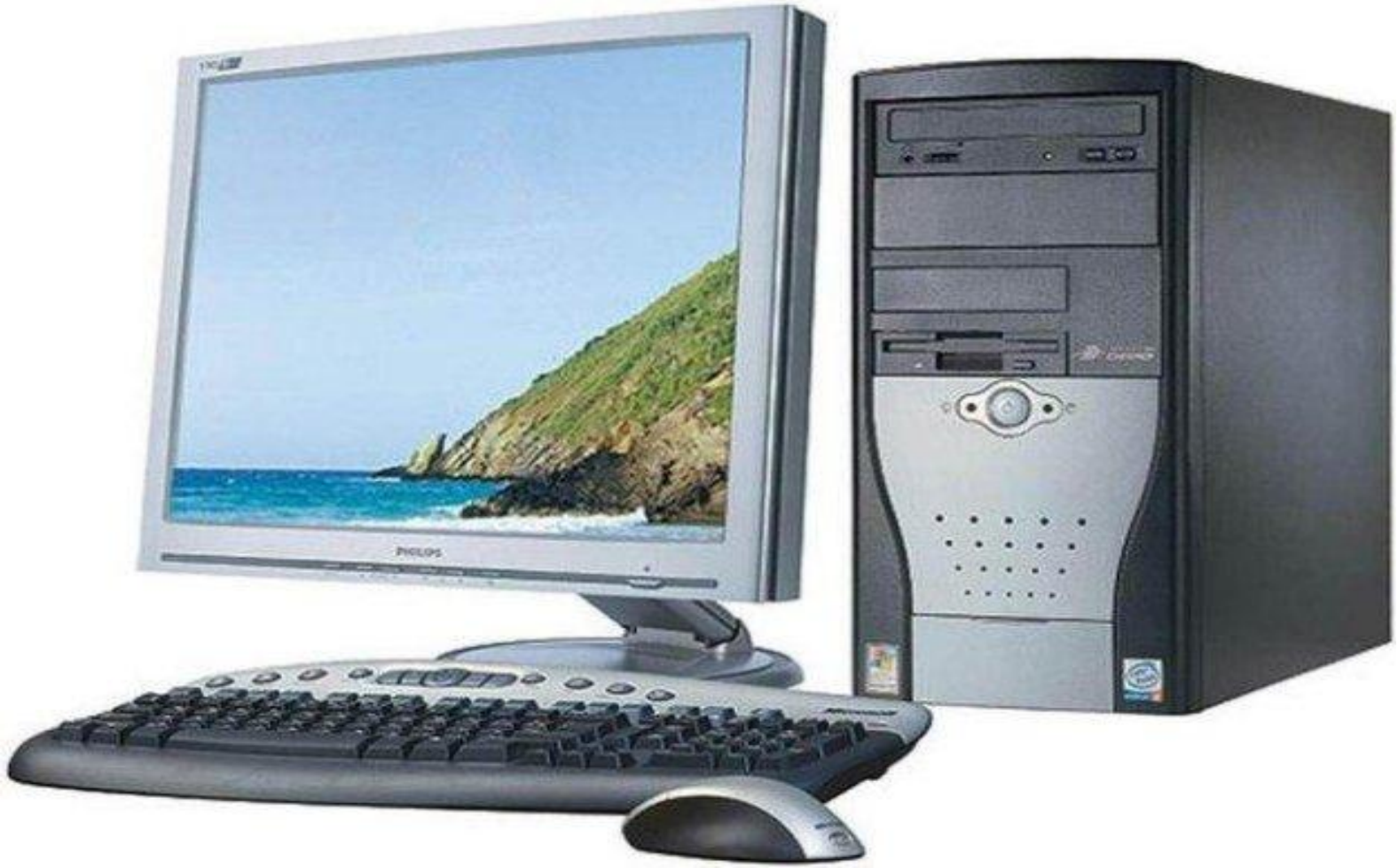
Our virtual computer

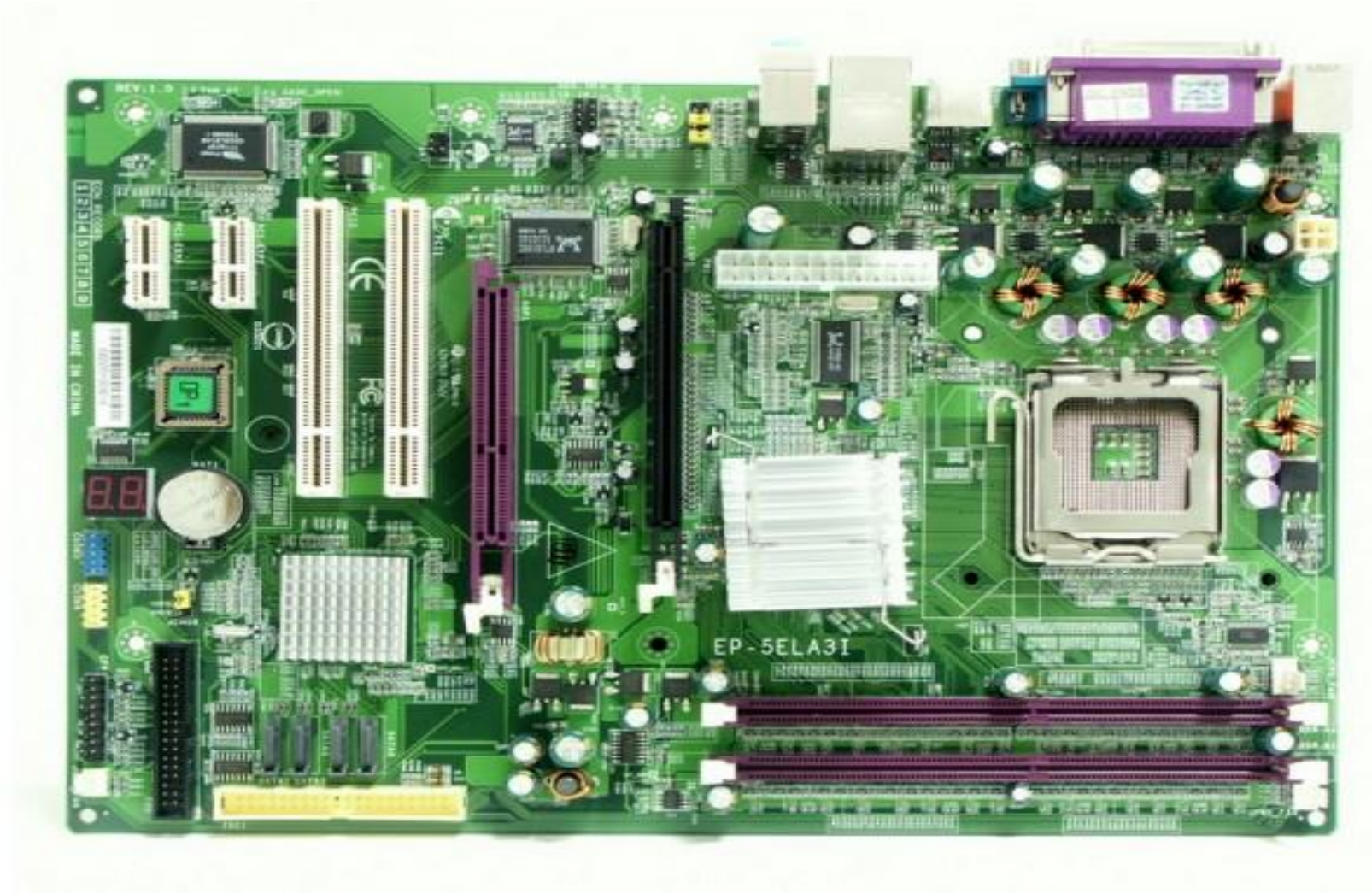


Power Supply

Power Supply

A power supply provides the needed voltage to power the various electronic circuits that make up the PC.

Motherboard



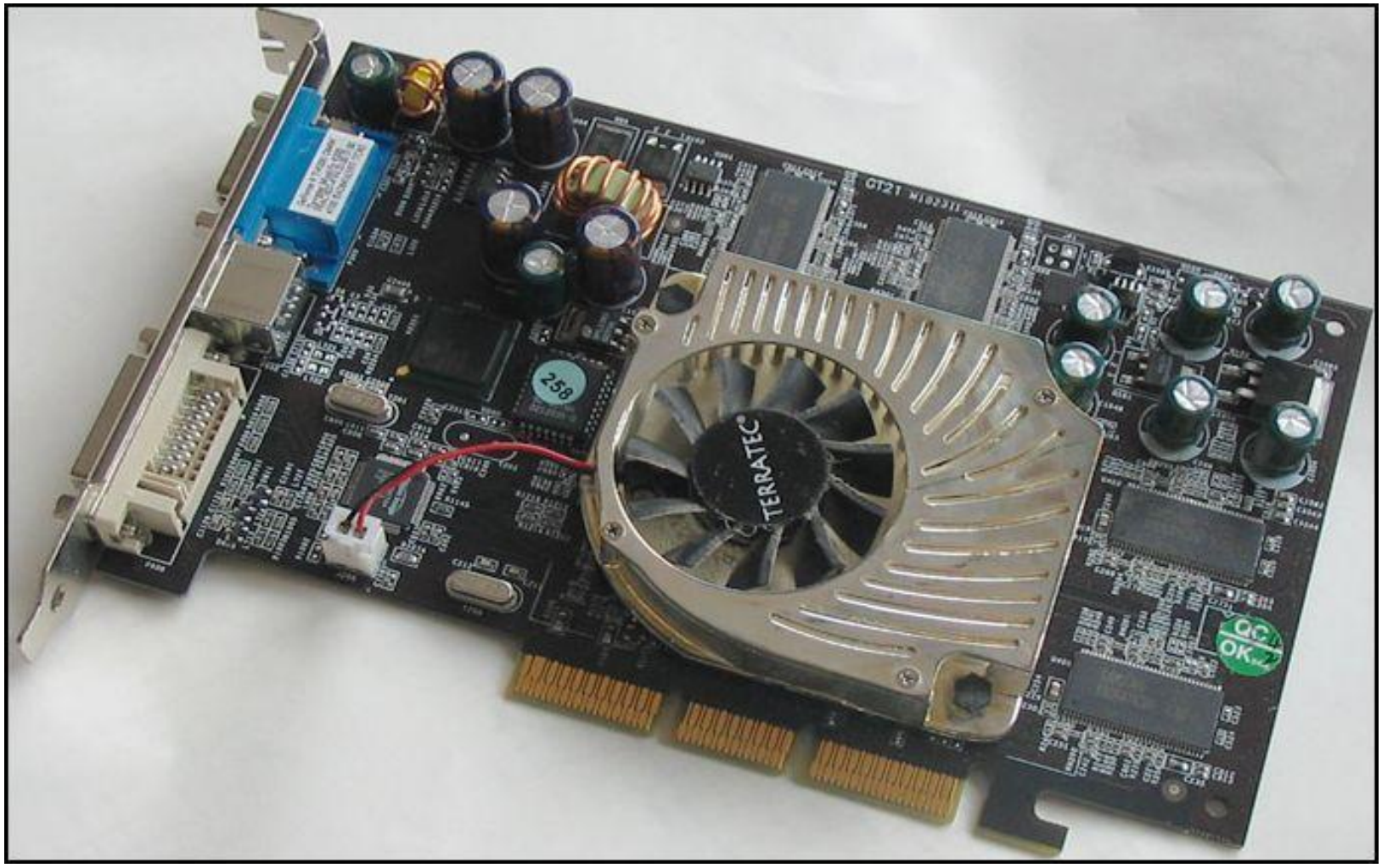
Motherboard

The motherboard is the main printed circuit board that connects all the components of the computer.

On the motherboard, we will work with the following components:

- CPU
- Thermal compound
- CPU heat sink/fan assembly
- RAM module (2)
- Motherboard

Adapter cards



Adapter cards

Adapter cards are installed on the motherboard to add functionality to your computer.

A network interface card (NIC) is *an adapter card used to connect your computer to a network.*

A wireless NIC is *an adapter card used to connect your computer to another computer or a wireless access point using radio signals.*

A video adapter is *an adapter card that sends data to a computer display.*

Internal drives

Internal drives

The hard disk drive (HDD) is a magnetic drive that stores large amounts of data on fixed media.

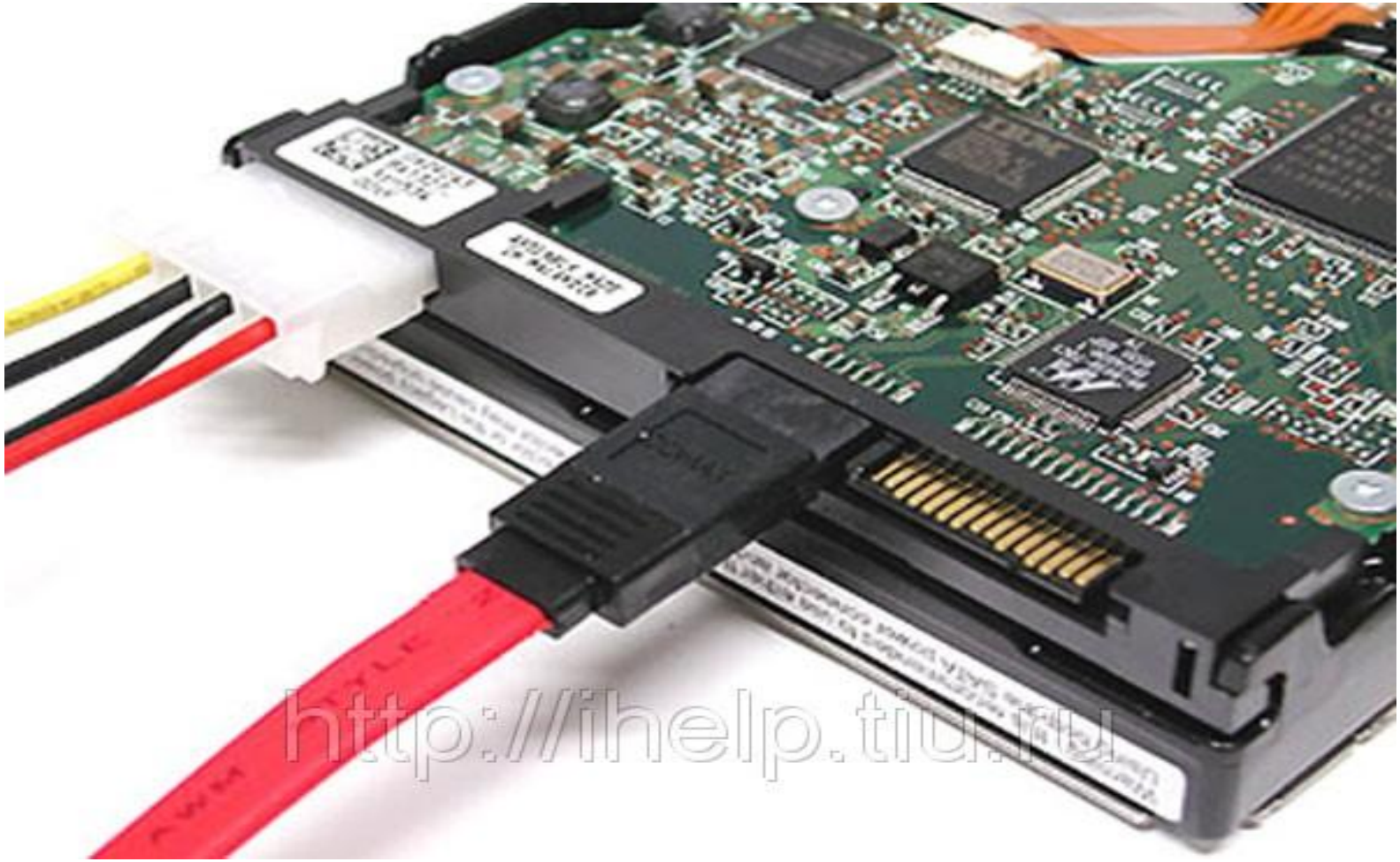
Drives in external bays

Drives in external bays

The CD-RW/DVD drive is an optical storage device that reads and writes information to CDs and reads DVDs.

A floppy disk drive (FDD) is a magnetic drive that reads and writes information to floppy diskettes.

Internal cables



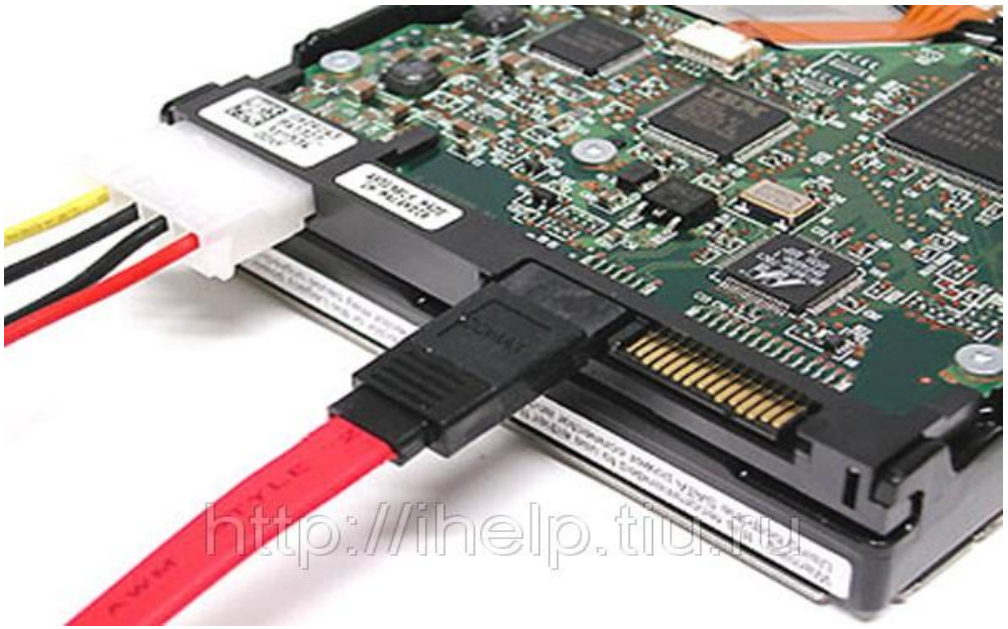
Internal cables

We must connect all internal cables to the appropriate computer components.

We must be sure to match Pin 1 to Pin 1 when connecting cables to the devices.

We must connect the cables to the devices:

* **20-pin ATX Power**
* **4-pin Auxiliary Power**
* **SATA Power**
* **Molex Power**
* **Berg Power**
* **Case Fan Power**
* **SATA**
* **PATA**
* **Floppy Drive**



External cables

External cables

Now we are ready to connect the external cables to the ports on the back of the computer.

We must connect the cables to the computer:

* Monitor
* Keyboard
* Mouse
* USB
* Ethernet
* Wireless Antenna
* Power

Our virtual computer is ready