

PIN OUT

PPM input	
1	GND
2	VCC
3	PPM

PWM output 1-6	
1	GND
2	VCC
3	SIGNAL

I2C connector	
1	GND
2	SDA
3	SCL
4	5V

3.3v Serial RX (Spektrum Sat.DSM)	
1	RXD3
2	GND
3	3.3V

BUZZER	
1	BUZZER-
2	BUZZER+

VBAT	
1	GND/BATTERY NEGATIVE-
2	BATTERY POSITIVE+

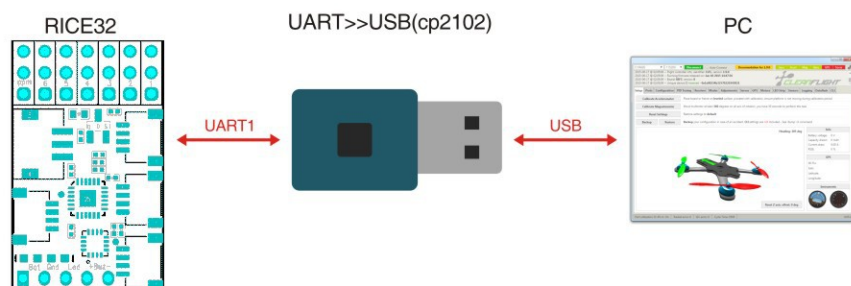
UART1 - used for 5v serial IO(OSD,etc)	
1	GND
2	RXD1
3	TXD1
4	5V

UART2 - used for 5v serial IO(GPS,etc)	
1	GND
2	RXD2
3	TXD2
4	5V

UART3 - used for 5v serial IO(S.Bus,etc)	
1	GND
2	RXD3
3	TXD3
4	5V

LED_STRIP	
1	LED Strip data signal can be used to change individual colors of each LEDs on a strip of WS2812 RGB leds - Perfect for battery warning lights, orientation lights, indicators, failsafe, display flight modes, etc.

Connection



RICE32

Micro Racing Flight Controller F303

Features

- Tiny space saving design – full NAZE capabilities in a package half the size and half the weight.
- Protective case – comes with custom case for protection as well as easy installation.
- Black box flight log recorder – high capacity on-board storage for easy tuning optimization, flight replay, and troubleshooting.
- Next-generation STM32 F3 processor with faster ARM-Cortex M4 core with floating point hardware unit for efficient flight calculations. Loop times are up to twice as fast as previous-generation STM32F1 based boards.
- All plugs are located on the same side of the board for a more space-efficient design.
- 6 PWM 3Pin though-holes connectors for ESCs, Servos. Full support for OneShot ESCs.
- Supports SBus, SumH, SumD, Spektrum1024/2048, XBus, PPM, Built-in inverters.
- Dedicated output for programmable LEDs.
- Battery monitoring ports for voltage.
- Buzzer port for warnings and notifications.
- Barometer mounted on the bottom of the board for easy wind isolation.
- Configuration of the flight controller via a cross-platform GUI (Windows/OSX/Linux).
- Supports a variety of aircraft, tricopters, quadcopters, hexacopters, octocopters, planes and more.

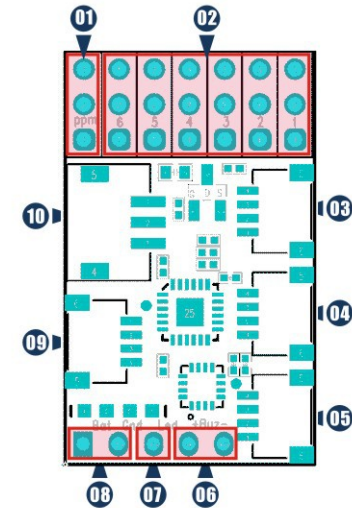
Hardware Specifications

- 30x18mm board
- ~5 grams.
- STM32F303 CPU with FPU 256kB flash.
- 8MB (64Mbit) High-Capacity Flash.
- MPU6050 accelerometer/gyro.
- MS5611 barometer (Deluxe only).
- HMC5983 magnetometer (Compass Sensor, Deluxe only).

- 4x4pin JST-SH sockets (UART1/OSD,UART2/GPS,UART3/ SERIAL RX,I2C)
- 5x1pin though-holes for pin headers for VBAT,LED,Buzzer.
- 6x3pin though-holes for pin headers for ESC/Servo connections.
- 1x3pin though-holes for pin headers for PPM RC input.
- 1x3pin JST-ZH sockets (sat.DSM)

TOP

- 01.PPM input headers
- 02.PWM output headers 1-6
- 03.UART1 connector
- 04.UART3 connector
- 05.I2C connector
- 06.Buzzer headers
- 07.LED_STRIP
- 08.Battery voltage monitoring headers
- 09.UART2 connector
- 10.SPK/DSM connector



BOTTOM

- Jp1. Compass Jumper
 - :Open for external compass
 - :Short for onboard compass

