



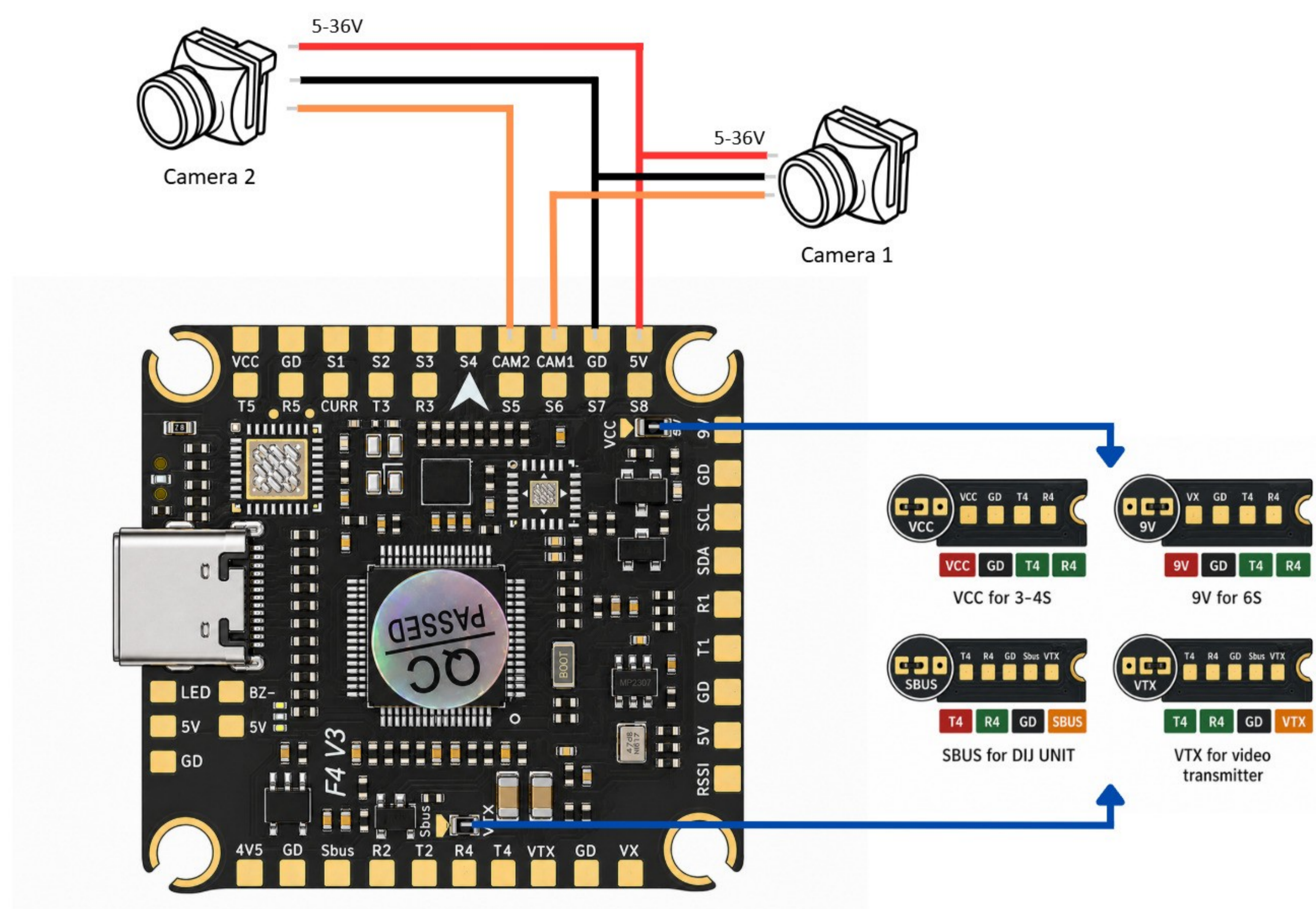
The F405 V3 3080 AM32 80A is a flight controller integrated with an STM32F405 microcontroller, supporting the Betaflight firmware and featuring an analog OSD. It includes an integrated 4-in-1 ESC with an AT32F421K8U7 MCU, capable of continuous current up to 80A and peak current of 100A, with bi-directional DShot protocol support and an AM32 configurator. The device operates within a temperature range of -20°C to 40°C and can function in humidity levels from 20% to 95% RH (non-condensing). Mechanical dimensions include a flight controller size of 36 x 36 mm and an ESC size of 55 x 52 mm, and it weighs 42.6 grams.

| Product details          |                          |
|--------------------------|--------------------------|
| Model                    | F405 V3 3080 AM32 80A    |
| SKU                      | 6288                     |
| 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, PWM  |
| Bi-directional DShot     | yes                      |
| Electrical specification |                          |
| ESC type                 | 4 in 1                   |
| Continuous current       | 4 x 80 A                 |
| Peak current             | 4 x 100 A                |
| BEC                      | 5 V @ 2.5 A, 9 V @ 2.5 A |

|                                  |  |
|----------------------------------|--|
| Input voltage                    | 3 - 8S   |
| Capacitor included               | 2 x 1000 $\mu$ F @ 35 V                                      |
| Power connector                  | Solder pads  |
| <b>Sensors</b>                   |  |
| Gyro                             | ICM42688-P   |
| Gyro connection                  | SPI  |
| Accelerometer                    | Built-in   |
| Barometer                        | SPL06  |
| Magnetometer                     | Built-in   |
| Number of gyros                  | 1  |
| <b>Interfaces</b>                |  |
| 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                           |
| <b>Mechanical specifications</b> |  |
| FC dimensions                    | 36 x 36 mm   |
| ESC dimensions                   | 55 x 52 mm   |

|                             |  |
|-----------------------------|--|
| Mounting                    | 30.5 x 30.5 mm (M3)  |
| Weight                      | 42.6 g   |
| <b>Operating conditions</b> |  |
| Cooling requirements        | Passive (natural airflow)  |
| Operating temperature       | -20 - 40 °C  |
| Storage temperature         | -30 - 50 °C  |
| Humidity range              | 20-95% RH (non-condensing)   |
| <b>Common</b>               |  |
| 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

