# **Illustrated Parts & Service Map**

# HP Pro 1105 Series All-in-One Business PC



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## **Key Specifications**

Processor Type	AMD Dual Core E1-1200 (1.40 GHz, 1 MB L2 cache)	
RAM Type	PC3-10600 DDR3, 1333 MHz, non-ECC SDRAM	
Maximum RAM Supported	8 GB (2 SODIMM slots)	
Display	18.5-inch, HD, anti-glare, non-touch	
Expansion Slots	(1) Mini PCIe x1, half-height	
Graphics Adapter	Integrated ATI Radeon HD 7310 Microsoft® DirectX® 11 capable	
Chipset	AMD A68 FCH	
Drive Support	(1) 5.25-inch Slimline, (1) 3.5-inch hard drive	
I/O Interfaces	<u>Side</u> : (2) USB 3.0, (1) microphone in, (1) headphone out, (1) 6-in-1 card reader <u>Rear</u> : (4) USB 2.0, (1) Power connector, (1) RJ-45 Ethernet, (1) Stereo audio line out	
Operating Systems	Windows 8 Professional 64-bit Windows 8 64-bit FreeDOS	

# **Spare Parts**



# System Unit

1	Front bezel	710542-001	
Dis	Display panel, 18.5-inch, CCFL, non-ZBD, 200 nits		
2	2 AUO 7		
* CMO		710539-001	
* LG 7		710540-001	
3 Rear cover (does not include stand) 6699		669985-001	
4 Foot assembly 669986-		669986-001	
5 Side I/O cover assembly, USB 3.0 71054		710543-001	
6 Stand 669988		669988-001	
* Mylar, for use on stand hinge 669994		669994-001	

\* Not shown



### **Miscellaneous Parts**

1	Fan (blower)	669981-001
2	2 Speaker kit, includes left and right speakers	
3	3 Rubber grommet for use in the hard drive cage	
*	Mouse, USB, optical	596410-001
*	HP Business Digital Headset	642738-001

\*Not shown



# Cables

1	LVDS cable	669996-001
2	Optical drive cable	669998-002
3	Hard drive cable	669997-001
4	Webcam cable	669995-001
*	Antenna	669974-001
*	Backlight cable for use with AUO and CMI display panels	710536-001
*	Backlight cable for use with LG display panels	710537-001

#### Mass Storage Devices (not illustrated)

HP SuperMulti DVD Writer Drive (includes bezel)	657958-001
1 TB hard drive	621418-001
750 GB hard drive	632938-001
500 GB hard drive	621421-001
320 GB hard drive	621420-001
250 GB hard drive	621419-001

#### Keyboards (not illustrated)

Jade, wired, USB Wireless, OTP (-201 only) Wireless (-161 only)		655571-xx1 678360-xx1 708630-xx1	
Brazilian Portuguese -201		U.S.	-001
Latin America Spanish	-161		



#### Boards. memory processors

1	System board with AMD E1-1200 processor, USB 3.0 (includes heat sink, gasket, processor, replacement thermal material)	703642-001
2	Backlight controller	710541-001
3	Ralink RT3290LE 802.11bgn 1x1 Wi-Fi and Bluetooth 4.0 Combo Adapter (WLAN module)	701399-001
*	Ralink RT5390R 802.11bgn 1x1 Wi-Fi Adapter (WLAN module)	701396-001
4	Webcam module, 720p HD	710544-001
5	4-GB memory module (PC3-12800, SODIMM)	689373-001
*	2-GB memory module (PC3-12800, SODIMM)	689372-001
*	1-GB memory module (PC3-10600, SODIMM)	646808-001
*not il	lustrated	

## System Board



#### System Board Components

INVERTER	Inverter board connector	JSPKL1	Left speaker connector
LVDS	Display connector	JSPKR1	Right speaker connector
WEBCAM	Webcam connector	LAN1	RJ-45 network connector
JDDR2	Memory slot, channel B	USB	USB port
JDDR1	Memory slot, channel A	DC INPUT	AC power connector
WLAN	Mini PCIe slot	HDD POWER	Hard drive power connector
CARD READER	Card reader	SATA HDD	Hard drive data connector
BATTERY	RTC battery slot	SATA ODD	Optical drive data connector
USB	USB ports	ODD PWR	Optical drive power connector
JMIC1	Microphone (line in) connector	SYSTEM FAN	Fan connector
HEAD- PHONE	Headphone (line out) connector	CLR_ PASSWORD	Password jumper
LINE OUT	Line out connector	CLR CMOS	CMOS jumper

## 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     System BIOS     SKU number (some models)     Chassis serial number		
	Processor type/speed/stepping     Asset tracking number		
	Cache size (L1/L2/L3)     ME firmware version     Installed memory size/speed/cb     ME management mode		
	Integrated MAC Address		
	About - Displays copyright notice.		
	Set Time and Date - Allows you to set system time and date.		
	Replicated Setup - Allows you to save or restore system configuration to/		
	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		
Charage	default settings and exits Computer Setup.		
Siorage	devices. The following options are available:		
	CD-ROM     SSD Life Used		
	Hard Disk     SMART (ATA disks only)     Default Values     Diskette		
	Translation Mode     SATA Defaults		
	Storage Options - Allows you to set:		
	<ul> <li>SATA Fort's set SATA port as esata port of use with external drive.</li> <li>SATA Emulation - Choose how the SATA controller and devices are</li> </ul>		
	<ul> <li>accessed by the OS. SATA Emulation choices are AHCI, RAID, or IDE.</li> <li>Removable Media Boot - Enables/disables ability to boot the system</li> </ul>		
	from removable media.		
	<ul> <li>Max eSATA Speed - Allows you to choose 1.5 Gbps or 3.0 Gpbs as the maximum eSATA speed. By default, the speed is limited to 1.5</li> </ul>		
	Gbps for maximum reliability.		
	DPS Self-Test - Execute self-tests on ATA hard drives capable of per- forming the Drive Protection System (DPS) self-tests		
	Boot Order - Specify boot order for UEFI and legacy boot sources. Also		
	specify hard drive boot order.		
Security	Setup Password - Set and enable the setup (Admin) password.		
coounty	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		
	cover removal sensor to disable/notify user/setup password.		
	Device Security - Set Device Available/Device Hidden for: embedded security		
	device, system audio, network controller, USB controller, serial/parallel ports, and SATA ports.		
	USB Security - Set Device Available/Device Hidden for front USB ports,		
	rear USB ports, internal USB ports, accessory USB ports.		
	SIDE SECURITY - DISABLE THE PUL, PULE, and MINI Card Slots.		
	System IDs - Allows you to update asset tag, ownership tag UUID key-		
	board locale setting.		
	Master Boot Record Security - enables/disables MBR.		
	System Security - Allows you to set:     Data Execution Prevention (enable/disable)		
	SVM CPU Virtualization (enable/disable).		
	<ul> <li>Virtualization Technology/Directed IO (VTd) (enable/disable)</li> </ul>		
	Trusted Execution Technology (enable/disable)     Embodded Security Davias (aspha/disable)		
	<ul> <li>Reset to Factory Settings (Do not reset/Reset)</li> </ul>		
	<ul> <li>Measure boot variables/devices to PCR1 (enable/disable)</li> <li>OS management of Embedded Security Device (enable/disable)</li> </ul>		
	Reset of Embedded Security Device through OS (enable/disable)		
	<ul> <li>No PPI provisioning (Windows 8 only; enable/disable)</li> <li>Allow PPI policy to be changed by OS (enable/disable)</li> </ul>		
	DriveLock Security - Allows you to assign or modify a master or user		
	password for hard drives.		
	<ul> <li>Legacy Support (enable/disable)</li> </ul>		
	Secure Boot (enable/disable).     Kov Management (anable/disable)		
	<ul> <li>Fast Boot (enable/disable)</li> </ul>		
Power	OS Power Management - Allows you to enable/disable Runtime Power		
	Hardware Power Management - Enable/disable SATA nower 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:		
	<ul> <li>POST messages (enable/disable)</li> </ul>		
	Press the ESC key for Startup Menu (enable/disable)     Ontion ROM Promot (enable/disable)		
	After Power Loss (off/on/previous state)		
	POST Delay (none, 5, 10, 15, 20, or 60 seconds)     Bemote Wakeup Boot Source (remote server/local bard drive)		
	Factory Recovery Boot Support (enable/disable)		
	Bypass F1 Prompt on Configuration Changes (enable/disable)		
	BIOS Power-On - Set the computer to turn on at a preset time.		

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Advanced (continued)	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: Printer mode (Bi-Directional, EPP + ECP, Output Only) Num Lock State at Power-on (off/on) Integrated Video (enable/disable) Integrated Graphics (Auto/Disable/Force) Internal Speaker (enable/disable) NIC PXE Option ROM Download (enable/disable) SATA RAID Option ROM Download (enable/disable) Multi-Processor (enable/disable) Hyper-threading (enable/disable) Turbo Mode (enable/disable)
	VGA Configuration - Allows you to specify which VGA controller is the "boot"/primary. Displayed only if add-in video card installed.
	AMT Configuration - Allows you to set: • AMT (enable/disable) • Unconfigure AMT/ME (enable/disable) • Hide Unconfigure ME Confirmation Prompt (enable/disable) • Watchdog Timer (enable/disable)

#### Common POST Error Messages

Screen Message	Probable Cause	Recommended Action	
101-Option ROM Error	System ROM or expansion board option ROM check- sum.	<ol> <li>Verify ROM, reflash if required</li> <li>Remove recently added cards to see if problem remains.</li> <li>Clear CMOS. If message disappears, may be card problem.</li> <li>Replace system board</li> </ol>	
103-System Board Failure	DMA or timers	<ol> <li>Clear CMOS memory.</li> <li>Remove expansion boards.</li> <li>Replace system board.</li> </ol>	
163-Time & Date Not Set	Invalid time or date in con- figuration memory. RTC battery may need to be replaced.	Reset the date and time under Control Panel (Computer Setup can also be used). If the problem persists, replace the RTC battery.	
164-Memory Size Error	Memory amount has changed since the last boot (memory added/removed).	Press the F1 key to save the memory changes.	
164-Memory Size Error	Incorrect memory configura- tion	<ol> <li>Run Setup (F10).</li> <li>Make sure memory module(s) installed properly.</li> <li>If third-party memory added, test using HP- only memory.</li> <li>Verify proper module type.</li> </ol>	
201-Memory Size Error	RSM failure	<ol> <li>Ensure memory modules are correctly installed.</li> <li>Verify proper module type.</li> <li>Remove and replace faulty module(s).</li> <li>If error persists after replacing modules, replace system board.</li> </ol>	
214-DIMM Config- uration Warning	Populated DIMM configura- tion is not optimized	Rearrange DIMMs so that each channel has the same amount of memory.	
219-ECC Memory Module Detected ECC Modules not supported on this Platform	Recently added memory module(s) support ECC memory error correction.	<ol> <li>If additional memory was recently added, remove it to see if the problem remains.</li> <li>Check product documentation for memory support information.</li> </ol>	
301-, 304-Key- board error	Keyboard failure.	<ol> <li>Reconnect keyboard with system turned off.</li> <li>Check kybd connection or keys.</li> <li>Check connector for bent or missing pins.</li> <li>Replace keyboard.</li> <li>If 304, possible sys bd problem.</li> </ol>	
511-CPU Fan not Detected	CPU Fan not Detected.	1. Reseat CPU fan. 2. Reseat fan cable. 3. Replace CPU fan.	
1805-Ambient Temperature Pre- viously Over Limit	This system was placed in a low power state to prevent damage due to excessive environmental temperature.	<ul> <li>Make sure the system meets the HP enclosure guidelines as listed in the Quick Specs, including the following:</li> <li>Clean the air vents on the front, back, or any other vented side of the computer.</li> <li>Ensure that there is a 10.2 cm (4 in) clearance on all vented sides of the computer to permit the required airflow.</li> <li>Ensure that computers are not so near each other that they are subject to each other's re-circulated or preheated air.</li> </ul>	
2200-PMM Alloca- tion Error during MEBx Download	(2200) Memory error during POST execution of the Man- agement Engine (ME) BIOS Extensions option ROM.	<ol> <li>Reboot the computer.</li> <li>Unplug the power cord, re-seat the memory modules, and reboot the computer.</li> <li>If the memory configuration was recently</li> </ol>	
ule did not check- sum correctly 2202-PMM Deallo-	(2201) Memory error during POST execution of the Man- agement Engine (ME) BIOS Extensions option ROM.	changed, unplug the computer, restore the original memory configuration, and reboot the computer. 4. If the error persists, replace the system	
MEBx cleanup	(2202) Memory error during POST execution of the Man- agement Engine (ME) BIOS Extensions option ROM.	board.	
2230-General error during MEBx execution 2231-ME error dur- ing MEBx execu- tion 2232-AMT error during MEBx exe- cution	(2230) Error occurred during MEBx execution which fails into the "General" grouping. Status information displayed along with the error provides further clarity into the failure. MEBx handles transference of information between the system BIOS and ME firm- ware.	<ol> <li>Reboot the computer.</li> <li>If the error persists, update to the latest BIOS version and ME firmware version.</li> <li>If the error still persists, replace the system board.</li> </ol>	
2233-HECI error during MEBx exe- cution	(2231) Error occurred during MEBx execution which fails into "ME" grouping.		
	(2232) Error occurred during MEBx execution which fails into "AMT" grouping.		
	(2233) Error occurred during MEBx execution which fails into "MEI or HECI" grouping.		

# **Password Security and CMOS**

# 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.
- To establish Setup password, select Security > Setup Password and follow the instructions.
   or -

or 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.

#### Resetting a Setup or Power-On password

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 header labeled CLR PASSWORD.
- 4. Remove the jumper and place it on pins 1 and 2.
- 5. Wait for three seconds, and then replace the jumper to its original position (pins 2 and 3).
- ${\bf 6}.$  Replace the access panel and reconnect the power cord.
- 7. Turn on the computer and allow it to start.

#### **Resetting 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 header labeled CLR CMOS.
- 4. Remove the jumper and place it on pins 2 and 3.
- 5. Wait for three seconds, and then replace the jumper to its original position (pins 1 and 2).
- 6. Replace the access panel and reconnect the power cord.
- 7. Turn on the computer and allow it to start.