Peter the Great St. Petersburg Polytechnic University

Institute of Computer Science and Technology

Computer Hardware and Software Systems

Article: Radiolocation. Radar data processing.

The work was made by:
Smirnov L.A.
Group: 13541/1
Lecturer:
Bogach N.V.

1 Introduction

Remote sensing of the Earth is an intensively developing area of investigations over the past decades. Radar data is used in the huge number of tasks like socio-economic and scientific monitoring of natural environment in order to agrometeorology, ecology and etc. So radiolocation is widely considered in our life.

Efficiency and quality of receiving radar data are quite important factor of competition problem in the market. Now hardware and software tools emerge to take it to the next level of possibility to processing and transferring the radar data. Now demands to speed of each hardware module are seeing sustained growth with capacity of hardware.

This paper introduces only one of mass ways to increasing efficiency and quality of receiving radar data. Developing the hardware and software providing the increases bandwidth of inside the device communication data channel. The main principles of hardware were discussed in this article.