

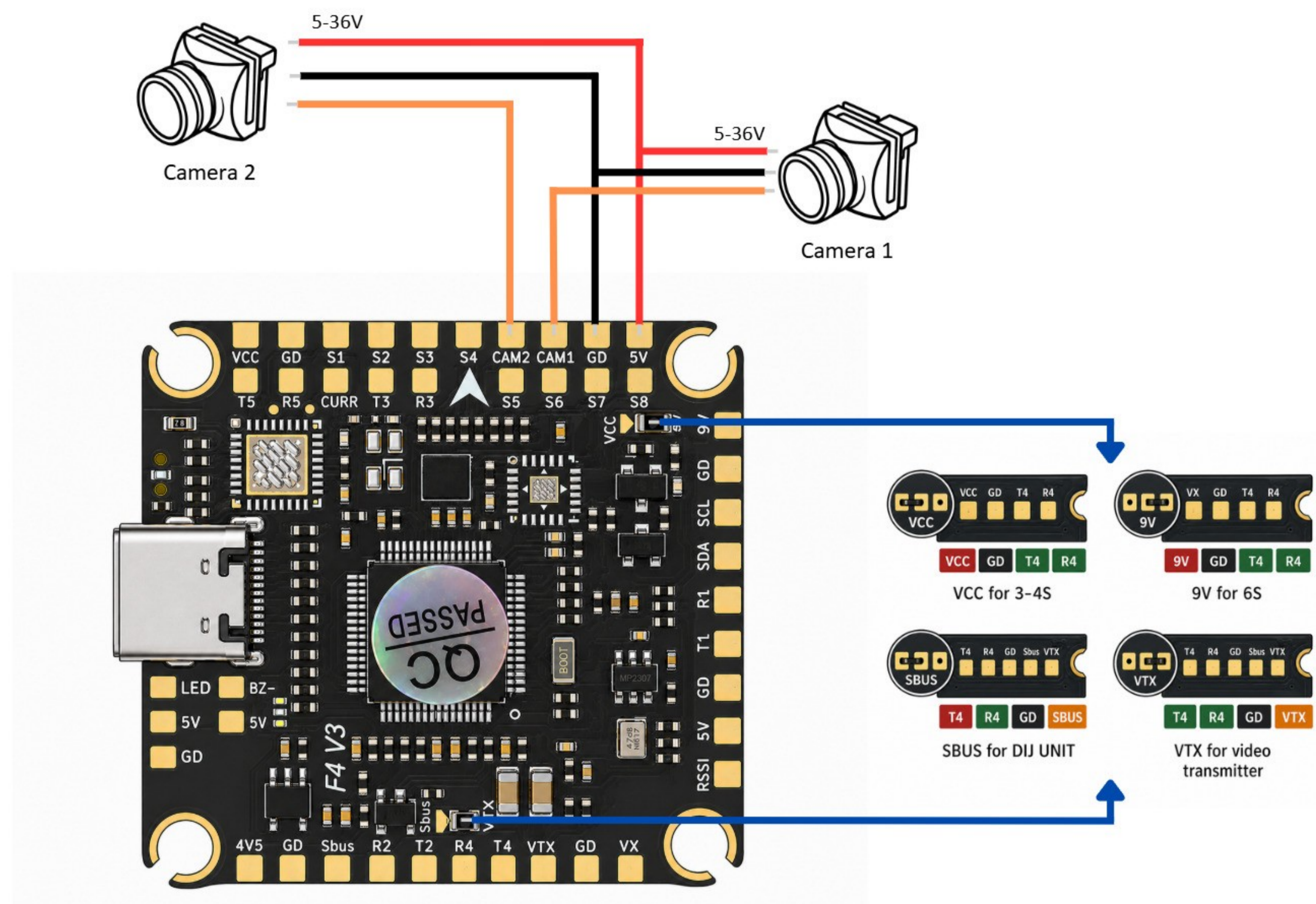
The F405 V3 ICM42688 AM32 75A is an FPV flight controller and ESC combination featuring an STM32F405 microcontroller and an AT32F421K8U7 ESC microcontroller. It supports Betaflight firmware, incorporates an ICM42688-P gyro, and includes built-in sensors such as an accelerometer and SPL06 barometer for enhanced flight stability. Operating within a temperature range of -20 to 40 °C, it has a humidity tolerance of 20-95% RH and relies on passive cooling through natural airflow. The device is designed with a compact footprint, featuring a weight of 25.4 grams and dimensions suitable for various drone applications.

Product details	
Model	F405 V3 ICM42688 AM32 75A
SKU	6207
FC MCU	
FC MCU	STM32F405
Firmware target	PILOTIXF405V3
Firmware support	Betaflight
OSD type	Analog OSD
ESC MCU	
ESC MCU	AT32F421K8U7
Firmware	AM32
ESC configurator	AM32 Configurator
ESC protocols	DShot300, DShot600, DShot150, Multishot, OneShot
Bi-directional DShot	yes
Electrical specification	
ESC type	4 in 1
Continuous current	4 x 75 A
Peak current	4 x 85 A
BEC	5 V @ 2.5 A, 9 V @ 3 A

Input voltage	3 - 8S
Capacitor included	1 x 1000 μ F @ 35 V
Power connector	Solder pads
Sensors	
Gyro	ICM42688-P
Gyro connection	SPI
Accelerometer	Built-in
Barometer	SPL06
Magnetometer	Built-in
Number of gyros	1
Interfaces	
Motor control outputs	4
Motor output wire	Solder pads
Receiver protocol	SBUS, CRSF, ELRS, FrSky, Futaba, Flysky, TBS Crossfire, DSMX
DFU button	yes
I2C port	1
LED strip output	yes
SD card slot	no
UART ports	5
USB port	USB Type C
Video inputs	2
Video input	Analog
Video output	Analog
Buzzer output	yes
Control connector	JST-SH 1.0 mm
Telemetry support	Current, Voltage, Temperature, RPM
Mechanical specification	
FC dimensions	36 x 36 mm
ESC dimensions	44.5 x 40.5 mm

Stack height	13 mm
Mounting	30.5 x 30.5 mm (M3)
Weight	25.4 g
Operating conditions	
Cooling requirements	Passive (natural airflow)
Operating temperature	-20 - 40 °C
Storage temperature	-30 - 50 °C
Humidity range	20-95% RH (non-condensing)
Common	
Package contents	Shock-absorbing balls (4x), Set of cables, Screws (4x), Nuts (4x), Power cord, Solid-state capacitors , Heat shrink tubing
Warranty	2 years

FC wiring diagram



ESC wiring diagram

