

Autonomous Kit For Overo Product datasheet

KIT045

USD399.00

Autonomous Kit for Overo

The kit consists of the following components:

- AeroCore 2 for Overo
- Overo AirSTORM-Y COM
- Pre-GO
- Caspa VL (camera)
- USB Cable (micro-B to standard-A)

Powered by an AeroCore 2 for the Overo, which contains an ARM Cortex-M4 microprocessor, and an included Overo AirSTORM-Y, the Autonomous Kit For Overo offers all the tools you need for your unmanned aerial vehicle.

With NutX RTOS for real-time servo control and onboard WiFi 802.11b/g/n and Bluetooth 4.1 communications, the Autonomous Kit for Overo will have you flying in no time at all.

The brain of the kit is the AeroCore 2 MAV control board which runs NutX RTOS for real time servo control and sensor measurements. The Overo COM provides access to onboard wifi and Bluetooth 3.0 and/or 802.11b/g/n wireless communications transmitted by the U.FL antenna. It is fully compatible with PX4 software, including MAVLink and QGroundControl and supports Mission Planner, ArduPilot and APM Planner.

Product Features

Robotics	
Accelerometer	3-Axis Accelerometer + 3-Axis Magnetometer
Barometer	Included
GPS	U-Blox NEO-7M GPS Receiver
Gyroscope	3-Axis Angular Rate Sensor
Communications	
Bluetooth	Included
Camera	
Camera Connector	
Memory	
Flash Memory (NAND)	512
Processor	
Graphics Acceleration	OpenGL POWER SGX Graphics Accelerator
Digital Signal Processor	C64x Fixed Point DSP 660,800 Mhz (Max.)
Processor	ARM Cortex-M4 Microcontroller
Processor Architecture	ARM Cortex-A8
Processor Base Clock	Up to 1 GHz (recommended @ 800MHz)
Temperature	Built with components rated -25C <T <70C
Misc	
Power	3.3V-4.2V, provided by the attached Overo COM (not included)
Power	
Power Management	Texas Instruments TPS65950
Usb	
USB OTG	USB Micro-AB Connector
Mechanical	
Weight	BRD30009C @ 22.9g





Other connector

2 × Low-Profile 20-Pin Header

Mating connector

2 × U.FL Connector

1 × Hirose 27-Pin Camera Connector (Overo COMs)

2 × 70-Pin AVX Connector (Male Overo COMs)

1 × Molex Easy-On FPC Connector (Caspa Cameras)

1 × 70-Pin AVX Connectors (Female Overo Expansion)

What's included

1 × USB Cable (micro-B to standard-A)

1 × Overo FireSTORM-P

1 × Caspa VL

1 × AeroCore for the Overo

1 × Overo AirSTORM-Y

1 × GPS Board

1 × AeroCore 2 for the Overo (no GPS)

Key component

1 × U.FL Antenna with Collar

1 × microSD Card Slot

1 × Texas Instruments TPS65950 Power Management

1 × W2CBW0015 Wifi+Bluetooth Module

1 × Micron 512MB DDR LPDRAM & 512MB NAND Flash Memory

1 × Texas Instruments DM3730 Applications Processor

1 × Aptina MT9V032C12STC Image Sensor

1 × Camera Flex Ribbon Cable (80mm, White)

1 × FTDI FT4232H Quad USB - Serial

1 × Texas Instruments TPS62111 Step-Down Converter

1 × ST L3G4200D 3-Axis Gyroscope

1 × Memory (SPI FRAM 1MB 1.8V)

1 × MS5611 Barometric Sensor

1 × LSM303D 6-Axis Accelerometer

1 × TI WiLink8 WL1831MOD

1 × Texas Instruments AM3703 Applications Processor

1 × Texas Instruments SN65HVD232 CAN Transceiver

1 × FTDI FT232RQ USB UART Interface

Product links

- [Firmware](#)
- [Bootloader](#)
- [Firmware \(.px4\)](#)
- [AeroCore 2 MAV Control Board Reference Manual](#)
- [Geppetto®Workspace](#)

