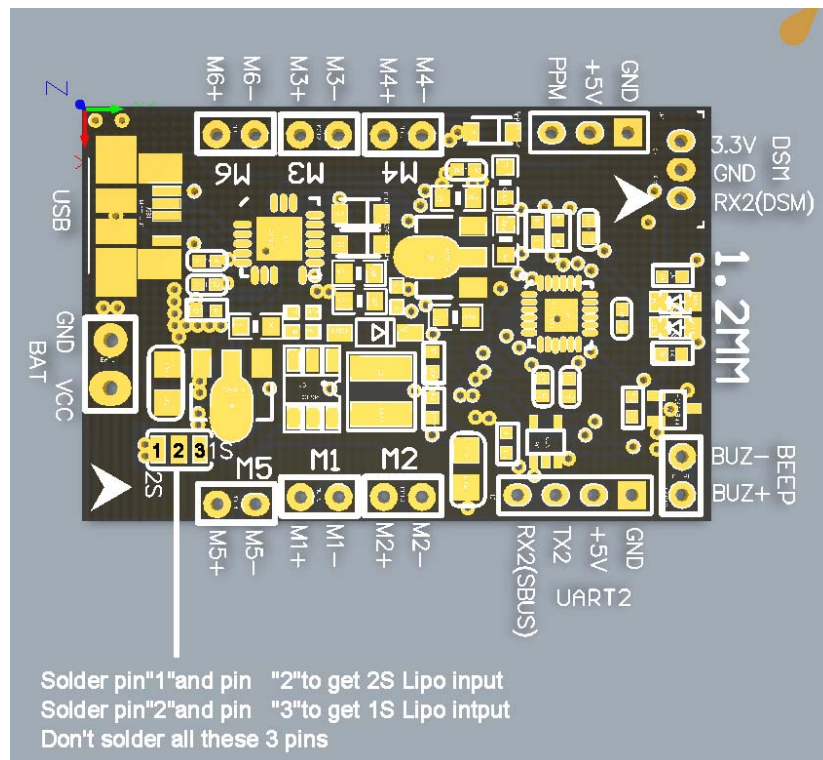


## Connection diagram:



Micro USB socket: Connect to computer to flash firmware and configure the flight controller

M1/M2/M3/M4/M5/M6: Connect to Brush motor

VCC/GND: Connect to the battery 1s~2s input (Configure by the voltage input pad)

UART2: GND +5V TX2 SBUS Receiver input (RX2)

DSM/DSM2/DSMX: 3.3V GND RX2 DSM/DSM2/DSMX Receiver input

PPM: PPM +5V GND PPM Receiver input

BUZ+ -: Connect to a external buzzer

## Receiver configuration:

1. DSM receiver soldered directly to the DSM/DSM2/DSMX Receive interface 3.3V, GND, RX2. Enable Seria\_RX for UART2 and Set Receiver mode RX\_SERIAL ,Select Spektrum1024(DSM/DSM2) or Spektrum2048(DSMX) in Cleanflight configurator.

**Note:** not all combinations are valid. When the flight controller firmware detects this the serial port configuration will be reset.  
**Note:** Do **NOT** disable MSP on the first serial port unless you know what you are doing. You may have to reflash and erase your configuration if you do.

Identifier	Data	Logging	Telemetry	RX	GPS
UART1	<input checked="" type="checkbox"/> MSP 115200 ▾	<input type="checkbox"/> Blackbox 115200 ▾	Disabled ▾ AUTO ▾	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▾
UART2	<input type="checkbox"/> MSP 115200 ▾	<input type="checkbox"/> Blackbox 115200 ▾	Disabled ▾ AUTO ▾	<input checked="" type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▾

**Receiver Mode**

RX\_PPM PPM RX input

RX\_SERIAL Serial-based receiver (SPEKSAT, SBUS, SUMD)

RX\_PARALLEL\_PWM PWM RX input (one wire per channel)

RX\_MSP MSP RX input (control via MSP port)

**Serial Receiver Provider**

**Note:** Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX\_SERIAL feature.

SPEKTRUM1024

SPEKTRUM2048

SBUS

SUMD

SUMH

XBUS\_MODE\_B

XBUS\_MODE\_B\_RJ01

IBUS

2. SBUS receiver welded to the UART2 GND, + 5V, RX2 . Then Enable Serial\_RX and Set Receiver mode RX\_SERIAL , Select Sbus signal in Cleanflight configurator.

**Note:** not all combinations are valid. When the flight controller firmware detects this the serial port configuration will be reset.  
**Note:** Do **NOT** disable MSP on the first serial port unless you know what you are doing. You may have to reflash and erase your configuration if you do.

Identifier	Data	Logging	Telemetry	RX	GPS
UART1	<input checked="" type="checkbox"/> MSP 115200 ▾	<input type="checkbox"/> Blackbox 115200 ▾	Disabled ▾ AUTO ▾	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▾
UART2	<input type="checkbox"/> MSP 115200 ▾	<input type="checkbox"/> Blackbox 115200 ▾	Disabled ▾ AUTO ▾	<input checked="" type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▾

**Receiver Mode**

RX\_PPM PPM RX input

RX\_SERIAL Serial-based receiver (SPEKSAT, SBUS, SUMD)

RX\_PARALLEL\_PWM PWM RX input (one wire per channel)

RX\_MSP MSP RX input (control via MSP port)

**Serial Receiver Provider**

**Note:** Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX\_SERIAL feature.

SPEKTRUM1024

SPEKTRUM2048

SBUS

SUMD

SUMH

XBUS\_MODE\_B

XBUS\_MODE\_B\_RJ01

IBUS

3. PPM receiver welded to the PPM + 5V, GND .Then set Receiver mode to RX\_PPM in Cleanflight configurator.

**Note:** not all combinations are valid. When the flight controller firmware detects this the serial port configuration will be reset.  
**Note:** Do **NOT** disable MSP on the first serial port unless you know what you are doing. You may have to reflash and erase your configuration if you do.

Identifier	Data	Logging	Telemetry	RX	GPS
UART1	<input checked="" type="checkbox"/> MSP 115200 ▾	<input type="checkbox"/> Blackbox 115200 ▾	Disabled ▾ AUTO ▾	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▾
UART2	<input type="checkbox"/> MSP 115200 ▾	<input type="checkbox"/> Blackbox 115200 ▾	Disabled ▾ AUTO ▾	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▾

**Receiver Mode**

- RX\_PPM PPM RX input
- RX\_SERIAL Serial-based receiver (SPEKSAT, SBUS, SUMD)
- RX\_PARALLEL\_PWM PWM RX input (one wire per channel)
- RX\_MSP MSP RX input (control via MSP port)

**Serial Receiver Provider**

**Note:** Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX\_SERIAL feature.

- SPEKTRUM1024**
- SPEKTRUM2048
- SBUS
- SUMD
- SUMH
- XBUS\_MODE\_B
- XBUS\_MODE\_B\_RJ01
- IBUS

## Notice:

Before applying power, pay attention to the battery voltage selection.

The default setting is 1S (4.2V); if you use 2s lipo, please first need to disconnect pin2 and pin 3 and then solder pin 1 and pin2. Prohibit the same three pads shorted together.

