

Exploration of Function of Electronic Circuit Emulation in Electronic Application and Development

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Abstract. The development of economic society drives the continuous improvement of electronic technique. Policy and technological level of electronic circuit is gradually improved. During practical operation process, in order to guarantee the high efficiency, it needs to do good emulation technique of electronic circuit so as to better apply it to the development of electronics. This article analyzes the application of electronic circuit emulation technique in the development of electronics, show the application of electronic circuit emulation technique in such aspects as virtually testing circuit characteristics, verifying circuit function, developing electronics, promoting development of integrated circuit, realizing innovation of designed circuit, etc. and finally look the development of electronic circuit emulation technique into the distance to provide help for relevant employees.

Introduction

The improvement of society makes our country's degree of modernization higher and higher. Due to development of economic technique, new electronics come out like mushrooms after rain, which bring convenience to our daily life, gradually improve people's living quality and enrich our life. Rapid development of electronics makes management level of enterprises' elites higher. However, upgrading of electronics is very fast. New technology greatly reduces the time of upgrading time to electronics. Thus, technicians keep innovation and try to change the development mode of electronics so as to improve the quality. During development, only to fully play the policy and technique of electronic circuit can it protect the development scientificity and security of electronics. The policy and technique of electronic circuit can realize the optimization and management to electronic application products' designing scheme, with big function to the test run of electronics.^[1] If policy and technique of electronic circuit can not be appropriately used, it would result in such problems as operational defect, etc. of electronics. If unqualified electronic application products are put into the market, it would not only cause troubles of uses but also affect enterprises' fame. Thus, the policy and technique of electronic circuit is of great significance to the development of electronic application.

Application Analysis

The application of electronic circuit emulation technique in virtual test to circuit characteristics

During the operational process of computer networks, using electronic circuit emulation technique could help to carry out simulation of various work environments and provide absolute rating environment during equipment operation to realize the needed absolute working condition. For example, during practical operational process, rationally using electronic circuit emulation technique could simulate work environment of big current parameter. In addition, it could realize working test of electronic circuit in high pressure and temperature condition. But in practical circuit working condition, it is hard to realize repetition of emulation technique or guarantee the electronic circuit in

extreme working condition all the time. Thus, electronic circuit emulation technique is of great significance to practical production and design of electronic circuit. ^[2] Mainstay to take electronic circuit emulation technique as the application and development of electronics can not only realize scientific design of electronics but also guarantee economy and security of electronic circuit.

The application of electronic circuit emulation technique in verifying circuit function

When electronic workers design the electronics according to customers' requirement, it should confirm the design scheme and does effective verification to circuit function by electronic circuit emulation technique according to practical operating environment. The circuit verification by electronic circuit emulation technique could test whether the designed electronic circuit meets to practical standard. In addition, during the exploitation and design of electronics, it could also use electronic circuit emulation technique to identify whether the designed electronics have practical application effects and meanwhile realize functional error test of designed circuit. Thus, electronic circuit emulation technique runs through the process of electronic application and development, with great significance to electronic application and development. Rationally using electronic circuit emulation technique could help to reduce design errors in practice. Before volume-producing electronics, scientific emulation is of necessity, which could test malfunction and guarantee functional reliability of electronics, finally reducing many unnecessary maintenance work in the future. ^[3] Thus, electronic circuit emulation technique can not only realize high-quality production of electronics but also furthest reduce research and development time of electronics, guaranteeing high efficiency of electronics design.

The electronic circuit emulation technique could help to extend research and development method of electronics

In order to guarantee electronics' quality, research personnel would pay more attention to service time of electronics. Thus a whole set of electronics development process is very complicated, which should be repeatedly deliberated and made. In addition, in order to guarantee effectiveness of designed scheme, it should modify the scheme for many times and make initial debugging on the basis of modification. No matter in scheme modification or products debugging, the designing scheme of electronics is of great significance for products to put in the market. If it doesn't fully play the modification and debugging of designing scheme, it would cause that designed electronics can not practically realize purpose of design, even mass sub-quality products being on stream. Therefore, electronic circuit emulation technique is of great significance in modification of designing scheme and debugging of electronic circuit. In order to protect reliability of electronics, it can not be limited in traditional circuit modification and debugging, but should advance with the times, innovating development technology of electronics according to practice and guaranteeing scientificity of developing electronics.

The electronic circuit emulation technique could effectively drive development of integrated circuit

When developing electronics, in order to promote sound development of integrated circuit, it should rationally use electronic circuit emulation technique. During the development of electronics, it has very high requirements to integrated circuit. With the increase of the function, density of integrated circuit is also enlarged. Thus, designers should change development idea to use chip system to carry out design and development of electronics. And the essence to use chip system is to gather all needed functions in designed chips. ^[4] It can not only guarantee the use of electronics but also effectively enhance work efficiency, meeting the practical working needs. In order to complete the above work, it needs to rationally use electronic circuit emulation technique to the development of electronics.

The electronic circuit emulation technique could realize innovation and optimization of designing circuit

Due to high degree of precision, electronic devices are very sensitive to temperature. If the temperature changes obviously, their function would become disorder. In addition, the change of temperature would make working stability of electronic devices greatly restricted. Thus, using electronic circuit emulation technique could help to change the bad condition of electronic products'

circuit at the initial stage. Due to the influence of temperature, it can use electronic circuit emulation technique to simulate different working conditions of electronic devices in different temperature environments and analyze their characteristics according to the working conditions. Designers could acquire information to analyze result according to electronic circuit emulation technique and then make improvement to electronic devices, which would at most avoid electronic devices being affected by temperature. If the electronic devices of same type have different electronic parameters, it would cause serious problems in the production of electronics. Using electronic circuit emulation technique to detection could reliably solve these problems ^[5] because the electronic circuit emulation technique could realize systematical analysis to electronic devices and get relevant analysis data. Thus designers could make optimal design to circuit and guarantee feasibility of designing scheme. For example, during design process, it could set tracking times, analyze parameters without consistency and finally remodify designing scheme of electronic devices by emulation technique result.

Development of Electronic Circuit Emulation Technique

The continuous development of computer technology promotes the progress of electronic circuit emulation technique which has become the critical field in computer development. Thus, we need to keep perfecting electronic circuit emulation technique and make sustainable development to electronic application and development technology. However, the current electronic circuit emulation technique is still at the initial stage, staying at the inquiry of hardware system in artificial circuit rather than realizing CPU analogue simulation according to digital program of hardware system. Researchers in electronic science technosphere are devoted to the exploitation and application of electronic circuit emulation technique. Under the promotion of our science and technology, the arithmetic of electronic circuit emulation technique would become more and more precise, which used in electronic circuit emulation system model would be further developed, realizing electronic circuit emulation technique of CPU digital system program.

CPU simulation scheme of electronic circuit emulation technique is to do real-time emulation of application program of flushbonading electronic system and make real-time test and monitoring according to the application procedure of flushbonading electronic system and its working condition in electrical system. This is also a main attack direction to realize permanent development of electronic system. Secondly, according to the CPU procedure emulation technique of electronic circuit emulation technique and its corresponding language description of hardware equipment, we can realize designs of hardware system and software system in the future. Workers to realize electronic application development should use hardware description language to realize design optimization of hardware platform to make electronic circuit emulation technique to be played in the subsequent designing application system. It is to use electronic circuit emulation technique to realize hardware equipment and its procedure to make precise calculation and reliable emulation of design system. Finally, it is to discuss the qualified overall plan with professional manufacturers, getting standard samples meeting users' demands according to production technology of electronics.

The development and utilization of electronic application has scientificity, reliability and security. It is the process to change electronic design philosophy to electronic application products and make electronics socialized and universal. The application and development of electronics reflects function of electronic circuit emulation technique and fully use hardware description language to make diverse hardware description language work patterns of electronics. Finally, it realizes large-scale development of integrated circuit and extensive use of electronic devices. Rationally using electronic circuit emulation technique could bring huge influence to the whole process of producing electronics. Thus, we can know that in order to carry out development and utilization of electronic application in an even better way, it needs to enrich designing methods of electronics in application and development and use high-efficiency and high- convenience product to enhance reliability of electronic devices. The sound development of application and development technology of electronics

needs to circle its characteristics, gradually perfect electronic circuit emulation technique and make relevant test methods more safe and reliable. Finally, it could realize reducing development time, enhance development efficiency and increase development profit, which could guarantee high-efficiency application of electronic circuit emulation technique in electronic application and development technology.

Conclusion

To sum up, during the whole process of realizing electronic application and development, electronic circuit emulation technique plays a very important role. Thus, rationally using electronic circuit emulation technique in the electronic application and development is of great significance. As the new electronic application and development technology used widely, electronic circuit emulation technique has wide development space. However, during the practical electronics application, most people can not notice its importance, which limit the efficiently development of electronics. Thus, we need to help more and more technicians to understand the advantages of electronic circuit emulation technique to better drive the development of electronics. This article analyzes the specific application of electronic circuit emulation technique. It could not only realize virtual test of circuit characteristics but also apply to verify circuit function. In addition, it could also help to expand research and development ways of electronics and enrich development approaches. As to promote the development of integrated circuit, the electronic circuit emulation technique has some function as well. Designers could effectively realize innovation and optimization of designing circuit by electronic circuit emulation technique according to the operational condition of circuit designing scheme so as to realize innovative development of electronic circuit emulation technique.

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