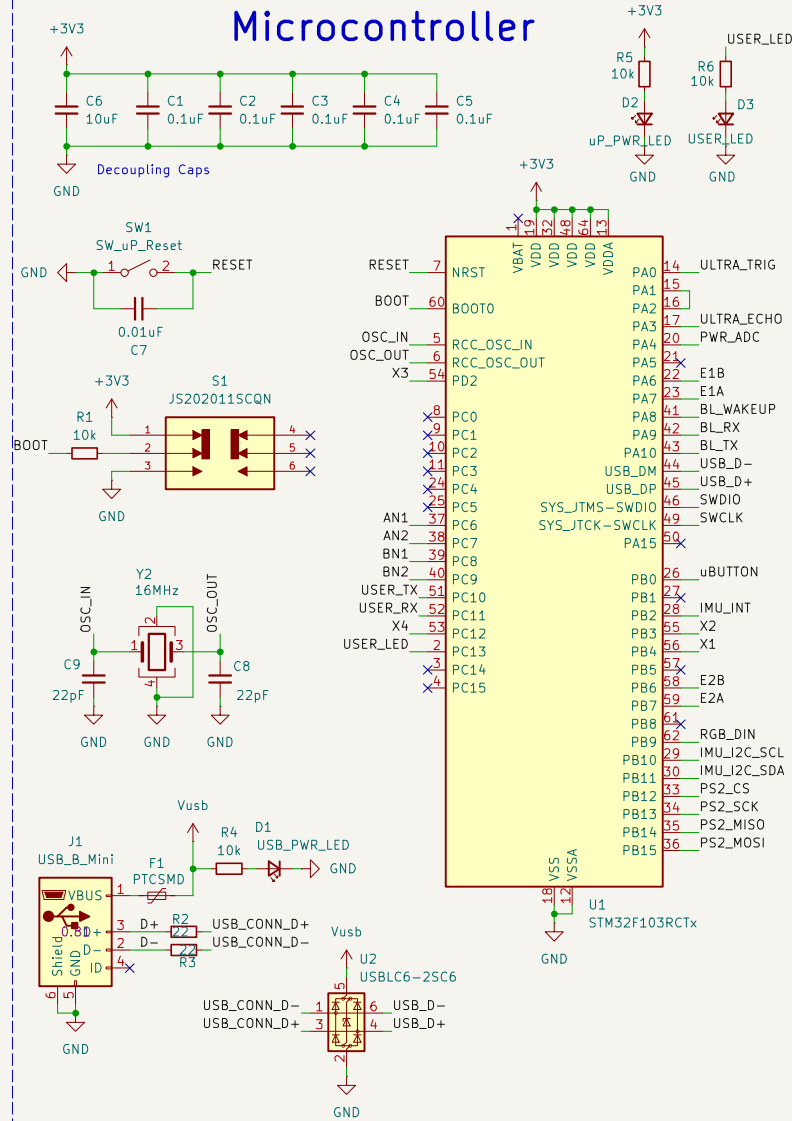
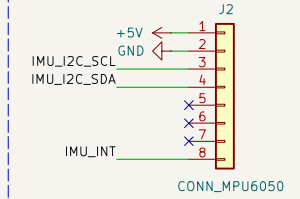


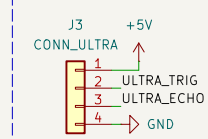
Microcontroller



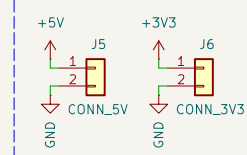
IMU (MPU6050)



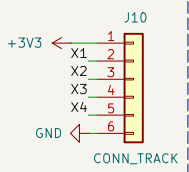
ULTRA SONIC SENSOR



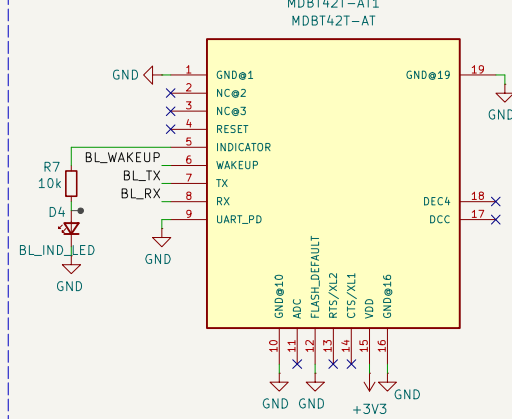
PWR CONN



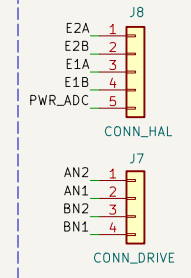
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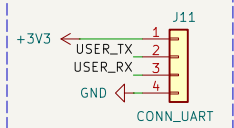
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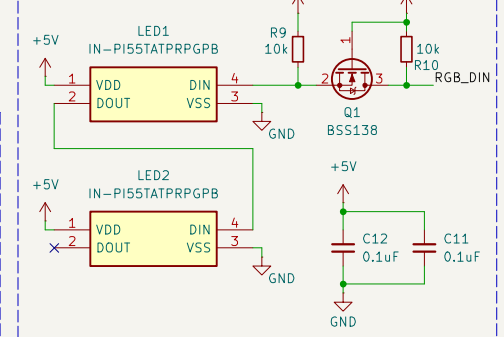
MOTORS



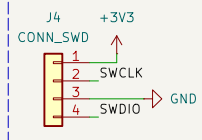
USER UART



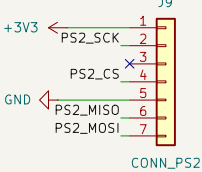
RGB LED



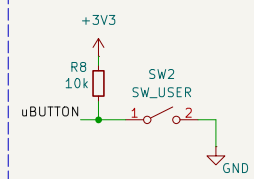
SWD



PS2



BUTTON



motor_controller

pinout

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Ali Alalwia

Sheet: /
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Title: Robot Brain PCB Board

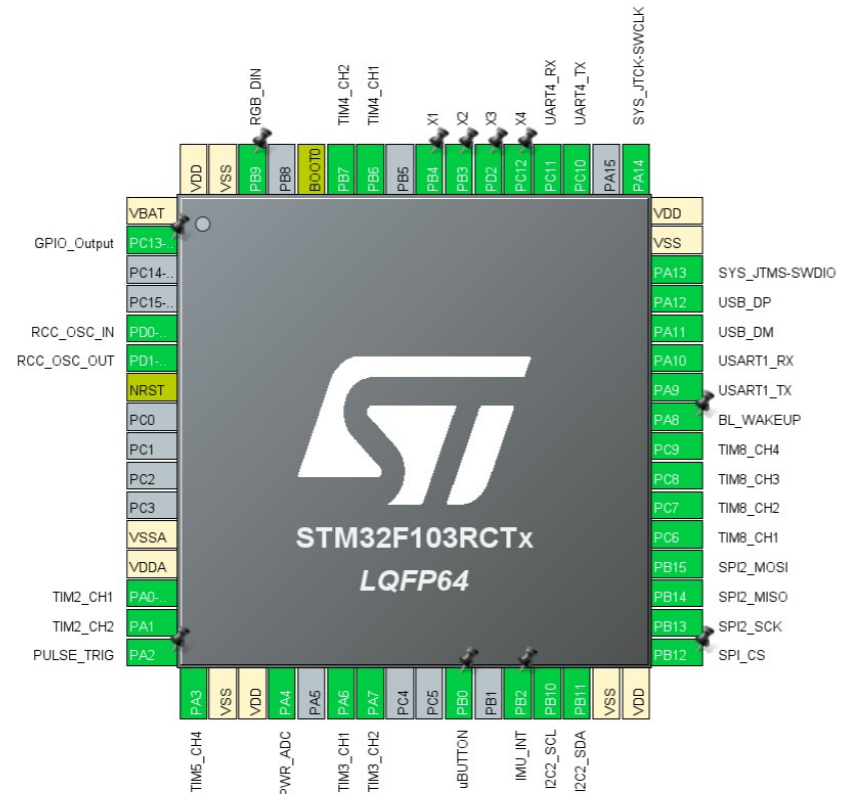
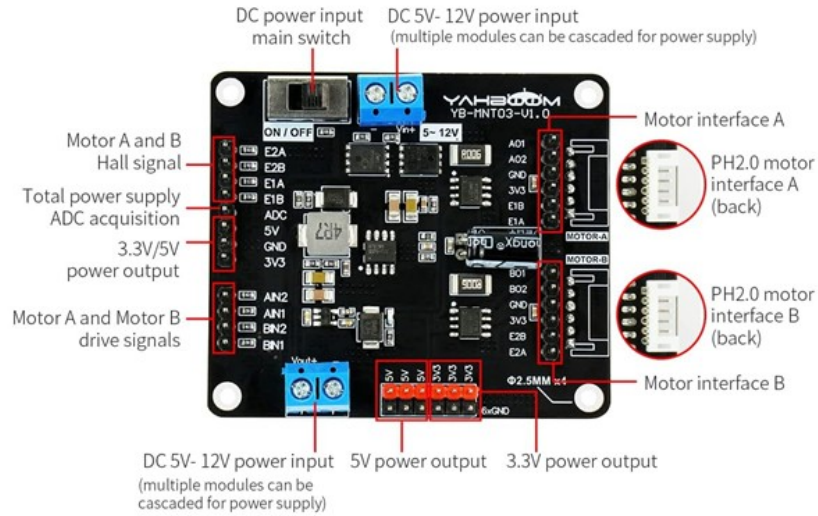
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Rev: 1.0

Id: 1/2

Interface Description



Pin details

Interface type	Pin name	Pin description	Interface type	Pin name	Pin description
MCU/host interface	E1A	Motor 1 Hall signal A	Motor port	AO1	Motor 1 power supply+
	E1B	Motor 1 Hall signal B		AO2	Motor 1 power supply-
	E2A	Motor 2 Hall signal A		GND	GND
	E2B	Motor 2 Hall signal B		3V3	Motor 1 Hall power supply
	ADC	Collect VM input voltage		E1B	Motor 1 Hall signal B
	5V	Output 5V3A power supply		E1A	Motor 1 Hall signal A
	GND	GND		BO1	Motor 2 power supply+
	3V3	Output 3.3V voltage		BO2	Motor 2 power supply-
	AIN1	Motor 1 drive signal 1		GND	GND
	AIN2	Motor 1 drive signal 2		3V3	Motor 2 Hall power supply
	BIN1	Motor 2 drive signal 1		E2B	Motor 2 Hall signal B
	BIN2	Motor 2 drive signal 2		E2A	Motor 2 Hall signal A

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Title:

Size: A4 Date: 2025-04-30

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Rev:

Id: 2/2