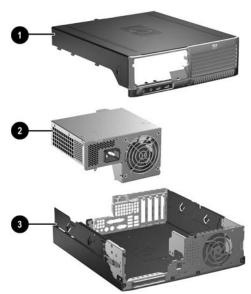
# HP Compaq Business Desktop dc7100 Series Personal Computer

Illustrated Parts Map Small Form Factor

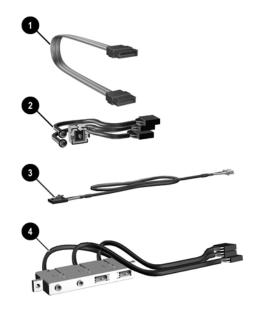






System	Unit

1	Computer cover assy with front bezel and no inserts	378007-001
1	Computer cover assembly with front bezel and no inserts (not painted, for Blue Angel use only)	367855-001
2	Power supply, PFC	350030-001
3	Chassis assembly	not spared



Cal	Cables				
1	SATA hard drive cable, 24" (326965-007)	368388-001			
1	SATA hard drive cable, 18", (326965-002)	346142-005			
2	Power switch/LED cable - use switch holder (370857-001)	368387-001			
3	Audio cable (CD to system board) (387527-001)	149806-005			
4	Front I/O device with cable	368386-001			
*	Diskette drive cable (168999-006)	370499-001			
*	UATA data cable, 8.6" (108950-054)	368389-001			
*	Cable for PCI serial port card (use with 283984-005)	302652-005			
*	Y-adapter Zip drive cable assembly (use with 333504-005 and 326772-005)	374794-001			
*	RJ-11 telephone cable (use with 361286-021 and 361287-021)	198220-005			

<sup>\*</sup>Not shown

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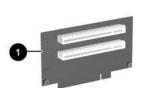
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First Edition, September 2004 Second Edition, January 2005

> Document Number 361291-002





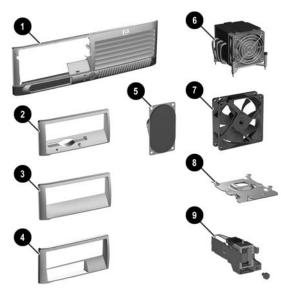


Standard	and	Ontional	Boarde
Stanuaru	anu	Optional	Duarus

1 S	System board with alcohol pad and thermal grease	361682-001
	Riser board (riser board is spared complete with expansion/riser card holder and computer backwall)	371921-001
Memo	ory Modules	I
* 1	28 MB/400 MHz FSB	335697-005
* 2	256 MB/400 MHz FSB	335698-005
* 5	12 MB/400 MHz FSB	335699-005
* 1	.0 GB/400 MHZ FSB	335700-005
Intel F	Pentium 4 Processors with alcohol pad and thermal g	rease
* 2	2.8 GHz\800 MHz FSB, 1MB cache	367594-001
* 3	.0 GHz\800 MHz FSB, 1MB cache	366643-001
* 3	3.2 GHz\800 MHz FSB, 1MB cache	366644-001
* 3	.4 GHz\800 MHz FSB, 1MB cache	367415-001
* 3	6.6 GHz\800 MHz FSB, 1MB cache	367416-001
* 3	8.8 GHz\800 MHz FSB, 1MB cache	377483-001
Intel C	Celeron D Processors with alcohol pad and thermal g	rease
* 2	2.66 GHz/533 MHz FSB, 256 KB cache	375361-001
* 2	2.8 GHz/533 MHz FSB, 256 KB cache	375362-001
Other	Cards	
* T	TPM security module	366504-001
* P	PCI Modem, International, FH bracket	361286-021
* P	PCI Modem, International, LP bracket	361287-021
* E	Broadcom Gigabit NIC, FH bracket	321793-005
* E	Broadcom Gigabit NIC, LP bracket	367853-001
* I	ntel Gigabit NIC	314901-005
* I	ntel Pro 10/100/1000 MT NIC, LP bracket	338154-005
* F	FireWire 1394 card, 2 ext/1 int port, LP bracket	361551-001
* F	FireWire 1394 card, 2 ext/1 int port, FH bracket	361552-001
	PCI serial port card without internal cable/mtg bkt. see cable 302652-005)	283984-005
Wirele	ess LAN adapters (802.11b)	I
* 1	4 channel, LP bracket, antenna, Japan only	359721-291
* 1	4 channel, antenna	377160-001
* 1	4 channel, LP bracket, PCI, antenna	377161-001
Graph	ics Solutions	1
* 4	Layer ADD2 Graphics, LP bracket	361264-001
-	ATI RV370 VGA graphics, 64M, LP bracket	364833-001
	ATI RV370 VGA graphics, 128M, LP bracket	364834-001
	Quadro NVS 280, 64M, PCI-E, SFF	377158-001

\*Not shown LP= Low profile mounting bracket FH = Full height mounting bracket

40 GB\7200 RPM SATA hard drive	365555-00
80 GBV7200 RPM SATA hard drive	345713-0
120 GBV200 RPM SATA hard drive	365556-0
160 GB\7200 RPM SATA hard drive	345712-0
Diskette drive with mounting screws	333505-0
48X CD-ROM drive with mounting screws	326773-0
52X CD-ROM drive	333969-0
48X/32X/48X CD-RW drive	346788-0
48X/32X/48X +16X DVD/CD-RW drive	359493-0
8X DVD+R/RW drive	358688-0
16X DVD+R/RW drive	381417-0
16/40X DVD ROM drive	325313-0
Zip 250 drive with mounting bracket	333504-0
Zip 250 drive without mounting bracket	326772-0
MultiBay Components	•
MultiBay drive adapter	335805-0
Diskette drive, MultiBay	335169-0
24X CD-ROM MultiBay drive	325314-0
24X/24X/24X/8X CD-RW/DVD ROM MultiBay	346789-0
8X/24X DVD-ROM MultiBay drive	325316-0



Miscel	laneous	Parts

1	Front bezel assembly with no inserts	368086-00	
*	5.25" Bay bezel blank (carbonite)	335937-00	
2	CD drive bezel with diskette drive slot	370501-00	
2	CD drive bezel with diskette drive slot (Blue Angel)	374792-00	
3	CD drive bezel without diskette drive	367852-00	
4	CD drive bezel with Zip drive slot	370504-00	
4	CD drive bezel with Zip drive slot (Blue Angel)	374793-00	
5#	Speaker with alcohol pad and thermal grease	368084-00	
6	Heatsink with thermal grease and alcohol pad	367857-00	
7	Chassis fan	366641-00	
*	Heatsink duct baffle	375514-00	
8	Heatsink retention plate with thumbscrew	370709-00	
9	Solenoid lock with cable	367854-00	
*	Hood sensor	267529-00	
*	Mouse, 2-Button, PS/2 with scroll wheel	323614-00	
*	Mouse, 2-Button, USB, optical with scroll wheel	323615-00	
*	Mouse, 2-Button, USB, with scroll wheel	323617-00	
*	Power switch holder with LED holders (use with 368387-001 switch)	370857-00	
*	Drive Key, USB flash drive, 16 MB	324780-00	
*	Drive Key, USB flash drive, 128 MB	349988-00	
*	Drive Key, USB flash drive, 256 MB	344249-00	
*	Drive Key II, USB flash drive, 256 MB	372889-00	
*	Real-time-clock battery	153099-00	
*	Port control cover	367856-00	
*	Universal clamp lock without cable	335808-00	
*	Universal clamp lock with cable	335809-00	
	Flying serial port with cable 370500-001		

316904-181 Belgium Cameroon 316904-AR1 Czech 234963-225 Denmark 316904-085 316904-045 Germany 316904-151 Greece Finland 316904-355 France 316904-051 234963-215 Hungary

trated) (use with 198220-003)				
		Israel	316904-BB1	
		Italy	316904-065	
		Netherlands	316920-335	
		Norway	234963-095	
		Poland/Russia	316904-241	
		Sweden	316904-105	
		Switzerland	304398-115	
		Turkey	316904-141	
		I I K	158503-035	

\*Not shown

#You must remove the heatsink before removing the speaker. When reinstalling the heatsink, clean the mating surfaces between the heatsink and the processor with the alcohol pad provided, and apply fresh thermal grease.

Miscellaneous Screw Kit (not illustrated)			
Miscellaneous screw kit, including: 337237-005			
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			

See next page for keyboard spares

#6-19 x .315, T15 head (331310-001) 2 ea

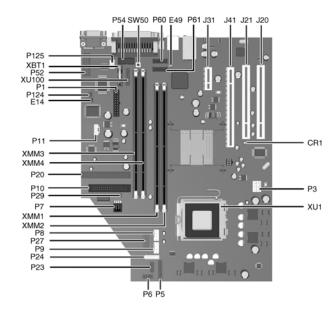
Keyboards (not illustrated)					
PS/2, Basic USB, Basic USB, Modular		355630-xxx 355631-xxx 355102-xxx			
Arabic	-175	German	-045	Portuguese	-135
Belgian	-185	Greek	-155	Russian	-255
BHCSY	-B45	Hebrew	-BB5	Slovakian	-235
Brazilian Portuguese	-205	Hungarian	-215	Spanish	-075
Czech	-225	International**	-B35	Swedish***	-105
Danish	-085	Italian	-065	Swiss	-115
Europe*	-025	Japanese	-295	Taiwanese	-AB5
Finnish	-355	Korean (Hanguel)	-KD5	Thai	-285
French	-055	LA Spanish	-165	Turkish	-145
French Arabic	-DE5	Norwegian	-095	U.S.	-005
French Canadian	-125	PRC	-AA5	U.K.	-035

<sup>\*</sup> For 355102 only \*\*Not for 355102 \*\*\* Not for 355630

#### **USB Basic Keyboard (not illustrated)**

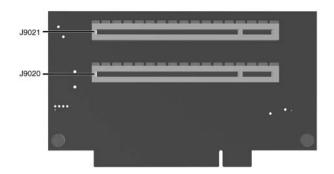
Europe, gray and carbonite (Blue Angel)

355632-B35



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

CR1	5CV Aux power LED	P24	USB connector, front panel
E14	Boot block	P27	Multi Bay
E49	Password jumper	P29	SCSI LED connector
J20	PCI slot 1	P52	Serial port "B"
J21	PCI slot 2	P54	Serial Port "A"
J31	PCI Express x1	P60	Primary Serial ATA (SATA) Port
J41	PCI Express x16	P61	Secondary Serial ATA (SATA) Port
P1	Main power (24 pin)	P124	Hood lock
P3	Processor VccP Power 12V (6 pin)	P125	Hood sensor
P5	Main power switch/LED	SW50	CMOS button
P6	Internal chassis speaker	XBT1	Battery
P7	CD audio in	XMM1	Memory socket
P8	Primary chassis fan	XMM2	Memory socket
P9	Secondary chassis fan	XMM3	Memory socket
P10	Diskette drive	XMM4	Memory socket
P11	Aux audio in	XU1	Microprocessor
P20	IDE	XU100	Security
P23	Front audio		



## **Riser Board Connectors**

	J9020	PCI connector	J9021	PCI connector	
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## **System Hardware Interrupts**

IRQ	System Function	IRQ	Sy
0	Timer Interrupt	8	Re
1	Keyboard	9	Uı
2	Interrupt Controller Cascade	10	Uı
3	Serial Port (COM B)	11	Uı
4	Serial Port (COM A)	12	M
5	Unused, available for PCI	13	Co
6	Diskette Drive	14	Pr
7	Parallel Port (LPT 1)		

IRQ	System Function		
8	Real-Time Clock		
9	Unused		
10	Unused, available for PCI		
11	Unused, available for PCI		
12	Mouse		
13	Coprocessor		
14	Primary ATA (IDE) Controller		

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	Clear	Off	(S4) Hibernation
Power	Clear	Off	(S5) Computer off

Power	Clear	Off	(S4) Hibernation
Power	Clear	Off	(S5) Computer off
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	Defective or missing memory
Power	Red*	6 blinks 1 second apart	Defective or missing graphics
Power	Red*	7 blinks 1 second apart	System board failure (detected prior to video)
Power	Red*	8 blinks 1 second apart	Invalid ROM based on checksum
Power	Red*	9 blinks 1 second apart	System not fetching code

<sup>\*</sup>Blinking codes are repeated after a 2 second pause. Beeps stop after fifth iteration but LEDs continue until problem is resolved.

System hang while loading an option ROM

Hard drive activity

10 blinks 1 second apart

Blinking

#### Keyboard Diagnostic LEDs, PS/2 Keyboards Only

Green

Computer Diagnostic LEDs (on front of computer)

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

<sup>\*</sup> 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

Power

Hard Drive

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: You must disconnect the power cord 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.
- Press the CMOS button located on the system board and keep it depressed for  $5\ \text{seconds}.$
- 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

- 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 to avoid losing it.
- Replace the access panel.
- 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.
- To re-enable the password features, repeat steps 1-3, then replace the jumper on pins 1 and 2.
- Repeat steps 5-6, then establish new passwords.

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

# Computer Setup (F10) Utility Features (features may vary)

File	System Information About Set Time and date	Replicated Setup Default Setup Apply Defaults and Exit	Ignore Changes and Exit Save Changes and Exit	
Storage	Device Configuration Storage Options	DPS Self-Test Boot Order		
Security	Setup Password Power-On Password Password Options Smart Cover Embedded Security	Drivelock Security Data Execution Prevention Master Boot Record Security Save Master Boot Record Restore Master Boot Record	Device Security Network Service Boot System IDs	
Power	OS Power Management	Hardware Power Management	Thermal	
Advanced	Power-On Options BIOS Power On Onboard devices	PCI Devices Bus Options	Device Options PCI VGA Configuration	