Compaq Evo D500 Ultra-slim Desktop Personal Computer Illustrated Parts Map

Compaq Evo Desktop D500 Series of Personal Computers



COMPAQ



System Unit

1	Access panel (238756-001) with thumbscrews	280164-001
2	Power supply	244163-001
3	Chassis	not spared
4	MultiPort blank cover (244902-001)	279937-001
5	Front bezel assembly	274663-001

*Not shown



© 2002 Compaq Computer Corporation. Compaq and the Compaq logo, Registered U. S. Patent and Trademark Office. iPAQ is a trademark of Compaq Information Technologies Group, L.P in the United States and other countries.

Intel, Intel Inside, Pentium and Celeron are trademarks of Intel Corporation in the United States and other countries.

All other product names mentioned herein may be trademarks of their respective companies.

Compaq shall not be liable for technical or editorial errors or omissions contained herein. The information in this document is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Compaq products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty warranty.

Part Number 269767-001





Mass Storage Devices (not illustrated)

Mass Storage Devices (not must aled)	
20-GB Hard drive, 5400 RPM	254451-001
40-GB Hard drive, 5400 RPM	236921-001
60-GB Hard drive, 7200 RPM	232022-001
24X CD-ROM drive, MultiBay	228746-001
Diskette drive, MultiBay	241995-001
8/8/24X CD-RW drive, MultiBay	250105-001
8X DVD drive, MultiBay	251292-001



Cables

1	MultiPort cable (238744-001)	279936-001
2	Hard drive cable	274665-001
3	I/O panel cable for Power, LED, and Audio	274664-001
4	I/O Panel cable for USB	274662-001



Documentation and Packaging (not illustrated)

Illustrated Parts Map (269767-001)	279938-001
Service Reference Guide	259968-001
Quick Troubleshooting Guide	153837-001
Return kit with buns	277460-001

Keyboards (not illustrated)

Keyboard, Easy Access, PS2	271122-xxx
United States	-001
French Canadian	-121
Japanese (Kanji)	-191
Latin American Spanish	-161
PRC Chinese	-AA1
Taiwanese	-AB1
Keyboard, Easy Access, USB	271123-xxx
United States	-001
French Canadian	-121
Japanese (Kanji)	-191
Latin American Spanish	-161
PRC Chinese	-AA1
Taiwanese	-AB1



Miscellaneous Parts

1	Legacy module	269175-001
2	MultiPort 802.11b Wireless LAN	230340-001
2	MultiPort Bluetooth Wireless LAN	230336-001
3	Mounting stand	not spared
4	Power supply	244163-001
5	Heatsink with alcohol pad, retaining clip, and ther- mal interface	240763-001
6	Speaker	274307-001
*	2-Button mouse, scroll type, PS2	237241-001
*	2-Button mouse, scroll type, USB	164999-001

*Not shown

Miscellaneous Screw Kit (not illustrated)

Miscellaneous Screw Kit includes:	279935-001
#6-19 x 0.5 Platsite, button head, 4 ea. (249935-001)	
M2 x 0.4p x 3 mm Phillips head, 4 ea. (249686-001	
#6-32 x 0.5 TT, FSLT, Hi Top, 4 ea. (262508-005)	
#6-32 x .188 Taptite shoulder screw, 4 ea. (242966-0	01)
Tamper resistant wrench (296770-002)	



Plastics	
----------	--

1	MultiBay blank	231612-001
2	MultiPort blank cover	279937-001
3	Front bezel assembly	274663-001



Standard and Optional Boards

1	1.3 GHz Celeron Processor with alcohol cleaning pad and thermal interface	272404-001
2	Video cache board	226615-001
3	MultiBay backplane board	269171-001
4	System Board	269014-001
5	128 MB Memory module	170081-001
*	256 MB Memory module	192014-001
*	MultiPort device	see Misc Parts
6	USB/Audio board	269174-001

*Not shown



Connectors and Jumpers

E49*	Password
J113	Graphics Memory Upgrade
J114	MultiPort
J12346	Front I/O - Power button, LED, Audio
J12348	Front USB
P1	Main Power
P6	Internal Speaker

P20	Primary IDE	
P21	MultiBay Riser	
P70	CPU Fan	
SW50	CMOS	
XBT2	Battery	
XMM1, 2	Memory Sockets	
XU1	Processor	

System Hardware Interrupts

IRQ	System Function	IRQ	System Function
0	Interval Timer	8	Real-time clock
1	Keyboard	9	User available
2	Interrupt Controller Cascade	10	User available for PCI
3*	COM B (Serial Port)	11	USB/Audio
4*	COM A (Serial Port)	12	Mouse
5	Network Interface Controller (NIC)	13	Coprocessor
6	Diskette Drive	14	Primary ATA (IDE) Controller
7*	Parallel Port	15	Secondary ATA (IDE) Controller (MultiBay)

System Hardware DMA

DMA	System Function	DMA	System Function
0	Unused	4	DMA Controller Cascading
1	Unused	5	Unused
2	Diskette Drive	6	Unused
3	ECP Parallel Port	7	Unused

ICH Fixed I/O Registers

Port	Register Name	
00h, 02h, 04h, 06h	Channel 0, 1, 2, 3 DMA Base & Current Address Regsiter	
C0h, C4h, C8h, CCh	Channel 4, 5, 6, 7 DMA Base & Current Address Register	
01h, 03h, 05h, 07h	Channel 0, 1, 2, 3 DMA Base & Current Count Register	
C2h, C6h, Cah, CEh	Channel 4, 5, 6, 7 DMA Base & Current Count Register	
10h-1Fh	Aliased at 00h-0Fh	
20h	Master PIC ICW1 Init. Cmd Word 1 Register Master PIC OCW2 Op Ctrl Word 2 Register Master PIC OCW3 Op Ctrl Word 3 Register	
21h	Master PIC ICW2 Init. Cmd Word 1 Register Master PIC ICW3 Init. Cmd Word 1 Register Master PIC ICW4 Init. Cmd Word 1 Register Master PIC OCW1 Op Ctrl Word 3 Register	
24h-25h, 28-29h, 2Ch-2Dh, 30h- 31h, 34h-35h, 38h-39h, 3Ch-3Dh	Aliased at 20h-21h	
40h	Counter 0 Interval Time Status Byte Format Counter 0 Counter Access Port Register	
41h	Counter 1 Interval Time Status Byte Format Counter 1 Counter Access Port Register	
42h	Counter 2 Interval Time Status Byte Format Counter 2 Counter Access Port Register	
43h	Timer Control Word Register Timer Control Word Register Read Back Counter Latch Command	
50h-53h	Aliased at 40h-43h	
61h	NMI Status and Control Register	
70h	NMI Enable Register Real-Time Clock (Standard RAM) Index Register	
71h	Real-Time Clock (Standard RAM) Target Register	
72h	Extended RAM Index Register	
73h	Extended RAM Target Register	
74h-75h	Aliased at 70h-71h	
76h-77h	Aliased at 72h-73h or 70h-71h	
80h, 84h-86h, 88h	Reserved Page Registers	
81h, 82h, 83h	Channel 2, 3, 1 DMA Memory Low Page Register	
89h, 8Ah, 8Bh	Channel 6, 7, 5 DMA Memory Low Page Register	
8CH-8Eh	Reserved Page Registers	
8Fh	Refresh Low Page Register	
91h-9Fh (except 92h)	Aliased at 81h-8Fh	
92h	Fast A20 and INIT Register	
A0h	Slave PIC ICW1 Init. Cmd Word 1 Register Slave PIC OCW2 Op Ctrl Word 2 Register Slave PIC OCW3 Op Ctrl Word 3 Register	
Al	Slave PIC ICW2 Init. Cmd Word 2 Register Slave PIC ICW3 Init. Cmd Word 3 Register Slave PIC ICW4 Init. Cmd Word 4 Register Slave PIC OCW1 Op Ctrl Word 1 Register	
A4h-A5h, A8h-A8h, ACh-ADh, B0h-B1h, B4h-B5h, B8h-B9h, BCh-BDh	Aliased at A0h-A1h	
B2h	Advanced Power Management Control Port Register	

ICH Fixed I/O Registers (Continued)

Port	Register Name
B3h	Advanced Power Management Status Port Register
C0h, C4h, C8h, CCh	Channel 4, 5, 6, 7 DMA Base and Current Address Register
C1h	Aliased at C0h
C5h	Aliased at C4h
C9h	Aliased at C8h
CDh	Aliased at CCh
C2h, C6h, CAh, CEh	Channel 4, 5, 6, 7 DMA Base and Current Count Register
C3h	Aliased at C2h
C7h	Aliased at C6h
CBh	Aliased at CAh
CFh	Aliased at Ceh
D0h	Channel 4-7 DMA Command Register Channel 4-7 DMA Status Register
D1h	Aliased at D0h
D4h	Channel 4-7 DMA Write Single Mask Register
D5h	Aliased at D4h
D6h	Channel 4-7 DMA Channel Mode Register
D7h	Aliased at D6h
D8h	Channel 4-7 DMA Clear Byte Pointer Register
D9h	Aliased at D8h
DAh	Channel 4-7 DMA Master Clear Register
DBh	Aliased at DAh
DCh	Channel 4-7 DMA Clear Mask Register
DEh	Aliased at DCh
DEh	Channel 4-7 DMA Write All Mask Register
DFh	Aliased at DEh
F0h	Coprocessor Error Register
170h-177h	PIO Mode Command Block Offset for Secondary Drive
1F0h-1F7h	PIO Mode Command Block Offset for Primary Drive
3F6h	PIO Mode Control Block Offset for Primary Drive
4D0h	Master PIC Edge/Level Triggered Register
4D1h	Slave PIC Edge/Level Triggered Register
400-47F	Super I/O
CF9h	Reset Control Register
F800-F87F	Reserved (power management)
FA00-FA3F	Reserved (GPIO management)
FC00-FC0F	Reserved (SMBUS controller)

System Memory Map

Size	Memory Address	Description
512 KB	FFFFFFFh to FEC00000h	System ROM
3839 MB	FEBFFFFFH to 10000000h	PCI Memory Expansion
511 MB	0FFFFFFh to 00100000h	Host or PCI memory expanion
128 KB	000FFFFFh to 000E0000h	System ROM
96 KB	000DFFFFh to 000C8000h	PCI option ROMs
32 KB	000C7FFFh to 000C0000h	Video ROM
128KB	000BFFFFh to 000A0000h	Video RAM
640 KB	0009FFFFh to 0000000h	Base memory

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:

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. 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.

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.