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Information Technology Processors

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Comparison of AMD and Intel began in the early seventies. Both companies produce wonderful processors and it's good that there are two of them. This excludes the existence of a monopoly and leads to a competition between two firms in which the buyer will benefit. Both firms also have problems, but most of them are all solved and taken into account when releasing new products.

A computer for working with office programs with the ability to play not very demanding games and no matter how much electricity the system consumes, it is worth looking to AMD. If you are worried about the energy consumption of equipment and do not want to have problems with non-optimized applications, then the choice in the direction of Intel will be more obvious. Although this will have to pay a large sum than for AMD. For powerful gaming computers, the best solution would be to build on the basis of Intel Core i5 –i7 processors with the "K" index.

Having studied the characteristics of both processors, Intel preferred the following reasons:
− Fast work in applications, if it alone is active (games, video converters, photo editors, archivers).
− Lower power consumption.
− A lot of applications and games have been optimized for the processors of this company.
− Excellent work with RAM.

– Intel processors have more overclocking potential, especially with the index K. Now Intel is not only an advanced corporation that produces microprocessor equipment for building computer systems. The range of Intel equipment and components is growing every year, and the corporation confidently affirms itself on more and more new positions in the market of computer technologies.

Since the founding of Intel in 1968, the technology for manufacturing integrated circuits has been continuously complicated, requiring ever greater accuracy and detail [1]. Faced with the growing complexity of microprocessor design, Intel has taken up the development and implementation of new, more sophisticated manufacturing processes. As a result, generations of technology for etching circuits in silicon were replaced crystal, and the accuracy of this process continuously increased. The first microprocessors were manufactured using 10 micron technology, i.e. the value of one elementary element of the circuit was of the order of 10 microns, but, already, Intel486DX processors were first produced using 1-micron technology and then using 0.8 and 0.6 micron technology. Pentium II and Celeron processors today are mainly manufactured using 0.25 micron technology, and on the horizon, they're getting into a series of 0.18 microns micron technology. Each such technological "leap" brings with it a decrease in the dimensions of the microcircuit, an increase in its speed, a decrease in energy consumption, and, as a rule, a drop in cost. First microprocessor Intel 4004 counted 2,300 transistors on a single chip, while modern Pentium II and Celeron processors include approximately 7.5 million transistors. That gives you just the cosmic performance / cost ratio in just 20 years. However, the 90s were a turning point in corporate policy. The fact is that further increase in productivity with the pace achieved earlier, and the same cost reduction has become impossible. The limit of technological

equipment and the technology of the 80x86 series itself has been reached. On the horizon already loomed the development of a new series of Intel Pentium. However, technological advances of this technology allowed to reduce the cost of processors only in recent years, and at that time Intel needed a serious and ambitious advertising company, which, by the way, was successfully carried out in order to leave the conquered market spaces for itself and take new frontiers.

Pentium III processor development completed One of the most important news of the beginning of 1999 is that the Pentium III processor went into serial production and although it cannot be called a new generation processor, as it is based on the same P6 core as the Pentium II, Pentium III operates at higher clock frequencies, contains more than 70 new instructions, new registers and implements the latest hardware and software technological solutions [2]. It is designed to accelerate the operation of all multimedia tools and systems.

Achievements made by the corporation over 25 years at the beginning of the journey could not have been imagined. With such rapid progress in the microprocessor and computer industry, it is entirely possible that by 2011 Intel microprocessors will operate at a clock frequency of up to 10 GHz (gigahertz). At the same time, the number of transistors on each processor will reach 1 billion, and the processing power - 100 billion operations per second (BIPS). Now it's almost impossible to describe all the areas of PC application into which it will enter in just 10 years. Increasing the capacity of network and telecommunication technologies already leads to the opening of a new information space and the rapid transition into it of a wide variety of areas of human activity - from banking and business to art and science. Internet has become not only information highway, but also the environment of existence. Further development of Internet technology will lead to an integrated integration of information

resources of audio, video and other communications. The technology of visualization and presentation of information World Wide Web (WWW) will create a climate of even closer cooperation and communication on a global scale. Speech recognition and handwriting capabilities, remote control of complex Internet-based application programs, real-time three-dimensional animation will become mass attributes of everyday PC operation. And a considerable contribution to the realization of best hopes computer and information technology and contributed by Intel Corporation.

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