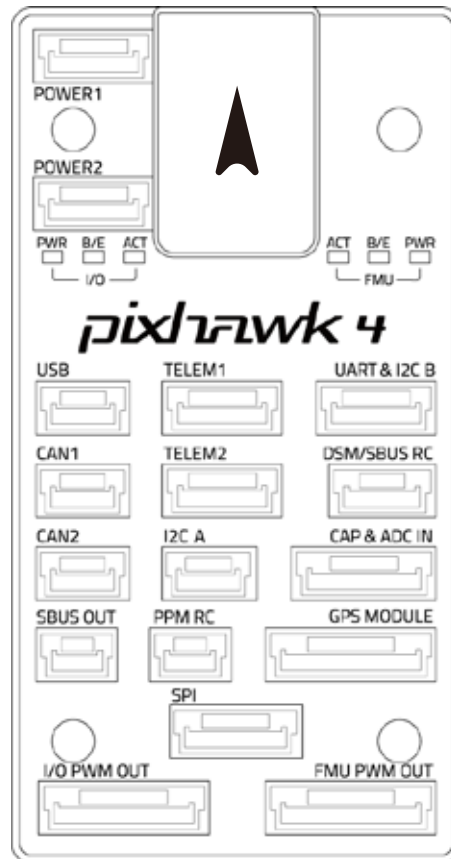


pixhawk[®] 4



Pinouts

Power 1, Power 2 ports

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	VCC	+5V
3(black)	CURRENT	+3.3V
4(black)	VOLTAGE	+3.3V
5(black)	GND	GND
6(black)	GND	GND

USB port

Pin	Signal	Volt
1(red)	VBUS	+5V
2(black)	DM	+3.3V
3(black)	DP	+3.3V
4(black)	GND	GND

TELEM1, TELEM2 ports

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	TX(out)	+3.3V
3(black)	RX(in)	+3.3V
4(black)	CTS(in)	+3.3V
5(black)	RTS(out)	+3.3V
6(black)	GND	GND

UART & I2C B port *

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	TX(out)	+3.3V
3(black)	RX(in)	+3.3V
4(black)	SCL2	+3.3V
5(black)	SDA2	+3.3V
6(black)	GND	GND

*A spare port for connecting sensors supporting serial communication or I2C e.g. a second GPS module can be connected here.

CAN1, CAN2 ports

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	CANH	+3.3V
3(black)	CANL	+3.3V
4(black)	GND	GND

DSM RC port

Pin	Signal	Volt
1(null)	VDD_5V_SBUS_RC	+5V
2(yellow)	SBUS*	+3.3V
3(null)	RSSI**	+3.3V
4(red)	VDD_3V3_SPEKTRUM	+3.3V
5(black)	GND	GND

SBUS RC port

Pin	Signal	Volt
1(red)	VDD_5V_SBUS_RC	+5V
2(yellow)	SBUS*	+3.3V
3(null)	RSSI**	+3.3V
4(null)	VDD_3V3_SPEKTRUM	+3.3V
5(black)	GND	GND

*Connect SBUS or DSM/Spektrum receiver's signal wire connect here.

** Sends the RC signal strength info to autopilot.

I2C A port

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	SCL4	+3.3V
3(black)	SDA4	+3.3V
4(black)	GND	GND

CAP & ADC IN port

Pin	Signal	Volt
1(red)	VCC	+5V
2 (black)	FMU_CAP1	+3.3V
3(black)	FMU_CAP2	+3.3V
4(black)	FMU_CAP3	+3.3V
5(black)	TIM5_SPARE_4	+3.3V
6(black)	ADC1_SPARE_1	+3.3V*
7(black)	ADC1_SPARE_2	+6.6V*
8(black)	GND	GND

*WARNING: Sensors connected to this pin should not send a signal exceeding this voltage!

GPS MODULE port

Pin	Signal	Volt
1(red)	VCC	+5V
2 (black)	TX(out)	+3.3V
3(black)	RX(in)	+3.3V
4(black)	SCL1	+3.3V
5(black)	SDA1	+3.3V
6(black)	SAFETY_SWITCH	+3.3V
7(black)	SAFETY_SWITCH_LED	+3.3V
8(black)	VDD_3V3	+3.3V
9(black)	BUZZER-	0V/5V
10(black)	GND	GND

SBUS OUT port

Pin	Signal	Volt
1(red)		
2(yellow)	SBUS_OUT	+3.3V
3(black)	GND	GND

PPM RC port

Pin	Signal	Volt
1(red)	VCC	+5V
2(yellow)	PPM	+3.3V
3(black)	GND	GND

SPI port

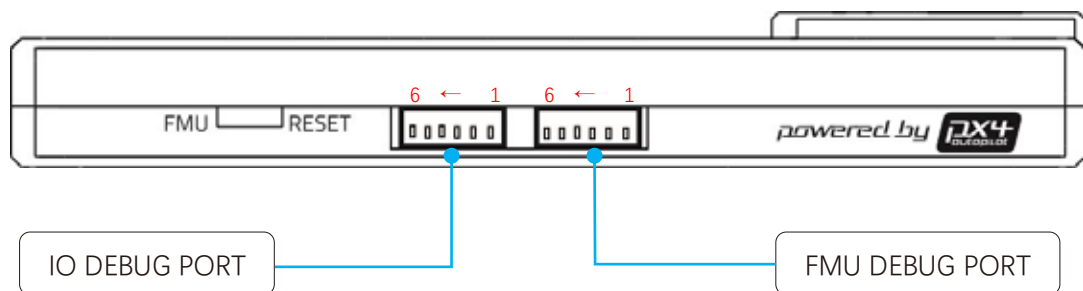
Pin	Signal	Volt
1(red)	VCC	+5V
2 (black)	SCK	+3.3V
3(black)	MISO	+3.3V
4(black)	MOSI	+3.3V
5(black)	CS1	+3.3V
6(black)	CS2	+3.3V
7(black)	GND	GND

I/O PWM OUT port

Pin	Signal	Volt
1(red)	VDD_SERVO	
2 (black)	IO_CH1	+3.3V
3(black)	IO_CH2	+3.3V
4(black)	IO_CH3	+3.3V
5(black)	IO_CH4	+3.3V
6(black)	IO_CH5	+3.3V
7(black)	IO_CH6	+3.3V
8(black)	IO_CH7	+3.3V
9(black)	IO_CH8	+3.3V
10(black)	GND	GND

FMU PWM OUT port

Pin	Signal	Volt
1(red)	VDD_SERVO	
2 (black)	FMU_CH1	+3.3V
3(black)	FMU_CH2	+3.3V
4(black)	FMU_CH3	+3.3V
5(black)	FMU_CH4	+3.3V
6(black)	FMU_CH5	+3.3V
7(black)	FMU_CH6	+3.3V
8(black)	FMU_CH7	+3.3V
9(black)	FMU_CH8	+3.3V
10(black)	GND	GND

**I/O DEBUG port**

Pin	Signal	Volt
1(red)	VT	+3.3V
2(black)	TX	+3.3V
3(black)	NC	
4(black)	SWDIO	+3.3V
5(black)	SWCLK	+3.3V
6(black)	GND	GND

FMU DEBUG port

Pin	Signal	Volt
1(red)	VT	+3.3V
2(black)	TX	+3.3V
3(black)	RX	+3.3V
4(black)	SWDIO	+3.3V
5(black)	SWCLK	+3.3V
6(black)	GND	GND