

Specifications

The table below provides technical information about the components that make up the computer.

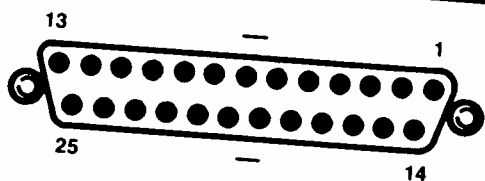
Item	Specification
Color/monochrome CRT adaptor card (optional)	Size: 60mm (W) x 134mm (H) (2-3/8" (W) x 5-3/8" (H)) Weight: Approx. 0.075 kg (0.17 lbs) Emulation: CGA/MDA mode selectable Interface: Direct connection to bus Main Unit Connector: 50-pin female connector Color CRT connector: 9-pin female connector
External 5-1/4" floppy disk drive (optional)	One 5-1/4 inch drive with the following: Capacity: 500K unformatted Size: 118mm (W) x 331mm (D) x 189mm (H) (4-3/4" (W) x 13" (D) x 7-1/2" (H)) Weight: Approx. 5.1 kg (11.3 lbs) Power source: 120V AC, 60 Hz Operating Temperature: 10 to 35 degrees C (50 to 95 degrees F) Storage Temperature: -20 to 60 degrees C (-4 to 140 degrees F) Operating Humidity: 20 to 80% Storage Humidity: 10 to 90%
External 5-1/4" floppy disk port	Interface: CE-452F 5-1/4" floppy disk drive unit exclusive-use
Hard disk drive (PC-4641 only)	3.5 inch hard disk with the following: Capacity: 40M bytes

Item	Specification
Internal floppy disk drive	3-1/2 inch with the following: Capacity: 1M unformatted
Keyboard	90 keystrokes including: 10 programmable function keys; 14 numeric keypad; 55 typewriter keys; 4 separated cursor keys; 4 control keys (Set Up, Esc, Ins, Del); 3 lock keys (NumLock, Scroll Lock, CapsLock)
Main unit	Size: 307mm (W) x 348mm (D) x 81mm (H) (12-1/8" (W) x 13-3/4" (D) x 3-1/4" (H)) Weight: (without AC adaptor) PC-4602: 4.9 kg (10.8 lbs) PC-4641: 5.4 kg (11.9 lbs) Power source: Lead battery, AC adaptor Operating temperature: 10 to 35 degrees C (50 to 95 degrees F) Storage temperature: -20 to 60 degrees C (-4 to 140 degrees F) Operating humidity: 20 to 80% Storage humidity: 10 to 90%
Parallel I/O port	Interface: Centronics Connector: 25 pin female, type D-shell
Processor (standard)	80188 compatible with 10 MHz clock
Processor (optional)	Socket for 8087-1 (10 MHz version)
RAM	640K
ROM	64K EP-ROM with IPL, BIOS, selfcheck, CG, and set up functions
Screen	Screen type: Super twist liquid crystal display View area: 25 lines by 80 characters Emulation: CGA, MDA, AT&T 640 x 400 Graphics: 640 by 400 pixels bit-mapped CGA double scan emulation with black and white 320 x 200 pixels with 4 color emulation (tyling) Character cell size: 8 by 16 dots

Item	Specification
Serial I/O card (optional)	Size: 95mm (W) x 140mm (H) (3-3/4" (W) x 5-1/2" (H)) Weight: Approx. 0.08 kg (0.18 lbs) Interface: RS-232C Transmission method: Asynchronous full or half duplex Baud rate: 110, 150, 300, 600, 1200, 2400, 4800, 9600 Data length: 7 or 8 bits Parity check: None, even, or odd Stop bit: 1 or 2 bits Connector: 25-pin male, type D-shell
Serial I/O port	Interface: RS-232C Transmission method: Asynchronous full or half duplex Baud rate: 110, 150, 300, 600, 1200, 2400, 4800, 9600 Data length: 7 or 8 bits Parity check: None, even, or odd Stop bit: 1 or 2 bits Connector: 9-pin male, type D-shell

Pin Layout

Parallel Connector. The following is a pin location diagram for the parallel connector port on the computer:

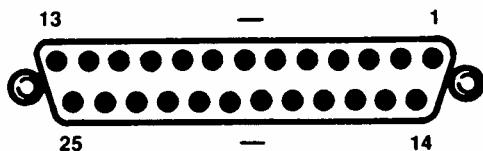


The following table describes the pins for the parallel connector:

Pin Number	Signal Name	Input/Output
1	Strobe	Output
2	Data 0	Output
3	Data 1	Output
4	Data 2	Output
5	Data 3	Output
6	Data 4	Output
7	Data 5	Output
8	Data 6	Output
9	Data 7	Output
10	Acknowledge	Input
11	Busy	Input
12	Paper-end	Input
13	Select	Input
14	Auto feed	Output
15	Printer error	Input
16	Initialize printer	Output
17	Select input	Output
18-25	Ground	

5-1/4" Floppy Disk Drive Unit Connector

The following is a pin location diagram for the 5-1/4" floppy disk connector port on the computer:

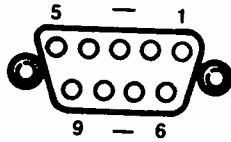


The following table describes the pins for the 5-1/4" floppy disk connector:

Pin Number	Signal Name	Input/Output
1		
2	IDX	Input
3	TK00	Input
4	WPT	Input
5	RD02	Input
6		
7		
8		
9	DS3	Output
10	DS2	Output
11	MON	Output
12	WDT2	Output
13	WTG2	Output
14		
15	HSL2	Output
16	DRTN2	Output
17	STP2	Output
18-25		

Serial Connector

The following is a pin location diagram for the RS-232C connector port on the computer:

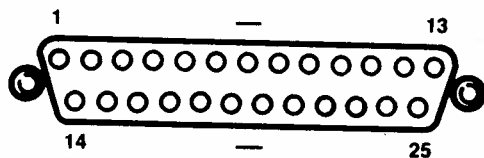


The following table describes the pins for the serial connector:

Pin Number	Signal Name	Input/Output
1	Carrier detect	Input
2	Receive data	Input
3	Send data	Output
4	Data terminal ready	Output
5	Signal ground	
6	Data-set-ready	Input
7	Request-to-send	Output
8	Clear-to-send	Input
9	Calling indicator	Input

Serial Connector (Option)

The following is a pin location diagram for the connector port on the CE-451B serial I/O card.

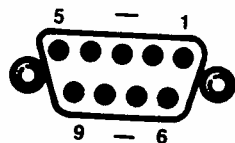


The following table describes the pins of the serial connector:

Pin Number	Signal Name	Input/Output
1	Frame ground	
2	Transmit data	Output
3	Receive data	Input
4	Request-to-send	Output
5	Clear-to-send	Input
6	Data-set-ready	Input
7	Signal ground	
8	Carrier detect	Input
20	Data terminal ready	Output
22	Calling indicator	Input

Color/Monochrome CRT Connector (Option)

The following is a pin location diagram for the CE-451A color/monochrome CRT adaptor connector port:



The following table describes the pins for the color/monochrome CRT connector:

In the color mode:

Pin Number	Signal Name	Input/Output
1	Ground	
2	Ground	
3	Red	Output
4	Green	Output
5	Blue	Output
6	Intensity	Output
7	Not used	
8	Horizontal synch	Output
9	Vertical synch	Output

In the monochrome mode:

Pin Number	Signal Name	Input/Output
1	Ground	
2	Ground	
3	Not used	
4	Not used	
5	Not used	
6	Intensity	Output
7	Video	Output
8	Horizontal synch	Output
9	Vertical synch	Output

SHARP