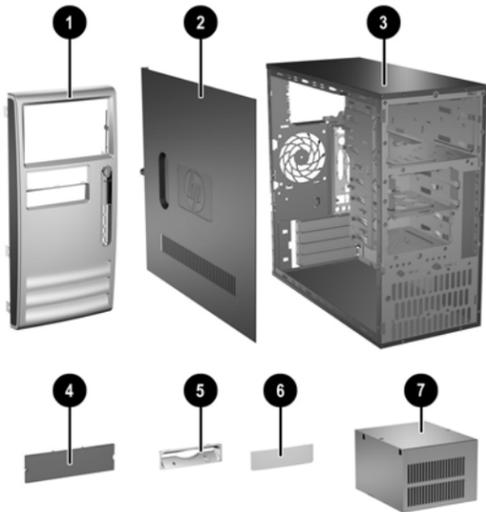


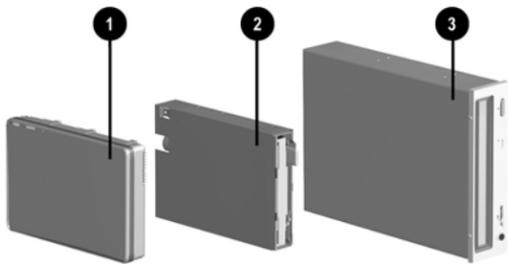
# HP Business Desktop d325/dx6050

Illustrated Parts Map  
Microtower Chassis, AMD Processor



| System Unit                |                      |            |
|----------------------------|----------------------|------------|
| 2                          | Access panel         | 326777-001 |
| 3                          | Chassis              | not spared |
| Front bezel assy includes: |                      | 326778-001 |
| 1                          | Front bezel frame    |            |
| 4                          | 5.25" Bezel blank    |            |
| 5                          | Diskette drive bezel |            |
| 6                          | 3.5" Bezel blank     |            |
| 7                          | Power supply, PFC    | 308615-001 |

# See Miscellaneous Parts for detailed illustrations



| Mass Storage Devices |  |            |
|----------------------|--|------------|
| 1                    | 40 GB\5400 RPM Hard drive              | 236921-001 |
| *                    | 80 GB\5400 RPM Hard drive              | 292208-001 |
| *                    | 40 GB\7200 RPM Hard drive              | 286692-001 |
| *                    | 80 GB\7200 RPM Hard drive              | 250185-001 |
| *                    | 160 GB\7200 RPM Hard drive             | 325306-001 |
| *                    | 250 GB\7200 RPM Hard drive             | 344058-001 |
| 2                    | Diskette drive with mounting screws    | 333505-001 |
| 3                    | 48X CD-ROM drive with mounting screws  | 326773-001 |
| *                    | 52X CD-ROM drive with mounting screws  | 333969-001 |
| *                    | 48X/24X/48X CD-RW                      | 325308-001 |
| *                    | 48X/32X/48X CD-RW                      | 346788-001 |
| *                    | 48X/32X CD/DVD                         | 359493-001 |
| *                    | 48X/24X/48X +16X DVD/CD-RW             | 325309-001 |
| *                    | 4X DVD+R/RW                            | 325317-001 |
| *                    | 8X DVD+R/RW                            | 358688-001 |
| *                    | Zip 250 Drive with mounting bracket    | 333504-001 |
| *                    | Zip 250 drive without mounting bracket | 326772-001 |

\* Not shown

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3rd Edition, May 2004

Document Part Number

325807-003



Spare Part Number

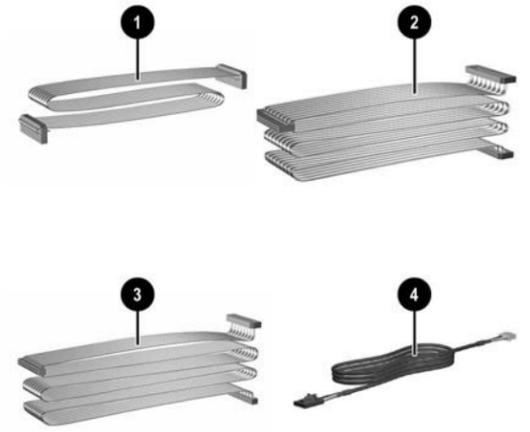
336582-001



| Miscellaneous Parts |  |            |
|---------------------|--|------------|
| 1                   | Heatsink with fan, alcohol pad, and thermal grease         | 326771-001 |
| 2                   | Front I/O device with cable                                | 326775-001 |
| *                   | Diskette drive bezel blank                                 | 335938-001 |
| 3                   | Speaker  | 326776-001 |
| 4                   | Power/LED cable with switch, LED holders and switch holder | 330456-001 |
| 5                   | Heatsink removal tool                                      | 337599-001 |
| 6                   | Chassis fan  | 330457-001 |
| *                   | Real-time clock battery                                    | 153099-001 |
| *                   | Drive Key, 16 MB   | 324780-001 |
| *                   | Drive Key, 64 MB   | 331465-001 |
| *                   | Drive Key, 128 MB, Carbon                                  | 331466-001 |
| *                   | Drive Key, 128 MB, Carbonite                               | 349988-001 |
| *                   | Return kit with buns                                       | 331249-001 |
| *                   | PCMCIA Reader  | 331589-001 |
| *                   | Port control   | 335936-001 |
| *                   | Hood sensor  | 267529-001 |
| *                   | Hood lock solenoid   | 336442-001 |
| *                   | Universal (Nobel) clamp without cable                      | 335808-001 |
| *                   | Universal (Nobel) clamp with cable                         | 335809-001 |

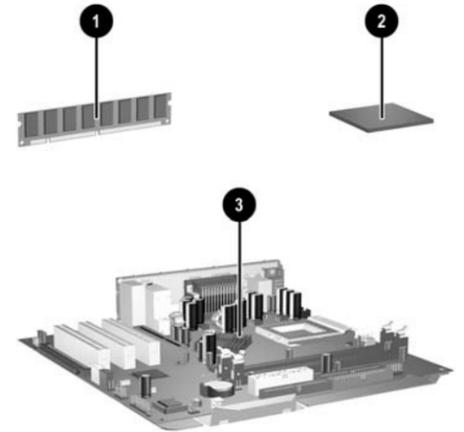
| Mouse                              |  |            |
|------------------------------------|--|------------|
| *                                  | 2-Button, PS/2 with scroll wheel                       | 323614-001 |
| *                                  | 2-Button, USB, optical with scroll wheel               | 323617-001 |
| *                                  | 2-Button, wireless with scroll wheel                   | 323616-001 |
| *                                  | 2-Button, USB, with scroll wheel                       | 323615-001 |
| Miscellaneous screw kit, includes: |  | 330458-001 |
| *                                  | M3 x 5mm Full slot hi top, taptite (4 ea) (263585-001) |            |
| *                                  | #6-32 x 1/4Hi top, taptite (4 ea) (262508-001)         |            |
| *                                  | #6-32 x 5/16 Hi top, taptite (2 ea) (262508-002)       |            |
| *                                  | #6-32 x 3/32 Hi top, taptite (4 ea) (262508-003)       |            |
| *                                  | #6-32 x 3/8 Tap tite with washer (1 ea) (114399-069)   |            |
| *                                  | #6-32 x 1/4 Thumbscrew (1 ea) (124702-004)             |            |
| *                                  | Countersunk, flat head plastite (1 ea) (247481-001)    |            |

\*Not shown



## Cables

|   |  |            |
|---|--|------------|
| 1 | Diskette drive cable (143218-005)  | 257309-001 |
| 2 | IDE UATA dual device, hard drive/CD-ROM data cable, 10" with pull tab (108950-037) | 257047-001 |
| 3 | IDE UATA dual device, hard drive/CD-ROM data cable, 14" (108950-038)               | 257048-001 |
| 4 | CD-ROM audio cable (387527-001)  | 149806-001 |



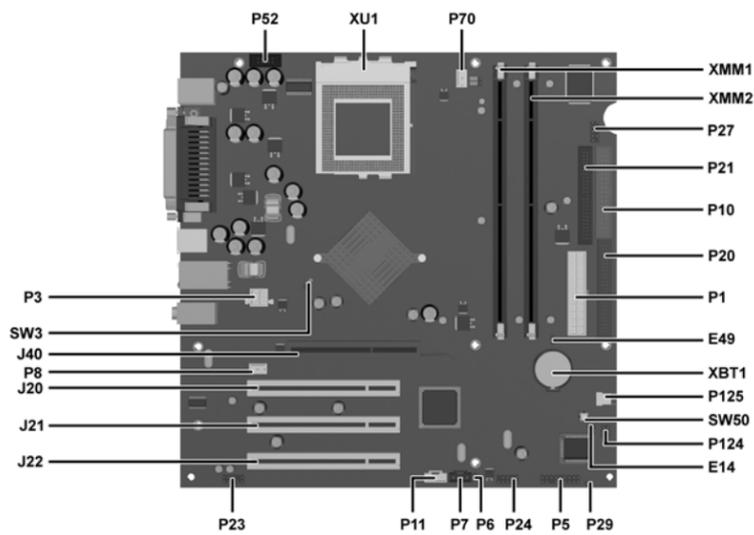
## Standard and Optional Boards

| Memory Modules  |  |            |
|---|--|------------|
| 1   | 128 MB/266 MHz FSB SDRAM                         | 237121-001 |
| *   | 256 MB/266 MHz FSB SDRAM                         | 237122-001 |
| *   | 512 MB/266 MHz FSB SDRAM                         | 257526-001 |
| *   | 1 GB/266 MHz FSB SDRAM                           | 286403-001 |
| *   | 128 MB/333 MHz FSB SDRAM                         | 314795-001 |
| *   | 256 MB/333 MHz FSB SDRAM                         | 314793-001 |
| *   | 512 MB/333 MHz FSB SDRAM                         | 314796-001 |
| *   | 1 GB/333 MHz FSB SDRAM                           | 314794-001 |
| AMD Athlon Processors with thermal grease and alcohol pad |  |            |
| 2   | XP2000, 1.667 GHz/266 FSB                        | 293585-001 |
| *   | XP2200, 1.8 GHz /266 FSB                         | 308925-001 |
| *   | XP2400, 2.0 GHz/266 FSB                          | 293587-001 |
| *   | XP2600, 2.133 GHz/266 FSB                        | 319746-001 |
| *   | XP2800, 2.083 GHz/333 FSB                        | 326769-001 |
| *   | XP3000, 2.167 GHz/333 FSB                        | 326770-001 |
| *   | XP3200+, 2.33 GHz/333 FSB                        | 345970-001 |
| *   | XP3000, 2.1 GHz/400 FSB                          | 361259-001 |
| *   | XP3200+, 2.1 GHz/400 FSB                         | 359495-001 |
| *   | XP3000+, 2.2 GHz/400 FSB                         | 359495-001 |
| 3   | System board with thermal grease and alcohol pad | 322122-001 |
| PCI, 56 kbs Modem   |  |            |
| *   | Lucent V92 modem                                 | 239411-001 |
| Graphics Controllers                                      |  |            |
| *   | nVIDIA MX440 AGP                                 | 322891-001 |
| *   | nVIDIA Quadro4 100 NVS, 32 MB                    | 322893-001 |
| *   | nVIDIA GeForce FX128MB, DDR, VGA                 | 342253-001 |
| Network Interface Controller Cards                        |  |            |
| *   | NIC, 10/100/1000 Gigabit PCI adapter             | 321793-001 |
| *   | NIC, Intel Pro/1000 MT adapter                   | 314901-001 |
| Other cards   |  |            |
| *   | 1394 Expansion card w/2 ext and 1 int port       | 287476-001 |

\* Not shown

## Keyboards (not illustrated)

See next page for information on all keyboards.



### System Board Connectors and Jumpers

|     |                      |      |                                  |
|-----|----------------------|------|----------------------------------|
| E49 | Password jumper      | P21  | Secondary IDE                    |
| J20 | PCI expansion slot 1 | P23  | Audio                            |
| J21 | PCI expansion slot 2 | P24  | Front USB                        |
| J22 | PCI expansion slot 3 | P29  | SCSI LED                         |
| J40 | AGP connector        | P52  | Serial port                      |
| P1  | Main power connector | P70  | CPU fan                          |
| P3  | CPU 12V reg input    | P124 | Hood lock                        |
| P5  | Power button/LED     | P125 | Hood sensor                      |
| P6  | Internal speaker     | SW3  | Safe Mode jumper (default = 1-2) |
| P7  | CD audio             | SW50 | CMOS reset                       |
| P8  | Chassis fan          | XBT1 | Real-time clock battery          |
| P10 | Diskette drive       | XMM1 | Memory                           |
| P11 | Aux audio            | XMM2 | Memory                           |
| P20 | Primary IDE          | XU1  | Processor                        |

### Interrupts

| IRQ | System Resource                | IRQ | System Resource                      |
|-----|--------------------------------|-----|--------------------------------------|
| 0   | Reserved, interval timer       | 12  | Onboard mouse port                   |
| 1   | Reserved, keyboard buffer full | 13  | Reserved, numeric data coprocessor   |
| 4   | Serial Port (COM 1)            | 14  | Primary IDE controller               |
| 5   | PCI system management          | 15  | Secondary IDE controller             |
| 6   | Diskette drive controller      | 19  | Integrated graphics (GPU)            |
| 8   | Real-time clock                | 21  | Integrated audio/USB host controller |
| 9   | ACPI-compliant system          | 22  | Network interface card (NIC)         |

### Computer Setup (F10) Utility Features (not all features may be available)

|                 |   |
|-----------------|---|
| <b>File</b>     | System Information<br>About<br>Set Time and Date<br>Save to Diskette<br>Restore From Diskette<br>Set Defaults and Exit<br>Ignore Changes and Exit<br>Save Changes and Exit  |
| <b>Storage</b>  | Device Configuration<br>Storage Options<br>IDE DPS Self-Test<br>Controller Order<br>Boot Order  |
| <b>Security</b> | Setup Password<br>Power-On Password<br>Password Options<br>Embedded Security<br>Smart Cover<br>Smart Sensor<br>DriveLock<br>System IDs<br>Master Boot Record Security<br>Save Master Boot Record<br>Restore Master Boot Record<br>Device Security<br>Network Service Boot |
| <b>Advanced</b> | Power-On Options<br>BIOS Wakeup<br>Onboard devices<br>PCI Devices<br>Bus Options<br>Device Options<br>PCI VGA Configuration   |

Note: See Computer Setup (F10) Utility Guide on the Documentation Library CD.

### Clearing CMOS

- Turn off the computer and any external devices, then disconnect the power cord from the power outlet.
- Remove the access panel.
- Locate the switch SW50 and press the button, holding it down for 5 seconds.
- Replace the access panel.
- Connect the power cord to the power outlet.
- Turn on the computer, allow it to start.

### Clearing and Setting the Setup and Power-On Passwords

- Turn off the computer and any external devices, then disconnect the power cord from the power outlet.
- Remove the access panel.
- Locate the header labeled E49.
- Move the jumper from pins 1 & 2 to pins 2 & 3.
- Replace the access panel.
- Connect the power cord to the power outlet.

NOTE: Placing the jumper on pins 2 & 3 and restarting the computer 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 & 2 (safe position).
- Repeat steps 5-6, then establish new passwords.

NOTE: All passwords will be cleared.

### Diagnostic LEDs

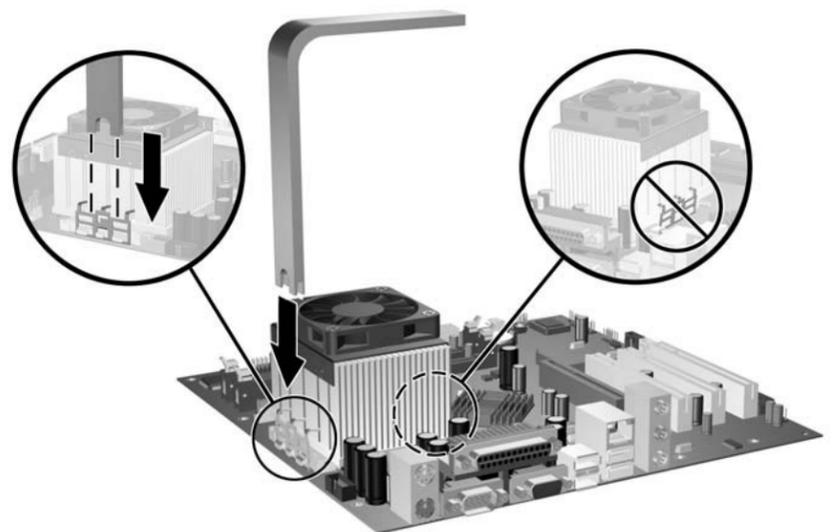
| LED        | Color     | LED Activity  | State/Message                        |
|------------|-----------|---|--------------------------------------|
| Power      | Green     | On  | (S0) Computer on                     |
| Power      | Green     | 1 blink every 2 seconds   | (S1) Normal Suspend Mode             |
| Power      | Green     | 1 blink every 2 seconds   | (S3) Suspend to RAM                  |
| Power      | Clear     | Off   | (S4) Suspend to Disk (if applicable) |
| Power      | Clear     | Off   | (S5) Computer off                    |
| Power      | Red/Green | Red when flashing ROM;<br>Green 1 blink every second<br>when user can restart | Boot block recovery w/Embedded Video |
| Power      | Red       | 3 blinks 1 every second, then 2<br>second pause                               | CPU not installed                    |
| Power      | Red       | 4 blinks 1 every second, then 2<br>second pause                               | CPU thermal shutdown                 |
| Power      | Red       | 5 blinks 1 every second, then 2<br>second pause. 5 Beeps                      | Memory error                         |
| Power      | Red       | 6 blinks 1 every second, then 2<br>second pause. 6 Beeps                      | Graphics error                       |
| Power      | Red       | 7 blinks 1 every second, then 2<br>second pause. 7 Beeps                      | System board failure                 |
| Power      | Red       | 8 blinks 1 every second, then 2<br>second pause. 8 Beeps                      | Invalid ROM                          |
| Hard Drive | Green     | Blinking  | Hard drive activity                  |

### Keyboard Diagnostic LEDs

| LED                    | Color | LED Activity                                      | State/Message  |
|------------------------|-------|---|--|
| Num. Caps, Scroll Lock | Green | Flash On-Off 2 times (Beeps -<br>1L, 3S)          | Invalid system ROM detected. ROM forces<br>reflash.          |
| Num. Caps, Scroll Lock | Green | On (Rising Tone)                                  | ROM reflashed successfully                                   |
| Num Lock               | Green | On  | ROMPaq diskette not present, is bad, or drive<br>not ready.* |
| Caps Lock              | Green | On  | Enter password.  |
| Num. Caps, Scroll Lock | Green | Blink On in sequence, one at a<br>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.

### Heatsink Removal



### Keyboards (not illustrated)

| Easy Access Keyboard, PS/2 |      | 323686-001-xxx             |      | 324634-001-xxx |      |
|----------------------------|------|----------------------------|------|----------------|------|
| Europe*                    | -021 | International**            | -B31 | Thai           | -281 |
| French Canadian            | -121 | Latin American Spanish     | -161 | U.S.           | -001 |
| Japanese                   | -291 | People's Republic of China | -AA1 |                |      |
| Korean (Hangul)            | -AD1 | Taiwanese                  | -AB1 |                |      |

\*For 324634-xxx keyboard only  
\*\*For 323686-xxx keyboard only

| Keyboard, Wireless |      | 323745-xxx                 |      |           |      |
|--------------------|------|----------------------------|------|-----------|------|
| French Canadian    | -121 | International              | -B31 | Taiwanese | -AB1 |
| Japanese           | -291 | Latin American Spanish     | -161 | Thai      | -281 |
| Korean (Hangul)    | -AD1 | People's Republic of China | -AA1 | U.S.      | -001 |

| Smartcard, Easy Access Keyboard, USB |      | 323746-xxx                 |      |           |      |
|--------------------------------------|------|----------------------------|------|-----------|------|
| French Canadian                      | -121 | International              | -B31 | Taiwanese | -AB1 |
| Japanese                             | -291 | Latin American Spanish     | -161 | Thai      | -281 |
| Korean (Hangul)                      | -AD1 | People's Republic of China | -AA1 | U.S.      | -001 |

| Keyboard, Basic, USB  |      | 355631-xxx             |      |      |      |
|-----------------------|------|------------------------|------|------|------|
| Keyboard, Basic, PS/2 |      | 355630-xxx             |      |      |      |
| French Canadian       | -121 | Latin American Spanish | -161 | U.S. | -001 |