Compaq Evo D510 e-pc Desktop Computer

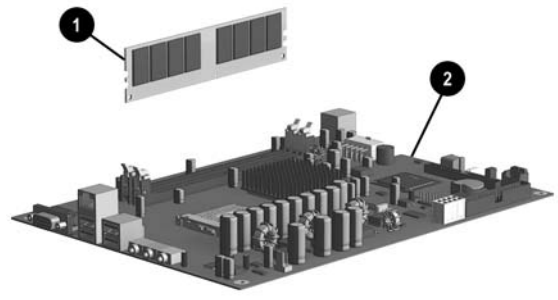
Illustrated Parts Map

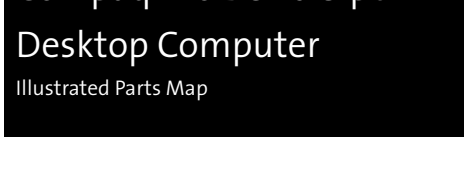
COMPAQ

August 2002

Document Number
304518-001

Spare Part Number
235551-001

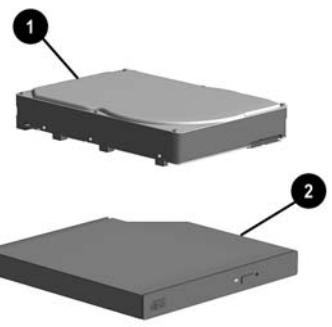




System Unit

1	Enclosure	not spared
2	Drawer assembly	307604-001
3	Power supply	304516-001

**Not shown*



Mass Storage Devices

1	20-GB, 5400 RPM Hard drive	303591-001
*	20-GB, 7200 RPM Hard drive	303592-001
*	40-GB, 5400 RPM Hard drive	304766-001
*	40-GB, 7200 RPM Hard drive	303593-001
*	80-GB, 7200 RPM Hard drive	303594-001
2	8X DVD drive, slimline	304765-001
*	24X CD-ROM drive, slimline	303587-001
*	External USB Diskette drive	303590-001

**Not shown*

Documentation and Packaging (not illustrated)

Illustrated Parts Map	233551-001
Shipping box with buns	306939-001

Cables

Cable kit, includes:		305233-001
1	Hard drive cable	
2	Optical disk drive cable	
Other cables		
*	USB to serial port converter	305380-001
*	USB to printer converter	305244-001

** Not shown*

Keyboards (not illustrated)

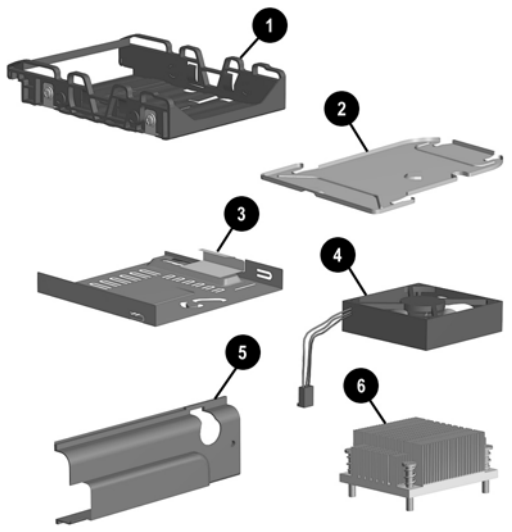
Easy Access, USB		**271123-xxx**	
Arabic	-171	Korean (Hanguel)	-AD2
Belgian	-181	International	-B31
Brazilian Portuguese	-201	Latin American Spanish	-161
BHCSY*	-B41	Norwegian	-091
Czech	-221	Polish	-241
Danish	-081	Portuguese	-131
Dutch/Netherlands	-331	Russian	-251
Estonian	-CA1	Simplified Chinese	-AA1
Finnish	-351	Slovakian	-231
French	-051	Spanish	-071
French-Canadian	-121	Swedish	-101
German	-041	Swiss	-111
Greek	-151	Taiwanese	-AB1
Hebrew	-BB1	Thai	-281
Hungarian	-211	Turkish	-141
Italian	-061	United Kingdom	-031
Japanese	-191	U.S.	-001

**Bosnia-Herzegovina, Croatia, Slovenia, and Yugoslavia*

Standard and Optional Boards (not illustrated)

1	Memory Module, DDR	
*	128 MB	285648-001
*	256 MB	285649-001
*	512 MB	285650-001
*	1 GB	286403-001
2	System board with cooler plate and plate mounting screw, thermal grease, and alcohol pad (see Miscellaneous Parts for illustration of cooler plate)	307605-001
Intel Celeron Processor		
*	1.7 GHz	288691-001
*	1.8 GHz	288692-001
Intel Pentium Processor		
*	1.8 GHz	306779-001
*	20. GHz	273051-001
*	2.2 GHz	273052-001
*	2.4 GHz	283925-001
*	2.5 GHz	303726-001
*	2.6 GHz	303727-001

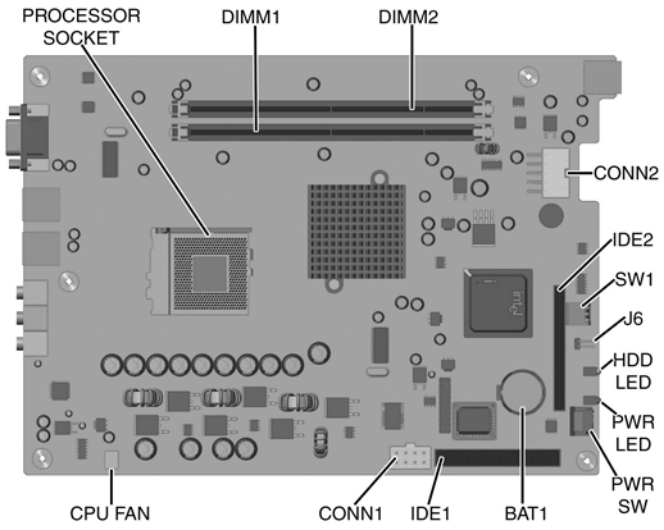
** Not shown*



Miscellaneous Parts

1	Hard drive tray with screws	305234-001
2	Cooler plate (spared only with system board)	see System Board
3	Slimline optical drive carrier	305230-001
4	Fan	305235-001
5	Security kit (cable cache with screw and screwdriver)	305246-001
6	Heatsink	305640-001
*	Bezel blank, slimline drive bay	303754-001
*	Battery	153099-001
*	Mouse, optical	266654-001
*	Mouse, 3-button	164999-001
*	Rubber feet (2 silver and 6 carbon)	305236-001
*	DiskOnKey, 32 MB	303589-001
Miscellaneous screw kit, includes:		307606-001
*	#6-32 x .250 tatpite hi-top (3 ea) (262508-001)	
*	M3 x 5 mm taptite hi-top (3 ea) (263585-001)	
*	Hard drive retaining screw (2 ea) (304729-001)	

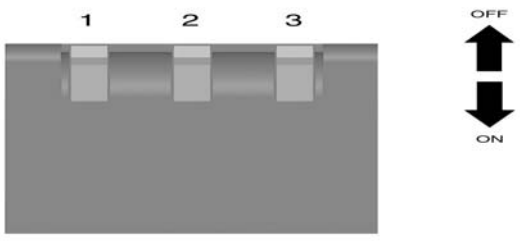
** Not shown*



Connectors and Jumpers

BAT1	Battery	IDE1	Hard drive connector
CONN1	Main power connector 1	IDE2	Optical drive connector
CONN2	Main power connector 2	J6	
CPU FAN	Chassis fan connector	PROCESSOR SOCKET	Processor socket
DIMM1	Memory socket 1	PWR LED	Power LED
DIMM2	Memory socket 2	PWR SW	Power switch
HDD LED	Hard drive activity LED	SW1	Selector switch

Note: Computer Setup is activated by pressing the F2 key when the cue appears on the monitor.



System Board Switches

Switch	Switch Position	Function	Default
1	ON	Boot block not protected by hardware. Software protection exists.	ON
	OFF	Boot block protection by hardware	
2	ON	Clear CMOS and reload default values in Computer Setup. Clear Passwords.	
	OFF	Normal operation	OFF
3	ON	Reserved	
	OFF	Reserved	OFF

System Hardware Interrupts

IRQ	System Function	IRQ	System Function
0	System timer	8	Real-Time Clock
1	Onboard USB controller	9	Unused
2	Reserved	10	Onboard USB controller
3	Onboard USB controller	11	Onboard graphics
4	Onboard NIC	12	Unused
5	Onboard USB controller	13	Math co-processor
6	Unused	14	IDE primary channel
7	Onboard audio	15	IDE secondary channel

Clearing CMOS and Disabling All Passwords

The computer's configuration (CMOS) may occasionally be corrupted. If it does, it is necessary to clear the CMOS memory* using DIP switch 2 on SW1.

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

1. Prepare the computer for disassembly.
2. Remove the chassis from the enclosure.
3. Set the number 2 DIP switch to the ON position.
4. Reinstall the chassis into the enclosure, attach the power cable, and start the computer. This clears the old entries and resets the CMOS defaults.
5. Turn the computer OFF and remove the chassis from the enclosure.
6. Reset the number 2 DIP switch to the OFF position.
7. Turn the computer on.

*Note: Clearing CMOS also clears/disables all passwords.

Changing Known Passwords

When existing passwords are known, they may be changed using the following procedures:

1. Restart the computer and press F2 when the computer begins its reboot cycle to access the Setup Utility.
2. Move the screen indicator to the password to be changed using the arrows on the keyboard.
3. Press ENTER and follow the online directions for changing the password.
4. Follow the online instructions to complete the process and to save and exit the changes made to the Setup Utility.

BIOS Crisis Recovery

Use this procedure when the BIOS has become corrupt.

1. Download the BIOS image from the Web site onto a computer hard drive.
2. Create a bootable diskette that contains the IO.SYS, MSDOS.SYS, DRVSPACE.BIN, and COMMAND.COM files. (DRVSPACE.BIN is not needed to boot the computer.)
3. Copy the BIOS.ROM file from the computer hard drive onto the bootable diskette and rename it AMIBOOT.ROM. This file must be on the diskette before it is copied to the CD-ROM.
4. Create a bootable CD-ROM disk using the “El-Torito” specification that contains the entire image from the diskette.
5. Verify the files on the CD-ROM:

   If EasyCD Creator 4.0 was used to create the bootable disk only two files will appear in the directory; Bootcat.bin and Bootimg.bin. Bootimg.bin will contain the BIOS image and other files needed for the process. (AMIBOOT.ROM is included in the Booting.bin file but is not visible under Windopws Explorer.)

   If a different CD creation software package was used, either COMMAND.COM and AMIBOOT.ROM will be found in the Windows Explorer or no files at all will be seen. (Although no files are visible on Windows Explorer, they are physicaly present on the CD.)
6. Insert the CD-ROM disk into the internal CD drive and turn on the computer. (Only an IDE drive may be used for this procedure, a USB device will not work.)
7. The monitor will display a DOS prompt when the computer has successfully copied the file onto the computer. Remove the disk and restart the computer.

Pre-boot Diagnostic Codes

Beeps	Issue/Meaning	Resolution
When the power switch is depressed to activate the computer and there are no faults found, the computer will start up with no unusual or special sounds.If a fault is found during the start-up, the computer will generate a series of ringing tones followed by the correct number of beeps shown in this table that correspond to the fault found.		
1 Beep	Processor fault	1. Check that processor and heatsink are properly installed. 2. Replace processor.
2 Beeps	Power supply overload (crowbar)	1. Disconnect all external devices and restart the computer. If the computer starts correctly, add devices one-at-a-time until the overload situation is achieved and the faulty device is identified. 2. If the computer does not start, disconnect the internal drives and restart the computer. If the computer starts correctly, add devices one-at-a-time until the overload situation is achieved and the faulty device is identified.
3 Beeps	Memory error	1. Verify that memory modules are properly installed in the computer. 2. Check that the memory modules are the design specified by Compaq. 3. Try replacing the memory modules with other known good modules.
4 Beeps	Graphics solution error	Replace the system board.
5 Beeps	Plug and Play initialization error	Replace the system board.
6 Beeps	BIOS corrupt. Reflash BIOS	Reflash the BIOS.
7 Beeps	Bad system board	Replace the system board.