



UQ MARS Micromouse

Competition Documentation

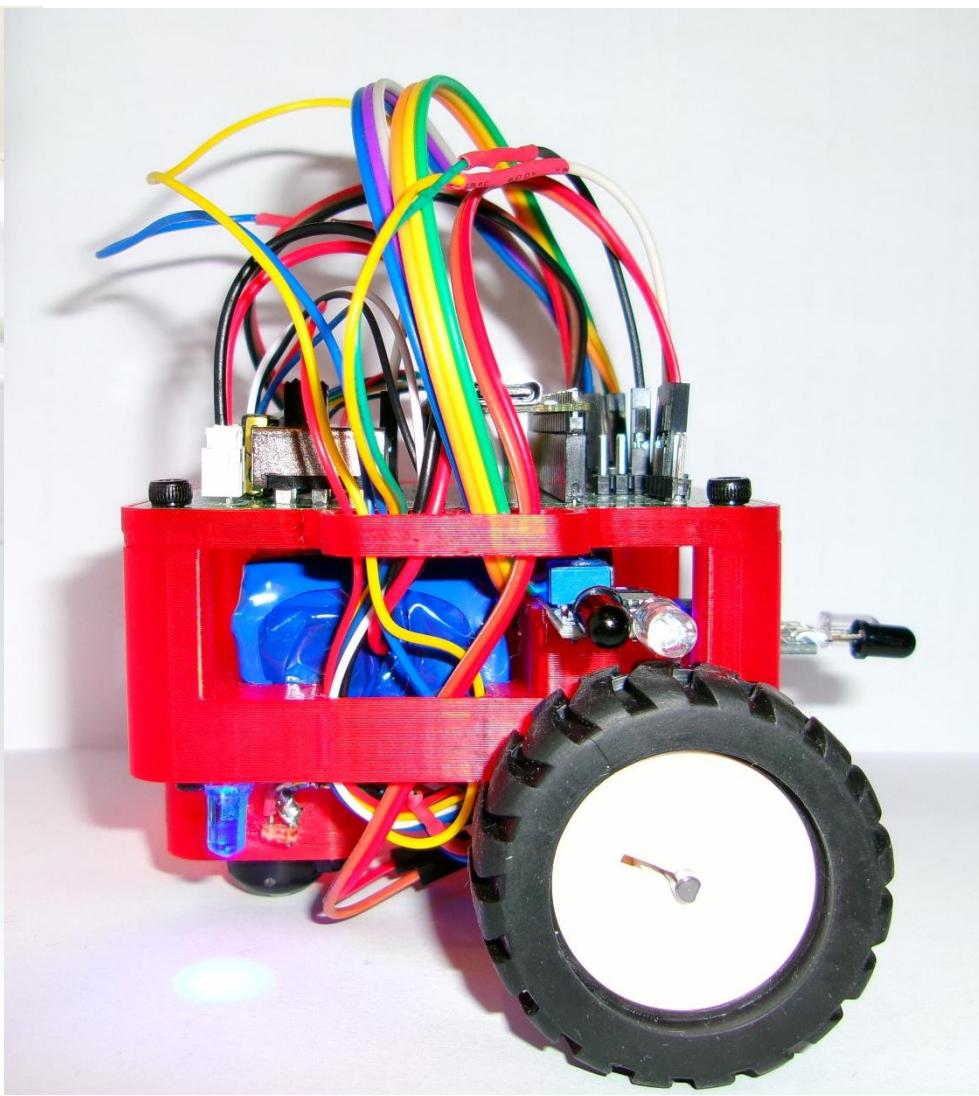
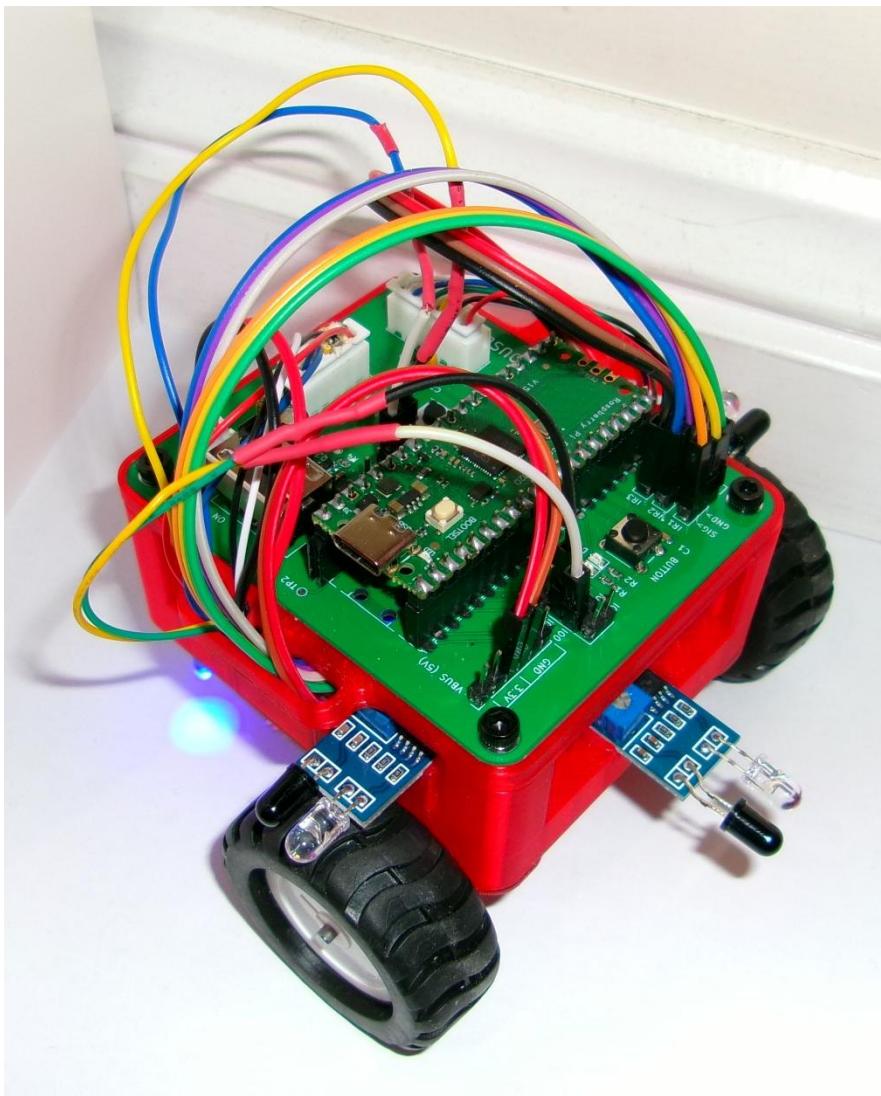
TEAM NAME: Fried Mice

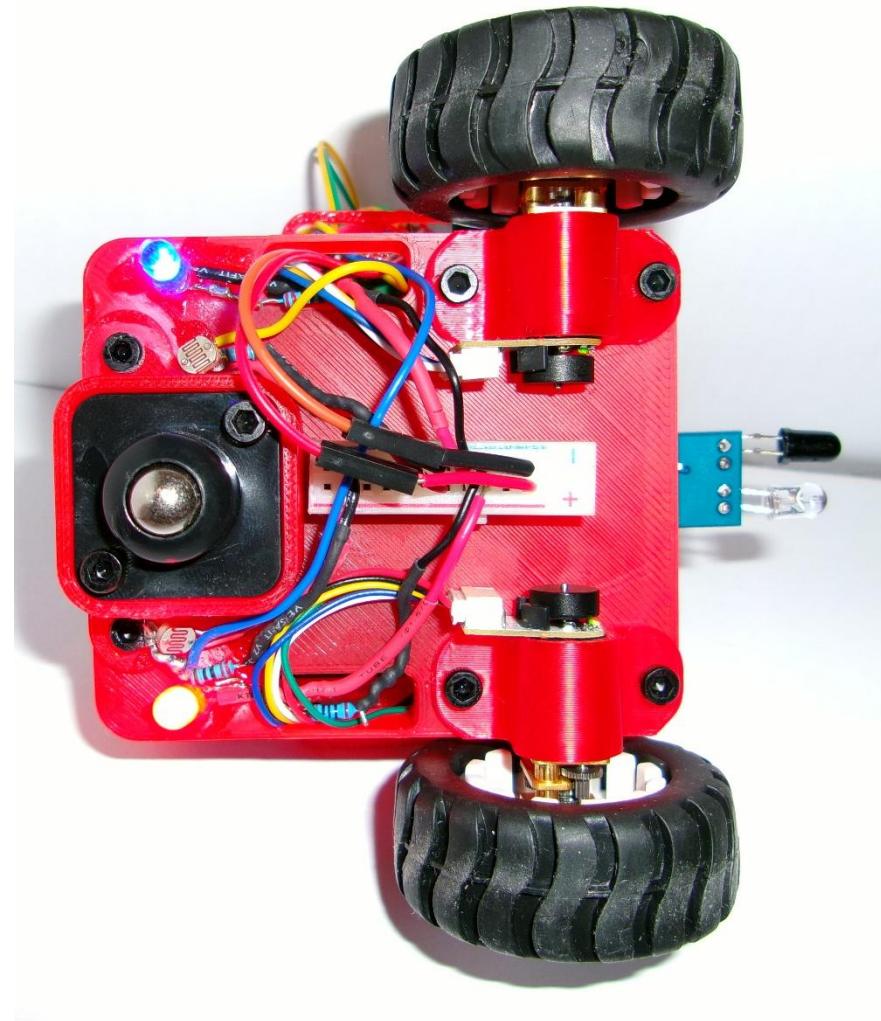
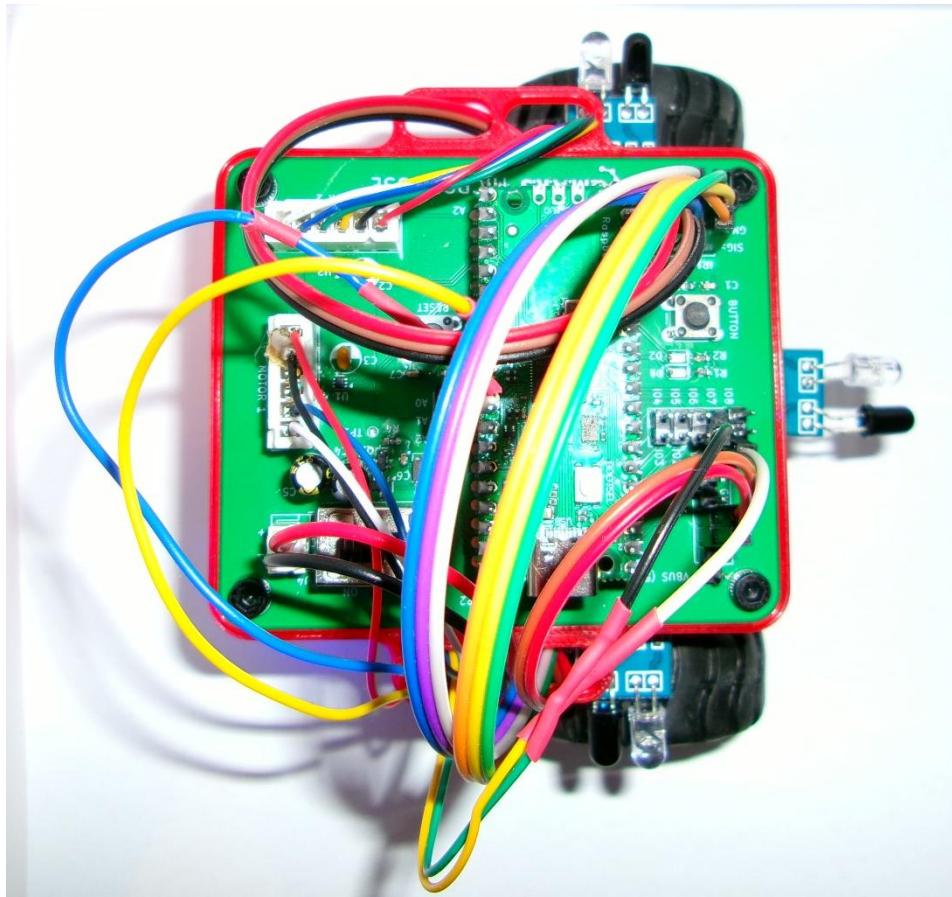
MEMBERS: Manoli Samios, James Brough

08/02/2026

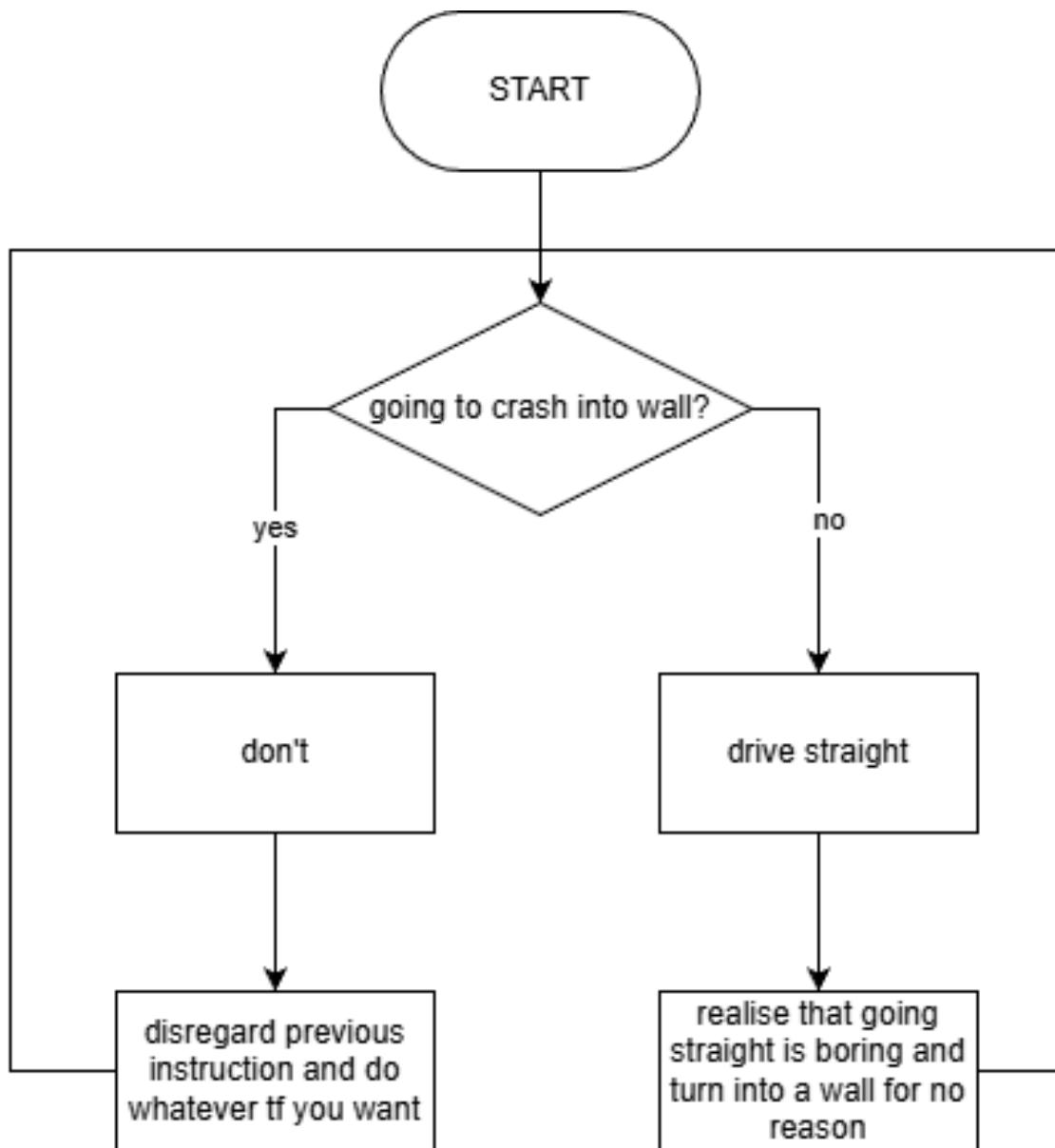
GitHub Repo: <https://github.com/Manos-200/Manoli-and-James-MARS-Micromouse-2026>



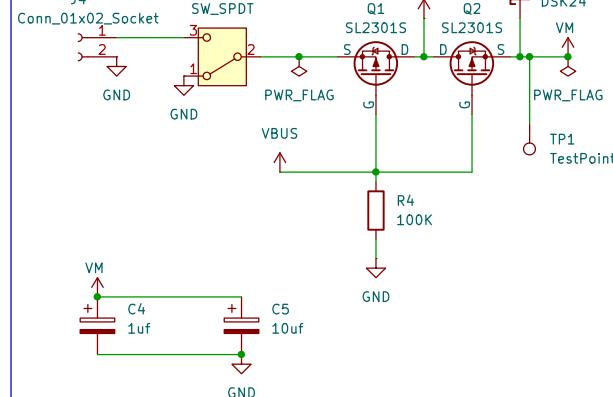




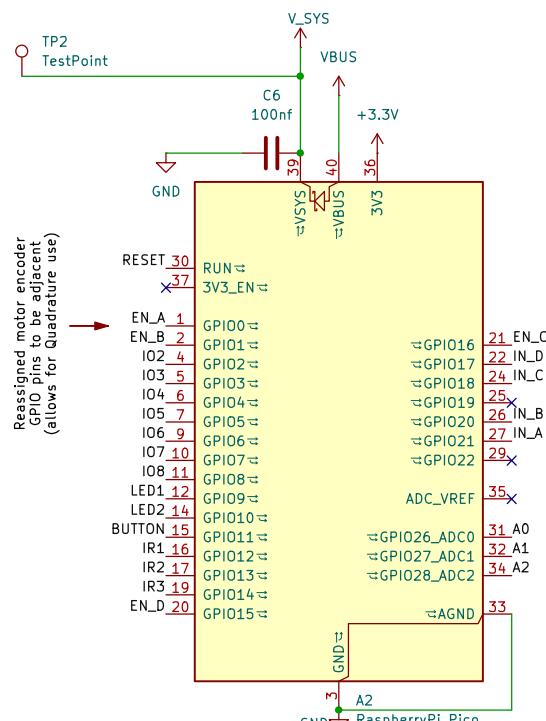
Name	Type	Material	Qty	Cost	Subtotal	Link
Micromouse PCB Assembly	Internally Manufactured		1	-		
Top Plate 3D Print	3D Printed	PLA	1	-		
Base Plate 3D Print	3D Printed	PLA	1	-		
Motor Clamp 3D Print	3D Printed	PLA	2	-		
Caster Ball Extension 3D Print	3D Printed	PLA	1	-		
IR Proximity Sensor	Purchased		3	\$0.70	\$2.10	Aliexpress
N20 Motor with Encoder (6V 100RPM)	Purchased		2	\$9.33	\$18.66	Aliexpress
N20 Motor 43mm Wheel	Purchased		2	\$1.60	\$3.20	Aliexpress
Caster Ball	Purchased		1	\$0.50	\$0.50	Aliexpress
M3 x 8mm Hex Button Screw	Purchased	Stainless Steel	15	\$0.10	\$1.50	Aliexpress
3.7V 1S 2000mAh LiPo Battery	Purchased		1	\$15.30	\$15.30	Core Electronics
USB-C Lipo Charger	Purchased		1	\$7.60	\$7.60	Core Electronics
Raspberry Pi Pico	Purchased		1	\$3.89	\$3.89	Aliexpress
Light Dependent Resistor	Owned		2	\$0.37	\$0.72	
Breadboard	Owned		10%	\$5.00	\$0.50	
LED	Owned		2	\$0.92	\$1.84	
Super Glue	Owned			-		
				Total :	\$55.81	



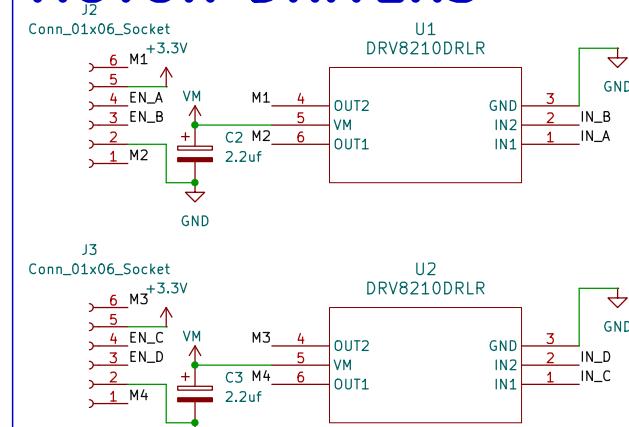
POWER



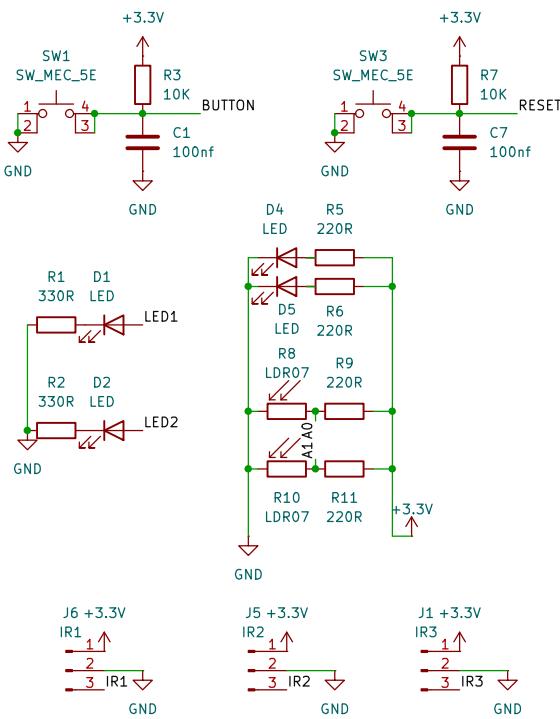
MCU-RP2040



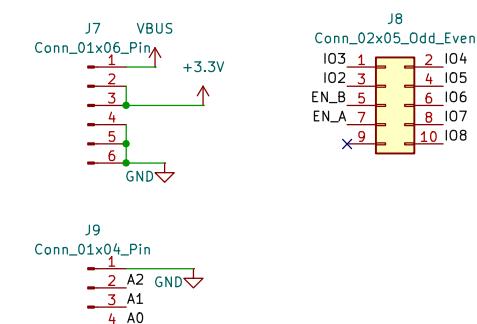
MOTOR DRIVERS



PERIPHERALS



BREAKOUT

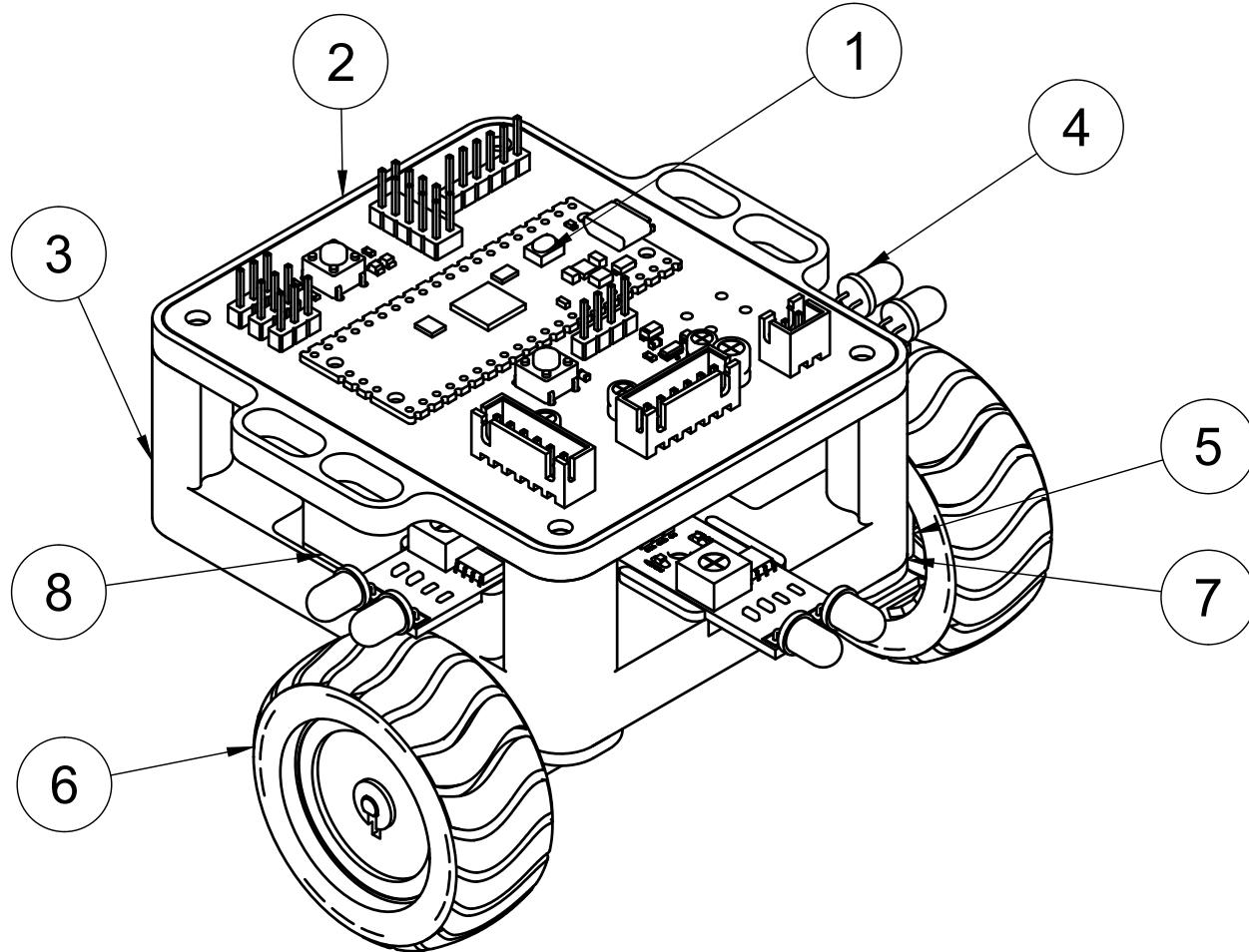


H1
MountingHole

H2
MountingHole

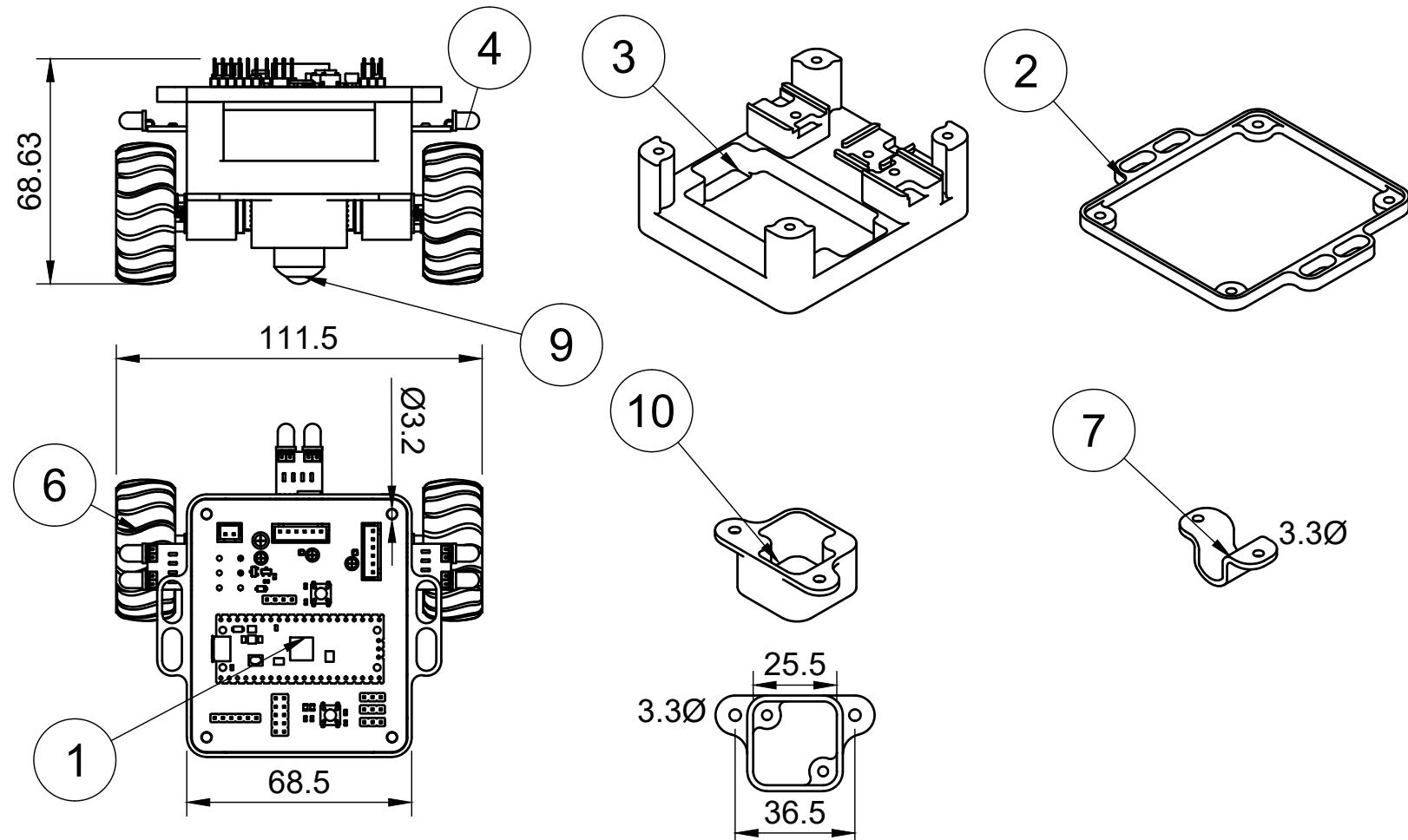
H3
MountingHole

H4
MountingHole



Parts List		
Item	Qty	Part Name
1	1	MARS_Micromouse_PCB
2	1	Top Plate
3	1	Base Plate
4	3	IR_Sensor_YL63
5	2	N20 Mini Micro Metall Gear Motor
6	2	RC wheel
7	2	Motor Clamp
8	1	Battery
9	1	Caster Ball
10	1	Caster Ball Extension

Dept.	Technical reference	Created by Manoli Samios 6/02/2026	Approved by
		Document type	Document status
		Title MARS Micromouse Box	DWG No.
		Rev.	Date of issue
			Sheet 1/2



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