

Maksim Bulgakov  
L.M. Korotenko, scientific supervisor  
M.L. Isakova, language adviser  
SHEI “National Mining University”, Dnipropetrovsk

### Personal Computer

IBM is an American multinational technology and consulting corporation, which has created the first mass computer known as «IBM PC». It was a first try to create something we called today a «personal computer».

A computer is in itself a device that can perform a well-defined sequence of operations as prescribed by the program. The concept of the «computer» is wider than «Unified System of Electronic Computers», because the last one is more useable for calculation. The main feature of personal computer (PC) is that it can be used by one person, without any help of support staff, and also doesn't need a huge amount of power. PC is usually focused on interaction with one user (in the games sometimes with two), and also interaction happens in different sphere of communication — alphanumeric and graphical dialogue through the display, keyboard, and mouse to the virtual reality devices, in which is not involved, probably, just smells. PC supports collaboration: the ability of many computers in this family can use them as servers in the network or in the local multiterminal systems. Thus, we can explain the phrase «PC server», which assumes a high power (speed calculations, the amount of RAM and the external memory) and special designed (a spacious body frame) computer. The phrase «PC server» is rather strange, but in peer networks this phrase can have an explanation — a personal computer can provide the resources (eg, disk space, printers and modems) to other computers for which it is not a selected server. We will also institute such a term as «workstation» (WS), which can have two meanings. In network workstation is a user's computer (as an opposition to a server). However, the workstation can be called a stand-alone computer (a connection to a network, of course, is not excluded). In this case, it is often an implied architecture, different from IBM PC. Personal computers, which are compatible with IBM PC, are divided into a few generations (or classes) that start with the historical models:

IBM PC first model: Intel 8088, addressable memory - 1 MB, expansion bus - ISA (8-bit) the floppy disk drive (FDD), up to 360 Kbytes;

IBM PC / XT (eXtended Technology - XT) - all the same, but c hard drives (hard drives, hard drive), and the ability to install the Intel 8087 Mathematics;

IBM PC / AT (Advanced): CPU - Intel 80286/80287 addressable memory - 16 MB, bus - ISA 16 bit floppy - 1.2 and 1.44 MB HDD.

Nowadays the AT class machines developed in several directions: the 16-bit processor is replaced by a 32-bit (already P6 class and above); now 64-bit memory is addressed in the space of 4 or 64 GB (or more): there are used more effective expansion bus (PCI, PCI-X and PCI Express) with preserving (not always) ISA to be compatible with old-STI adapter.