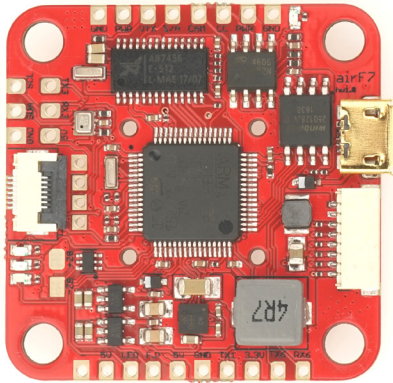


# Racerstar airF7

Revision 08.08.2019



## Technical data

MCU	F722
Flash	128Mb(16MB)
BEC	1 +1
UART	6
OSD	AB7456
BT	Yes(optional)
VTX Power switch	Yes
Mounting Holes	M4/30.5x30.5mm

- Firmware, please use Racerstar AirF7(Not Airbot F7)

## Overview

airF7 combines the most useful features for FPV on one board. It uses F722 MCU with ICM gyro for the best performance, the soft mount grommets plus specially designed filter circuit bring you the most "MPU6000 like" stability with ICM responding speed.

## Highlight

- Specially designed filter system "Good Dream", will reduce most noise from power line
- Modular design, many PNP modules are coming, different BEC/BT/Receiver could be mounted on FC without ext. wires
- Highside video power switch function, cut off the VTX and camera power like real switch
- 6x Hardware UART + 1 independent I2C, every function one independent port, no more Multiplexing
- Airbot Configuration assistant supported, easier to config the functions for the FC
- Supported by EMUflight

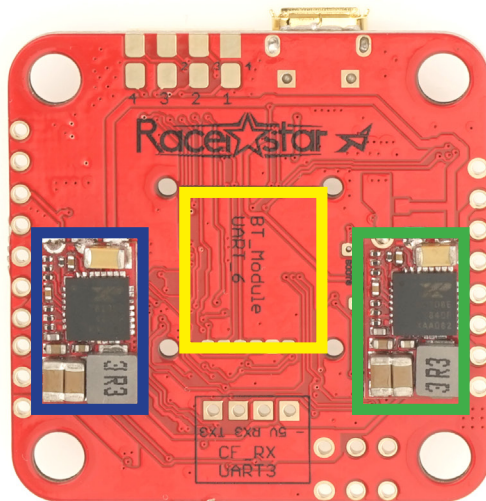
## Features

- STM32F722 MCU
- AB7456 OSD onboard
- 128mb(16MB) Flash for blackbox
- ICM Gyro
- 5V 3A BEC
- 9V 3A BEC(optional)
- BT module supported(optional)
- Receivers could be plugged and mounted direct on the FC(Frsky RXSR-FC and Cross fire RX)
- Highside video power switch
- Built in power filter system for main power and VTX/Camera power
- 6 UART
- 1x independent I2C(not need to share UART3)
- Independent 3.3v power source for sensors and digital device
- "Strong pad" design, all solder pads have spare or through holes, no worry about ripped off solder pads



## Resources:

Function	Solder Pad Silk screen	Resources	MCU Pin	Notes
SBUS / F.port	F.P	TX4	PA0	
DSM2 / FPC RX	TX1	TX 1	PA9	CLI: serialrx_halfduplex set to ON (For DSM)
Smart Audio VTX	S/A	TX 5	PC12	
ESC Telemetry	TLM	TX 2	PA2	CLI: set esc_sensor_halfduplex = ON
Camera Control	CC		PA8	
SDA	SDA	I2C1_SDA	PB9	Ext. Pull up needed
SCL	SCL	I2C1_SCL	PB8	
GPS	RX3/TX3	UART 3	PA10/11	
WS2812B LED	LED		PA15	
Buzzer	Bz-/Bz+		PB0	



Camera BEC
  BT Module
  FC BEC(5V)

For No-Camera BEC version, short these green points will power the FC by VBAT

