

Illustrated Parts & Service Map

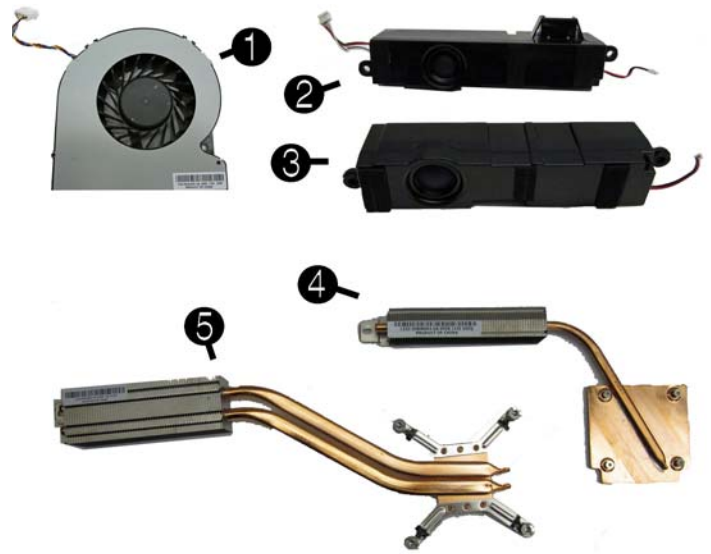
HP TouchSmart Elite 7320 All-in-One Business PC



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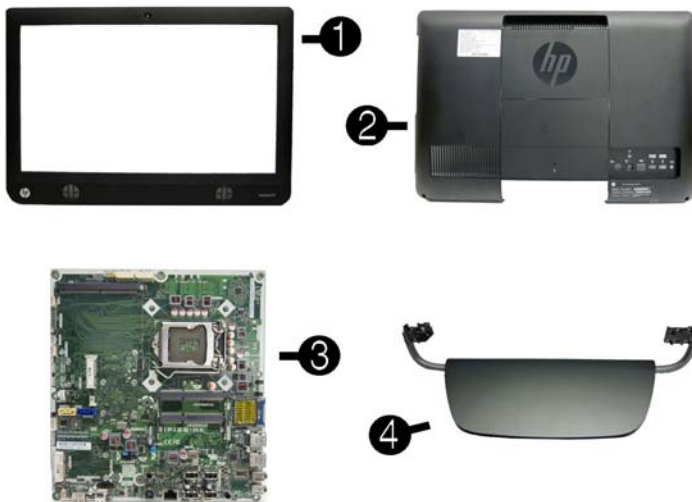


Key Specifications

Processor Type	Intel® Pentium dual core, Intel Core™i7, i5, i3
RAM Type	PC3-10600 DDR3, 1333 MHz, non-ECC SDRAM
Maximum RAM Supported	8 GB (2 slots)
Display	21.5-inch, full HD (1080p) WLED anti-glare
Expansion Slots	<ul style="list-style-type: none"> (1) full-height mini PCIe x1 (1) half-height mini PCIe x1 (1) graphics slot
Graphics Adapter	<ul style="list-style-type: none"> Integrated Intel HD graphics Optional MXM graphics* *not available in the Americas region
Chipset	Intel H61 Express
Drive Support	<ul style="list-style-type: none"> (1) 5.25-inch Slimline (1) 3.5-inch hard drive
I/O Interfaces	Side: (2) USB 3.0 ports, microphone, headphone, 6-in-1 media card reader Rear: (4) USB 2.0, DisplayPort, RJ-45 Ethernet, line out, IR Emitter, TV coax in
Operating Systems	Windows 7 Home Premium

Spare Parts

System Unit



System Unit

1	Front bezel	671590-001
2	Rear cover	671589-001
3	System board (includes replacement thermal material)	671547-001
4	Stand	671591-001

* Not shown

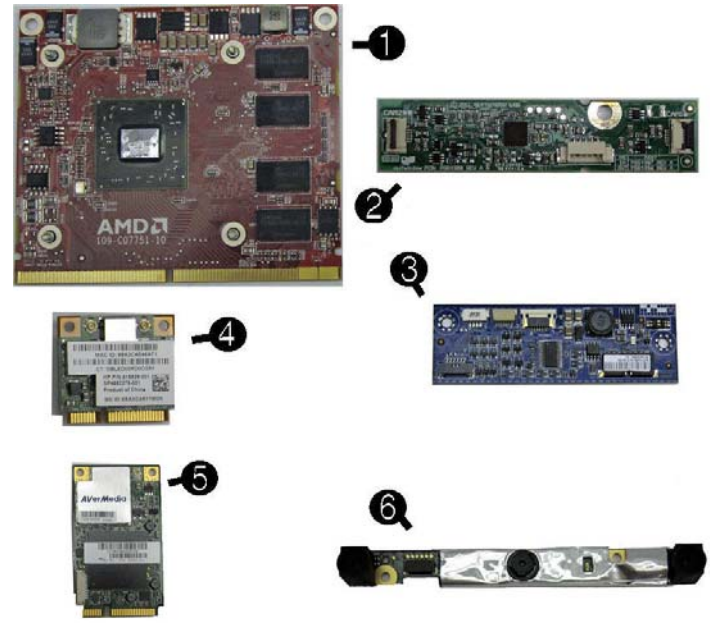
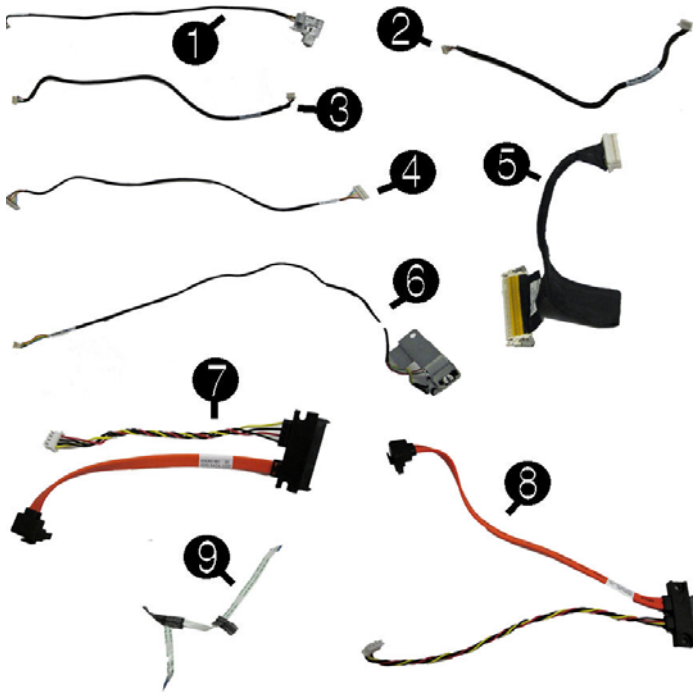
Miscellaneous Parts

1	Fan	671582-001
2	Speaker, left	671587-001
3	Speaker, right	671588-001
4	Thermal module (heat sink) for use with the graphics board	671562-001
5	Thermal module (heat sink) for use with the processor	671548-001
*	Thermal pad for use with the thermal module and processor	671549-001
*	Thermal pad for use with VCORE	671550-001
*	Thermal pad for use with VAXG	671551-001
*	Thermal pad for use with PCH/SB	671552-001
*	Thermal pad for use with memory modules	671553-001
*	Display panel, 21.5-inch, LGD (touch screen, includes bezel)	671571-001
*	Display panel, 21.5-inch, Samsung (touch screen, includes bezel)	671573-001
*	Display panel, 21.5-inch, AUO (touch screen, includes bezel)	671574-001
*	Power supply, 180W, external	613766-001
*	Mouse, USB, optical	596410-001
*	Mouse, wireless	625685-001
*	Hard drive cage	671554-001
*	Hard drive rubber grommet	663357-001
*	Optical drive dummy bezel	671556-001
*	Optical drive dummy bezel	671557-001
*	Optical drive bracket	671558-001
*	Label, rear I/O (NTSC/PAL)	671592-001

*Not shown

Mass Storage Devices (not illustrated)

HP SuperMulti DVD Writer Drive, 8x, LightScribe (includes bezel)	671555-001
HP SuperMulti DVD Writer Drive, 8x, LightScribe (does not include bezel)	619238-001
HP SuperMulti DVD Writer Drive, 8x, non-LightScribe (does not include bezel)	657959-001
HP Slim Slot Blu-ray Combo Drive, 4x (does not include bezel)	619239-001
2 TB, 7200-rpm hard drive	613210-001
2 TB, 5400-rpm hard drive	616608-001
1.5 TB, 7200-rpm hard drive	613209-001
1.5 TB, 5400-rpm hard drive	652272-001
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



Boards, memory processors

Cables

1	Display panel cable, LG	671578-001
1	Display panel cable, Samsung	671580-001
1	Display panel cable, AUO	671581-001
2	Webcam cable	671586-001
3	Touchscreen, USB	671600-001
4	Converter	671599-001
5	LVDS	671598-001
6	Power button/LED	671597-001
7	Hard drive	671595-001
8	Optical drive	671596-001
9	IR blaster cable	671594-001
*	TV tuner, RF, NTSC, 40mm	671593-001
*	TV tuner, RF, PAL, 40mm	671601-001
*	Antenna for use with 2x2 WLAN module	671559-001
*	Antenna for use with 1x1 WLAN module	671560-001

1	AMD Radeon HD 6450A 1GB DDR3 MXM 3.0A (includes bracket; not available in the Americas region)	671561-001
*	AMD Radeon HD 6550A 2GB DDR3 MXM 3.0A (includes bracket; not available in the Americas region)	671563-001
*	NVIDIA GeForce GT 5xx 1GB DDR3 MXM 3.0A (includes bracket; not available in the Americas region)	671564-001
*	NVIDIA GeForce GT 5xx 2GB DDR3 MXM 3.0A (includes bracket; not available in the Americas region)	671565-001
2	Touch controller	671570-001
3	Converter	671569-001
4	802.11b/g/n (2x2) WLAN card	654602-001
*	HP WLAN combo 802.11b/g/n + Bluetooth 2.1 card	652279-001
*	802.11b/g/n (1x1) WLAN module	634906-001
5	HP Digital TV Tuner Mini PCIe Card (includes TV tuner and hardware kit; non-BFR)	613990-001
*	HP Digital TV Tuner Mini PCIe Card (includes TV tuner and hardware kit; BFR)	621425-001
*	HP TV Tuner SW DVB-T Mini Card for use in EMEA	671566-001
6	Webcam module	671583-001
*	Webcam lens cover	671585-001

Keyboards (not illustrated)

USB, red *	537923-xx1		
USB, low cost **	630886-xx1		
Wireless	665719-xx1		
USB, jade with Beats logo	655572-xx1		
USB, jade	655571-xx1		
Arabic	-171	Norwegian	-091
Belgian	-181	The Netherlands	-331
BHCSY	-B41	Nordic	-DH1
Brazilian Portuguese	-201	Poland	-241
Bulgaria	-261	Portuguese	-131
Czech	-221	Romanian	-271
Danish	-081	Russian	-251
Finnish	-351	Saudi Arabia	-DE1
French	-051	Slovakian	-231
French Canadian	-121	Spanish	-071
German	-041	Swedish	-101
Greek	-151	Swiss	-111
Hungarian	-211	Turkish	-141
International English	-L31	U.S.	-001
Italian	-061	U.K.	-031
LA Spanish	-161		

* -071 only

** -DH1 only

Memory modules (PC3-10600; not shown)

*	4 GB	646801-001 593234-001
*	2 GB	646800-001 593233-001
*	1 GB	646808-001

Intel Core i7 processors (include thermal replacement material; not shown)

*	2600S, 2.7 GHz, 8-MB L3 cache	638419-001
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Intel Core i5 processors (include thermal replacement material; not shown)

*	2500S, 2.7 GHz, 6-MB L3 cache	638420-001
*	2400S, 2.5 GHz, 6-MB L3 cache	640953-001

Intel Core i3 processors (include thermal replacement material; not shown)

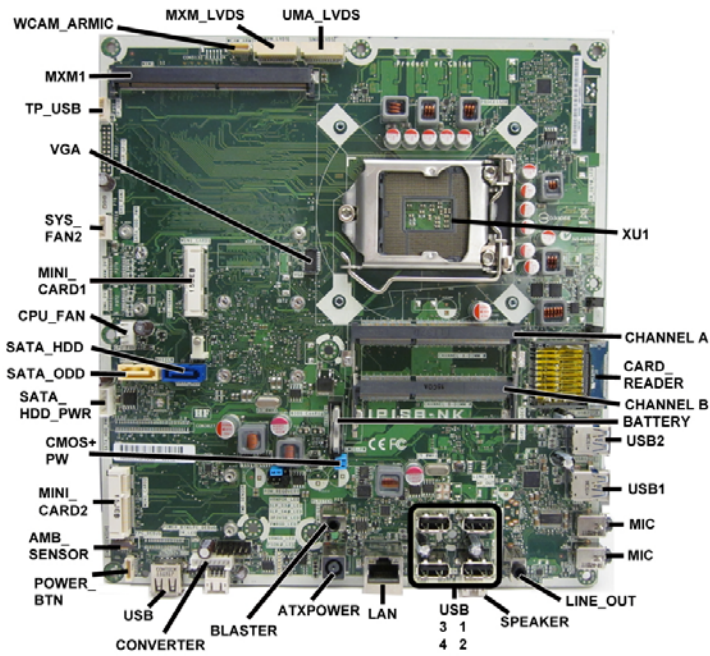
*	2120, 3.3 GHz, 3-MB L3 cache	638412-001
*	2105, 3.1 GHz, 3-MB L3 cache	655970-001
*	2100, 3.1 GHz, 3-MB L3 cache	638411-001

Intel Pentium Dual-Core processors (include thermal replacement material; not shown)

*	G850, 2.9 GHz, 3-MB L3 cache	655973-001
*	G840, 2.8 GHz, 3-MB L3 cache	655972-001
*	G620, 2.6 GHz, 3-MB L3 cache	655971-001

*Not shown

System Board



System Board Components

WCAM_AR MIC	Webcam connector	BLASTER	IR Blaster connector
MXM_LVDS	Display connector - MXM	CONVERTER	Converter board connector
UMA_LVDS	Display connector - UMA	USB	USB connector
XU1	Processor socket	POWER_BTN	Power button board connector
CHANNEL A	Memory socket - Channel A	AMB_SENSOR	Ambient light board sensor
CARD_READER	Card reader	MINI_CARD2	PCIe mini card connector
CHANNEL B	Memory socket - Channel B	CMOS+PW	CMOS/password header
BATTERY	RTC battery socket	SATA_HDD_PWR	Hard drive power connector
USB2	USB connector	SATA_ODD	Optical drive connector
USB1	USB connector	SATA_HDD	Hard drive connector
MIC	Microphone connector	CPU_FAN	Processor fan connector
MIC	Microphone connector	MINI_CARD1	PCIe mini card connector
LINE_OUT	Audio out connector	SYS_FAN2	System fan connector
SPEAKER	Speaker connector	VGA	Graphics connector
USB1-4	USB connectors	TP_USB	Touchscreen connector
LAN	RJ-45 jack	MXM1	Graphics card connector
ATXPOWER	AC adapter connector		

Common POST Error Messages

Screen Message	Probable Cause	Recommended Action
101-Option ROM Error	System ROM or expansion board option ROM checksum.	<ol style="list-style-type: none"> 1. Verify ROM, reflash if required 2. Remove recently added cards to see if problem remains. 3. Clear CMOS. If message disappears, may be card problem. 4. Replace system board
103-System Board Failure	DMA or timers	<ol style="list-style-type: none"> 1. Clear CMOS memory. 2. Remove expansion boards. 3. Replace system board.
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 configuration	<ol style="list-style-type: none"> 1. Run Setup (F10). 2. Make sure memory module(s) installed properly. 3. If third-party memory added, test using HP-only memory.
201-Memory Size Error	RSM failure	<ol style="list-style-type: none"> 1. Verify proper module type. 1. Ensure memory modules are correctly installed. 2. Verify proper module type. 3. Remove and replace faulty module(s). 4. If error persists after replacing modules, replace system board.
214-DIMM Configuration Warning	Populated DIMM configuration is not optimized	Rearrange DIMMs so that each channel has the same amount of memory.
301-, 304-Key-board error	Keyboard failure.	<ol style="list-style-type: none"> 1. Reconnect keyboard with system turned off. 2. Check kybd connection or keys. 3. Check connector for bent or missing pins. 4. Replace keyboard. 5. If 304, possible sys bd problem.
501-Display Adapter Failure	Graphics display controller.	<ol style="list-style-type: none"> 1. Reseat graphics card. 2. Clear CMOS. 3. Check monitor connection. 4. Replace graphics card.
511-Display Adapter Failure	CPU Fan not Detected.	<ol style="list-style-type: none"> 1. Reseat CPU fan. 2. Reseat fan cable. 3. Replace CPU fan.

Computer Setup.

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 • Memory size/speed/ no. channels • Integrated MAC Address • System BIOS • Chassis serial number • Asset tracking 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 setup without applying or saving any 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. <ul style="list-style-type: none"> • Hard Disk - size, model, firmware, serial number, connector color, SMART, emulation type. • CD-ROM - model, firmware, serial number.
	Storage Options: SATA Emulation (AHCI, IDE).
	DPS Self-Test - Lets you execute self-tests on DPS-capable ATA hard drives.
	Boot Order - Allows you to specify boot order or order of attached hard drives.
Security	Setup Password-Lets you set and enable setup (Administrator) 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 network server mode, specify password requirement for warm boot, and allows you to enable/disable Setup Browse Mode, enable/disable Stringent Password, set up password prompt on F9, F11, & F12.
	Device Security -Enables/disables audio, network controllers, SATA ports.
	USB Security - Allows you to enable/disable groups of or individual USB ports. Front USB Ports, Rear USB Ports. internal USB ports.
	Slot Security - Allows you to enable/disable any PCI Express and mini card slots.
	Network Service Boot - Enables/disables boot from OS on a network server.
System IDs - Allows you to view or set product name, serial number, UUID, SKU number, family name, asset tag, feature byte, build ID, and keyboard locale setting.	
System Security (some models) - Allows you to enable/disable: <ul style="list-style-type: none"> • Data Execution Prevention • Protected Audio Video Path (PAVP) (some models) • Virtualization Technology (VTx/VTd) (some models) • Trusted Execution Technology I/O • Embedded Security Device Support • OS management of Embedded Security Device (some models) 	
Power	Hardware Power Management-Lets you enable/disable S5 Wake ON LAN, SATA bus power management and S5 maximum power savings.
	Thermal - Allows you to view CPU fan speed and system fan speed.
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.
	PCI Devices - Lists installed PCI devices with their IRQ settings and allows you to reconfigure IRQ or disable devices.
	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 (on/off) • Multiprocessor • Hyper-threading • Integrated video • NIC PXE Option ROM Download
	Management Devices - Only displayed in the Advanced Menu when the BIOS detects multiple management options. This option is for installed NIC cards that support ASF or DASH. Use the Management Devices menu to select if the BIOS management operations will be through the embedded solution or one of the installed NIC cards.