FireFly™ Autopilot

Low SWaP Flight Management System

ADSYS CONTROLS INC.

Adsys Controls' FireFly™ autopilot is a small form factor full featured flight management system with integrated sensor and wireless communication packages.

The low size, weight and power make FireFly™ ideal for small UAS platforms demanding the ultimate in precision flight control.

Guidance and Flight Control
» Fixed Wing Standard Configuration, Flying Wing, Airship, Rotorcraft and Multi-copter Support
» Precision Flight Control
» Pitch/Bank Limiting
» Programmable Mission Plans
» Contingency Routing (Lost Comm, Engine Out, Emergency Condition, etc.)
» Autonomous Path Reversal (for Lost Comm)
» Waypoint Following
» Manual Overrides for Heading, Speed, Altitude, and Climb Rate
» Go-to Waypoint
» Loiter Patterns

Specifications
» 200 grams (0.45 lb) Total Weight
» < 3 Watts
» 4.0" x 2.5" x 2.0" Sealed Enclosure

Processor and Peripherals
» 16 MB Flash Memory
» 32 MB DDR-SDRAM
» CAN Bus
» 10/100 Ethernet
» RS-232
» USB
» Queued DMA SPI (QSPI)
» High-Speed Synchronous Serial Interface (SSI)
» Up to 18 General Purpose I/O Channels
» Onboard Attitude & Heading Reference System (AHRS)
» Air Data Sensing

Expandable I/O and Processing
» Onboard GPS with WAAS DGPS
» Integrated 900 MHz or 2.4 GHz Radio

Adsys Controls provides solutions for precision control systems, advanced electro-optical systems, laser systems, modeling and simulation, and unmanned aerial systems for military and commercial markets. From electronics design, embedded RT software, and image processing to game-changing laser and electro-optical systems for ISR&T, weapons, communication, and navigation, Adsys Controls provides state-of-the-art solutions for the most challenging problems.

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