

Flight Controller for UAV Carrier Module

ALS50: Unmanned Aerial Vehicles– Indian Defence OEM

SUMMARY

- Fully Autonomous Vertical Take-Off and Landing (VTOL) UAV (Quadcopter to fixed wing for long distance)
- More than 50km Range and endurance about 120 minutes
- MTOW > 50 Kgs/100 Kgs

PROJECT HIGHLIGHTS

- DO178C Software development for Flight Control, Flight Plan and BMS
- Platformization for Avionics
- Established in 2007
- Operations beyond 50km and high altitude
- Onboard Sensors for Navigations, Positions
- IMA for Flight Control, FMS, DAQ, and PDU

SCOPE

- System Safety Analysis FMEA (ARP4761)
- Flight Control Software at DAL B
- Hardware Compliance and Verification per DO254
- Environmental Testing per MIL-810
- Model Based Design for Software (SCADE)
- Model based System Engineering
- Hardware Design and Development based on DO254

