

Overview: a research drone

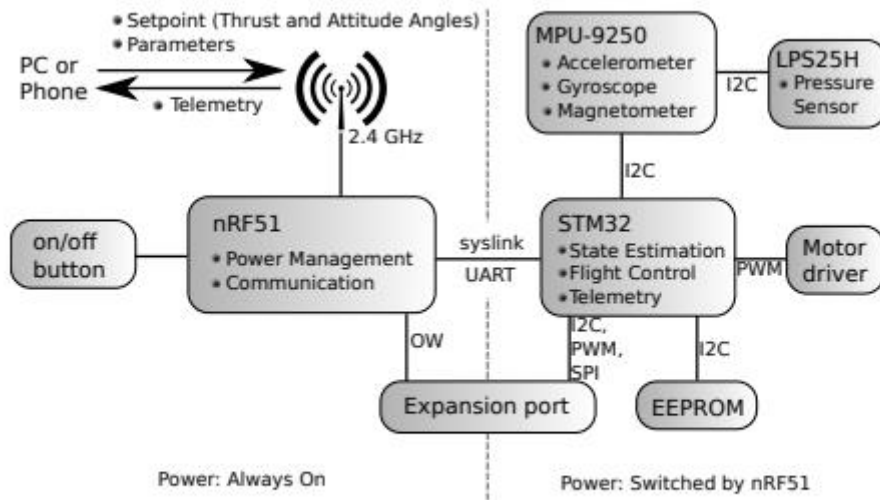


Fig. 2. Components and architecture of the Crazyflie 2.0 quadcopter. Based on images by Bitcraze AB.

The Crazyflie 2.1 is a **durable, open-hardware** nano **quadcopter** that targets hobbyists and researchers. Its small size (92 mm diagonal rotor-to-rotor) and weight (27 g) make it ideal for indoor swarming applications. The firmware is open source and the flexibility of the platform makes it ideal for research, education or other applications where **openness** and **full control** is important.

As a fist-sized, lightweight and **re-assemblable** piece of equipment, it offers functional hardware for drone autonomy in a field marred by **hardware constraints**. Its 6 to 7 minutes of flight time make it practical for testing **autonomous flight algorithms**, and it has become the drone of choice for research laboratories. It is particularly adept to autonomous control and coordination of **multi-robot systems**, since its small size allows for **dense formations with low air turbulence**. It also offers agility in research pertaining to **control optimisation** for **aggressive manoeuvres**.

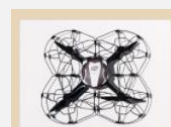
Starting point for the Crazyflie 2.1

<https://www.bitcraze.io/documentation/start/>

External projects based on the Crazyflie

<https://www.bitcraze.io/support/external-projects/>

For **drone maintenance**, please refer to the drone tips tutorial.



Drone Guards and other flight tips

⌚ Less than 1 minute read
Information about this drone and its framework.