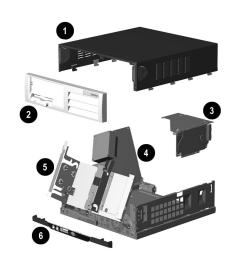
# Compaq Evo Deskpro D300 and D500 **Small Form Factor** Pentium Version

Illustrated Parts Map

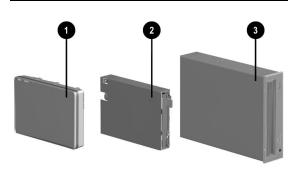


# COMPAQ



## System Unit

1	Computer cover	Not spared
2	Front bezel assembly, complete	262011-001
3	Expansion card cage	not spared
4	Power supply, PFC, dual voltage	244165-001
5	Chassis assembly with drive cage (reference only)	Not spared
6	Front trim (below front bezel)	257404-001



### Mass Storage Devices

IVIC	iss otorage bevices	
1	20-GB, UATA, 100/7200 Quiet hard drive	180476-001
*	20-GB, UATA, 100/5400 Quiet hard drive	254451-001
*	40-GB UATA 100/7200 Quiet hard drive	202904-001
*	40-GB UATA 100/5400 Quiet hard drive	236921-001
*	60-GB, UATA 100/7200 hard drive	232022-001
*	36.2-GB U3 SCSI, 10 K hard drive	192197-001
2	Diskette drive, 3.5-inch, buttonless, carbon	237180-001
*	10/10/40X CD-RW drive, carbon	246691-001
3	48X CD-ROM drive, carbon	232320-001
*	16X DVD-ROM drive, carbon	232319-001
*	ZIP 250 drive, carbon	232317-001

<sup>\*</sup>Not shown

 $\ @$  2001 Compaq Computer Corporation.

Compaq, the Compaq logo, and Evo are trademarks of Compaq Information Technologies Group, L.P.

Intel, 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.

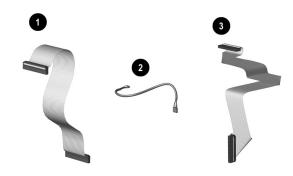
Document Part Number 265762-002

November 2001



Spare Part Number 265816-001





### Cables

1	Diskette drive cable (168999-003)	258208-001
2	CD-ROM Audio cable, 12 in. (387527-002)	192263-001
3	Hard drive data cable (108950-035)	258209-001
*	CD-ROM drive data cable (108950-034)	258207-001
*	SCSI drive data cable (155825-003)	258210-001
*	SCSI LED cable	247485-001
*	Solenoid cable	265954-001
*	Audio, stereo extender cable, 100 mm (1 ea)	257081-001
		•

<sup>\*</sup>Not shown

### **Documentation and Packaging (not illustrated)**

Service Reference Guide	259968-001
Quick Troubleshooting Guide	153837-001
Illustrated Parts Map	265816-001
Return kit	266280-001

### Keyboards (not illustrated)

Internet Basic Smart Card		164996-xxx 240441-xxx	
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	-AB
Greek	-151	Thai	-281
Hungarian	-211	Turkish	-141
Italian	-061	United Kingdom	-031
Japanese	-191	U.S.	-001
Korean (Hanguel)	-AD1		

<sup>\*</sup>Bosnia-Herzegovina, Croatia, Slovenia, and Yugoslavia \*\*Use -B31 for 240441-xxx, use -002 for 164996-xxx



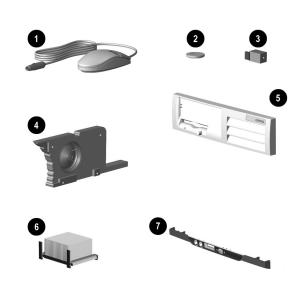




### Standard and Optional Boards

1	System board	252299-001
2	Memory module, 64 MB SDIMM	170080-001
*	Memory module, 128 MB SDIMM	170081-001
*	Memory module, 256 MB SDRAM	192014-001
*	Memory module, 512 MB SDRAM	254283-001
3	Riser board	252298-001
*	NIC, 3COM	253951-001
4	Modem, Lucent v90	239411-001
*	U3 SCSI controller	158364-001
Per	ntium P4 Processor with alcohol pad	
*	1.5 GHz	252918-001
*	1.6 GHz	255434-001
*	1.7 GHz	252919-001
*	1.8 GHz	255435-001
*	1.9 GHz	255436-001
*	2.0 GHz	252920-001
Gra	aphics Solutions	•
*	nVIDIA GeForce 2 MX graphics card, 16 MB memory	253127-001
*	nVIDIA GeForce 2 MX graphics card, 32 MB memory	251291-001
*	Vanta 16 graphics card	253126-001
*	Matrox G200 MMS PCI graphics card	171975-001

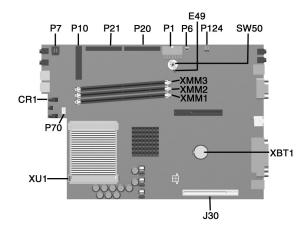
 $<sup>* \,</sup> Not \, shown$ 



### Miscellaneous Parts

1	Mouse, 2-button carbon	237241-001
2	Battery	153099-001
*	Chassis fan assembly	257405-001
3	Solenoid, 2-coil	201485-001
*	Rubber foot (4 ea)	266051-001
4	Speaker (240534-001)	249968-001
5	Front bezel assembly, complete	262011-001
6	Heatsink with thermal interface, and alcohol pad	254286-001
7	Front trim (below front bezel)	257404-001
Mis	cellaneous plastics kit, includes	257051-001
*	Bezel blank (166775-002)	
*	Cable clip (172948-001)	
*	Power switch spring (not for this product)	
*	LED holder (not for this product)	

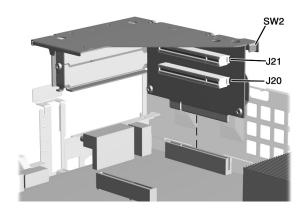
<sup>\*</sup>Not shown



#### **System Board Connectors and Jumpers**

CR1	3.3V Aux LED
E49	Password jumper (Installed = Enabled, Removed = Cleared)
J30	Riser board socket
P1	Power supply connector
P6	Speaker connector
P7	CD-ROM audio
P10	Diskette drive connector
P20	Primary ATA (IDE) connector

P21	Secondary ATA (IDE) connector
P70	CPU fan connector
P124	Hood intrusion sensor
SW50	Clear CMOS button
XBT1	Battery
XMM1-3	Memory sockets
XU1	Processor socket



#### **Riser Board Connectors and Jumpers**

J20	PCI Slot	SW2	Security hood switch
J21	PCI Slot		

### **System Hardware Interrupts**

IRQ	System Function
0	Timer Interrupt
1	Keyboard
2	Interrupt Controller Cascade
3	Serial Port (COM B)
4	Serial Port (COM A)
5	Audio
6	Diskette Drive
7	Parallel Port (LPT 1)

IRQ	System Function
8	Real-Time Clock
9	Available for PCI
10	Available for PCI
11	Available for PCI
12	Mouse
13	Coprocessor
14	Primary ATA (IDE) controller
15	Secondary ATA (IDE) controller

### System Hardware DMA

DMA	System Function	
0	Unused	
1	Unused	
2	Diskette Drive	
3	ECP Parallel Port LPT1 (Default; Alternate = DMA 0)	

DMA	System Function	
4	DMA Controller Cascading	
5	Unused	
6	Unused	
7	Unused	

## ICH Fixed I/O Registers

Port	Register Name
00h, 02h, 04h, 06h	Channel 0, 1, 2, 3 DMA base and current address register
C0h, C4h, C8h, CCh	Channel 4, 5, 6, 7 DMA base and current address register
01h, 03h, 05h, 07h	Channel 0, 1, 2, 3 DMA base and current count register
C2h, C6h, Cah, CEh	Channel 4, 5, 6, 7 DMA base and current count register
10h-1Fh	Aliased at 00h-0Fh
20h	Master PIC ICW1 Init. Cmd Word 1 register, Master PIC OCW2 Init. Cmd Word 2 register, and Master PIC OCW3 Init. Cmd Word 3 register
21h	Master PIC OCW1 Init. Cmd Word 1 register, Master PIC ICW2 Init. Cmd Word 2 register, and Master PIC ICW3 Init. Cmd 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 and Counter 0 counter access port register
41h	Counter 1 interval time status byte format and Counter 1 counter access port register
42h	Counter 2 interval time status byte format and Counter 2 counter access port register
43h	Timer control word register, Timer control word register read back, and Counter latch command
50h-53h	Aliased at 40h-43h
61h	NMI status and control register
70h	NMI enable register and 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
81h, 82h, 83h	Channel 2, 3, 1 DMA memory low page register
84h-86h, 88h	Reserved page registers
89h, 8Ah, 8Bh	Channel 6, 7, 5 DMA memory low page register

ICH Fixed I/O Registers (Conf	tinued)	
Port	Register Name	
8Ch-8Eh	Reserved page registers	
8Fh	Refresh low page register	
91h-9Fh (except 92h) Aliased at 81h-8Fh		
92h	Fast A20 and INIT register	
CF9h	Reset control register	
A0h	Slave PIC ICW1 Init. cmd word 1 register, Slave PIC OCW2 Init. cmd word 2 register, and Slave PIC 0CW3 Init. cmd word 3 register	
A1	Slave PIC ICW2 Init. cmd word 2 register, Slave PIC ICW3 Init. cmd word 3 register, Slave PIC ICW4 Init. cmd word 4 register, and Slave PIC OCW1 Init. cmd 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	
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 atC4h	
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 and 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	
376h	PIO mode control block offset for secondary drive	
3F6h	PIO mode control block offset for primary drive	
4D0h	Master PIC edge/level triggered register	
3F6h	PIO mode control block offset for primary drive	
4D1h	Slave PIC edge/level triggered register	
400-47F	Super I/O	
F800-F87F	Reserved (power management)	
	Reserved (GPIO management)	
FA00-FA3F		
FC00-FC0F	Reserved (SMBUS controller)	

NOTE: When the POS\_DEC\_EN bit is set, additional I/O ports get positively decoded by the ICH.

### **System Memory Map**

Size	Memory Address	System Function
512 KB	FFFFFFFh to FFF80000h	System ROM
3839 MB	FFFBFFFFh to 10000000h	PCI memory expansion
511 MB	0FFFFFFh to 00100000h	Host or PCI memory expansion
128 KB	000FFFFh to 000E0000h	System ROM
96 KB	000DFFFFh to 000C8000h	PCI option ROMs
32 KB	000C7FFFh to 000C0000h	Video ROM
128 KB	000BFFFFh to 000A0000h	Video RAM
640 KB	0009FFFFh to 00000000h	Base memory

# 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

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

\*When the CMOS button is pushed or the jumper is removed, both the power-on password and the setup password become invalid because both are stored in the configuration memory. You will need to reset the passwords.

### Disabling or Clearing the Power-On and Setup Passwords\*

- Turn off the computer and any external devices, and disconnect the power cord from the power outlet. 1.
- 2. Remove the access panel.
- 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.)
- 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.

\*When the CMOS button is pushed or the jumper is removed, both the power-on password and the setup password become invalid because both are stored in the configuration memory. You will need to reset the passwords.