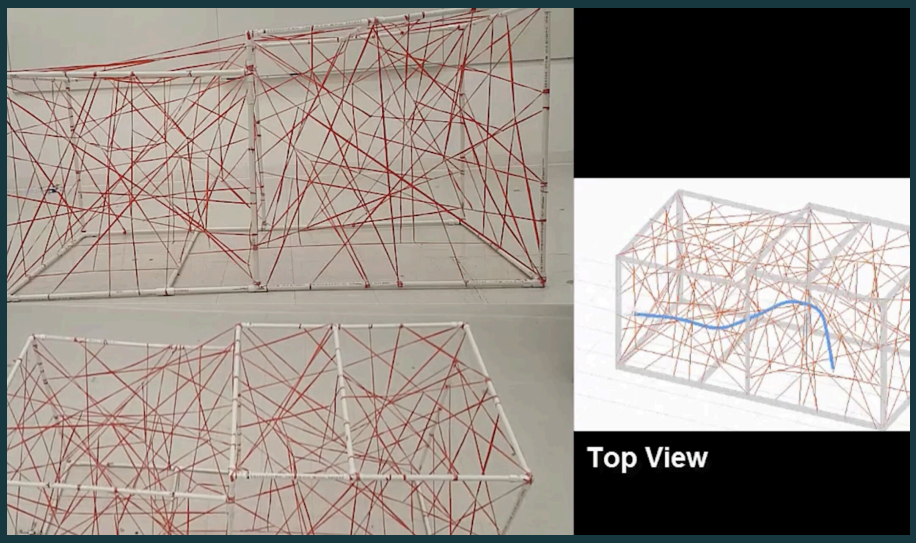
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INDUSTRIAL PRODUCT DATASHEET

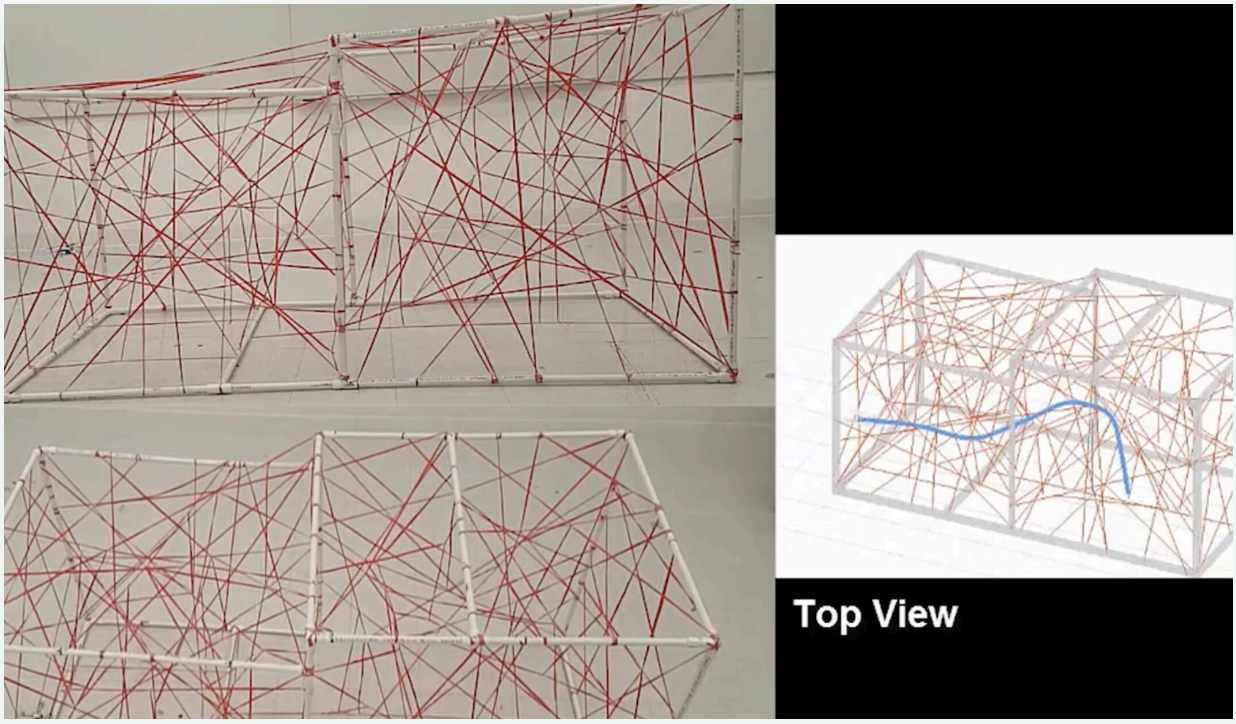
Crazyflie 2.1+ version - Open Source Mirco Quadcopter Drone,Support Bluetooth5 LE,Robotics,Suitable for Indoor/Small Space/High Density

Open-source Crazyflie 2.1+ micro quadcopter with Bluetooth 5 LE, no-soldering assembly, expansion decks, and upgraded flight performance for indoor, small-space, and high-density robotics applications.

SKU	UPDATED	PRICE
114993295	2026-10-23 02:47:37	$240.00(Excl. VAT)



Overview



The Crazyflie 2.1+ is an open-source micro quadcopter drone supporting Bluetooth 5 LE and designed for indoor, small-space, and high-density robotics use. It features tool-free assembly, automatic expansion deck detection, cross-platform compatibility, long-range radio communication, wireless firmware updates, dual-MCU real-time logging, and upgraded battery and propellers for up to 15% improved flight performance, making it ideal for education, research, swarming, and development with open-source software and expansion decks such as LED-ring, Flow deck v2, and Multi-ranger for assistance, obstacle avoidance, and autonomous flight.

Key Features

Note:

This product has shipping restrictions for certain countries. It cannot be shipped to the following regions: China

- **Easy to assemble:** no soldering required
- **Automatic Expansion Deck Detection**
- **Cross-Platform Compatibility:** Compatible with **iOS and Android** via **Bluetooth LE**, and with Windows, Mac, and Linux using **Crazyradio**, **Crazyradio PA**, or Crazyradio 2.0 for flying.
- **Long-Range Radio Communication:** Tested to further than **1 km** radio range line-of-sight (LOS) with the Crazyradio PA
- **Wireless firmware updates**
- **Dual-MCU architecture:** Supports Real-time logging, graphing and variable setting in addition to full use of expansion decks when using a Crazyradio or Crazyradio PA and a computer

The Crazyflie 2.1+ of the successful Crazyflie 2.X development platform comes with upgraded battery and propellers for a up to 15% improved flight performance. Together with an extensive ecosystem of software and deck expansions it's ideal for education, research and swarming.

Crazyfly 2.1 + is designed to be as flexible as possible. This meant adding as many features as users could fit and writing firmware made to be modified. In addition to the default functionality that comes with the Crazyflie 2.1 + that added a flexible expansion interface where a variety of expansion decks can be attached, both on the top and the bottom of the Crazyflie 2.1 +. From this expansion interface the user can access buses such as UART, I2C and SPI as well as PWM, analog in/out and GPIO.

Go to **Getting started with the Crazyflie 2.1 +** to build your crazyflie, update its firmware and fly with it with the clients. Also take a look at our System overview to learn more about Crazyflie's ecosystem of positioning systems, Clients and of course the crazyflie itself with its expansion decks.

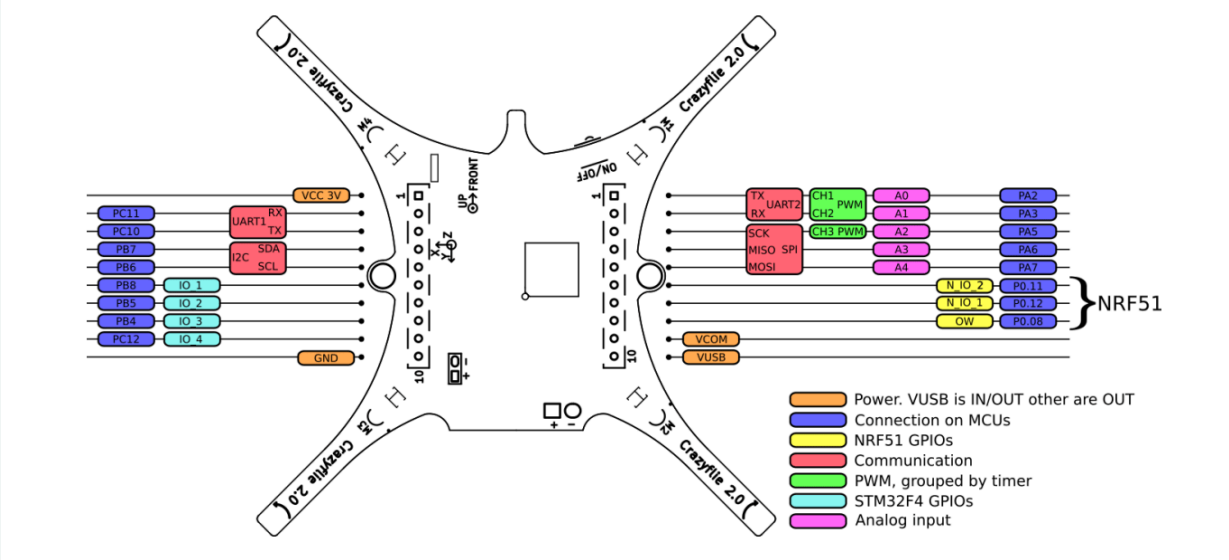
Product Gallery

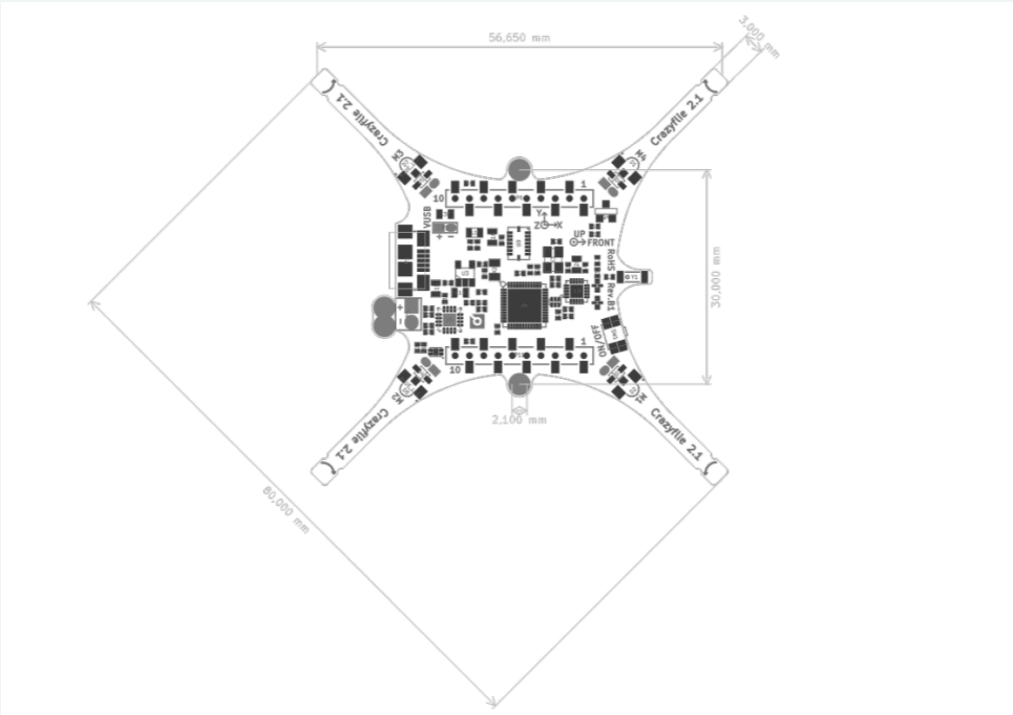


Specification

Parameter	Description
Microcontrollers Spec	
Main application MCU	STM32F405,Cortex-M4, 168MHz, 192kb SRAM, 1Mb flash
Radio and power management MCU	nRF51822,Cortex-M0, 32Mhz, 16kb SRAM, 128kb flash
Connector	micro-USB
On-board LiPo charger	100mA, 500mA and 980mA modes available
Memory	8KB EEPROM
Port	Full speed USB device
	Partial USB OTG capability present but no 5V output
IMU Spec	
3 axis accelerometer / gyroscope	BMI088
High precision pressure sensor	BMP388
Flight Spec	
Flight time with stock battery	7 minutes
Charging time with stock battery	40 minutes
Max recommended payload weight	15 g
Radio Spec	
ISM band radio	2.4GHz
radio range LOS	> 1 km (Increased range with 20 dBm radio amplifier)
Wireless	BLE
Support platform	iOS / Android clients
	Win/Linux/OSX python client(Any gamepad/controller with at least 4 analog axes)
Antenna	Dual antenna support
Onboard components	chip antenna
	U.FL connector
Expansion connector mode	
VCC	3.0V (max 100mA)
VCOM	max 1A(unregulated VBAT or VUSB)
VUSB	both for input and output
Interfaces	SPI
	I2C (400kHz)
	2 x UART
	4 x GPIO/CS for SPI
	1-wire bus for expansion identification
	2 x GPIO connected to nRF51
Mechanical Spec	
Takeoff weight	27g
Size (WxHxD)	92x92x29mmm (motor-to-motor and including motor mount feet)

Hardware Overview





Applications

- **Use the Crazyflie 2.X for development:** The Crazyradio PA enables you to connect the Crazyflie 2.X to a computer wireless and download new firmware, modified to your liking. The logging and parameter frameworks provide APIs for getting and setting data in the Crazyflie 2.X live, even when you are flying! All software, firmware, as well as clients on the computer that is open source and the source code is available for you to play with as you like.
- **Paint in the dark with a Crazyflie:** The Crazyflie 2.X is fun to fly as is but adding the LED-ring deck and flying in the dark adds a new dimension. The RGB LEDs let you choose any colour and with some coding any light sequence can be displayed, for instance, controlled by the on board sensors. Why not take photos with an open shutter of a moving Crayflie 2.X and paint in the dark?
- **Assistance when flying the Crazyflie and Crazyradio PA:** Flying a quadcopter like the Crazyflie manually requires some skill and practising. By adding the Flow deck v2 the Crazyflie gets more information about its motion and can assist the pilot. note: Currently assisted mode is only supported when flying using a computer and gamepad, not with a mobile device.
- **Awareness of the surroundings to the Crazyflie and Crazyradio PA:** The Multi-ranger deck measures the distance to objects forward/back/left/right and up. It can be used for obstacle avoidance, mapping a room or games where the Crazyflie 2.X “bounces” between the walls of a room. Combine with a Flow deck v2 to measure the distance to the floor as well and support autonomous flight.

Part List

Crazyflie 2.1 Plus control board	1
250mAh LiPo battery(spare part)	1
7mm DC coreless motor (1 spare)(spare part)	5
7mm motor mounts (2 spare) (spare part)	6
Foam battery pad	1
CCW propellers (3 spare) (spare part)	5
CW propellers (3 spare) (spare part)	5
Battery holder deck (spare part)	1
Short male deck connectors(spare part)	2
Long male deck connectors (spare part)	2
micro-USB cable (48cm) (spare part)	1

Compliance & Logistics



HSCODE	9023009000
USHSCODE	9023000000
UPC	
EUHSCODE	9023001000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- https://www.seeedstudio.com/Crazyflie-V2-1-p-5948.html
- Start here
- Development
- Getting help
- crazyflie_2_1_plus-datasheet.pdf

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