## Compaq Evo Desktop

 D300 and D500
## Desktop Models

Illustrated Parts Map


## COMPAQ



| Mass Storage Devices |  |  |
| :--- | :--- | :--- |
| 1 | 20 GB, UATA, $(100 / 5400)$ Quiet hard drive | $254451-001$ |
| $*$ | 20 GB, UATA, $(100 / 7200)$ Quiet hard drive | $180476-001$ |
|  | 20 GB, UATA, $(100 / 7200)$ Quiet hard drive | $260671-001$ |
| $*$ | 40 GB, UATA, $(100 / 5400)$ Hard drive | $236921-001$ |
| $*$ | 40 GB, UATA, $(100 / 7200)$ Hard drive | $202904-001$ |
| $*$ | 40 GB, UATA, $(100 / 7200)$ Hard drive | $260672-001$ |
| $*$ | 60 GB, UATA, $(100 / 7200)$ Hard drive | $232022-001$ |
| $*$ | 60 GB, UATA, (100/7200) hard drive | $260673-001$ |
| $*$ | 36 GB U3 SCSI $(10 \mathrm{~K})$ hard drive | $192197-001$ |
| 2 | Diskette drive w/o button, carbon | $237180-001$ |
| 3 | $48 X$ CD-ROM drive, carbon | $232320-001$ |
| $*$ | $10 / 10 / 40 X$ CD-RW drive, carbon | $246691-001$ |
| $*$ | $16 X$ DVD-ROM drive, carbon | $232319-001$ |
| $*$ | Zip 250 drive, carbon | $232317-001$ |
| $*$ |  |  |

## Documentation and Software (not illustrated)

| Illustrated Parts Map | $265814-001$ |
| :--- | :--- |
| Service Reference Guide | $259968-001$ |
| Quick Troubleshooting Guide | $153837-001$ |

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November 2001

Document Part Number 265763-002

| Internet |  | 164996-xxx |  |
| :---: | :---: | :---: | :---: |
| Basic Smart Card |  | 240441-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 |  |  |

## Miscellaneous Screw Kit (not illustrated)

Miscellaneous Screw Kit, includes:
257050-001

| $6-32 \times 1 / 4 ~ h i-t o p, ~ t h r e a d-f o r m i n g ~ s c r e w ~ w i t h ~ s e r r a t i o n s ~(5 ~ e a) ~$. <br> $(192308-001)$ |
| :---: |
| 6 -19 x $5 / 16$ hi-top, taptite screw with captive washer (1 ea.) (114399-069) |
| 6-32 x 3/16 hi-top, thread-forming screw with serrations (4 ea.) (192308-003) |
| $6-32 \times 3 / 16$ button head tamper-resistant, taptite screw with serrations (1 ea.) (296769-002) |
| .197 dia x 17 TPI x 0.5 lg , plastite flathead, Phillips (4 ea) (247481-001) |
| M3 $\times 5 \mathrm{~mm}$ hi-top, taptite screw with serrations (4 ea) (247348-001) |


| Miscellaneous Parts |  |  |
| :--- | :--- | :--- |
| 1 | Fan, chassis | $265953-001$ |
| 2 | Power switch holder | $224849-001$ |
| $*$ | Battery | $153099-001$ |
| $*$ | Speaker | $192518-001$ |
| $*$ | Mouse, 2-button carbon | $237241-001$ |
| $*$ | Solenoid | $201485-001$ |
| $3^{*}$ | Hood intrusion sensor (140466-004) | $267529-001$ |
| ${ }^{*}$ | Rubber foot (4 ea) | $266051-001$ |
| $*$ | Front panel I/O accent | $254288-001$ |
|  | Air baffle (249633-001) | $266194-001$ |
| $*$ | Heatsink with fan, retaining clip, and alcohol pad | $254285-001$ |
| $*$ | Return Kit with buns (U.S.) | $265808-001$ |
| Miscellaneous plastics kit, includes: | $257051-001$ |  |
| $*$ | Bezel blank (166775-002) |  |
| $*$ | LED holder (1 ea) (112589-001) |  |
| $*$ | Power switch spring (1 ea) (166837-002)(not used <br> this product) |  |
| $*$ |  |  |
| $*$ | Power supply cable clip (1 ea) (172948-001) |  |



## Standard and Optional Boards

| 1 | System board | 252608-001 |
| :---: | :---: | :---: |
| Graphics Controllers |  |  |
| * | nVIDIA GeForce 2 MX graphics card, 16 MB memory | 253127-001 |
| * | nVIDIA GeForce 2 MX graphics card, 32 MB memory | 251291-001 |
| * | Vanta 16 MB graphics card, AGP, LP | 253126-001 |
| * | Matrox G200 MMS graphics card | 171975-001 |
| * | Matrox G450 graphics card | 203626-001 |
| Memory Module 133MHz |  |  |
| 2 | SDIMM, 64 MB | 170080-001 |
| * | SDIMM, 128 MB | 170081-001 |
| * | SDIMM, 256MB | 192014-001 |
| * | SDIMM, 512 MB | 254283-001 |
| Intel Pentium 4 Processor |  |  |
| * | 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 |
| Other boards |  |  |
| , | U3 SCSI controller | 158364-001 |
| * | Modem, PCI, Lucent v90 | 239411-001 |
| 3 | NIC, 3COM | 253951-001 |
| * | Front USB board | 252610-001 |



| J20-22 | PCI slots | P21 | Secondary IDE connector |
| :---: | :---: | :---: | :---: |
| J30 | PCI Extension socket | P24 | USB header |
| J40 | AGP/AIMM connector | P29 | SCSI LED connector |
| P1 | Power supply connector | P49 | Password jumper (Installed = Enabled, Removed $=$ Cleared |
| P5 | Power button, Power LED, and HD LED connector | P70 | CPU fan connector |
| P6 | Speaker connector | P124 | Hood lock solenoid connector |
| P7 | CD-ROM audio connector | P125 | Hood intrusion sensor |
| P8 | Chassis fan connector | SW50 | Clear CMOS button |
| P10 | Diskette drive connector | XBT2 | Battery |
| P11 | Aux audio connector | XMM1-3 | Memory sockets |
| P20 | Primary IDE connector | XU1 | Processor socket |


| 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 | Available for PCI | 13 | Coprocessor |
| 6 | Diskette Drive | 14 | Primary IDE Controller |
| 7 | Parallel Port (LPT 1) | 15 | Secondary IDE Controller |


| 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 LPT1 (Default; Alternate $=$ DMA 0 ) | 7 | Unused |


| Port | Register Name |
| :---: | :---: |
| 00h, 02h, 04h, 06h | Channel 0, 1, 2, 3 DMA Base \& Current Address Register |
| 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 |
| 21 h | 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, 30h31h, 34h-35h, 38h-39h, 3Ch-3Dh | Aliased at 20h-21h |
| 40 h | 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 |
| 61 h | NMI Status and Control Register |
| 70 h | NMI Enable Register Real-Time Clock (Standard RAM) Index Register |
| 71 h | Real-Time Clock (Standard RAM) Target Register |
| 72h | Extended RAM Index Register |
| 73 h | 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 |


| ICH Fixed I/O Registers (Continued) |  |
| :--- | :--- |
| Port | Register Name |
| A1 | Slave PIC ICW2 Init. Cmd Word 2 Register <br> Slave PlC ICW3 Init. Cmd Word 3 Regiser <br> Slave PIC ICW4 Init. Cmd Word 4 Register <br> Slave PIC OCW1 Op Ctrl Word 1 Register |
| A4h-A5h, A8h-A8h, ACh-ADh, <br> B0h-B 1h, B4h-B5h, B8h-B9h, <br> 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 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 | Channet 4-7 DMA Command Register |
| Channel 4-7 DMA Status Register |  |

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 FFF80000 | System ROM |
| 2030 MB | FEDFFFFFh to 80000000h | PCI Memory Expansion |
| 2047 MB | 7FFFFFFFh to 00100000h | HOST or PCI Memory Expansion |
| 128 KB | 000FFFFFh to 00000000h | System ROM |
| 128 KB | 000DFFFFh to 000C0000h | PCI Option ROMs |
| 128 KB | 000BFFFFh to 000A0000h | Video RAM |
| 640 KB | 0009FFFFh to 000000000 | 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 jumper 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 (Section 4.6).
3. Press the CMOS button located on the system board and keep it depressed for 5 second.
4. Replace the access panel.
5. Turn the computer on.
6. 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*

1. Turn off the computer and any external devices, and disconnect the power cord from the power outlet.

Remove the access panel.
Locate the header and jumper labeled E49.
Remove the jumper from pins 1 and 2 . Place the jumper over pin 2 only, in order to avoid losing it
Replace the access panel.
6. Plug in the computer and turn on power to all equipment. 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.
*When the CMOS button is pushed or the jumper is removed, both the power-on password and the setup password
.

