power
(SPEED)
light hard disk drive
(HDD) light

POWER
button

diskette drive

AC outlet

voltage
switch

AC inlet

keyboard   mouse serial 1   serial 2   printer   'VGA
monitor

device)

Computer Specifications

CPU and Memory

32-bit CPU	**Upgradable 486-class processor**
Green PC energy saver	**Energy Star compliant, low-power doze, sleep, and suspend modes for the CPU, hard disk drive, and video signals sent by the computer to the monitor; select time-out periods in SETUP; in a standard configuration of one hard disk drive and one diskette drive, system consumes less than 30 Watts in sleep mode**
System speed	**Fast and slow system clock speeds available; fast is the speed of the processor and slow is 8 MHz; from MS-DOS, speed selectable by keyboard command**

Memory	**4MB RAM (ActionPC 2600) or 8MB RAM (ActionPC 5500, 4MB on system board); expandable to 132MB; two SIMM sockets; SIMMs must be tin-plated, 72-pin, 32-bit, fast-page mode type with access speed of 70ns or faster**
ROM	**1MB flash ROM BIOS, video BIOS, and SETUP code located in flash ROM on system board; 128KB subsystem BIOS ROM**
Video RAM	**512KB or 1 MB DRAM on system board; expandable to 2MB using additional 512KB, 40-pin, SOJ flat pack video DRAM chips**
Shadow RAM	**Supports shadowing of system and video BIOS ROM into RAM and in SETUP program**
Cache	**At least 8KB of internal cache in the processor; supports 128 or 256KB of external cache with 32K x 8, 15 or 20ns SRAM DIP chips and a 32K x 8 tag chip**
Math **coprocessor**	**Math coprocessor built into the processor on all DX and Intel Pentium OverDrive processors**
Clock/calendar	**Real-time clock, calendar, and CMOS RAM soldered on system board with integrated Lithium battery**

Controllers

PCI Chipset	**Provides postwrite buffers, memory and control for the PCI bus, and the two-channel PCI IDE interface; integrated PCI bridge translates CPU bus cycles to PCI bus cycles and CPU-to-PCI memory write cycles to PCI burst cycles**
Video	**Trident 9440AGI high-performance PCI local bus GUI accelerator controller supports resolutions up to 1024 x 768 in 256 colors with 1MB of DRAM; 1280 x 1024 in 256 colors with 2MB of DRAM**
Diskette	**Controller on system board supports up to two diskette drives or one diskette and one tape drive**
Hard disk	**Two PCI, ATA-2 compatible two-channel, PCI local bus IDE interfaces on system board support up to four IDE devices (two on each channel); CD-ROM drives cannot be connected to the same channel as hard disk drives; BIOS provides hard disk auto-detection and enhanced IDE functions, and supports PIO modes 0-4**

Interfaces

Monitor
Energy Star compliant video interface built into system board for fixed or multifrequency monitor; 15-pin, D-shell connector

Parallel
One standard, multimode parallel interface built into system board; supports 8-bit unidirectional, 16-bit bidirectional, and EPP/ECP (Enhanced **Parallel Port/Extended Capability Port**) modes; 25-pin, D-shell connector; operation controllable by SETUP program and jumpers

Serial
Two high-speed RS-232C, programmable, asynchronous interfaces built into system board; 16C550 compatible; 9-pin, D-shell connectors

Keyboard
PS/2 compatible keyboard interface built into system board; 6-pin, mini DIN connector

Mouse
PS/2™ compatible mouse interface built into system board; 6-pin, mini DIN connector

Option slots
Connector card with three 16-bit ISA compatible (8.33 MHz bus speed) and one 32-bit PCI compatible (25/33 MHz bus speed) I/O expansion slots; three slots are available-the 32-bit slot and one 16-bit slot are shared

Speaker
Internal

Mass Storage

Internal mount:
One 3.5-inch wide, one-inch high drive
Externally accessible mounts:
Two 5.25-inch wide, half-height drives

Diskette drive types
3.5-inch diskette drive, 720KB, 1.44MB, or 2.88MB storage capacity; 5.25-inch diskette drive, 360KB or 1.2MB storage capacity; or combination 3.5-inch/5.25-inch or combination 3.5-inch/PCMCIA diskette drive

Hard disk drive types
5.25-inch or 3.5-inch form factor hard disk drive(s), up to half-height size; maximum of two drives

Other devices
Half-height tape drive, CD-ROM drive, optical drive, PC card reader; or other storage device; 5.25-inch or 3.5-inch with mounting frames

Keyboard

Keyboard
Detachable, two-position height; 101,102, or 104 sculpted keys; country-dependent main typewriter keyboard; numeric/cursor control keypad; four-key cursor control keypad; 12 function keys

Mouse
Detachable, two-button, PS/2 compatible

SETUP Program
Stored in ROM; accessible by pressing Del during boot

System security
Password available for system boot or for access to SETUP program

Virus protection
Detects when an attempt is made to write to the boot sector of a hard disk drive or to format a cylinder, head, or sector of a hard disk drive

Physical Characteristics

Dimension	Measurement
Width	14.8 inches (370 mm)
Depth	16.5 inches (412 mm)
Height	4.8 inches (120 mm)
Weight	16.7 lb (7.5 kg) with one diskette drive, without keyboard

Power Supply

Type
150 Watt, UL/TUV/CSA listed, fan-cooled

Input ranges
115 VAC or 230 VAC; switch-selectable

Maximum output
+5 VDC at 18 Amps, -5 VDC at 0.3 Amp
+12 VDC at 4 Amps, -12 VDC at 0.3 Amp

Frequency
47 to 63 Hz

Cables
Two to system board, five to mass storage devices

Option slot power limits

Output voltage (VDC)	+5 Volts	−5 Volts	+12 volts	−12 volts
For all slots	14 Amps	0.3 Amp	3.8 Amps	0.3 Amp

Environmental Requirements

Condition	Operating range	Storage range
Temperature	41° to 95° F (5° to 35° C)	−4° to 140° F (-20° to 60° C)
Humidity (non-condensing)	20% to 60%	10% to 95%
Altitude	-330 to 9,900 ft (-100 to 3,000 m)	-330 to 39,600 ft (-100 to 12,000 m)

System Board Components

The diagram below illustrates the components on the ActionPC 2600/ActionPC 5500 board. The table following it describes these components.
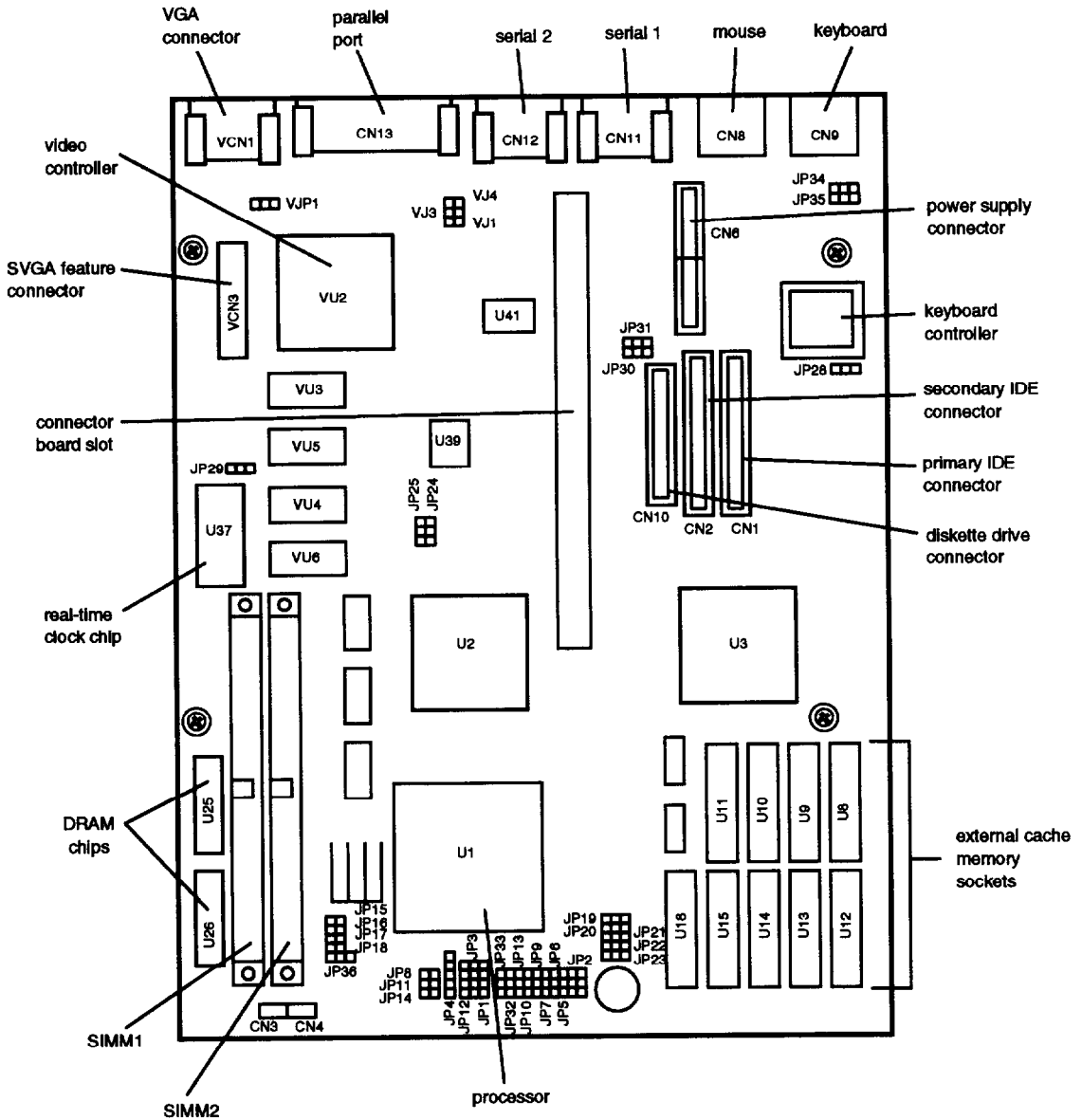
System board components

Connector	Function
CN9	PS/2 keyboard connector
CN8	PS/2 mouse connector
CN11	Serial 1 port connector
CN12	Serial 2 port connector
CN13	Printer (parallel) port connector
VCN1	15-pin DIN type VGA connector
CN6	Power connector
VCN3	VGA feature connector
CN10	Diskette drive connector
CN1	Primary IDE connector
CN2	Secondary IDE connector
CN3	HDD LED connector
CN4	Power LED connector
U2, U3	UMC UM8881, UMC UM8886 PCI chipset
U41	SMC FDC 37C665 parallel port super I/O diskette controller
VU2	Trident 9440AGI VGA controller
VU3–VU6	Video RAM chips and sockets
U37	Benchmarq real-time clock chip
U39	SST system and video BIOS chip
U1	CPU
U8–U15	External cache memory sockets
U18	Cache tag RAM chip

Jumper Settings

Miscellaneous jumper settings

Jumper number	Jumper setting	Function
JP28	1-2 2-3*	Clears CMOS memory (resets SETUP values to factory defaults) Normal CMOS values
VJP1	1-2 2-3*	Disables on-board VGA controller Enables on-board VGA controller
VJ3	1-2* Open	Interlaced monitor type Noninterlaced monitor type

* Default setting

Parallel port ECP mode DRQ jumper settings

Function	JP30	JP31
DRQ1 (DAK#1)	1-2	1-2
DRQ3 (DAK#3)	2-3*	2-3*

. Default setting

Cache jumper settings

Cache size	JP19	JP20	JP21
0KB	1-2	1-2	1-2
128KB	2-3	1-2	1-2
256KB	1-2	2-3	2-3

CPU type jumper settings

	CPU type						
	Intel or AMD	Intel				Cyrix	
Jumper number	486 DX4/100	Pentium Overdrive	486 DX4/75	486DX/SL/DX2	486DX2 (P24D L1-WB)	5x86	486 DX2/66
JP2	3-4	3-4. 5-6	3-4	3-4	3-4	3-4	3-4
JP5	1-2	1-2	1-2	1-2	1-2	1-2	1-2
JP6	2-3	2-3	2-3	2-3	2-3	2-3	2-3
JP7	1-2	1-2	1-2	1-2	1-2	1-2	2-3
JP9	Open	1-2	Open	Open	Open	Open	2-3
JP10	Open	2-3	Open	Open	Open	Open	1-2
JP13	Open	Open	Open	Open	Open	Open	Open
JP32	Open	Open	Open	Open	Open	Open	Open
JP33	Open	Open	Open	Open	Open	1-2	Open
JP1	1-2, 3-4	1-2, 3-4	1-2, 3-4	1-2, 3-4	1-2, 3-4	1-2, 3-4	1-2, 3-4
JP3	Open	1-2	Open	Open	Open	Open	2-3
JP12	3-4	2-3	3-4	3-4	3-4	3-4	3-4
JP4	2-3, 4-5	2-3, 4-5	2-3, 4-5	2-3, 4-5	2-3, 4-5	2-3, 4-5	1-2, 3-4
JP8	Open	Open	Open	Open	1-2	1-2	Open
JP11	Open	Open	Open	Open	1-2	1-2	Open
JP14	Open	Open	Open	Open	1-2	1-2	Open
JP15	Open	1-2	Open	1-2	1-2	Open	Open
JP16	Open	1-2	Open	1-2	1-2	Open	Open
JP17	1-2	Open	1-2	Open	Open	1-2	1-2
JP18	1-2	Open	1-2	Open	Open	1-2	1-2
JP36	1-2	1-2	2-3	1-2	1-2	1-2	1-2
JP22	1-2	1-2	1-2	1-2	1-2	1-2	1-2
JP23	1-2	1-2	1-2	1-2	1-2	2-3	2-3
JP24	1-2	2-3	2-3	1-2	1-2	1-2	1-2
JP25	1-2	2-3	2-3	1-2	1-2	1-2	1-2

CPU voltage jumper settings

CPU voltage	JP15-16*	JP17-18*	JP36*
3.3V	Open	1-2	2-3
3.45V	Open	1-2	1-2
5.0V	1-2	Open	Open

. Default setting depends on installed processor

CPU clock jumper settings

CPU clock speed	JP24	JP25
25 MHz	2-3	2-3
33 MHz	1-2'	1-2*

. Default setting

SIMM Installation

By installing SIMMs, you can increase the amount of memory up to 132MB

There are two SIMM sockets on the system board, and each can contain one memory module. You can install 1MB, 2MB, 4MB, 8MB, 16MB, 32MB, and 64MB SIMMs. The sockets are labeled on the system board.

The following table shows the recommended SIMM configurations. Do not install SIMMs in any other configuration.

SIMM configurations

Bank 1 (SIMM1)*	Bank 2 (SIMM2)*	On-board memory	Total memory
—	—	4MB	4MB
1MB	—	4MB	5MB
1MB	1MB	4MB	6MB
2MB	—	4MB	6MB
2MB	2MB	4MB	8MB
4MB	—	4MB	8MB
4MB	4MB	4MB	12MB
8MB	—	4MB	12MB
8MB	8MB	4MB	20MB
16MB	—	4MB	20MB
16MB	16MB	4MB	36MB
32MB	—	4MB	36MB
32MB	32MB	4MB	68MB
64MB	—	4MB	68MB
64MB	64MB	4MB	132MB

. If you install SIMMs In both Bank 1 and Bank 2, SIMM types must match.

Use only tin-plated, 32-bit, 72-pin, fast-page mode SIMMs that operate at an access speed of 70ns or faster. Be sure all the SIMMs operate at the same speed.

Video Memory

You can increase the video memory to 2MB by installing additional 512KB, 40-pin, SOJ flat pack video DRAM chips.

Video resolutions and colors

Resolution	Memory requirements	color	Refresh rates (Hz)	Remarks
640x480	1MB	16	60	8 bits/pixel*
	1MB	256	60/70/87	8 bits/pixel
	1MB	65K	60/72/75/87	16 bits/pixel
	1MB	16.8M (True Color)	60	24 bits/pixel
800x600	1MB	16	60/75	8 bits/pixel
	1MB	256	60/75	8 bits/pixel
	1MB	65K	56/60	16 bits/pixel
1024x768	1MB	16	60/70/75/87	8bits/pixel*
	1MB	256	60/70/75/87	8 bits/pixel*
1280x1024	1MB	16	60/87	4 bit planes"
	2MB	256	43.5	8 bits/pixel*

*Non-Interlaced and interlaced
**Interfaced

External Cache

You can install 128KB or 256KB of external cache with 32K x 8 15ns or 20ns, SRAM DIP chips and one 32K x 8 15ns tag chip.

You must install cache in one of the configurations in the table below (each bank contains four cache memory sockets).

Cache memory configurations

BANK 0 U8, 9, 10,11	BANK 1 U12,13,14,15	Tag SRAM U18	Total cache
32K x 8, 28-pin	None	32K x 8, 28-pin	128KB
32K x 8, 28-pin	32K x 8, 28-pin	32K x 8, 28-pin	256KB

Processor Upgrades

The computer's processor can be upgraded by replacing the existing processor with a faster one. The following table lists supported processors and voltages.

Supported processors

Processor	Voltage	Processor	Voltage
AMD DX4/100	3.45	Intel DX4/75	3.3
Cyrix DX2/66	3.45	Intel DX/SL/DX2	5.0
Cyrix 5x86	3.45	Intel DX2 (P24D)	5.0
Intel DX4/100	3.45	Intel Pentium Overdrive	5.0

Hard Disk Drive Types

Your computer comes with a hard disk auto-detection feature. To use it, select DetectMaster or DetectSlave from the Utility window in the SETUP program. The system detects the type of hard disk drive and records the drive's parameters.

Hard Disk Drive Information

The following table lists parameters for hard disk drives qualified for use in the computer.

Hard disk drive parameters

Parameters	Conner®					Western Digital™				
	CFS1275A	CFS850A	CFA540A	CFS425A	CFS420A	AC2700	AC2540	AC2420	AC2340	AC2250
Formatted capacity (MB)	1275	850	540	425	420	730	540	425	341	256
Size, width x height (in)	4 × 1	4 × 1	4 × 1	4 × 1	4 × 1	4 × 1	4 × 1	4 × 1	4 × 1	4 × 1
Weight (lb)	1.25	1.25	1.2	1.1	1.16	1.2	1.2	1.12	1.12	1.12
Cylinders	3687	3687	2805	839	2388	1416	1048	2720	2233	2233

Hard *disk drive parameters (continued)*

Parameters	Conner®					Western Digital®				
	CFS1275A	CFS850A	CFA540A	CFS425A	CFS420A	AC2700	AC2540	AC2420	AC2340	AC2250
Disks	3	2	2	1	2	2	2	2	2	2
Heads	6	4	4	2	4	4	4	4	4	3
Sectors per track	78 - 144	78 - 144	79 - 119	78 - 144	63 - 100	63	63	55 - 99	56 - 96	56 - 96
Rotational speed (RPM)	3600	3600	3600	3600	3600	4500	4500	3314	3322	3322
Buffer size (KB)	64	64	64	64	32	64	128	128	128	64
Average seek time (ms)	<15	<15	14	14	14	<10	11	<13	<13	<13
Encoding method	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7	RLL 1,7
Power dissipation (seek)	5.6 W	5.6 W	4.3 W	3.9 W	5-12 W	7.0 W	7.0 W	5.2 W	5.2 W	5.2 W
Logical parameters Cylinders	2479	1652	1050	826	826	1416	1048	989	1010	1010
Heads	16	16	16	16	16	16	16	15	12	9
Precomp zone	0	0	0	0	0	1416	1048	989	1011	1011
Landing zone	2479	1652	1050	826	826	1416	1048	989	1011	1011
Sectors	63	63	63	63	63	63	63	56	55	55

IDE hard disk drive jumper settings

Model number	Single drive	Master drive	Slave drive
Conner CFS1275A	C/D jumpered	C/D jumpered	No jumpers
Conner CFS850A	C/D jumpered	C/D jumpered	No jumpers
Conner CFS540A	C/D jumpered	C/D jumpered	No jumpers
Conner CFS425A	C/D jumpered	C/D jumpered	No jumpers
Conner CFS420A	C/D jumpered	C/D jumpered	No jumpers
Conner CFS270A	C/D jumpered	C/D jumpered	No jumpers
Western Digital AC2700	No jumpers	5-6 jumpered	3-4 jumpered
Western Digital AC2540	No jumpers	5-6 jumpered	3-4 jumpered
Western Digital AC2420	No Jumpers	5-6 jumpered	3-4 jumpered
Western Digital AC2340	No jumpers	5-6 jumpered	3-4 jumpered
Western Digital AC2250	No jumpers	5-6 jumpered	3-4 jumpered

DMA Assignments

Level	Assigned device
DMA0	Reserved
DMA1	Available/parallel
DMA2	Diskette drive controller
DMA3	Available/parallel
DMA4	Cascade from DMA1 to DMA2
DMA5	Spare
DMA6	Spare
DMA7	Spare

Hardware Interrupts

IRQ no.	Function
IRQ0	Timer output 0
IRQ1	Keyboard
IRQ2	Cascade to IRQ9
IRQ3	Serial port 2
IRQ4	Serial port 1
IRQ5	Available/LPT2
IRQ6	Diskette drive controller
IRQ7	Parallel port 1 (LPT1)
IRQ8	Real-time clock
IRQ9	Available
IRQ10	Available
IRQ11	Available
IRQ12	PS/2 mouse
IRQ13	Math coprocessor
IRQ14	Primary IDE controller
IRQ15	Secondary IDE controller

System Memory Map

Address range	Function
FE0000h-FFFFFFh	Shadowed system ROM BIOS
100000h-FDFFFFh	System extended memory (128MB maximum)
0E0000h-0FFFFFh	System ROM or adapter ROM
0C8000h-0DFFFFh	I/O
0C0000h-0C7FFFh	Shadowed video ROM BIOS
0A0000h-0BFFFFh	Graphics display buffer
000000h-09FFFFh	640KB base memory

System I/O Address Map

Hex address	Assigned device
000-01F	DMA controller 1,8237
020-03F	Interrupt controller 1,8259
022-024	Reserved
040-05F	Timer, 8254
060-06F	Keyboard controller, 8242PE
070 - 07F	Real-time clock NMI (non-maskable interrupt)
080 - 09F	DMA page register, 74LS612
0A0-0BF	Interrupt controller 2,8259
0C0-0DF	DMA controller 2,8237
0F0	Clear math coprocessor
0F1	Reset math coprocessor
0F8 -0FF	Math coprocessor
1F0 - 1F8	Primary hard disk interface
1E0 - 1E7	Secondary hard disk interface
200 - 207	Game I/O
278 - 27F	Parallel printer port 2
2B0 - 2DF	Alternate enhanced graphics adapter
2E1	GPIB (adapter 0)
2E2, 2E3	Data acquisition (adapter 0)
2F8-- 2FF	ISerial port 2
300-31F	Prototype card
360-363	Available
368-36B	Available
378 - 37F	Parallel printer port 1
380-38F	Available

System Z/O address map (continued)

Hex address	Assigned device
390 - 393	Available
3A0 - 3AF	Available
3B0 - 3BF	Available
3C0 - 3CF	Available
3D0 - 3DF	Available
3F0 - 3F7	Diskette drive controller
3F8 - 3FF	Serial port 1
6E2, 6E3	Available
790 - 793	Available
AE2, AE3	Available
B90, B93	Available
EE2, EE3	Available
1390 - 1393	Available
22E1	Available
2390 - 2393	Available
42E1	Available
63E1	Available
82E1	Available
A2E1	Available
C2E1	Available
E2E1	Available

Connector Pin Assignments

Parallel port connector pin assignments **(CN13)**

Pin	Signal	Pin	Signal	Pin	Signal
1	Strobe*	10	ACK*	19	Signal ground
2	Data 0	11	Busy	20	Signal ground
3	Data 1	12	Paper out	21	Signal ground
4	Data 2	13	Select	22	Signal ground
5	Data 3	14	Auto feed*	23	Signal ground
6	Data 4	15	Error*	24	Signal ground
7	Data 5	16	Init*	25	Signal ground
8	Data 6	17	Selectin*		
9	Data 7	18	Signal ground		

* Active low logic

Serial port connector pin assignments (CN11 and CN12)

Pin	Signal	Pin	Signal
1	Data carrier detect	6	Data set ready
2	Receive data	7	Request to send
3	Transmit data	8	Clear to send
4	Data terminal ready	9	Ring indicator
5	Signal ground reference		

Keyboard and mouse connector pin assignments (CN9 and CN8)

Pin	Signal	Pin	Signal
1	Data	4	+5 VDC
2	Reserved	5	Clock
3	Ground	6	Reserved

VGA port connector pin assignments (VCN1)

Pin	Signal	Pin	Signal	Pin	Signal
1	Red	6	Red ground	11	Reserved
2	Green	7	Green ground	12	Reserved
3	Blue	8	Blue ground	13	Horizontal sync
4	Unused	9	Key	14	Vertical sync
5	Ground	10	Sync ground	15	Unused

Power (SPEED) LED connector pin assignments (CN4)

Pin	Signal	Pin	Signal
1	Pull up 220	3	Ground
2	LED Turbo		

HDD LED connector pin assignments (CN3)

Pin	Signal	Pin	Signal
1	LED power (pull up 220)	2	HDD active

Power supply connector pin assignments (CN6)

Pin	Signal	Pin	Signal
1	NC	7	Ground
2	+5 VDC	8	Ground
3	+12 VDC	9	-5 VDC
4	-12 VDC	10	+5 VDC
5	Ground	11	+5 VDC
6	Ground	12	+5 VDC

Diskette drive connector pin assignments (CN10)

Pin*	Signal	Pin*	Signal
2	MODESELB	20	Step pulse
4	MODESELA	22	Write data
6	NC	24	Write enable
8	Index	26	Track 0
10	Motor enable AB**	28	Write protect
12	Drive select BA**	30	Read data
14	Drive select AB**	32	Select head 1
16	Motor enable BA**	34	Disk change
18	Direction		

* All odd-numbered pins are grounds

** Active low logic

IDE drive connector pin assignments (CN1 and CN2)

Pin	Signal	Pin	Signal	Pin	Signal
1	Reset*	15	SD1	29	DRQ7,6
2	Ground	16	SD14	30	Ground
3	SD7	17	SD0	31	IRQ14, IRQ15
4	SD8	18	SD15	32	IOCS16*
5	SD6	19	Ground	33	SA1
6	SD9	20	Key (NC)	34	PDIAG*
7	SD5	21	DRQ7,6	35	SA0
8	SD10	22	Ground	36	SA2
9	SD4	23	IOW*	37	CS0*
10	SD11	24	Ground	38	CS1*
11	SD3	25	IOR*	39	Active*
12	SD12	26	Ground	40	Ground
13	SD2	27	RSD (IOCHRDY*)		
14	SD13	28	NC		

*Active low logic

Option card riser board connector pin assignments

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	VCC	51	IOCHK*	101	1VCC	151	RSTDRV
2	Vcc	52	SD7	102	INTB*	152	Vcc
3	INTA*	53	SD6	103	INTD	153	IRQ9
4	INTC	54	SD5	104	REQ#2	154	-5V
5	PCIRST	55	SD4	105	Not used	155	DRQ2
6	Not used	56	SD3	106	REQ#1	156	-12V
7	GNT#2	57	SD2	107	REQ#0	157	OWS*
8	GNT#1	58	SD1	108	NC	158	+12V
9	GNT#0	59	SD0	109	Ground	159	Ground
10	Ground	60	CHRDY*	110	PCLKS3	160	SMEMW*
11	PCLKS1	61	AEN	111	Ground	161	SMEMR*
12	Ground	62	SA19	112	AD31	162	IOWR*
13	AD30	63	SA18	113	AD29	163	IORD*
14	IDSEL1	64	SA17	114	AD27	164	DAK#3
15	IDSEL2	65	SA16	115	Not used	165	DRQ3
16	Not used	66	SA15	116	AD25	166	DAK#1
17	AD28	67	SA14	117	CBE#3	167	DRQ1
18	AD26	68	SA13	118	AD23	168	Refresh*
19	AD24	69	SA12	119	Ground	169	SYSCLK
20	NC	70	SA11	120	AD21	170	IRQ7
21	AD22	71	SA10	121	AD19	171	IRQ6
22	AD20	72	SA9	122	AD17	172	IRQ5
23	AD18	73	SA8	123	CBE#2	173	IRQ4
24	AD16	74	SA7	124	Not used	174	IRQ3
25	Not used	75	SA6	125	IRDY*	175	DAK#2
26	Frame*	76	SA5	126	Devsel*	176	TC
27	TRDY*	77	SA4	127	LOCK*	177	BALE
28	STOP*	78	SA3	128	Ground	178	VCC
29	Ground	79	SA2	129	Ground	179	OSC
30	Ground	80	SA1	130	Ground	180	Ground
31	Ground	81	SA0	131	PERR*	181	MEM16*
32	NC	82	SBHE*	132	SERR*	182	IO16*
33	NC	83	LA23	133	CBE#1	183	IRQ10
34	PAR	84	LA22	134	AD14	184	IRQ11
35	AD15	85	LA21	135	AD1	185	IRQ12
36	AD13	86	LA20	136	Not used	186	IRQ15
37	Not used	87	LA19	137	AD10	187	IRQ14
38	AD11	88	LA18	138	AD8	188	DAK#0
39	AD9	89	LA17	139	AD7	189	DRQ0
40	CBE#0	90	MEMR*	140	AD5	190	DAK#5
41	AD6	91	MEMW*	141	AD3	191	DRQ5
42	AD4	92	SD8	142	AD1	192	DAK#6
43	AD2	93	SD9	143	VCC	193	DRQ6
44	AD0	94	SD10	144	NC	194	DAK#7
45	VCC	95	SD11	145	Not used	195	DRQ7
46	Not used	96	SD12	146	VCC	196	VCC
47	VCC	97	SD13	147	VCC	197	Master16*
48	VCC	98	SD14	148	Ground	198	Ground
48	Ground	99	SD15	149	Ground		
50	Ground	100	VCC	150	Ground		

* Active low logic

ISA option slot connector pin assignments

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	IOCHCK*	26	SA5	51	BCLK	76	SD11
2	SD7	27	SA4	52	IRQ7	77	SD12
3	SD6	28	SA3	53	IRQ6	78	SD13
4	SD5	29	SA2	54	IRQ5	79	SD14
5	SD4	30	SA1	55	IRQ4	80	SD15
6	SD3	31	SA0	56	IRQ3	81	M16*
7	SD2	32	Ground	57	DACK2*	82	IO16*
8	SD1	33	RSTDDRV	58	T/C	83	IRQ10
9	SD0	34	+5 VDC	59	BALE	84	IRQ11
10	IOCHRDY	35	IRQ9	60	+5 VDC	85	IRQ12
11	BAEN	36	-5 VDC	61	BOSC	86	IRQ15
12	SA19	37	DREQ2	62	Ground	87	IRQ14
13	SA18	38	-12 VDC	63	SBHE*	88	DACK0*
14	SA17	39	OWS*	64	SA23	89	DREQ0
15	SA16	40	+12VDC	65	SA22	90	DACK5*
16	SA15	41	Ground	66	SA21	91	DR EQ5
17	SA14	42	SMEMW*	67	SA20	92	DACK6*
18	SA13	43	SMEMR*	68	SA19	93	DR EQ6
19	SA12	44	IOW*	69	SA18	94	DACK7*
20	SA11	45	IOR*	70	SA17	95	DREQ7
21	SA10	46	DACK3*	71	MEMR*	96	+5 VDC
22	SA9	47	DREQ3	72	MEMW*	97	MASTER*
23	SA8	48	DACK1*	73	SD8	98	Ground
24	SA7	49	DREQ1	74	SD9		
25	SA6	50	RFSH*	75	SD10		

. Active low logic

PCI option slot connector pin assignments

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	NC	31	AD18	61	-12V	91	NC
2	+12V	32	AD16	62	NC	92	AD17
3	NC	33	NC	63	Ground	93	CBE#2
4	NC	34	FRAME*	64	NC	94	Ground
5	+5V	35	Ground	65	+5V	95	IRDY*
6	INTA*	36	TRDY*	66	+5V	96	NC
7	INTC*	37	Ground	67	INTB*	97	DEVSEL*
8	+5V	38	STOP*	68	INTD*	98	Ground
9	NC	39	NC	69	NC	99	LOCK*
10	+5V	40	SDONE	70	NC	100	PERR*
11	NC	41	SB0*	71	NC	101	NC
12	Ground	42	Ground	72	Ground	102	SERR*
13	Ground	43	PAR	73	Ground	103	NC
14	NC	44	AD15	74	NC	104	CBE#1
15	PCIRST*	45	NC	75	Ground	105	AD14
16	+5V	46	AD13	76	PCICLKS1	106	Ground
17	GNT#0	47	AD11	77	Ground	107	AD12
18	Ground	48	Ground	78	REQ#1	108	AD10
19	NC	49	AD9	79	+5V	109	Ground
20	AD30	50	CBE#0	80	AD31	110	AD8
21	NC	51	nc	81	AD29	111	AD7
22	AD28	52	AD6	82	Ground	112	NC
23	AD26	53	AD4	83	AD27	113	AD5
24	Ground	54	Ground	84	AD25	114	AD3
25	AD24	55	AD2	85	NC	115	Ground
26	IDSEL1 (AD13)	56	AD0	86	CBE#3	116	AD1
27	NC	57	+5V	87	AD23	117	+5V
28	AD22	58	NC	88	Ground	118	NC
29	AD20	59	+5V	89	AD21	119	+5V
30	Ground	60	+5V	90	AD19	120	+5V

. Active low logic

SIMM socket connector pin assignments

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	Ground	19	NC	37	DP1	55	DQ11
2	DQ0	20	DQ4	38	DP3	56	DQ27
3	DQ16	21	DQ20	39	Ground	57	DQ12
4	DQ1	22	DQ5	40	CAS0*	58	DQ28
5	DQ17	23	DQ21	41	CAS2*	59	VCC
6	DQ2	24	DQ6	42	CAS3*	60	DQ29
7	DQ18	25	DQ22	43	CAS1*	61	DQ13
8	DQ3	26	DQ7	44	RAS0*	62	DQ30
9	DQ19	27	DQ23	45	RAS1*	63	DQ14
10	VCC	28	A7	46	A10A	64	DQ31
11	NC	29	NC	47	WE*	65	DQ15
12	A0	30	VCC	48	A10B	66	NC
13	A1	31	A8	49	DQ8	67	PD1
14	A2	32	A9	50	DQ24	68	PD2
15	A3	33	RAS3*	51	DQ9	69	PD3
16	A4	34	RAS2*	52	DQ25	70	PD4
17	A5	35	DP2	53	DQ10	71	NC
18	A6	36	DP0	54	DQ26	72	Ground

• Active low logic

Tested Operating Environments

The following operating environments have been tested for compatibility with the system.

Microsoft MS-DOS 3.3 and later
Novell NetWare 3.12 and 4.02
Novell Personal NetWare
IBM OS/2 version 3.0 (Warp)

SCO Open Desktop
Microsoft Windows 3.1 and later
Microsoft Windows for WorkGroups
Microsoft Windows NT version 3.5 and later
Microsoft Windows 95

• Certified as workstation; tested as file server

Your system has also received Novell's "Yes, NetWare tested and approved" certification as a workstation. As new environments become available, these also will be tested.

Installation/Support Tips

Installing Diskette Drives

❏ Make sure that the drive type has been correctly selected in the SETUP program.

❏ Make sure that you enable the diskette drive controller in the SETUP program.

Installing Hard Disk Drives

❏ If you are installing a drive that cannot use the embedded IDE interface (such as an ESDI drive), it is recommended that you use a 16-bit, AT-type hard disk controller. If you install a non-IDE hard disk drive and controller card, you must use SETUP to disable the built-in IDE hard disk drive interface.

❏ When installing a hard disk drive, use the autodetection feature in SETUP to select the correct type for the drive. If this feature does not produce a match for the drive, you can define your own drive type by selecting type 47 from the Master Disk option on the Standard options window. You can then enter the drive's parameters yourself.

Software Problems

❏ When installing a copy-protected software package, first try the installation at high speed. If this does not work properly, select low speed by pressing Ctrl Alt - (on the numeric keypad). Try loading the program at low speed and then switching to high speed, if possible.

❏ When running a software package that uses a key disk as its copy-protection method, try loading it at high speed. If this does not work, load it at low speed.

Installing Option Cards

If you are installing a video adapter card, make sure you disable the built-in VGA controller by setting jumper VJP1 to 1-2.

Upgrading the Processor

When you replace the processor, you need to check the settings of several jumpers, as listed on page 4.

Booting Sequence

If you cannot boot the computer from the hard disk, make sure the booting sequence in SETUP is set to A:, C:. Then boot the computer from a system diskette in drive A.

Password

If you forget your password, you must discharge your CMOS memory as follows:

1. Turn off the computer and remove the cover.

2. Disable the password by setting jumper JP28 on the system board to 1-2.

3. Turn the computer on, leave it on for a few seconds, then turn it off again.

4. Set jumper JP28 back to 2-3 to select the system board battery.

5. Turn on the computer and run SETUP to enter a new password, if desired, and the system configuration.

Information Reference List

Engineering Change Notices

None.

Technical Information Bulletins

None.

Product Support Bulletins

None.

Related Documentation

TM-APC26/55	**EPSON ActionPC 2600,** **ActionPC 5500 Service Manual**
PL-APC26/55	**EPSON ActionPC 2600,** **ActionPC 5500 Parts Price List**
400521400	**EPSON ActionPC 2600,** **ActionPC 5500 User's Guide**