ABSTRACTS
Management Information System and Devises. 2009. N 146

UDC 681.326:519.613

Diagnosis and Testing Technologies for System-in-Package / E.I. Livinova // Management Information System and Devises. 2009. N 146. P.4-21.

Algebra-logical and vector-logical diagnosis methods for new generation of digital system-on-a-chip – system-in-package are proposed. They are based on use the fault detection table. Algebra-logical repair method for FPGA functional logical blocks is developed. It is based on solving the coverage problem and oriented on hardware implementation to a silicon chip as a component of Infrastructure IP. A method allows obtaining an exact solution in the form of minimal quantity of spares, which are necessary to repair of FPGA logical blocks under faults of all multiplicity.

Fig. 7. Ref.: 21 items.

UDC 620.26

Modelling of radiation background of rooms by Mathcad / B.V. Dzyundzyuk, A.V. Mamontov, V.A. Ross // Management Information System and Devises. 2009. N 146. P.21-27.

The problem of radiation activity of materials for building is considered. Imperfections of methods of computation of radiation background of apartments

are considered. The mathematical model of radiation background of apartment is developed. Are present the graphs which confirm importance of work.

Fig. 8. Ref.: 4 items.

UDC 504.3.05

Design of dynamics of populyatsiy of ecological system at antropogennih influences / A.V. Mamontov, G.V. Proniuk // Management Information System and Devises. 2009. N 146. P.27-32.

For the rise of exactness of prognostication of quantity of population a model is used the Lotki-Volterra «predator-victim». The extended model takes into account different forms of mutual relations between living organisms and influence for ecological system of antropogennih factors. On the basis of finding it is possible to draw conclusions about operating ecological factors and laws, and also about the survivability of populyatsiy in the set condition.

Fig. 6. Ref.: 5 items.

UDC 681.586.37 : 004.5

System design of a fractions code converters by the method of accumulation of an equivalents / N. Ya Kakyrin, Yu. V. Lopuhin, A. N. Makarenko, Yu. S. Zamaleev // Management Information System and Devises. 2009. N 146. P.33-39.

The paper considers a decomposition method of a system design of a fractions code converters by the method of accumulation of an equivalents that based on a search of decomposition with minimum hardware. A general model, that describes a functioning of a multiblock former of equivalents, and also an algorithm of multiblock code converters system design, are proposed.

Tab. 1. Fig. 5 Ref.: 4 items.

UDC 519.71

Optimization of decision-making processes is with the use of the limitations oriented to knowledge / Ye.I. Kucherenko, T.V. Smulskaya // Management Information System and Devises. 2009. N 146. P.39-43.

On the basis of rich in content analysis of subject domain and existent decisions the task of optimization of decision-making processes is formulated and decided with the use of unclear (fuzzy), oriented to knowledge of limitation Certainly terms of minimization of risks of freight transportations. Strategy of decision of practical tasks is offered taking into account unclear limits on the degree of risks. Efficiency of approach is confirmed practical realization.

Fig. 1. Ref.: 10 items.

UDC 336.144.31

Method budgeting of projects with provision for risks / O.B. Danchenko, O.M. Donec, T.P. Givotova, T.U. Olejnikova // Management Information System and Devises. 2009. N 146. P.44-49.

The offered method budgeting there is universal, can be used in process of management project any type moreover amount and types budgetary risk can also vary depending on application domain. When making the automatic system budgeting of project reasonable to use the offered method budgeting, which will allow to take into account and reduce the budgetary risks on all stage of the life cycle of the project and raise efficiency of management project as a whole. Use the offered method budgeting will allow to control the risk under budgeting and use the method flexible budgeting project c account risk in any application domain.

Fig. 4. Ref.: 9 items.

UDC 004.7; 004.8; 007.85

The development of the supporting model for decision-making in the service operation field of finanancion selfserving machine/ O.Ya. Kuzemin, N.V.Goloviy, Asir Daub // Management Information System and Devises. 2009. N 146. P.49-53.

The main feature of the viewed approach is original method, which based on the research process like agregated situations presented in graluated looking. It premits to take into account lots of facctors and theirs direct and feedback connections, what is beyond manual technologies of the supporting decision and also couldn't dynamically to appreciate alternatives of the accepted decisi

Fig. 1. Ref.: 3 items.

UDC 519.816

A design of area of the unstable states is in development of economic processes / V.O. Timofeev, I. G. Denisova, N.S. Savchenko// Management Information System and Devises. 2009. N 146. P.54-57.

This work covers the investigation of analytic functions like polynomial functions raised to n- power, applied in economics as production functions, functions of common costs and simulation of economic processes on the basis of catastrophes concepts usage. The basic applications of catastrophes concepts are the catastrophe "assembling", which consists of the simplest kind ("fold").

Fig. 2. Ref.: 4 items.

UDC 004.358+519.876.2+65.011.56

Model of process functioning an industrial site / I.G. Oksanich, S.V. Kashuba // Management Information System and Devises. 2009. N 146. P.58-61.

The model of process functioning of the industrial site is considered, allowing to carry out modeling processes of the control course of the manufacture basing use units of equipment.

Fig. 2. Ref.: 5 items.

UDC 621.372.061

Electronic circuit optimization as a controllable dynamic process / A.M. Zemliak, T.M. Markina /// Management Information System and Devises. 2009. N 146. P.62-69.

Process of designing of analog circuits is considered on the basis application of the theory of management. Properties and characteristics of various strategy of designing which can form a basis for construction of optimum algorithm are discussed.

Tab. 4. Fig. 3. Ref.: 21 items.

UDC 621.391

Comparative analysis of neural structures models for solving the classification problem of telecommunications network states / O.S. Vysochyna, S.I. Shmatkov // Management Information System and Devises. 2009. N 146. P. 70 -75.

This paper presents the results of an analysis of neural structures models. The problem under consideration is of great importance for modern society. It's no doubt that one of the basic distinctive features of the modern society is its informatization. At present the device of neural networks has been developed well enough. Neural networks are an exceptionally powerful method of modeling enabling us to reproduce extraordinarily difficult dependences. The aim of our research was to determine the dependence of different neural structures on input data. The studies were directed at solving the classification problem of telecommunications network states.

Tab. 1. Fig. 4. Ref.: 6 items.

UDC 519.81

Acceptance of multicriterion decisions in the conditions of the stochastic vagueness/ V.P. Ponomarenko, S.F. Chaliy // Management Information System and Devises. 2009. N 146. P. 76-80.

The questions of making a decision in the conditions of risk and vagueness are examined. The model of analytical calculation of statistical parameters of function of closeness of distributing of the generalized multivariable estimation of efficiency of decisions is offered.

Ref.: 3 items.