

Jeremy Trafas

Sheet: /
File: 2025_04_STM32F103_RobotBrain.kicad_sch

Title: Robot Brain PCB Board

Size: A4 Date: 2025-04-30

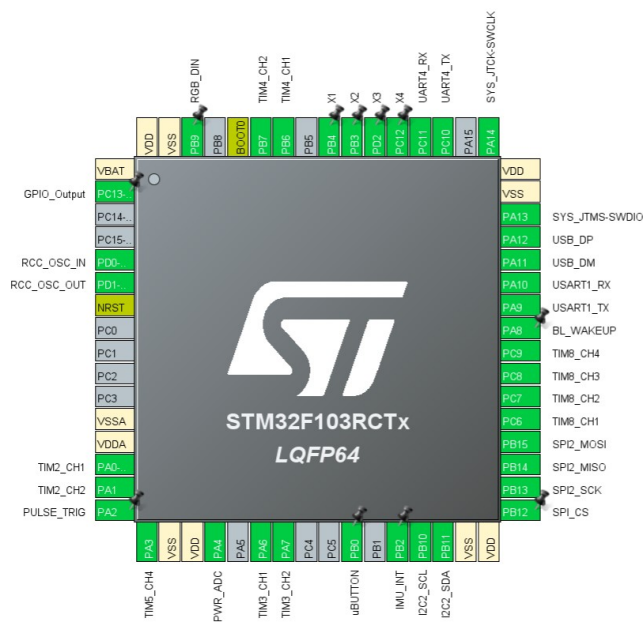
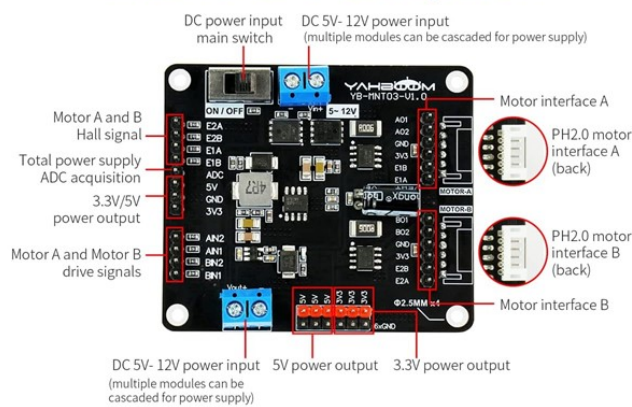
KiCad E.D.A. 9.0.1

Rev: 1.0

Id: 1/2

<https://www.amazon.com/Yahboom-Controller-AT8236-H-Bridge-Raspberry/dp/B0BVZT37H7th=1>

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

Sheet: /motor_controller/
File: motor_controller.kicad_sch

Title:

Size: A4
KiCad E.D.A. 9.0.1

Date: 2025-04-30

Rev:

Id: 2/2