

Brief History of Electronic devices

Modern electronics began with the invention of the vacuum tube by Dr Lee DeForest in 1907. The first vacuum tube was not an amplifier but the vacuum tube soon developed into a device with many functions, including the ability to amplify very small electrical signals. For the next nearly 50 years, the vacuum tube was king of electronics. By today's standards, it was not very efficient in the use of electricity. It generated a lot of extra heat with the filament as the source of electrons.

The transistor did not need a hot filament to generate electrons and was the first "Solid State Device". The transistor was invented December 16th 1947 at Bell Laboratory by the team of William Schockley, John Bardeen and Walter Brattain. This team was later awarded the Nobel Prize for this work. The first practical use of transistors was in the mid 1950's.

The Integrated Circuit (more than one transistor on a single piece of Silicon crystal) was invented in July of 1958 by Jack Kilby. Mr. Kilby received the Noble Prize in Physics—2000. The integrated circuit has evolved today to have many millions of transistors on a single "Chip of silicon" and most all our modern computers electronic devices include a microprocessor chip.

The Microprocessor chip was invented by Dr. M. E. Ted Holf in 1968. The microprocessor was introduced as a commercial product by Intel Corporation in 1971. The microprocessor was designed for a Japanese calculator company as the basis of a flexible calculator design. The idea that the microprocessor chip really had much use as a commercial success was not understood until several years later.