Compaq Evo Deskpro D510 Convertible Minitower

Illustrated Parts Map

COMPAQ

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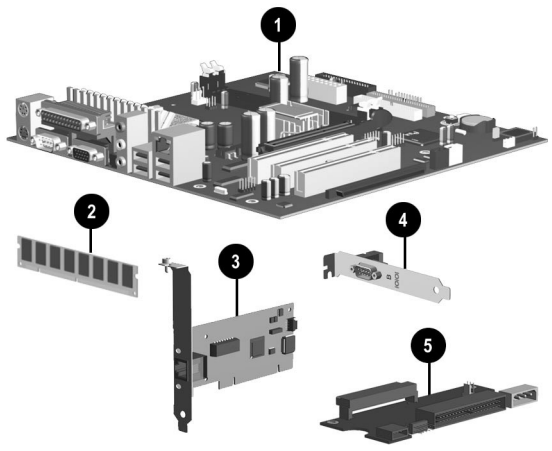
June 2002

Document Part Number 292402-001

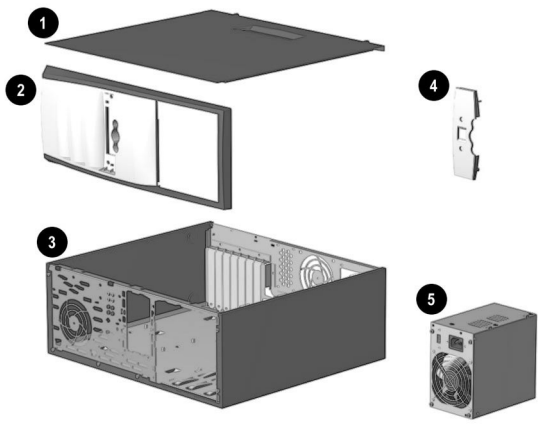
Spare Part Number 301291-001



Standard and Optional Boards

1	System board	283983-001
2	Memory module, 128 MB RAM, DDR	285648-001
*	Memory module, 256 MB RAM, DDR	285649-001
*	Memory module, 512 MB RAM, DDR	285650-001
Intel Celeron Processor with alcohol wipe		
*	1.7 GHz	288691-001
*	1.8 GHz	288692-001
Pentium P4 Processor with alcohol wipe		
*	1.7 GHz, 256 K cache	252919-001
*	1.8 GHz, 256 K cache	255435-001
*	1.9 GHz, 256 K cache	255436-001
*	2.0 GHz, 512 K cache/400 MHz	273051-001
*	2.2 GHz, 512 K cache/400 MHz	273052-001
*	2.4 GHz, 512 K cache/400 MHz	283925-001
*	2.26 GHz, 512 K cache/533 MHz	288688-001
*	2.4 GHz, 512 K cache/533 MHz	288689-001
*	2.53 GHz, 512 K cache/533 MHz	288690-001
Other Boards		
*	Front mounted Audio/USB board	284247-001
3	NIC, 3COM	253951-001
*	Intel Pro 100 S NIC	215774-001
*	Modem, Lucent v90	239411-001
*	PCI Expansion card	252609-001
4	Second serial port card	283984-001
5	MultiBay adapter board	283985-001
*	nVIDIA NV11 graphics, 64 MB, with ATX bracket	279777-001
*	U3 SCSI controller	158364-001

** Not shown*



System Unit

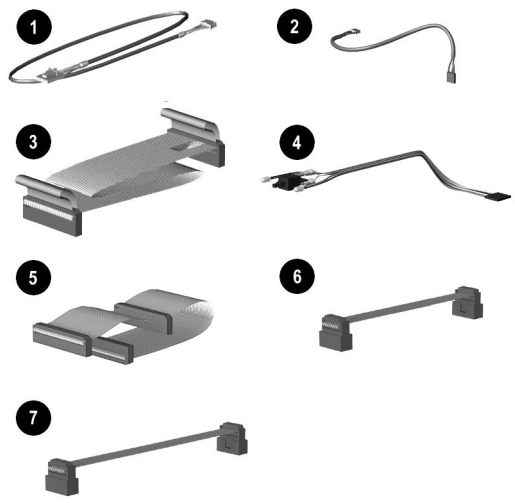
1	Access Panel	Not spared
2	Front bezel assembly, complete	299172-001
	Front bezel main panel insert, EMEA only (Blue Angel)	301645-001
3	Chassis assembly (reference only)	Not spared
4	Front bezel I/O insert, 2 USB, 2 audio	292209-001
5	Power supply, PFC, dual voltage	277979-001

Mass Storage Devices (not illustrated)

	20-GB, UATA, 100/7200 Quiet hard drive	180476-001
	20-GB, UATA, 100/5400 Quiet hard drive	254451-001
	20-GB Hard drive, MultiBay	273407-001
	36.2-GB U3 SCSI, 10 K hard drive	192197-001
	40-GB UATA 100/7200 Quiet hard drive	202904-001
	40-GB UATA 100/5400 Quiet hard drive	236921-001
	80-GB UATA, 100/7200 Hard drive	250185-001
	Diskette drive, 3.5-inch, buttonless, carbon	278644-001
	24X CD-ROM drive	228746-001
	48X CD-ROM drive, carbon	232320-001
	16/10/24X CDRW drive	286691-001
	40/12/40X CDRW drive	286711-001
	8X CDRW drive, MultiBay	251292-001
	6/10/40/12X CVD-DVD drive	281749-001
	16X DVD drive	278647-001

Miscellaneous Screws (not illustrated)

Miscellaneous screw kit, includes:	**257050-001**
.197 dia x 17 TPI x 0.5 lg, Plastite flathead, Phillips (4 ea) (247481-001)	
6-19 x 3/8 hi-top, plastite with captive washer (1 ea.) (114399-069) (not used this product)	
6-19 x 1/4 hi-top, plastite with captive washer (1 ea.) (114399-067)	
6-32 x 3/16 hi-top, thread forming with serrations (4 ea.) (192308-003)	
6-32 x 3/16 buttonhead tamper-resistant, taptite with serrations (1 ea.) (296769-002)	
6-32 x 1/4 hi-top, thread forming with serrations (5 ea.) (192308-001)	
M3 x 5mm, hi-top, plastite with serrations (4 ea.) (247348-001)	



Cables

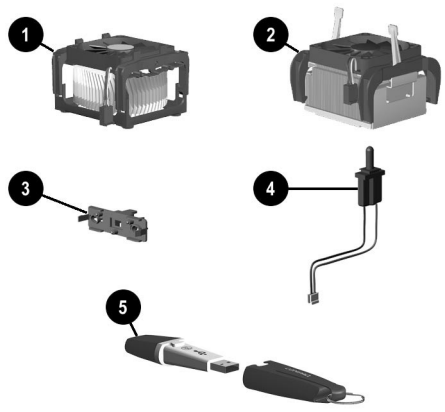
1	Audio cable for CD ROM drive, 21”	149806-001
2	Front panel audio cable, 451 mm (245152-001)	255440-001
*	USB cable for front panel, 12.5” (245151-003)	289574-001
3	Diskette drive cable (143218-005)	257309-001
4	Power switch/LED cable with switch and LEDs (174682-002)	257303-001
*	Solenoid cable (244168-001)	255438-001
*	IDE Ultra ATA dual device, hard drive/CD-ROM cable, 10” with pull tab, center polarization (108950-037)	257047-001
5	IDE Ultra ATA dual device, hard drive/CD-ROM cable, 14” (108950-038)	257048-001
*	SCSI LED cable (225537-001)	247485-001
*	SCSI data cable (155825-001)	158277-001
6	Second serial port cable (284217-001) (use with 283094-001)	302652-001
7	MultiBay signal cable (277521-001)	302604-001
Cable kit, includes:		303279-001
*	MultiBay data cable (289050-001)	
*	Hard drive, optical drive data cable (108950-042)	

**Not shown*

Keyboards (not illustrated)

Easy Access, PS/2		**271122-xxx**	
USB		**271124-xxx**	
Arabic	-171	International	**
Belgian	-181	Latin American Spanish	-161
Brazilian Portuguese	-201	Norwegian	-191
BHCSY*	-B41	Polish	**
Czech	-221	Portuguese	-131
Danish	-081	Russian	-251
Dutch/Netherlands	**	Slovakian	-231
Finnish	-351	Spanish	-071
French	-051	Swedish	-101
French-Canadian	-121	Swiss	-111
German	-041	Taiwanese	-AB1
Greek	-151	Thai	-281
Hungarian	-211	Turkish	-141
Italian	-061	United Kingdom	-031
Japanese	-191	U.S.	-001
Korean (Hanguel)	-AD1		

**Bosnia-Herzegovina, Croatia, Slovenia, and Yugoslavia*
**Use B31 for 240441-xxx, use -002 for 164996-xxx



Miscellaneous Parts

*	Chassis fan assembly	289575-001
*	Mouse, carbon	237241-001
Heatsink assembly Type 1, includes:		289576-001
1	Fan assembly with mounting base, heatsink, and attaching screws	
Heatsink assembly Type 2, includes:		300871-001
2	Heatsink with fan assembly and retaining clips	
*	Heatsink mounting base and attaching screws	
3	Power switch/LED holder	257051-001
4	Hood intrusion sensor	267529-001
*	Rubber foot (4 ea)	266050-001
*	Battery	153099-001
*	Solenoid, 2-coil	201485-001
5	DiskOnKey, 8 MB	249911-001
*	Labtech speakers (Japan only)	223492-291

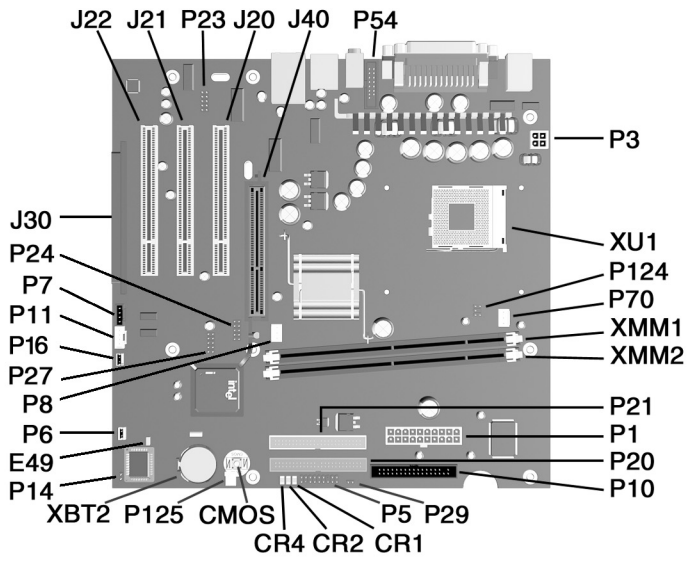
**Not shown*

Miscellaneous Plastics (not illustrated)

	Diskette drive bezel, carbon	257403-001
Miscellaneous plastics kit, includes		257051-001
	Switch holder (245154-001 (2 ea)	
	Bezel blank (166775-002)	
	Cable clip (172948-001)	
	Logo plate (243831-001)	
	Power switch spring (not for this product)	
	LED holder (not for this product)	

Documentation and Packaging (not illustrated)

Service Reference Guide	259968-001
Quick Troubleshooting Guide	153837-001
Illustrated Parts Map	301291-001
Return kit	270020-001



System Board Connectors and Jumpers (position of some untitled components may vary in location)

CMOS	Clear CMOS	P11	Aux audio
CR1	5V Aux (ON)/PSON (OFF)	P14	Boot block
CR2	Power button (OK)	P16	Intrusion
CR4	3.3V_Aux	P20	Primary ATA
E49	Password	P21	Secondary ATA
J20	PCI Expansion slot 1	P24	Front USB
J21	PCI Expansion slot 2	P27	MultiBay
J22	PCI Expansion slot 3	P29	SCSI LED
J30	PCI extension	P54	Com port B header
J40	AGP slot	P70	CPU fan
P1	Power, main	P124	Hood lock
P3	Power, processor (VCCP12V)	P125	Hood sensor
P5	Power switch/LED	XBT2	Battery
P6	Speaker	XMM1	DIMM 1
P7	CD audio	XMM2	DIMM2
P8	Chassis fan	XU1	Processor socket
P10	Diskette		

System Hardware Interrupts

IRQ	System Function	IRQ	System Function
0	Timer Interrupt	8	Real-Time Clock
1	Keyboard	9	Available for PCI
2	Interrupt Controller Cascade	10	Available for PCI
3	Serial Port (COM B)	11	Available for PCI
4	Serial Port (COM A)	12	Mouse
5	Audio	13	Coprocessor
6	Diskette Drive	14	Primary ATA (IDE) controller
7	Parallel Port (LPT 1)	15	Secondary ATA (IDE) controller

Computer Diagnostic LEDs (on front of computer)

LED	Color	LED Activity	State/Message
Power	Green	On	(S0) Computer on
Power	Green	1 blink every 2 seconds	(S1) Normal Suspend Mode
Power	Green	1 blink every 2 seconds	(S3) Suspend to RAM
Power	None	Off	(S4) Suspend to Disk (if applicable)
Power	None	Off	(S5) Computer off
Power	Red	2 blinks 1 second apart, followed by 2-second pause - Repeat	CPU thermal shutdown
Power	Red	On	CPU not installed
Power	Red	1 blink every 1 second	ROM error
Power	Red	1 blink every 2 seconds	Power supply crow bar
Hard Drive	Green	Blinking	Hard drive activity

Keyboard Diagnostic LEDs

LED	Color	LED Activity	State/Message
Num Lock	Green	Flashing (Beeps - 1S, 2L)	Memory error
Caps Lock	Green	Flashing (Beeps - 1L, 2S)	No video
Scroll Lock	Green	Flashing (Beeps - 2L, 1S)	System board failure, prior to video
Num, Caps, Scroll Lock	Green	Flash On-Off 2 times (Beeps - 1L, 3S)	Invalid system ROM detected. ROM forces reflash.
Num, Caps, Scroll Lock	Green	On (Rising Tone)	ROM reflashed successfully
Num Lock	Green	On	Boot block recovery failed - ROMPaq diskette not present, is bad, or drive not ready.*
Caps Lock	Green	On	Enter password.
Num, Caps, Scroll Lock	Green	Blink On in sequence, one at a time - N, C, SL	Keyboard locked in network mode

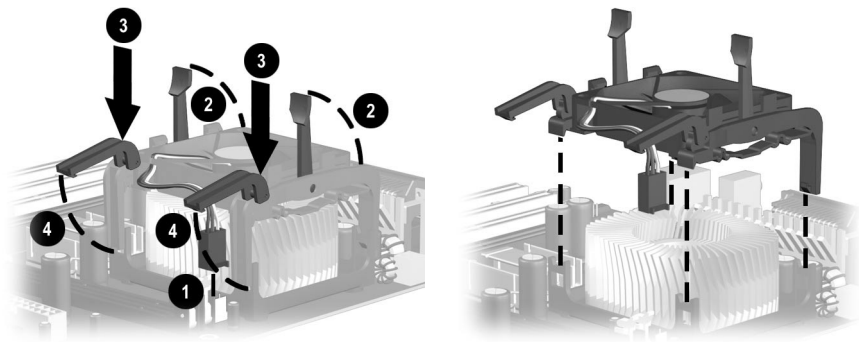
** Insert valid ROMPaq diskette in drive A. Turn power switch off, then on to reflash ROM. If ROM flash is successful, all three keyboard LEDs will light up, and you will hear a rising tone series of beeps. Remove diskette and turn power off, then on to restart the computer. For more information about flashing the ROM, refer to the Troubleshooting guide.*

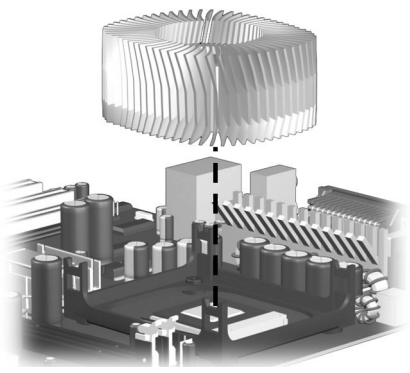
System Board Diagnostic Lights[1]

Main Power Switch Status	3.3 V_Aux LED	5 V_Aux/PSON LED	Power Button LED
OFF[2]	ON	ON[4]	OFF
ON[3]	ON	OFF[5]	ON

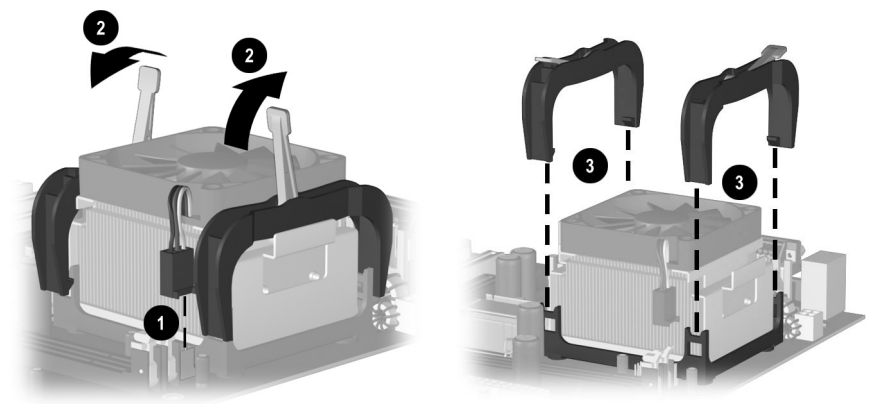
1. ON and OFF state of LEDs apply only to a good, working system board with AC power applied to the power supply.
2. Power LED on front of computer is OFF.
3. Power LED on front of computer is ON (Green).
4. 5V_Aux is ON.
5. PSON is active = power supply is turned ON.

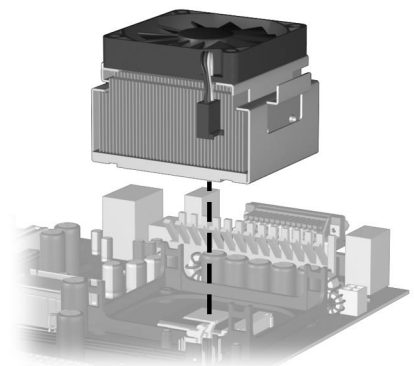
Type 1 Heatsink





Type 2 Heatsink





Clearing CMOS

The computer's configuration (CMOS) may occasionally be corrupted. If it is, it is necessary to clear the CMOS memory using 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 (NOTE: All LEDs on the board should be OFF). Failure to do so may damage the system board

2. Remove the access panel.
3. Press the CMOS button located on the system board and keep it depressed for 5 seconds.
4. Replace the access panel.
5. Turn the computer on and run F10 Computer Setup (delete-utility) to reconfigure the system.

Disabling or Clearing the Power-On and Setup Passwords*

1. Turn off the computer and any external devices, and disconnect the power cord from the power outlet.
2. Remove the access panel.
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 access panel.
6. Plug in the computer and turn on power. Allow the operating system to start. (Placing the jumper on pin 2 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.