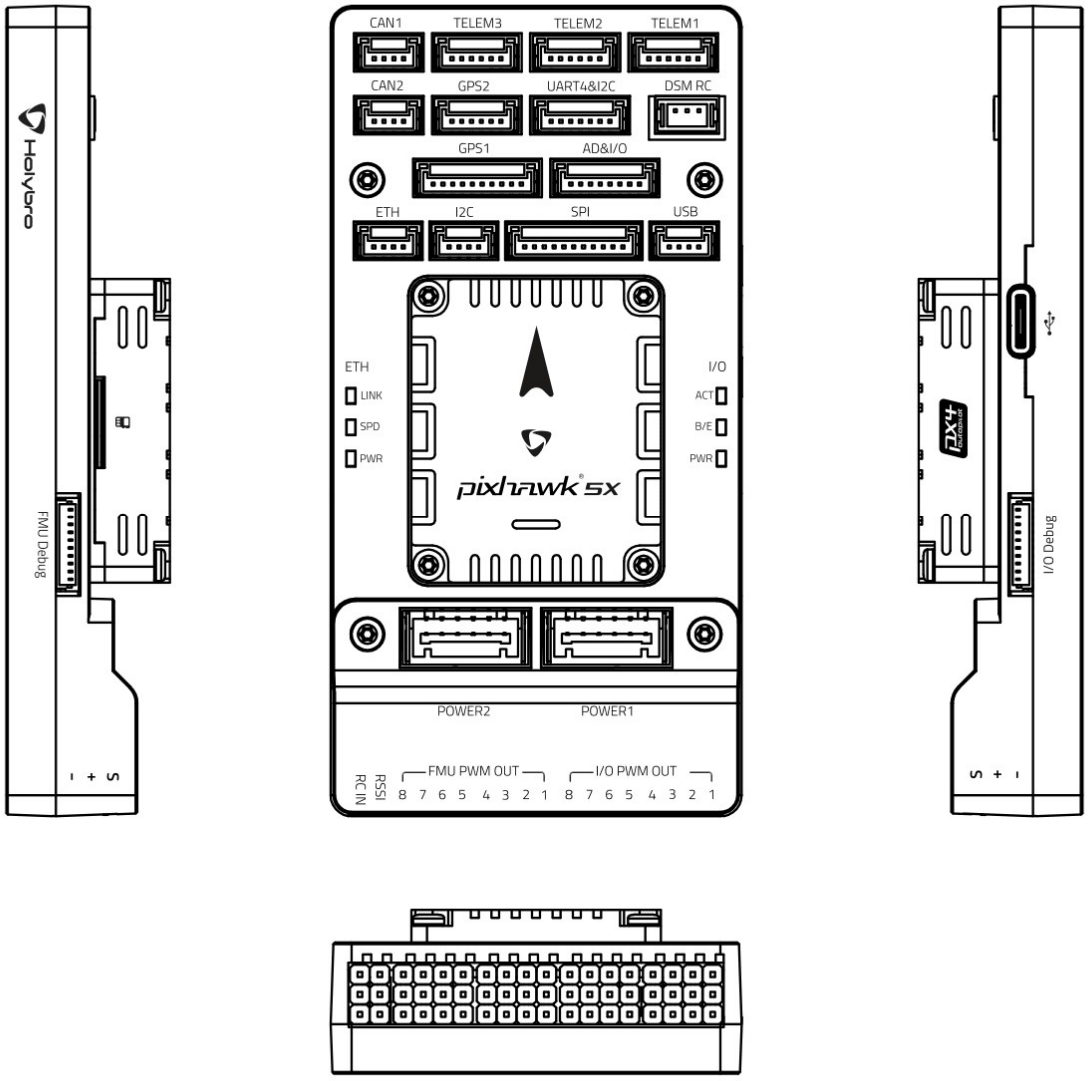
pixhawk® sx

Standard Basebaord Pinout



Pinouts (Pin 1 start from the left side of the port)

Power 1, Power 2 ports

Pin	Signal	Volt
1(red)	VDD5V_BRICK1/2	+5V
2(black)	VDD5V_BRICK1/2	+5V
3(black)	SCL1/2	+3.3V
4(black)	SDA1/2	+3.3V
5(black)	GND	GND
6(black)	GND	GND

Tel1, Tel2, Tel3 ports

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	TX7/5/2 (out)	+3.3V
3(black)	RX7/5/2 (in)	+3.3V
4(black)	CTS7/5/2 (in)	+3.3V
5(black)	RTS7/5/2 (out)	+3.3V
6(black)	GND	GND

CAN1, CAN2 ports

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	CANH1/2	+3.3V
3(black)	CANL1/2	+3.3V
4(black)	GND	GND

GPS1 port

Pin	Signal	Volt
1(red)	VCC	+5V
2 black)	TX1(out)	+3.3V
3(black)	RX1(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-	0~5V
10(black)	GND	GND

GPS2 port

Pin	Signal	Volt
1(red)	VCC	+5V
2 black)	TX8(out)	+3.3V
3(black)	RX8(in)	+3.3V
4(black)	SCL2	+3.3V
5(black)	SDA2	+3.3V
6(black)	GND	GND

Uart4&I2C port

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	TX4(out)	+3.3V
3(black)	RX4(in)	+3.3V
4(black)	SCL3	+3.3V
5(black)	SDA3	+3.3V
6(black)	NFC_GPIO	+3.3V
7(black)	GND	GND

SPI port

Pin	Signal	Volt
1(red)	VCC	+5V
2 (black)	SPI6_SCK	+3.3V
3(black)	SPI6_MISO	+3.3V
4(black)	SPI6_MOSI	+3.3V
5(black)	SPI6_CS1	+3.3V
6(black)	SPI6_CS2	+3.3V
7(black)	SPIX_SYNC	+3.3V
8(black)	SPI6_DRDY1	+3.3V
9(black)	SPI6_DRDY2	+3.3V
10(black)	SPI6_nRESET	+3.3V
11(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

I2C port

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	SCL3	+3.3V
3(black)	SDA3	+3.3V
4(black)	GND	GND

ETH port

Pin	Signal	Volt
1(red)	RXN	+3.3V
2(black)	RXP	+3.3V
3(black)	TXN	+3.3V
4(black)	TXP	+3.3V

IO Debug port

Pin	Signal	Volt
1(red)	IO_VDD_3V3	+3.3V
2 black)	IO_USART1_TX	+3.3V
3(black)	NC	--
4(black)	IO_SWD_IO	+3.3V
5(black)	IO_SWD_CK	+3.3V
6(black)	IO_SWO	+3.3V
7(black)	IO_SPARE_GPIO1	+3.3V
8(black)	IO_SPARE_GPIO2	+3.3V
9(black)	IO_nRST	+3.3V
10(black)	GND	GND

FMU Debug port

Pin	Signal	Volt
1(red)	FMU_VDD_3V3	+3.3V
2 black)	FMU_USART3_TX	+3.3V
3(black)	FMU_USART3_RX	+3.3V
4(black)	FMU_SWD_IO	+3.3V
5(black)	FMU_SWD_CK	+3.3V
6(black)	SPI6_SCK_EXTERNAL1	+3.3V
7(black)	NFC_GPIO	+3.3V
8(black)	PH11	+3.3V
9(black)	FMU_nRST	+3.3V
10(black)	GND	GND

AD&IO port

Pin	Signal	Volt
1(red)	VCC	+5V
2(black)	FMU_CAP1	+3.3V
3(black)	FMU_BOOTLOADER	+3.3V
4(black)	FMU_RST_REQ	+3.3V
5(black)	NARMED	+3.3V
6(black)	ADC1_3V3	+3.3V
7(black)	ADC1_6V6	+6.6V
8(black)	GND	GND

DSM RC port

Pin	Signal	Volt
1(yellow)	VDD_3V3_SPEKTRUM	+3.3V
2(black)	GND	GND
3(gray)	DSM/SPEKTRUM IN	+3.3V

RC IN port

Pin	Signal	Volt
S	SBUS/PPM in	+3.3V
+	VDD_5V _RC	+5V
-	GND	GND

FMU PWM OUT port

Pin	Signal	Volt
S	FMU_CH1~8	+3.3V
+	VDD_SERVO	0~36V
-	GND	GND

RSSI port

Pin	Signal	Volt
S	SBUS_OUT/RSSI_IN	+3.3V
+	VDD_SERVO	0~36V
-	GND	GND

I/O PWM OUT port

Pin	Signal	Volt
S	IO_CH1~8	+3.3V
+	VDD_SERVO	0~36V
-	GND	GND