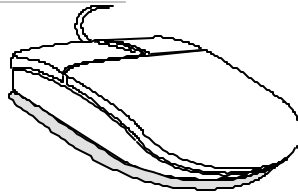


Building & Buying a PC

ALL ABOARD! THE COMPUTER BUS—

Common pathway between hardware devices. A computer bus connects the CPU to its main memory and the memory banks that reside on the control units of the peripheral devices. It is made up of two parts. Addresses are sent over the address bus to signal a memory location, and the data is transferred over the data bus to that location. Widely-used computer buses are ISA, EISA, NuBus, Micro Channel, TURBOchannel, VMEbus, MULTIBUS and STD bus. Our current bus, the (VLB) Vesa Local Bus is history. The Bus of choice is the PCI bus by Intel.

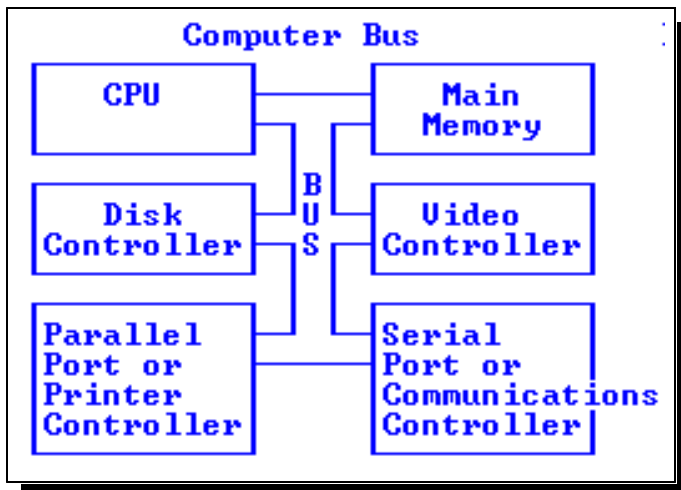


Bus Mastering

Bus design that allows add-in boards to process independently of the CPU and to be able to access the computer's memory and peripherals on their own.

Bus Mouse

Mouse that plugs into an expansion board. It takes up an expansion slot whereas a serial mouse takes up a serial port. The choice depends on how many devices must be connected to each type of socket.



Why Is It Called a Bus?

The term was coined after a real bus, because all bus stops are available to everyone on a bus. The same goes for an electronic bus. All signals on the bus are available to all stations or devices connected to it.

Bus Card

Expansion board (card) that plugs into the computer's expansion bus.

RAM

(Random Access Memory) Computer's primary workspace. Also true of most memory chips (ROMs, PROMs, etc.), "random" means that the contents of each byte can be directly accessed without regard to the bytes before or after it. RAM chips require power to maintain their content. *See dynamic RAM, static RAM and memory.*

Dynamic RAM

Most common type of computer memory, called DRAM. It usually uses one transistor and a capacitor to represent a bit. The capacitors must be energized hundreds of times per second in order to maintain the charges. Unlike firmware chips (ROMs, PROMs, etc.) both major varieties of RAM (dynamic and static) lose their content when the power is turned off.

In memory advertising, dynamic RAM is often stated as a package type; for example, "DRAMs, SIMMs and SIPs on sale." It should be "DIPs, SIMMs and SIPs," as all three packages typically hold dynamic RAM chips.

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*Definitions from the Electronic Computer
Glossary @ 215-297-5999, cost \$29.95.*