

BASIC INFORMATION ABOUT RAM AND ROM

There are two different sections in the main memory known as RAM and ROM. RAM (Random Access Memory) is used for the temporary storage of the user's programs and data. It is called random access because information can be written to or read from any cell with equal speed and ease. However, when information is written to a cell in RAM, any information previously stored there is destroyed. Furthermore, when the computer is switched off, all the information stored in Ram is lost.

Permanent storage of information is provided by ROM (Read Only Memory). The information stored in ROM is not lost when the computer is switched off.

However, as the name suggests, the computer can only read information stored in ROM but cannot put information into it. The information stored in ROM usually includes such things as the instructions necessary for the basic operation of the computer and the languages which the computer uses. ROM is normally programmed by the computer manufacturer and cannot be changed. However, programmable ROM chips (PROMs) can be used to allow the user to permanently store his own programs. This can be done only by using a special programming device. Erasable PROMs (EPROMs) were also available. Programs stored on EPROMs can be removed using ultraviolet light; then the EPROM can be reprogrammed.

Electrically erasable programmable read-only memory (EEPROM) chips remove the biggest drawbacks of EPROMs, e.g. the chip does not have to be removed to be rewritten.

Flash memory is a type of EEPROM. It works much faster than traditional EEPROMs because it writes data in chunks, usually 512 bytes in size.

