

## Your aircraft is advanced, your flight controller should be too!

The Atlas Flight Computer is a low-cost flight-computer solution based on the PixHawk PX4 FMUV6 open-source autopilot. It includes a mission-computer, airdata sensors, ethernet switch, and optional internal GPS and INS.

The Atlas Flight Computer enables autonomous operation in a highly integrated and ruggedized package.



 **Available with DroneCAN Support!**

### 🔌 Software Agnostic

The Atlas FMU is based on the open source Pixhawk FMUV6X standard, and is compatible with the PX4 autopilot software. With the same hardware, Atlas can run Allocortech's SDK, enabling highly customized flight control solutions.

### 🔌 Versatile Interface

With a wide variety of interfaces including RS232, RS422, CAN, Ethernet, PWM, and more, Atlas is able to integrate into a wide variety of systems and perform flight and payload management.

### 📄 Powerful Computer

Atlas' mission computer is a Toradex Verdin System on Module (SoM) and runs Linux. It is able to execute more strenuous software than the FMU but does not interrupt the FMU's autopilot processor with lower priority or less time sensitive tasks. This can include mission planning, communication with a ground station, payload management, and more.

### 🔧 Customization Available

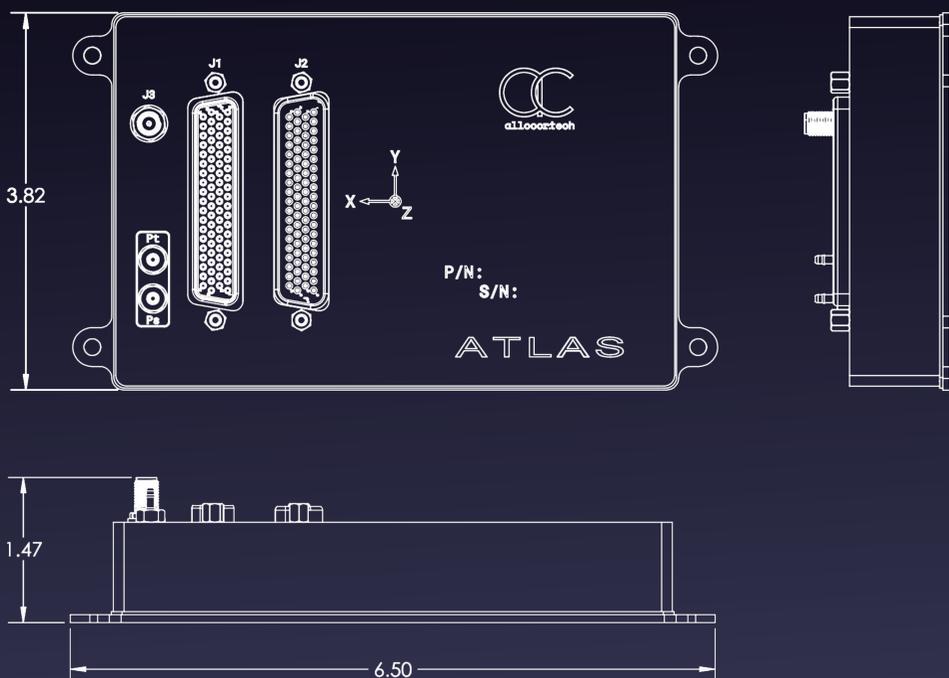
Atlas can be customized to meet your operational needs. Allocortech experts can add functionality, redesign PCBAs, and design alternate enclosures to enable easy integration into virtually any platform. Contact [sales@allocor.tech](mailto:sales@allocor.tech) for more information.

### 🛠 Custom Software

Our open-platform C++ allocore SDK allows Atlas to be configured to each customer's specific needs

## Atlas Specifications

<b>Input Voltage</b>	9 - 36VDC
<b>Internal Storage</b>	Mission Computer: 128GB FMU: 32GB
<b>Weight</b>	~386g
<b>Interfaces</b>	<b>Qty.</b>
CAN 2.0	2
RS232	4
RS422	2
PWM Out	12 to 16
General Purpose Out	2 to 6
General Purpose In	6
Analog In	6
Ethernet (10/100Mb)	2
Ethernet (1Gb)	1
<b>Power Distribution</b>	<b>Qty.</b>
Regulated 5V, 500mA Out	2
Nominal 28V, 2A Out	2
<b>Pressure Sensing</b>	
Absolute	250 to 1250 mbar
Differential	± 30 inH2O
<b>Environmental</b>	
Operating Temp.	-20 to 71°C
Storage Temp.	-40 to 85 °C



## Low Cost Flight Computer

The Atlas flight computer is a low cost flight compute system which incorporates a Pixhawk FMUV6X based autopilot, a Linux Mission Computer, and an Allocortech Wasp. With a wide variety of interfaces including RS232, RS422, CAN, Ethernet, PWM, and more. The Atlas can be integrated into a wide variety of systems to perform flight and payload management.

## Options

Atlas can be fitted with a variety of options:

- Internal UBlox GPS
- Internal VectorNav INS
- Mission computers with 1 to 16 GB RAM, 8 to 256 GB eMMC, 2x A53 to 6x A55 Arm Cortex cores
- FMU Memory from 8 to 256 GB eMMC

## Customized Packaging Solutions

Allocortech offers customized packaging solutions for Atlas so it can be integrated into your advanced vehicle.

