

Autonomous Drone Engineer

A1 – Intel Aero in 5mn

Paul.Guermonprez@intel.com

Autonomous Drone Solutions Architect



Autonomous?

Autonomous drones are NOT an evolution of RC drones.

Everything is different:

- Technical requirements
- Laws and regulations
- Manufacturers
- Clients
- Business models

It's a **disruption, not an **evolution****

We need specific **hardware and **software****

Yet another commercial drone?

You may find several commercial drones on the market:

- Nicely integrated packages
- Hard to customize “*black box*”
- Hard/impossible to resell
- Lack of sovereignty

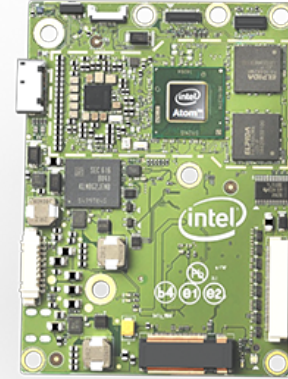
**Great if you need a commercial drone
with minimal customization**

But manufacturers and integrators need **quality ingredients
to develop their product and services**

Ingredients

We propose:

- Board: Intel Aero Compute Board
for on board processing, storage, communications
- 3D Sensor: Intel RealSense
for collision avoidance and SLAM
- Computer Vision: Intel Movidius coming soon
for advanced low power computer vision
- Software: Intel SLAM library, optimized libraries and an open drone ecosystem
integrate the software components of your choice
- Open Course: become an Autonomous Drone Engineer
in partnership with Universities worldwide



Quality **ingredients**, with software and courses

Easy prototyping: Intel Aero ReadyToFly Drone

Intel Aero's goal is to let drone integrators build their drone but we also propose a Ready To Fly drone for fast prototyping and universities. Included:

- Intel Aero Compute Board
- Intel R200
- Intel Aero Flight Controller and Spektrum remote
- All the parts assembled: frame, motors, propellers
- Reference hardware for the for the Autonomous Drone Engineer open course



**Experiment and learn Autonomous Drone development
with the Intel Aero RTF Drone**

Autonomous Drone Engineer Course

As an engineer or student, use this online course to learn about **autonomous drone development**:

- Hardware used is easily available and affordable
- It's not only about Intel Aero: we use interoperable standards and open source software as much as possible
- It's not about drones only: robotics, computer vision, artificial intelligence ...

As a professor:

- Use this course as a basis to build your own
- Contact us, we can help you with the course customization and deployment

Ecosystem

You can **learn and teach** with the Intel Aero Ready-to-Fly kit.

If you are a drone solution developer, you can **go to production** with the Intel Aero Compute Board and sensors.

Let us know, we are interested to learn from your product and developer experience.

If you are a client with drone needs, it may be simpler to ask a drone solution developer to **develop and operate** it for you.

Contact us, we can help you define your use case and find the right ecosystem partner.

Thanks

Paul.Guermonprez@intel.com