinks, 1 blink every second followed by a 2 second pause	MXM thermal shutdown
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	System ROM checksum error.	1. Verify ROM, reflash if required 2. Clear CMOS memory, reboot 3. Replace system board
103-System Board Failure	DMA, timers	1. Clear CMOS memory. 2. 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, 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	1. Check DIMMs for proper seating, type, compatibility. 2. Rearrange the DIMMs so that each channel has the same amount of memory.
301-, 304-Keyboard error	Keyboard failure.	Check kybd connection or keys. Check connector for bent or missing pins. Replace kybd. If 304, possible system board problem.
501-Display Adapter Failure	Graphics display controller.	1. Reseat graphics card. 2. Clear CMOS. 3. 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:

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 Power-On or Setup 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 rear cover.
3. On the system board, press and hold the CMOS button for 5 seconds.
4. Replace the chassis access panel and reconnect the power cord.
5. Turn on the computer and allow it to start.

System Setup and Boot

Access the Setup Utility during computer boot by pressing the **F10** key. If you do not press **F10** at the appropriate time, you must restart the computer and again press **F10** when the monitor light turns green. NOTE: Not all settings are available for all models.

Computer Setup Menu

Heading	Option/Description
File	System Information - Lists the following main system specifications: • Product name • Manufacturer • SKU number • Processor type/speed/stepping • Installed memory size/speed/ch • Integrated MAC Address • Chassis serial number • Asset tracking number • System board ID • System board CT Number • BIOS
	About - Displays copyright notice.
	Set Time and Date - Allows you to set system time and date.
	Flash System ROM - Allows you to update the system ROM with a BIOS image file located on removable media.
	Replicated Setup - Allows you to save or restore system configuration to/from a USB flash drive.
	Default Setup - Allows you to save current settings as default or restore factory settings as default.
	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 • Hard Disk • Diskette (external USB)
	Storage Options - Allows you to set: • SATA Emulation - Choose how the SATA controller and devices are accessed by the OS. SATA Emulation choices are AHCI or IDE. • Removable Media Boot - Enables/disables ability to boot the system from removable media.
	Boot Order - Specify boot order for UEFI and legacy boot sources. Also specify hard drive boot order. • Shortcut to Temporarily Override Boot Order
Security	Setup Password - Set and enable the setup (Admin) password.
	Power-On Password - Set and enable power-on password.
	Password Options - Allows to you enable/disable: • Lock Legacy Resources • Setup Browse Mode • Password prompt on F9 & F12 • Network Server Mode • Stringent Password
	Device Security - Set Device Available/Device Hidden for: system audio, network controller, and SATA ports.
	USB Security - Set Device Available/Device Hidden for front USB ports, rear USB ports, accessory USB ports.
	Slot Security - Disable any PCI, or PCIe slots.
	Network Boot - Enables/disables boot from OS (NIC models only).
	System IDs - Allows you to update asset tag, ownership tag, UUID, keyboard locale setting.
	Master Boot Record Security - enables/disables MBR.
	System Security - Allows you to set: • Data Execution Prevention (enable/disable) • Virtualization Technology (VTx) (enable/disable) • Virtualization Technology/Directed IO (VTd) (enable/disable) • Button Retask Password Protection (enable/disable)
	DriveLock Security - Allows you to assign or modify a master or user password for hard drives.
	Secure Boot Configuration (Windows 8 only) • Legacy Support (enable/disable) • Secure Boot (enable/disable). • Key Management (enable/disable) • Fast Boot (enable/disable)
Power	OS Power Management - Allows you to enable/disable Runtime Power Management, Idle Power Savings, Unique Sleep State Blink Rates.
	Hardware Power Management - Enable/disable SATA power management, S5 maximum power savings., PCI slots, network controller, USB 3.0 controller
	Thermal - Control minimum fan speed.
Advanced	Power-On Options - Allows you to set: • POST mode (QuickBoot, Clear Memory, FullBoot, or FullBoot Every x Days) • POST messages (enable/disable) • Press the ESC key for Startup Menu (enable/disable) • Option ROM Prompt (enable/disable) • After Power Loss (off/on/previous state) • POST Delay (none, 5, 10, 15, 20, or 60 seconds) • Remote Wakeup Boot Source (remote server/local hard drive) • Factory Recovery Boot Support (enable/disable) • Bypass F1 Prompt on Configuration Changes (enable/disable) • POST Memory Manager Runtime Allocation (enable/disable).
	BIOS Power-On - Set the computer to turn on at a preset time.
	Bus Options - Allows you to enable/disable PCI SERR# Generation and PCI VGA palette snooping.
	Onboard Devices - Allows you to set resources for or disable on-board system devices.
	Device Options - Allows you to set: • Turbo Mode (enable/disable) • Num Lock State at Power-on (off/on) • Internal Speaker (enable/disable) • Multi-Processor (enable/disable) • USB 3.0 BIOS Driver Support • Hyper-threading • USB Charging Port (enable/disable)
	VGA Configuration - Allows you to specify which VGA controller is the "boot"/primary. Displayed only if add-in video card installed.
	Option ROM Launch Policy - Allows you to set: • PXE Option ROMs (UEFI Only/Do Not Launch) • Storage Option ROMs (UEFI Only/Do Not Launch) • Video Option ROMs (UEFI Only/Do Not Launch) • NetClone Option ROMs (Legacy Only/Do Not Launch)
	PCIe Family Controller - Provides info about the PCIe controller, including: • Driver Name • Driver Version • Drive Release Date • Device Name • PCI Slot • MAC Address

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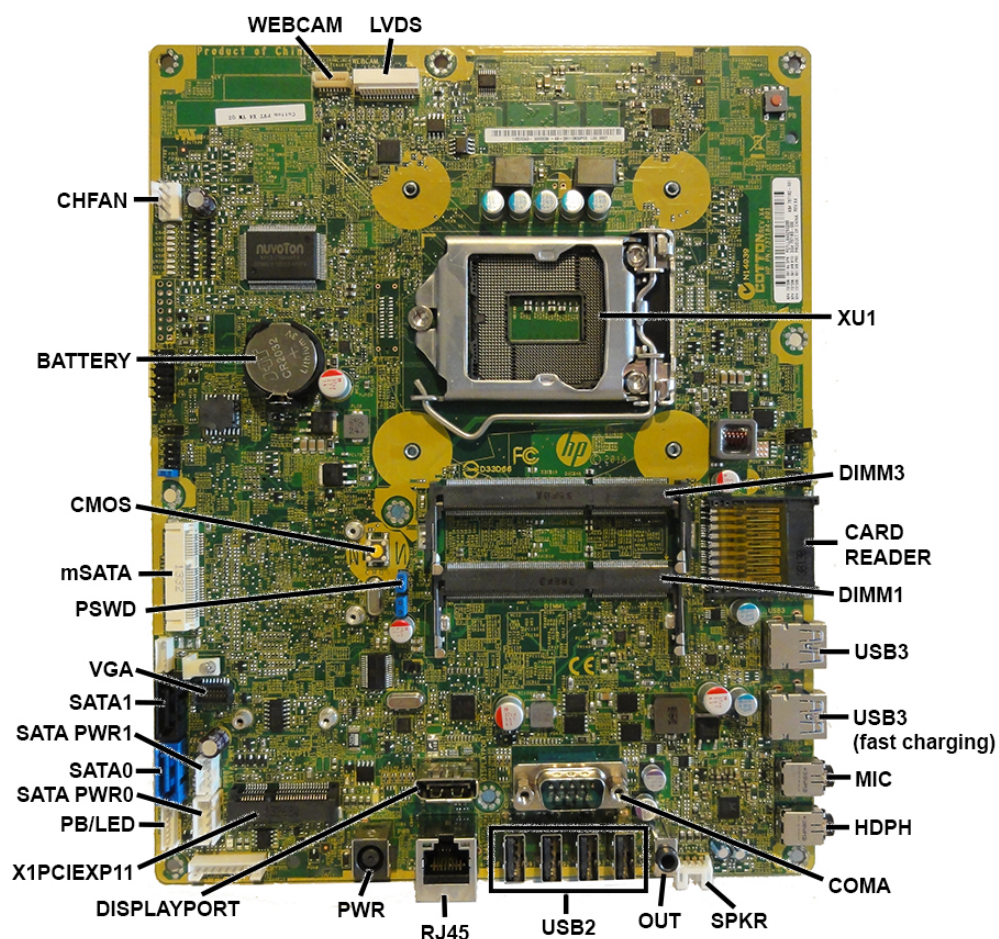
System Board Connectors and Jumpers (component location may vary)

WEBCAM	Webcam connector	PWR	Main power connector
LVDS	Display connector	DISPLAYPORT	DisplayPort connector
XU1	Processor socket	X1PCIEXP11	PCIe Express Mini slot
DIMM3	Memory socket - Channel B	PB/LED	Power switch connector
CARD READER	Card reader slot	SATA PWR0	Hard drive power connector
DIMM1	Memory socket - Channel A	SATA0	Hard drive data connector
USB3	Two external USB 3.0 connectors, one with USB 3.0, fast-charging support	SATA PWR1	Optical drive power connector
MIC	External microphone connector	SATA1	Optical drive data connector
HDPH	External headphone connector	VGA	Display connector
COMA	Serial port	PSWD	Password header
SPKR	Speaker connector	mSATA	mSATA slot
OUT	External audio out connector	CMOS	CMOS button
USB2	External USB 2.0 connectors	BATTERY	RTC battery socket
RJ45	Network jack	CHFAN	Fan connector