

Compaq iPAQ Desktop Personal Computer

Illustrated Parts Map
Compaq iPAQ Desktop
Series of Personal Computers



COMPAQ

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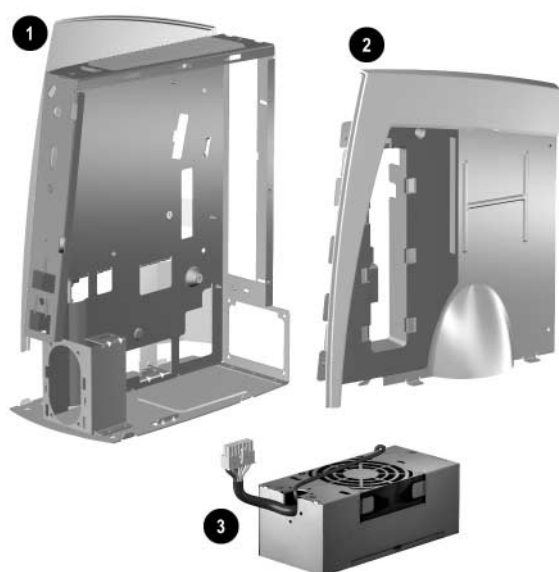
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Part Number 221459-003



Spare Part Number 231877-001



System Unit

1	Chassis assembly (reference only)	Not spared	B
2	Inner access panel (reference only)	Not spared	B
3	Power supply, 90 Watt, PFC (EMEA)	224054-001	B
*	Power supply, 90 Watt	218980-001	B

*Not shown



Plastics Kit

Plastics kit includes:		228743-001	B
4	Left access panel		
5	Right access panel		
6	Front bezel assembly		
7	Speaker grill		

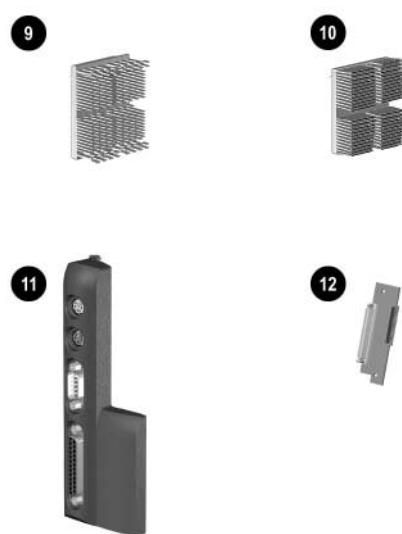
Mass Storage Devices (not illustrated)

10-GB Hard drive	203139-001	B
10-GB Hard drive - MultiBay	220994-001	B
24X CD-ROM drive - MultiBay	228746-001	B
LS-120 Drive - MultiBay	201274-001	B
250-MB ZIP drive - MultiBay	218683-001	B
CD-RW drive - MultiBay	153992-001	B
8X DVD drive - MultiBay	173949-001	B



Cables

8	Hard drive cable	228741-001	B
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Standard and Optional Boards

*	System Board	226786-001	B
Processors - with alcohol cleaning pads			
*	Intel Celeron 700/66	230788-001	B
*	Intel Celeron 800/100	235024-001	B
*	Intel PIII 866/133	231784-001	B
*	Intel PIII 933/133	239421-001	B
Heatsinks - with retaining clip and thermal pad			
9	For 800 and 866 MHz processors only	230005-001	B
10	For all processors	239422-001	B
Memory Modules - 133MHz			
*	SDIMM, 64 MB	170080-001	B
*	SDIMM, 128 MB	170081-001	B
*	SDIMM, 256MB	192014-001	B
11	Legacy module	228025-001	B
12	MultiBay board	218593-001	D
*	Video cache board	226615-001	B
*	V92 Modem, USB, domestic	228196-001	B
	V92 Modem, USB, international	228196-002	B

*Not shown

Documentation and Software (not illustrated)

Illustrated Parts Map	231877-001	D
Service Reference Guide	225698-001	D
Quick Troubleshooting Guide	153837-001	D

Keyboards (not illustrated)

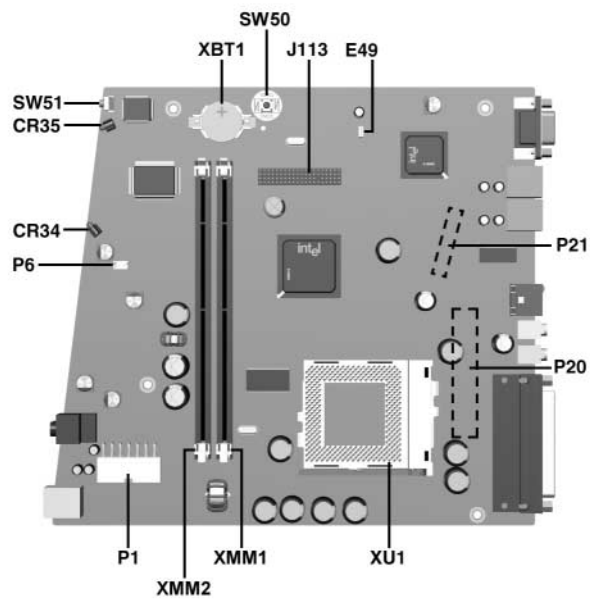
Keyboard, USB		
United States	222860-001	A
French Canadian	222860-121	A
HK Chinese	222860-AC1	A
Japanese (Kanji)	222860-291	A
Latin American Spanish	222860-161	A
Spanish (Mercosur)	222860-C91	A
PRC Chinese	222860-AA1	A
Taiwanese	222860-AB1	A
Keyboard, Internet		
United States	164996-001	A
French Canadian	164996-121	A
HK Chinese	164996-AC1	A
Japanese (Kanji)	164996-291	A
Latin American Spanish	164996-161	A
Spanish (Mercosur)	164996-C91	A
PRC Chinese	164996-AA1	A



Miscellaneous Parts

*	Bezel blank, MultiBay	231612-001	A
*	RTC battery	153099-001	D
*	Mouse	165000-001	A
*	Mouse, USB	164999-001	D
*	Rubber foot (10 ea)	141332-001	A
13	I/O panel (reference only)	Not spared	B
14	Top vent with lift handle (reference only)	Not spared	B
15	Security bracket with extension bar, security wrench, and two mounting screws	230008-001	B
*	Return kit with buns and cardboard inserts	191439-001	D

*Not shown



Connectors and Jumpers

CR34	Hard drive activity LED	P21	MultiBay connector
CR35	Power On LED	SW50	Clear CMOS switch
E49	Clear password jumper	SW51	Power switch
J113	Display cache connector	XBT1	Internal battery socket
P1	Power supply connector	XMM1-2	Memory sockets
P6	Internal speaker connector	XU1	Processor socket
P20	Primary IDE connector		

System Hardware Interrupts

IRQ	System Function	IRQ	System Function
NMI	I/O channel check	7*	LPT 1
0	Interval Timer	8	Real-time clock
1	Keyboard buffer full	9	User available
2	Cascade interrupt from secondary PIC	10	User available
3*	COM 2 (user available if not present)	11	User available
4*	COM 1	12	Onboard mouse port (user available if not present)
5	LPT2 (Plug and Play option)/audio/user available	13	Math coprocessor
6	User available	14	Primary IDE Controller (user available if not present)
		15	Secondary IDE Controller (MultiBay)

*Default, but can be changed to another IRQ

System Hardware DMA

DMA	Data Width	System Function	DMA	Data Width	System Function
0	8- or 16-bits	Audio	4		DMA Controller
1	8- or 16-bits	Audio/Parallel port	5	16-bits	Unused
2	8- or 16-bits	Unused	6	16-bits	Unused
3	8- or 16-bits	Parallel Port (for ECP or EPP)/ Audio	7	16-bits	Unused

Clearing CMOS

The computer's configuration (CMOS) may occasionally be corrupted. If it does, it is necessary to clear the CMOS memory using push button switch SW50

To clear and reset the configuration, perform the following procedure:

1. Prepare the computer for disassembly.

CAUTION: The power cord must be disconnected from the power source before pushing the Clear CMOS Button. Failure to do so may damage the system board

2. Remove the right access panel.
3. Insert the eraser end of a pencil into the hole in the green plastic panel and press the CMOS button. Keep the button depressed for 5 seconds.
4. Replace the right access panel, then reconnect the power cable.
5. Turn the computer on.
6. Run F10 Computer Setup to reconfigure the system.

Pushing the CMOS button will reset CMOS values to factory defaults and will erase any customized information including passwords, asset numbers, and special settings.

Disabling or Clearing the Power-On Passwords

1. Turn off the computer and any external devices, and disconnect the power cord from the power outlet.
 2. Remove the outer and inner right access panels.
 3. Locate the header and jumper labeled E49.
 4. Remove the jumper from pins 1 and 2. Place the jumper over pin 2 only, in order to avoid losing it.
 5. Replace the two access panels.
 6. Plug in the computer and turn on power to all equipment. Allow the operating system to start. This clears the current passwords and disables the password features.
 7. To re-enable the password features, repeat steps 1-3, then replace the jumper on pins 1 and 2.
 8. Repeat steps 5-6, then establish new passwords.
- Refer to the Computer Setup (F10 Setup) instructions to establish new passwords.

Setting the Setup and Power-On Passwords

- A. Setting the Setup Password provides access protection for the Computer Setup utility.
1. Turn on the computer. When the F10=Setup prompt appears in the right corner of the screen, press F10.
 2. Select "Setup Password," follow the online instructions and save the settings before exiting.
 3. The password will be enabled after exiting the utility and rebooting the computer.
- B. Setting a Power-On Password
1. Turn on the computer. When the F10=Setup prompt appears in the right corner of the screen, press F10.
 2. Select "Power-On Password," follow the online instructions and save the settings before exiting.
 3. The password will be enabled after exiting the utility and rebooting the computer.

ICH Fixed I/O Registers

Address (hex)	Size	Description
0000-001F	32 bytes	DMA controller 1
0020-0021	2 bytes	Programmable Interrupt Control (PIC)
0040-0043	4 bytes	System timer
0060	1byte	Keyboard controller byte-reset IRQ
0061	1 byte	System speaker
0064	1 byte	Keyboard controller, CMD/STAT byte
0070	1 byte	Real Time Clock/CMOS address register
0071	1 byte	Real Time Clock/CMOS data register
0072-0073	2 bytes	System CMOS
0080-008F	16 bytes	DMA low page register
0092	1 byte	Fast A20 and PIC
00A0-00A1	2 bytes	PIC
00B2-00B3	2 bytes	APM control
00C0-00D0	32 bytes	DMA controller 2
00F0	1 byte	Numeric data processor
0170-0177	8 bytes	Secondary IDE channel
01F0-01F7	8 bytes	Primary IDE controller
One of these ranges: 0200-0207 0208-020F 0210-0217 0218-021F	can vary from 1 to 8 bytes	Audio/game port
One of these ranges: 0220F-022F 0240-024F	16 bytes	Audio (SoundBlaster Pro compatible)
0228-022F*	8 bytes	LPT3
0278-027F*	8 bytes	LPT2
02E8-02EF*	8 bytes	COM4/video (8514A)
02F8-02FF*	8 bytes	COM2
One of these ranges: 0320-0327 0330-0337 0340-0347 0350-0357	8 bytes	MPU-401 (MIDI)
0376	1 byte	Secondary IDE Channel command port
0377, bit 6:0	7 bits	Secondary IDE channel status port
0378-037F	8 bytes	LPT1
0388-0388	6 bytes	AdLib+ (FM synthesizer)
03B0-03BB	12 bytes	Intel 8215e legacy VGA ranges
03C0-03DF	32 bytes	Intel 8215e legacy VGA ranges
03E8-03EF	8 bytes	COM3
03F0-03F5	6 bytes	Diskette channel 1
03F6	1 byte	Primary IDE channel command port
03F8-03FF	8 bytes	COM1
04D0-04D1	2 bytes	Edge/level triggered PIC
One of these ranges: 0530-0537 0E80-0E87 0F40-0F47	8 bytes	Windows sound system
0700	1 byte	NMI enable register
LPTn+400h	8 bytes	ECP port, LPTn base address 400h
0CF8-0CFB**	4 bytes	PCI configuration address register
0CF9***	1 byte	Turbo and reset control register
0CF8-0CFE	4 bytes	PCI configured data register
FFA0-FFA7	8 bytes	Primary bus master IDE registers
FFA8-FFAF	8 bytes	Secondary bus master IDE registers

*Default but can be changed to another address range

**Dword access only

***Byte access only

Note: Some additional I/O addresses are not available due to ICH address aliasing.

System Memory Map

Address Range	Memory Address	Size	Description
512M - 4G	20000000 - FFFFFFFF	3.5G	PCI memory space
1M - 512M	100000 - 1FFFFFFF	511M	Main DRAM memory
960K - 1MB	0F0000 - 0FFFFF	64K	Upper BIOS area
896K - 960K	0E0000 - 0EFFFF	64K	Lower BIOS area
768K - 896K	0C0000 - 0DFFFF	128K	Expansion card BIOS and buffer area
640K - 768K	0A0000 - 0BFFFF	128K	Standard PCI/ISA video memory
0K - 640K	000000 - 09FFFF	640K	DOS area