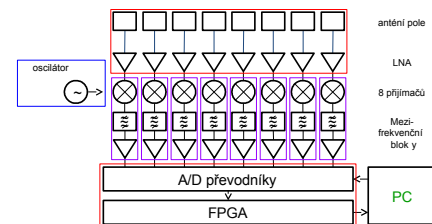


esc Aerospace is resolver of the project “DETUAV – The research of detection methods and localization of the UAV drones used for unlawful activities”.

The aim of this project is detection and defence against UAV/RPAS. It uses radioelectrical detection (wide-band electromagnetic track detection – specific pattern recognition an identification, high-RPM propeller engines, mobile radio locator, multi-lateral system), optical detection and acoustic detection. The project will combine legislative aspects of the various methods, focusing on: communication, methods of thermal, acoustic and optical. Testing will take place in Jince on polygon UAV.

Block Diagram of Radio Finder



Overview

The realization of the project is 9/2015 – 12/2018.

A successful project solution will offer a means of detecting the presence of UAV drones that should not occur in the space, and therefore there is a high probability that their mission is illegal.

The result of the solution is designed to prepare development work for a particular user.

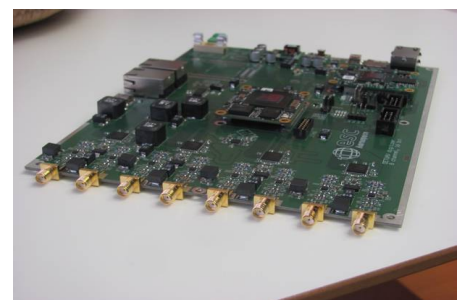
Predicted UAV / RPAS detection and localization range	approx.1 km, the goal of the project is to specify this number
Predicted accuracy of angular localization	1-5°, the goal of the project is to specify this number
Detected high-frequency bands of the UAV / RPAS communications line	Wi-Fi 2,45 GHz
Other parameters	It will be specified according to the results

The outcomes of the project are:

- The developing device will be designed to detect the presence of UAV drones and position monitoring following a proposal for a way to eliminate their mission. An analysis of the methods suitable for detecting the movement of remote controlled UAV drones will be performed. The principle of the selected detection method will be verified on a functional sample. More detailed technical data are the subject of a project solution.
- Software will also be part of the solution.

Users of the outcomes:

- Police of the Czech Republic
- Fire Rescue Service of the Czech Republic



PCB with Components