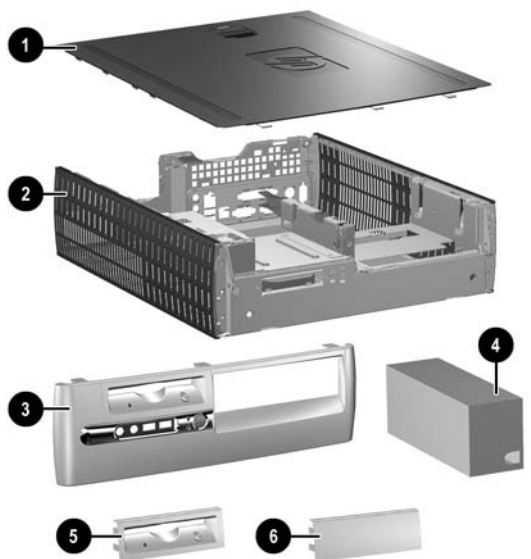


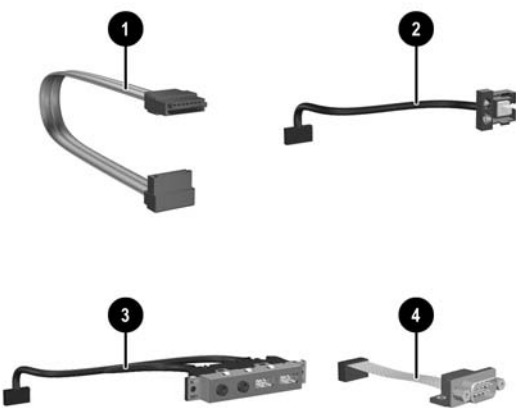
HP Business Desktop dx5150 Series Personal Computer

Illustrated Parts Map
Small Form Factor



System Unit

1	Access panel	383172-001* 410277-001
2	Chassis assembly	not spared
3	Front bezel	383173-001
4	Power supply, 200 W, PFC	376648-001* 409815-001
5	Diskette drive bezel	364508-001
6	Diskette drive bezel blank	337019-001
#	Bezel blank, 5.25-inch	335937-005



Cables

1	SATA hard drive cable, 10"	346143-005* 392307-001
2	Power switch, LED cable	337243-005* 407303-001
3	Front audio cable	383177-001* 410283-001
4	Com port cable (379443-001)	383287-001* 410279-001
*	SATA hard drive cable (alternate), 14"	346144-001* 391740-001
*	Diskette drive cable, 14.5" (143218-008)	383174-001* 410282-001
*	UATA data cable, 11" (108950-056)	383175-001* 410285-001

*Not shown

© 2005, 2006 Hewlett-Packard Development Company, L.P.

HP and the HP logo are trademarks of Hewlett-Packard Development Company, L.P.

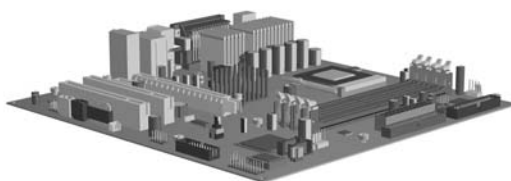
All other product names mentioned herein may be trademarks of their respective companies.

HP 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 HP products are set forth in the express limited warranty statements accompanying such products. **Nothing herein should be construed as constituting an additional warranty.**

Second Edition June 2006

First Edition April 2005

Document Number
361683-002



Standard and Optional Boards

1	System board with alcohol pad and thermal grease	380132-001* 409643-001
---	--	---------------------------

Memory Modules

#	128 MB/400 MHz FSB	335697-005*
#	256 MB/400 MHz FSB	335698-005* 407309-001
#	512 MB/400 MHz FSB	335699-005* 410810-001
#	1.0 GB/400 MHz FSB	335700-005* 407311-001

AMD Athlon processors with alcohol pad and thermal grease

#	1.8 GHz/1.0 GHz FSB, 512 KB cache, 3000+	383165-001*
#	2.0 GHz/1.0 GHz FSB, 512 KB cache, 3200+	383166-001*
#	2.2 GHz/512 KB cache, 3400+	411136-001
#	2.2 GHz/1.0 GHz FSB, 512 KB cache, 3500+	383167-001* 412689-001
#	2.4 GHz/1.0 GHz FSB, 512 KB cache, 3800+	383168-001* 412690-001
#	Dual core, 1MB cache, 3800+	404361-001
#	2.4 GHz/1.0 GHz FSB, 1 MB cache, 4000+	383292-001* 412692-001
#	Dual core, 1MB cache, 4200+	411415-001

AMD Sempron processors with alcohol pad and thermal grease

#	1.8 GHz, 256 KB cache, 3200+	383169-001* 405798-001
#	1.8 GHz, 128 KB cache, 3000+	383170-001* 404362-001
#	256K, 3500+	411137-001

Other Cards

#	TPM security module	366504-001*
#	PCI Modem, International, FH bracket	361286-021*
#	PCI Modem, International, LP bracket	361287-021*
#	Broadcom Gigabit NIC, LP bracket	367853-001*
#	Agere 2006 PCI 56K Soft Modem, LP/FH bracket	398661-001
#	Intel Pro 10/100/1000 MT NIC, LP bracket	338154-005*
#	Intel Pro 1000GT Gigabit NIC, LP brackets	413889-001
#	Intel Pro 1000 PT Gigabit NIC, LP bracket	398754-001
#	FireWire 1394 card, 2 ext/1 int port, LP bracket	361551-001* 393307-001

Wireless LAN adapters (802.11b)

#	14 channel, LP bracket, for Japan	356296-295
#	14 channel, LP bracket, international	356296-B35

Graphics Solutions

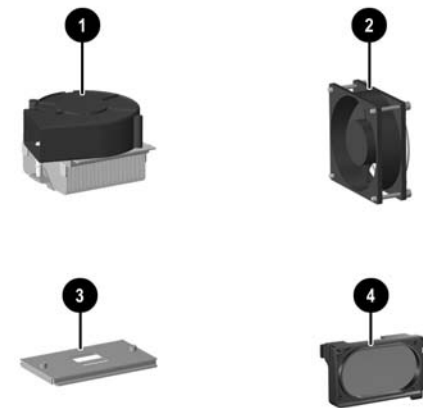
#	ATI Radeon X300 VGA graphics card, 128MB, LP bracket, FH bracket	361266-001* 398332-001
#	ATI Radeon X300 VGA graphics card, 64MB, LP bracket, FH bracket	361267-001*
#	ATI Radeon X1300 VGA graphics card, 256MB, LP bracket, FH bracket	413023-001

Not shown

LP = Low profile mounting bracket
FH = Full height mounting bracket

Mass Storage Devices (not illustrated)

40 GB/7200 RPM SATA hard drive	365555-001* 409232-001
80 GB/7200 RPM SATA hard drive	345713-005* 413319-001
160 GB/7200 RPM SATA hard drive	345712-005* 391741-001
1250 GB/7200 RPM SATA hard drive	391937-001
Diskette drive	333505-005* 392415-001
48X CD-ROM drive	326773-005* 391730-001
52X CD-ROM drive	333969-005* 413522-001
48X/32X/48X CD-RW	346788-005* 397130-001
48X/32X/48X +16X DVD/CD-RW	359493-005* 405425-001
48X/32X/48X CDRW	394382-001* 395272-001
16X DVD+R/RW	381417-001* 405760-001
16/40X DVD ROM Drive	325313-005* 405761-001
Zip 250 drive with mounting bracket	333504-005*
Media card reader	407187-001



Miscellaneous Parts

1	Heatsink with thermal grease and alcohol pad	383171-001* 409816-001
2	Chassis fan	383178-001* 409817-001
3	Processor backing plate	383179-001* 410278-001
4	Speaker	383176-001* 410291-001
#	Mouse, 2-Button, PS/2 with scroll wheel	323614-005* 390937-001
#	Mouse, 2-Button, USB, optical with scroll wheel	323615-005* 390939-001
#	Mouse, 2-Button, USB, with scroll wheel	323617-005* 390938-001
#	Drive Key, 128 MB	349988-005*
#	Drive Key, 256 MB	372889-001*
#	Real-time-clock battery	153099-001
#	Feet, rubber, 4 oval, 4 round	370708-001

*Not shown

Miscellaneous Screw Kit (not illustrated)

Miscellaneous screw kit, including:	337237-005
#6-32 x .250, hitop, taptite (192308-001) 4 ea	
#6-32 x .312, hitop, speaker (192308-002) 4 ea	
Countersunk, flat head plastite (247481-001) 2 ea	
M3 x 5mm, hitop (263585-001) 4 ea	
#6-32 x .250, hitop (262508-001) 8 ea	
#6-32 x .250, pan head (101517-067) 3 ea	
#6-32 x .312, hitop (262508-002) 4 ea	
#6-19 x .312, pan head (101346-068) 2 ea	
#6-19 x .315, T15 head (331310-001) 2 ea	

Keyboards (not illustrated)

PS/2, Basic	355630-xxx*	382925-xx1
USB, Basic	355631-xxx*	382927-xx1
USB, Modular	355102-xxx*	382926-xx1
USB SmartCard	373670-xx1	
Brazilian Portuguese	-205	Japanese -295
Europe#	-025	LA Spanish -165
French Canadian	-125	PRC -AA5
International##	-B35	U.S. -005

#For 355102 only

##Not for 355102

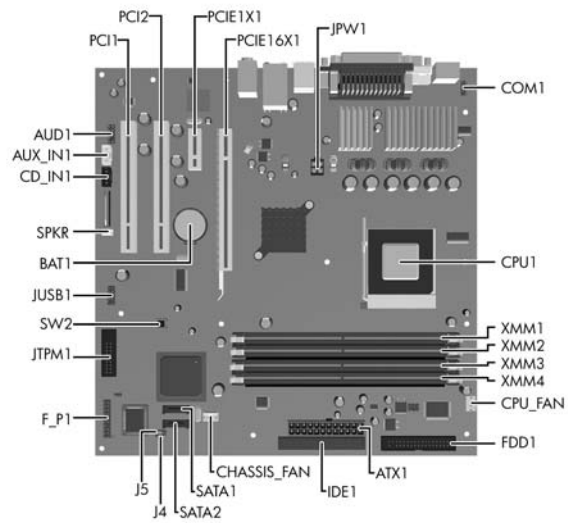
Notes:
* Original Spare
◆ Modified Spare

REQUIREMENT:

For customers in countries/regions with RoHS legislation* (e.g. EU, China, etc.) restricting the use of hazardous substances in electrical equipment.

The use of the Original Spare part is regulated by RoHS legislation. If your unit contains a part that is labelled with the Modified Spare number, the Modified Spare must be ordered as the replacement part. If your unit contains a part that is labelled with the Original Spare number, please order the Original Spare as the replacement part. In this case either the Original Spare or the Modified Spare may be shipped which will not affect performance or functionality of the unit.

*Directive 2002/95/EC restricts the use of lead, mercury, cadmium, hexavalent chromium, PBBs and PBDEs in electronic products. Countries/regions outside the EU, e.g. China, are introducing similar legislation. References to 'RoHS legislation' means requirements of Directive 2002/95/EC or similar substance restrictive legislation enacted by any country/region outside the EU, or similar substance restrictive legislation enacted by any country/region outside the EU.



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

ATX1	Main power connector (24 pin)	JTPM1	TPM security module
AUD1	Front I/O panel audio	JUSB1	Front USB connector
AUX_IN1	Aux audio in	PCI1	PCI socket 1
BAT1	Battery	PCI2	PCI socket 2
CD_IN1	CD audio in	PCIE1X1	PCI Express x1 connector
CHASSIS_FAN	System fan	PCIE16X1	PCI Express x16 connector
COM1	Flying serial port	SATA1	SATA drive
CPU_FAN	Processor fan	SATA2	SATA drive
CPU1	Processor socket	SPKR	Internal audio
F_P1	Hood sensor	SW2	CMOS switch
FDD1	Diskette drive	XMM1	Memory socket
IDE1	IDE drive connector	XMM2	Memory socket
J4	Boot block (default = off)	XMM3	Memory socket
J5	Password enable (default = off)	XMM4	Memory socket
JPW1	4-pin aux power connector		

System Hardware Interrupts

IRQ	System Function	IRQ	System Function
0	Reserved, Timer Interrupt	12	Onboard Mouse Port
1	Reserved, Keyboard Buffer Full Coprocessor	13	Reserved, Numeric Port
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 Controller	21	Integrated Audio/USB Host
9	ACPI Compliant System	22	Network Interface Card (NIC)

Computer Diagnostic LEDs (on front of computer)

LED	Color	LED/Beep Activity	State/Message
Power	Green	On	(S0) Computer on
Power	Green	1 blink every 2 seconds	(S1) Suspend Mode
Power	Green	1 blink every 2 seconds	(S3) Suspend to RAM
Power	Red*	2 blinks and beeps 1 second apart	CPU thermal shutdown
Power	Red*	3 blinks and beeps 1 second apart	CPU not installed
Power	Red*	4 blinks and beeps 1 second apart	Power supply overload.
Power	Red*	5 blinks and beeps 1 second apart	Pre-video memory error.
Power	Red*	6 blinks and beeps 1 second apart	Pre-video graphics card error
Power	Red*	7 blinks 1 and beeps second apart	System board failure (detected prior to video)
Power	Red*	8 blinks and beeps 1 second apart	Invalid ROM checksum
Power	Red*	9 blinks and beeps 1 second apart	System power on but is unable to boot.
Hard Drive	Green	Blinking	Hard drive activity

*Blinking codes are repeated after a two second pause. Beeps stop after fifth iteration, but LEDs continue until problem is resolved.

Keyboard Diagnostic LEDs, PS/2 Keyboards Only

LED	Color	LED Activity	State/Message
Num Lock	Green	On	ROMPaq diskette or ROMPaq CD 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.
Num, Caps, Scroll Lock	Green	On	Boot Block ROM Flash successful. Turn power off, then on to reboot.

* Diagnostic lights do not flash on USB keyboards.

Clearing CMOS Using Computer Setup

The computer's configuration (CMOS) stores password information and information about the computer's configuration. To clear and reset the configuration, perform the following procedure:

This is the preferred method for clearing CMOS. However, if you cannot access Computer Setup, refer to the next section for instructions on using the CMOS switch to clear CMOS.

- Turn on or restart the computer. If you are in Microsoft Windows, click **Start > Shut Down > Restart**.
- As soon as the computer is turned on, press and hold the **F10** key until you enter Computer Setup.
- If you do not press **F10** at the appropriate time, you must restart the computer and press and hold **F10** until you enter Computer Setup.
- Use the arrow keys to select **Load Optimized Defaults**, then press **Enter**.
- To apply and save changes, press **F10**, or select **Save & Exit Setup** and press **Enter**.

Clearing CMOS Using the CMOS Switch

The computer's configuration (CMOS) may occasionally be corrupted. If it is, it is necessary to clear the CMOS memory using switch SW2.

To clear and reset the configuration, perform the following procedure:

- Prepare the computer for disassembly.

CAUTION: You must disconnect the power cord from the power source before sliding the Clear CMOS switch (NOTE: All LEDs on the board should be OFF). The CMOS switch will not clear CMOS if the power cord is connected.

- Remove the access panel.
- Slide the CMOS button located on the system board and hold it for 5 seconds.
- Replace the access panel.
- Turn the computer on and run F10 Computer Setup (Setup Utility) to reconfigure the system.

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.
- With the power cord disconnected, press the power button again to drain any residual power from the computer.
- Remove the access panel.
- Locate the header and green jumper labeled J5.
- Remove the jumper from pins 1 and 2. Place the jumper over either pin 1 or pin 2, but not both, to avoid losing it.
- Replace the access panel.
- Plug in the computer and turn on power. Allow the operating system to start, which clears 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.
- Repeat steps 6-8, then establish new passwords in Computer Setup.

Refer to the Computer Setup (F10 Setup) instructions to establish new passwords.

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

System Information	Displays		
Standard CMOS Features	Date Time PATA IDE Channel 0 Master	PATA IDE Channel 1 Master PATA IDE Channel 2 Master Drive A	Floppy 3 Mode Support Halt On POST Delay
Advanced BIOS Features	Removable Device Boot Priority Hard Disk Boot Priority CD-ROM Boot Priority Network Boot Priority MBR Security	Quick Power On Self Test First Boot Device Second Boot Device Third Boot Device Fourth Boot Device	Boot Up NumLock Status APIC Function MPS Version Control for OS HDD S.M.A.R.T. Capability BIOS Write Protection
Advanced Chipset Features	Internal Video Mode AGP Aperture Size	UMA Frame Buffer Size Video Display Devices	Auto Detect PCI Clk Spread Spectrum
Integrated Peripherals	South OnChip IDE Device South OnChip PCI Device Init Display First Surroundview	OnChip USB Controller Front Panel USB Port Onboard FDC Controller Onboard Serial Port	Onboard Parallel Port Parallel Port Mode ECP Mode Use DMA
Power Management Setup	ACPI Function ACPI Suspend Type After AC Power Loss	PowerOn by PCI Card AMD Cool'n'Quiet RTC Alarm Resume	Date (of Month) Resume Time
PnP/PCI Configuration	Reset Configuration Data Resources Controlled By	IRQ Resource PCI/VGA Palette Snoop	Assign IRQ for VGA Assign IRQ for USB
PC Health Status	System Information Load Optimized Defaults	Set Supervisor Password Set User Password	Save & Exit Setup Exit Without Saving