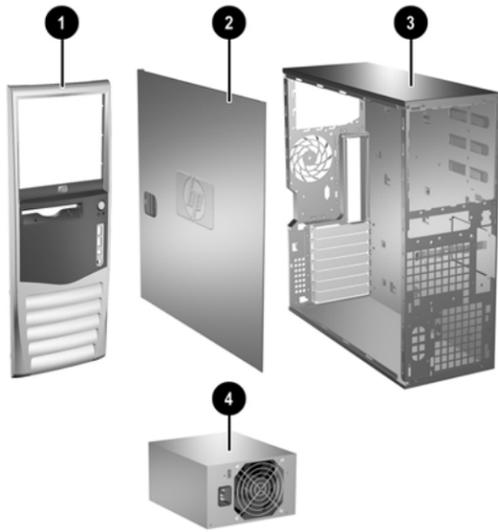


hp compaq d538 Series Personal Computer

illustrated parts map
convertible minitower



System Unit

1	Front bezel assembly with sub panel, 5.25" bezel blank, and diskette drive bezel	356593-001
2	Computer access panel	336444-001
3	Chassis assembly	not spared
4	Power supply, PFC	308615-001

Mass Storage Devices (not illustrated)

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
80 GB SATA Hard drive	345713-001
160 GB SATA Hard drive	345712-001
Diskette drive with mounting screws	333505-001
48X CD-ROM drive with mounting screws	326773-001
48X/24X/48X CD-RW Drive	325308-001
48X/32X/48X CD-RW Drive	346788-001
48X/24X/48X +16X DVD/CD-RW Drive	325309-001
4X DVD+R/RW Drive	325317-001
16/40X DVD-ROM Drive	325313-001
Zip 250 Drive with mounting bracket	333504-001
Zip 250 Drive without mounting bracket	326772-001
Zip 750 Drive with mounting bracket	344060-001
Zip 750 Drive without mounting bracket	344059-001
PC MCIA Drive bay reader	331589-001
MultiBay drive adapter	335805-001
24X/10X/24X/8X CD-RW/DVD-ROM MultiBay drive	325312-001
24X/24X/24X/8X CD-RW/DVD-ROM MultiBay drive	346789-001
24X CD-ROM MultiBay drive	325314-001
24/10/24X CD-RW MultiBay drive	325315-001
8X/24X DVD-ROM MultiBay drive	325316-001

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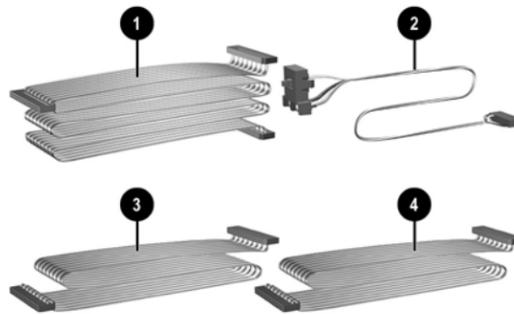
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Product of the United States

February 2004

Document Number
358328-001



Cables

1	IDE cable, 15.25", two device (108950-047)	336448-001
2	Power switch/LED cable with switch holder	336447-001
3	Diskette drive cable (143218-006)	333875-001
4	IDE cable, 12.5", two device (108950-046)	333876-001
*	SATA Hard drive cable, use in standard hard drive position	346141-001
*	SATA Hard drive cable, use in 5 1/4" drive bay only	346144-001
*#	DVI graphics cable	285380-001
*#	VGA graphics cable	285379-001
*#	DVI-VGA graphics adapter	202997-001
*	CD-ROM Audio cable (387527-001)	149806-001
*	Antenna cable for 332963-001 and 333864-001	333365-001
*	Flying serial port assembly kit	341899-001

*Not shown

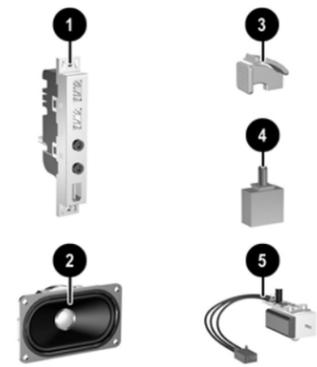
#Use with 322892-001, 322893-001, 274623-001, and 274622-001

Miscellaneous Screw Kit (not illustrated)

Miscellaneous screw kit	337237-001
M3 x 5mm, hitop (263585-001) 4 ea	
#6-32 x .250, hitop (262508-001) 8 ea	
#6-32 x .250, pan head (101517-037) 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	

Easy Access Keyboards (not illustrated)

PS/2 keyboard for PRC	323686-AA1
Wireless keyboard for PRC	323745-AA1
USB keyboard for PRC	324636-AA1
USB keyboard with SmartCard for PRC	323746-AA1

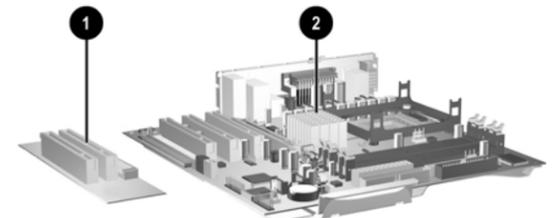


Miscellaneous Parts

1	Front I/O device	336446-001
2	Speaker	326776-001
3	PCI latch kit	339808-001
4	Hood sensor	267529-001
5	Solenoid lock with cable	336442-001
*	5.25" Bay bezel blank	335937-001
*	Diskette drive bay bezel blank	356687-001
*#	Heatsink with thermal grease and alcohol pad (see reverse side)	333866-001
*	Chassis fan	330457-001
*	Mouse, 2-Button, PS/2 with scroll wheel	323614-001
*	Mouse, 2-Button, USB, optical with scroll wheel	323617-001
*	Mouse, 2-Button, wireless with scroll wheel	323616-001
*	Mouse, 2-Button, USB, with scroll wheel	323615-001
*	Rubber foot (4 ea. round, 4 ea. oval))	336445-001
*	Drive Key, 16 MB, carbon	324780-001
*	Drive Key, 64 MB, carbon	331465-001
*	Drive Key, 128 MB, carbon	331466-001
*	Drive Key, 128 MB, carbonite	349988-001
*	Nobel security lock without cable	335808-001
*	Nobel security lock with cable	335809-001
*	Return kit with buns	337910-001
*	Real-time-clock battery	153099-001
*	Port control cover	340400-001
*	PCI extender card tray	335817-001

*Not shown

#See back side for more information



Standard and Optional Boards

1	PCI extender card	252609-001
2	System board with alcohol pad and thermal grease	323091-001
Memory Modules		
*	128 MB/400 MHz FSB	335697-001
*	256 MB/400 MHz FSB	335698-001
*	512 MB/400 MHz FSB	335699-001
*	1.0 GB/400 MHz FSB	335700-001
*	128 MB/333 MHz FSB	314795-001
*	256 MB/333 MHz FSB	314793-001
*	512 MB/333 MHz FSB	314796-001
*	1.0 GB/333 MHz FSB	314794-001

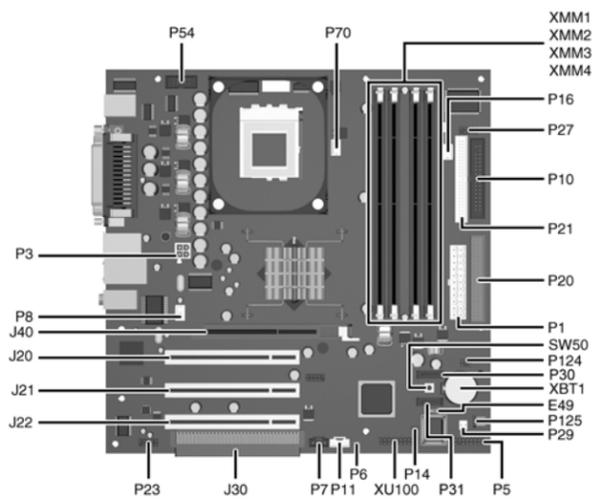
Intel Processors with alcohol pad and thermal grease

*	Celeron 2.0 GHz processor	309578-001
*	Celeron 2.2 GHz processor	321723-001
*	Celeron 2.3 GHz processor	335136-001
*	Celeron 2.4 GHz processor	351495-001
*	Celeron 2.5 GHz processor	344056-001
*	Celeron 2.6 GHz processor	344057-001
*	Pentium 2.4 GHz processor	288689-001
*	Pentium 2.53 GHz processor	333485-001
*	Pentium 2.66 GHz processor	305579-001
*	Pentium 2.8 GHz processor	305051-001
*	Pentium 3.0 GHz processor	315637-001
*	Pentium 2.4 GHz processor with Hyperthreading	335812-001
*	Pentium 2.6 GHz processor with Hyperthreading	333863-001
*	Pentium 2.8 GHz processor with Hyperthreading	333864-001
*	Pentium 3.0 GHz processor with Hyperthreading	333865-001
*	Pentium 3.2 GHz processor with Hyperthreading	335813-001

Other Cards

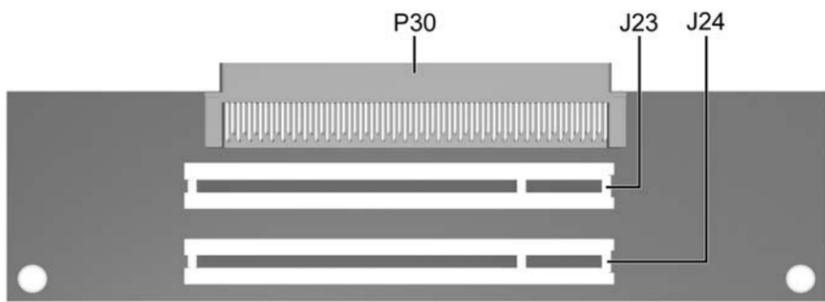
*	TPM security module	320163-001
*	Broadcom Gigabit NIC	321793-001
*	Intel Gigabit NIC	314901-001
*	Wireless LAN PCI Adapter, 11 channel (802.11)	332963-001
*	Wireless LAN PCI Adapter, 13 channel (802.11)	333364-001
*	nVidia GeForce2 MX400, 32 M, ATX bkt	309492-001
*	nVidia GeForce4 MX440, 64 M, ATX bkt	322891-001
*	nVidia MX400 64 MB, ATX BRACKET	335816-001
*	nVidia Quadro4 400 NVS, 64M, ATX bkt	274623-001
*	nVidia Quadro4 200 NVS, 32 M, ATX bkt	274622-001
*	nVidia Quadro4 100 NVS, 64 M, ATX bkt	322893-001
*	nVidia Quadro4 100 NVS, PCI, 64 M, ATX bkt	322892-001
*	DVI ADD 4-layer card	325833-001

*Not shown



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

E49	Password jumper	P21	Secondary IDE
J20	PCI slot 1	P23	Front audio/USB
J21	PCI slot 2	P27	Miulti Bay
J22	PCI slot 3	P29	SCSI LED
J30	PCI slot extender	P30	Primary Serial ATA (SATA) Port
J40	AGP slot	P31	Secondary Serial ATA (SATA) Port
P1	Main power (20 pin)	P54	Serial Port "B"
P3	CPU regulator power (4 pin)	P70	CPU fan
P5	Front panel	P124	Hood lock
P6	Internal chassis speaker	P125	Hood sensor
P7	CD audio in	SW50	CMOS button
P8	Chassis fan	XBT1	Battery
P10	Diskette drive	XMM1	Memory socket
P11	Aux audio in	XMM2	Memory socket
P14	Boot block	XMM3	Memory socket
P16	Power supply fan control	XMM4	Memory socket
P20	Primary IDE	XU100	Security



PCI Extender Card Connectors and Jumpers

J23	PCI slot 4	P30	Male expansion plug
J24	PCI slot 5		

System Hardware Interrupts

IRQ	System Function	IRQ	System Function
0	Timer Interrupt	8	Real-Time Clock
1	Keyboard	9	Unused
2	Interrupt Controller Cascade	10	Unused, available for PCI
3	Serial Port (COM B)	11	Unused, available for PCI
4	Serial Port (COM A)	12	Mouse
5	Unused, available for PCI	13	Coprocessor
6	Diskette Drive	14	Primary ATA (IDE) Controller
7	Parallel Port (LPT 1)	15	Secondary ATA (IDE) Controller

Computer Diagnostic LEDs (on front of computer)

LED	Color	LED 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	Green	Off	(S4) Suspend to Disk (if applicable)
Power	Clear	Off	(S5) Computer off
Power	Red	1 blink followed by 2-second pause - Repeat	Power Supply failure
Power	Red*	2 blinks 1 second apart	CPU thermal shutdown
Power	Red*	3 blinks 1 second apart	CPU not installed
Power	Red*	4 blinks 1 second apart	Power supply overload (crow bar)
Power	Red*	5 blinks 1 second apart	No memory
Power	Red*	6 blinks 1 second apart	No graphics
Power	Red*	7 blinks 1 second apart	System board failure (detected prior to video)
Power	Red*	8 blinks 1 second apart	Invalid ROM
Hard Drive	Green	Blinking	Hard drive activity

*Blinking codes are repeated after a 2 second pause.

Keyboard Diagnostic LEDs, PS/2 Keyboards Only

LED	Color	LED Activity	State/Message
Num, Caps, Scroll Lock	Green	On (Rising Tone)	ROM reflashed successfully
Num Lock	Green	On	ROMPaq diskette 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

* 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.

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.
2. Remove the access panel.
3. Press the CMOS button located on the system board and keep it depressed for 5 seconds.
4. Replace the access panel.
5. Turn the computer on and run F10 Computer Setup (Setup-utility) to reconfigure the system.

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

*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.
2. Remove the access panel.
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 access panel.
6. Plug in the computer and turn on power. Allow the operating system to start.
NOTE: 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.

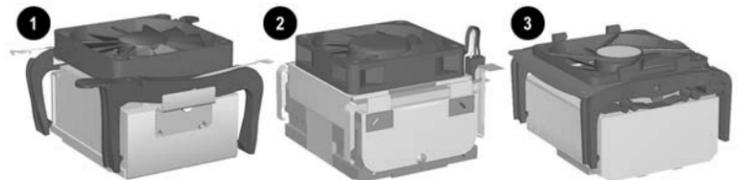
*When the CMOS button is pushed or the jumper is removed, both the power-on password and the setup password become invalid because both are stored in the configuration memory. You will need to reset the passwords.

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

File	System Information About Set Time and date	Save to Diskette Restore From Diskette Set defaults and Exit	Ignore Changes and Exit Save Changes and Exit
Storage	Device Configuration Options	IDE DPS Self-Test Controller Order	SCSI Narrow Termination Boot Order
Security	Setup Password Power-On Password Password Options Smart Cover	Smart Sensor DriveLock Master Boot Record Security Save Master Boot Record	Restore Master Boot Record Device Security Network Service Boot System IDs
Advanced	Power-On Options Onboard devices	PCI Devices Bus Options	Devise Options PCI VGA Configuration

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

Interchangeable Heatsinks



Heat Sink Removal

