CONTENTS

1 P. Tymoshchuk, S. Shatnyi

Hardware implementation of parallelized fuzzy adaptive resonance theory neural network

12 A. Holovatyy, V. Teslyuk, K. Kolesnyk, V. Tabala

Development of digital compass based on AVR microcontroller and MEMS ACCELEROMETER-magnetometer module LSM303DLHC

27 P. Kosobutskyy

On the universal regularity of the numbers of generalized recurrence sequence and solutions to its characteristic equation of second order

34 **O. Belej**

The main cluster node formation in wireless sensory networks

42 S. Shcherbovskykh, T. Stefanovych

Load-sharing accounting between the renewable communication channels of the system of three iot-devices connected by a triangle

50 P. Kosobutskyy, R. Ferens

Some features of the direct and inverse transformation of random variables

61 M. Melnyk

Development of a method for automated selection of sound absorbtion coefficient

71 A. Zdobytskyi, O. Matviykiv, M. Lobur, T. Klymkovych, N. Bokla

Portable system for sampling liquid atmospheric precipitation