

The motherboard

A motherboard is the main printed circuit board (PCB) in a computer. It is the computer's central communications backbone connectivity point, through which all components and peripherals connect.

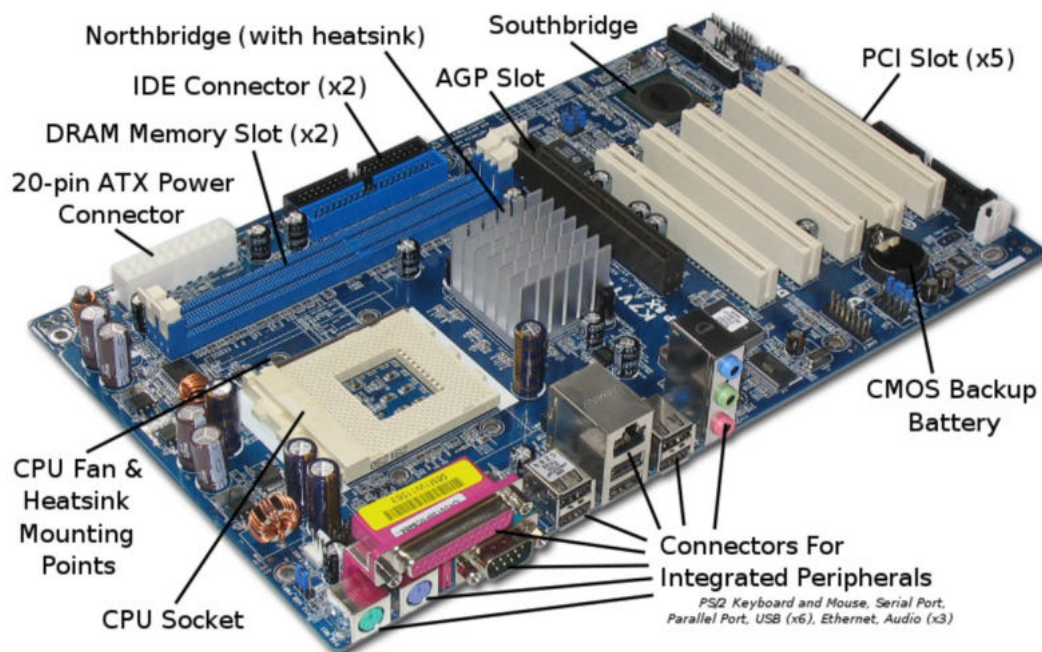
Motherboards are found in every computer and the components that connect through them include: chipsets, CPUs and memory. The peripherals include: Wi-Fi, Ethernet and graphic cards.

The PCB of a large motherboard may include 6 to 14 layers of fiberglass, copper connecting traces and copper planes for power and signal isolation. Other components are added to a motherboard through expansion **slots** such as processor **sockets**.


■ Motherboard components

Motherboards include the following primary components:

- **CPU;**
- **Memory;**
- **storage interface**, for solid-state or hard disk drive;
- **ROM BIOS**, providing non-volatile memory that stores firmware;
- **Northbridge chipset**, which connects CPU, memory, storage and other components;
- **Southbridge chipset**, which connects peripheral elements to the motherboard and connects to the Northbridge;
- **cooling fans**, which maintain a suitable internal operating temperature;
- **peripheral connector slots**, to plugin peripheral cards;
- **connectors for peripheral device**, such as USB ports and other connectors for external devices;
- **backup battery;**
- **power connector**, connecting to an external power source.




slot: *fessura*
socket: *presa*

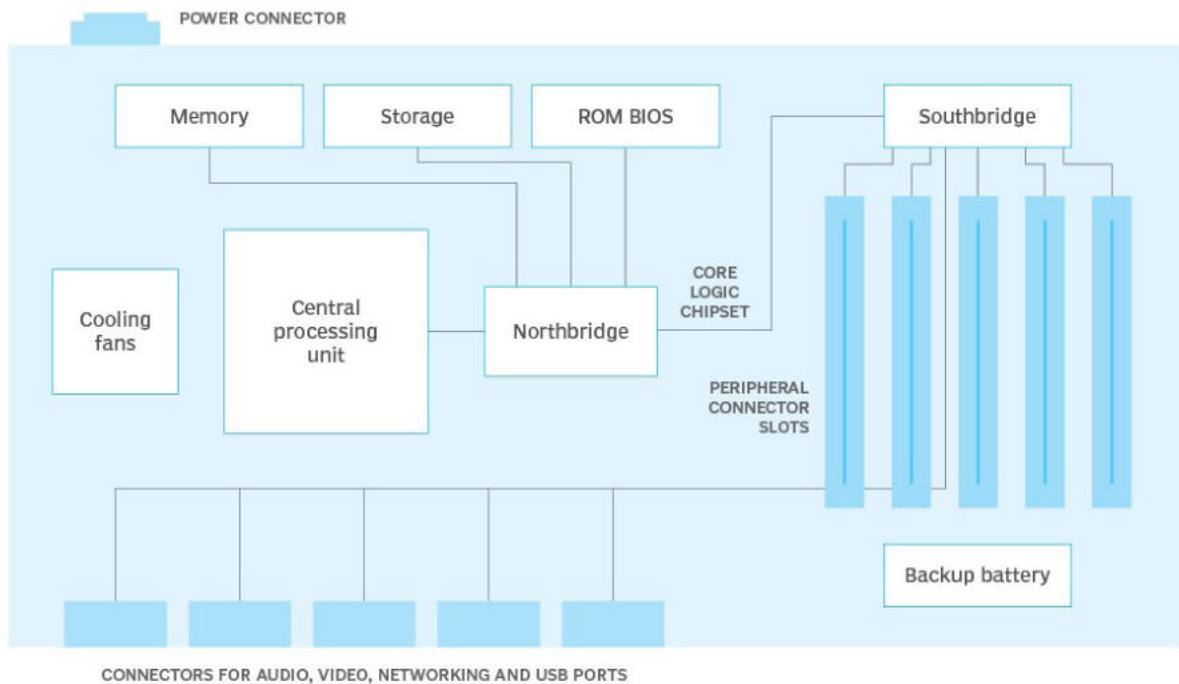
1  Decide if the statements are true or false. Correct the false ones.


1. The motherboard is the central part of a computer.
2. A graphic card is a computer component.
3. The connections of a motherboard are made of fiberglass.
4. A socket is a type of slot.
5. ROM stores non-volatile firmware.
6. A USB port connects peripheral devices.

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2  Look at the image and practise describing the different parts of a motherboard. You can refer to the previous page and make notes.

Typical motherboard configuration



3  **PAIR WORK** Practise asking what the different parts of a motherboard are.