

LAURIN – Low Altitude Unmanned Reconnaissance Airplane

Abstract

The combination of a powerful microcontroller and some additional sensor equipment results in a flight computer system (FCS) for model aircrafts. The contest entry illustrated some very important features of such a system.

For general purpose applications the high speed wireless data link and the picture transmission subsystem could be interesting for many other designs. The main topic of the contest entry is focused on such a wireless picture transmission system.

Independently from the detailed description of these parts, a short overview about all the components of the FCS will be given. The hardware includes everything from the necessary interface to sensors, servos and other components. The software shows the camera and the wireless radio link only.



Figure 1 LAURIN based the SIG-Tristar model kit

The LAURIN project based on a commercial model kit. The model, the SIG-Tristar, is not a new but look like very beautiful.

The Philips ARM LPC2136 works as core of the flight computer system. There is only a few external components necessary to build the complete system.



