

Registration

CSSD-UDJG 2015, Galați, 4-5 June 2015

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Option for paper presentation (Oral presentation/Poster)	Prezentare orală
Paper publication (if wanted): YES/NO (If yes, which journal)	DA
SECTION	Section 1. Advanced research in mechanical engineering, industrial engineering, electrical engineering and system engineering
Paper Title and Abstract	

Intelligent system for primary decoding signals from satellites with the display position using Intel Galileo

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Abstract

The acquisition of satellite data, particularly images requires great accuracy and precision. In research carried out in the thesis I had to use a first phase models and positioning satellites offered by ESA or NASA. Because these data often required by calculation Keplerian refresh was necessary to find a solution that brings data closer to real position of the satellite. This is possible by using an Intel-Galileo system which gave me both computing capabilities of Intel processor and acquisition capabilities of the Arduino board. To achieve this we used a GPS module type to Arduino and a module for data transmission type Pololu Wixel the final system. The Galileo Intel motherboard have been attached to a pressure plate and altitude, because the areas in which measurements are made are positioned at various altitudes that can influence measurement accuracy. Because Galileo Intel motherboard allows the use of its software was relatively easy implementation of software enabling interfacing with NOOELEC module is a dedicated receiver. In Figure 1, figure 2 are shown in system elements and a result of the acquisition and position of a NOAA weather satellite 18:

Keywords: Intel, Arduino, GPS module.

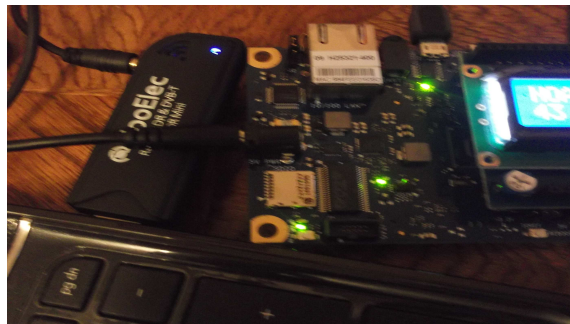


Figure 1

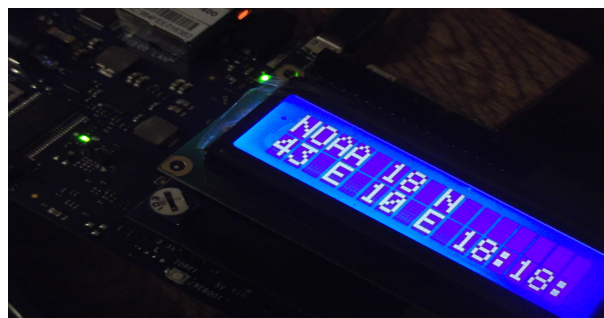


Figure 2