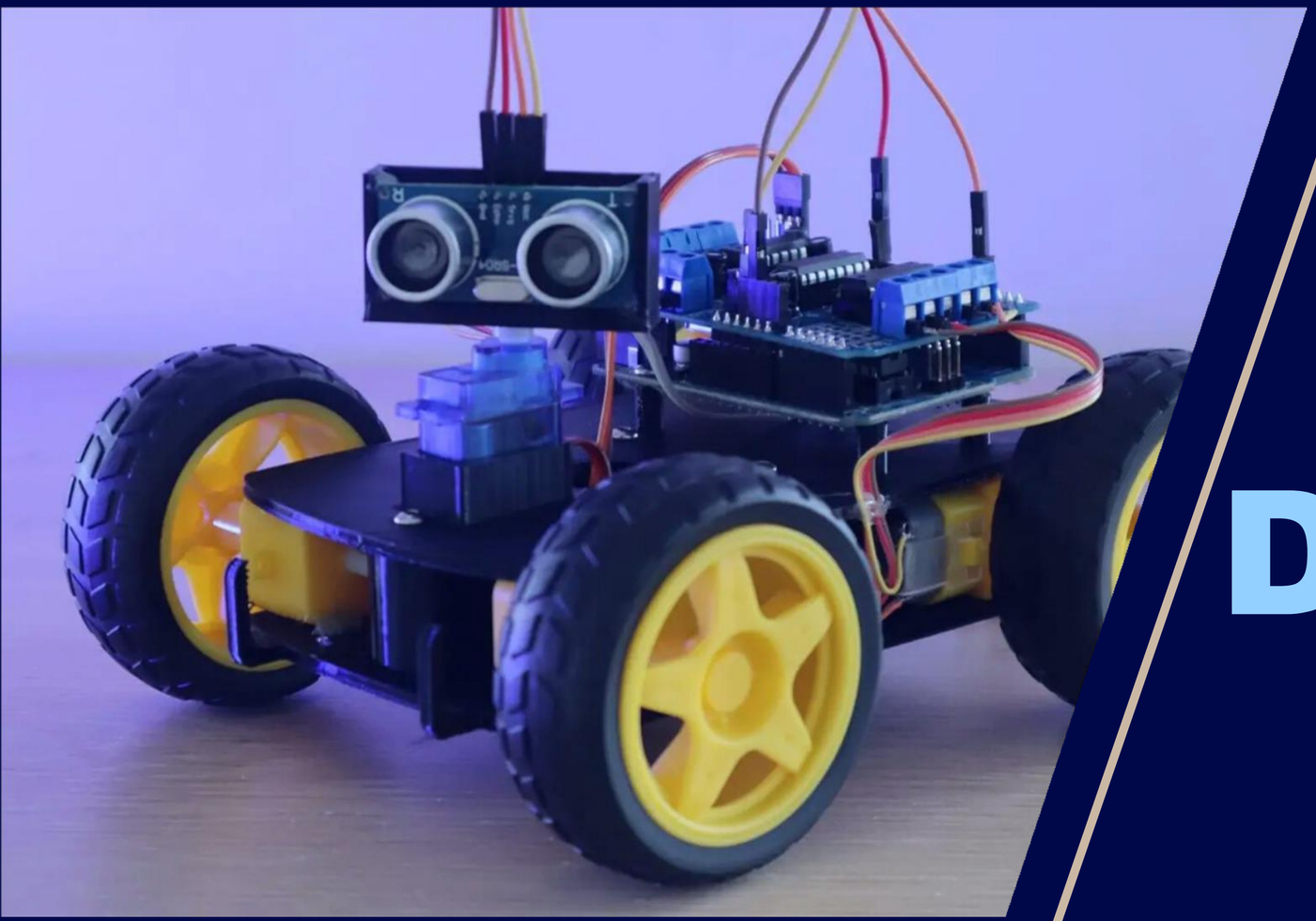


MINS

SUN SEEKING DRYER ROBOT

Specification

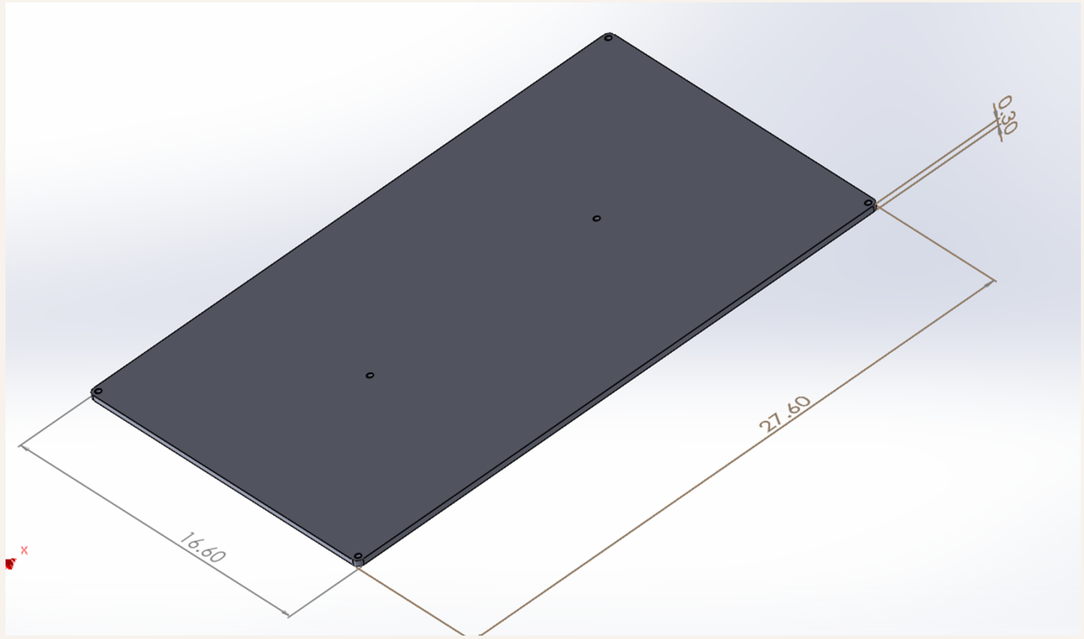
The team of MINS proudly presents the ‘ SelfoDryer’ ; a sun seeking dryer robot

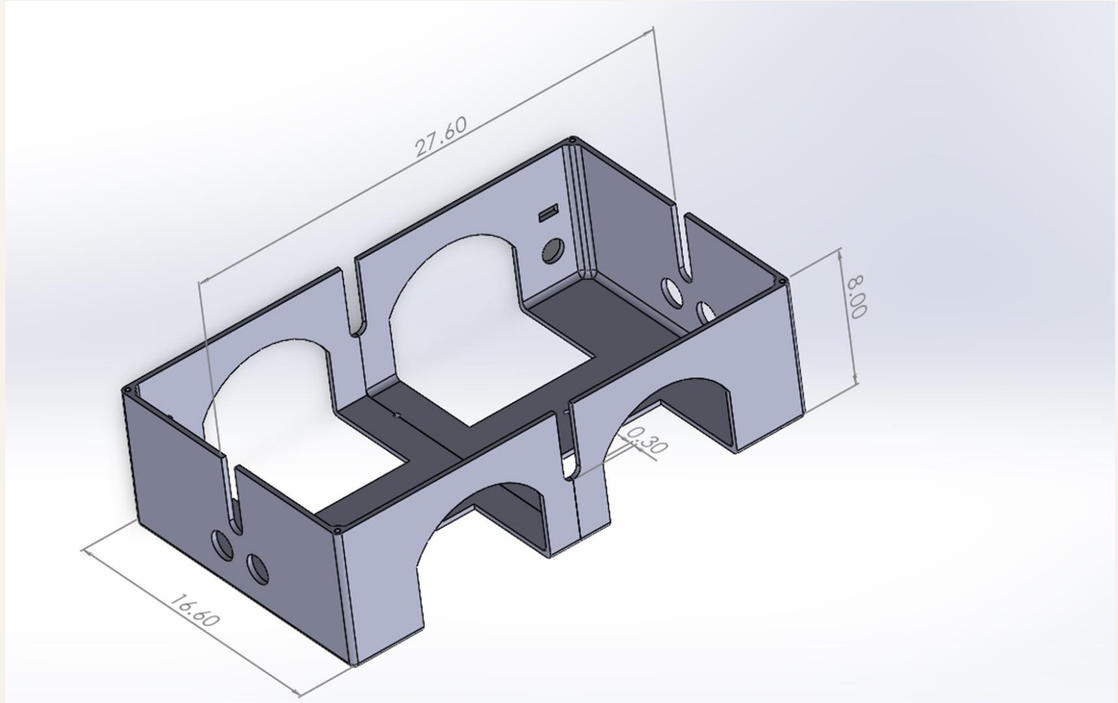
We designed the automatic sun seeking dryer in a way that it feature an advanced sun tracking system that precisely follows the sun's movement throughout the daytime with the use of LDR sensors. This system will utilize cutting-edge sensors and technology to ensure accurate alignment with the sun's position, optimizing the exposure of materials to sunlight for efficient drying.

‘sun seeking dryer’ would enable households in rural areas to dry clothes and other materials more efficiently, without the need for electricity or manual labor

‘

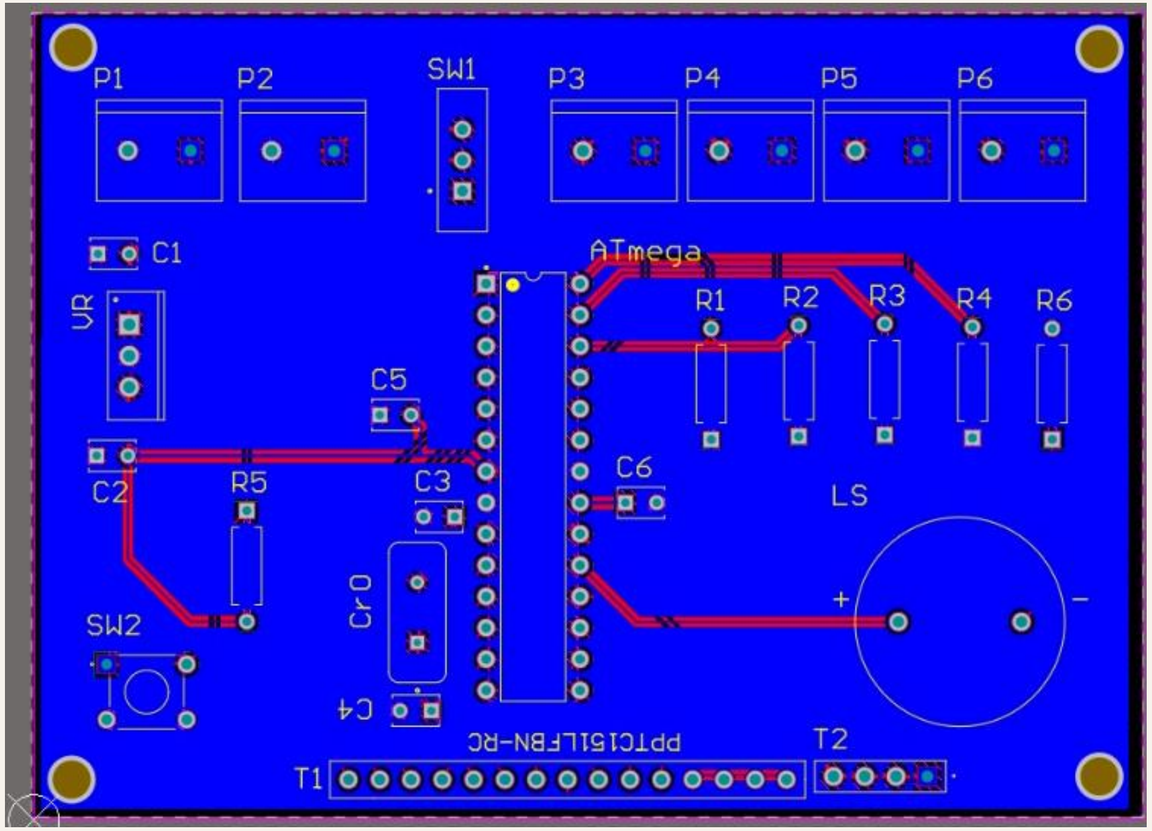
Enclosure Design





PLA

PCB Design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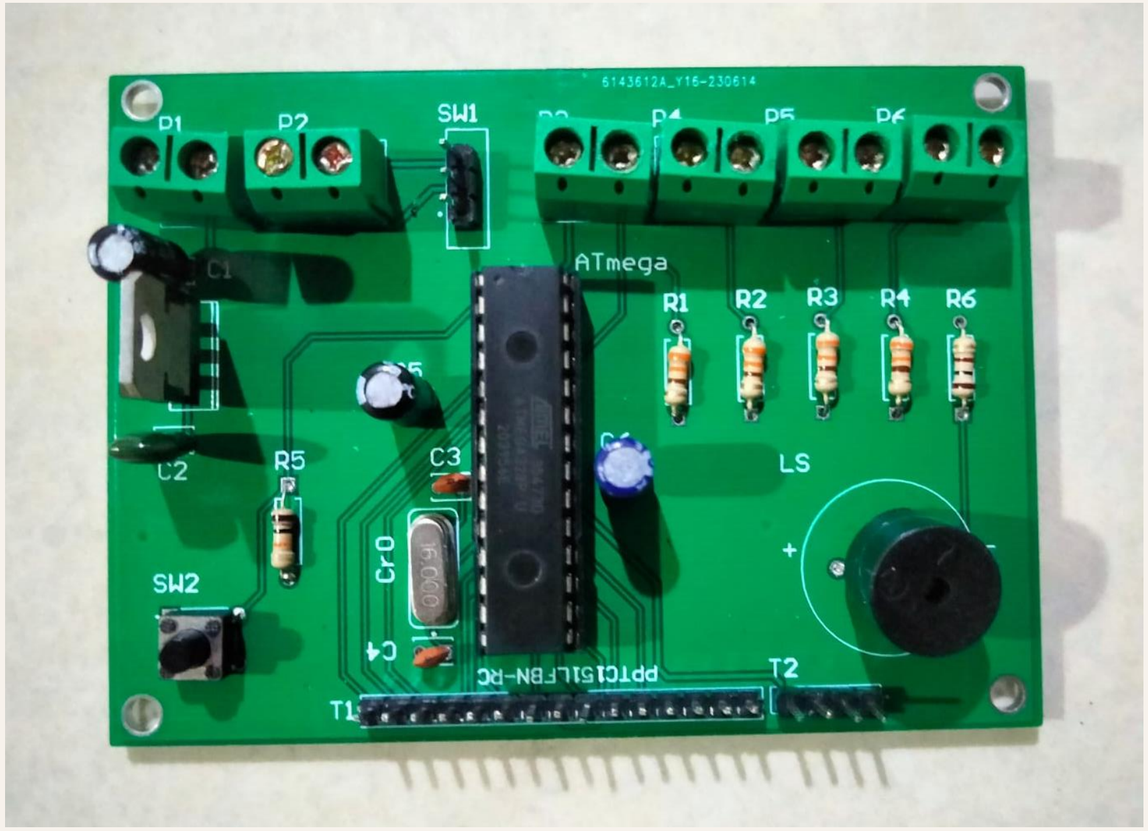
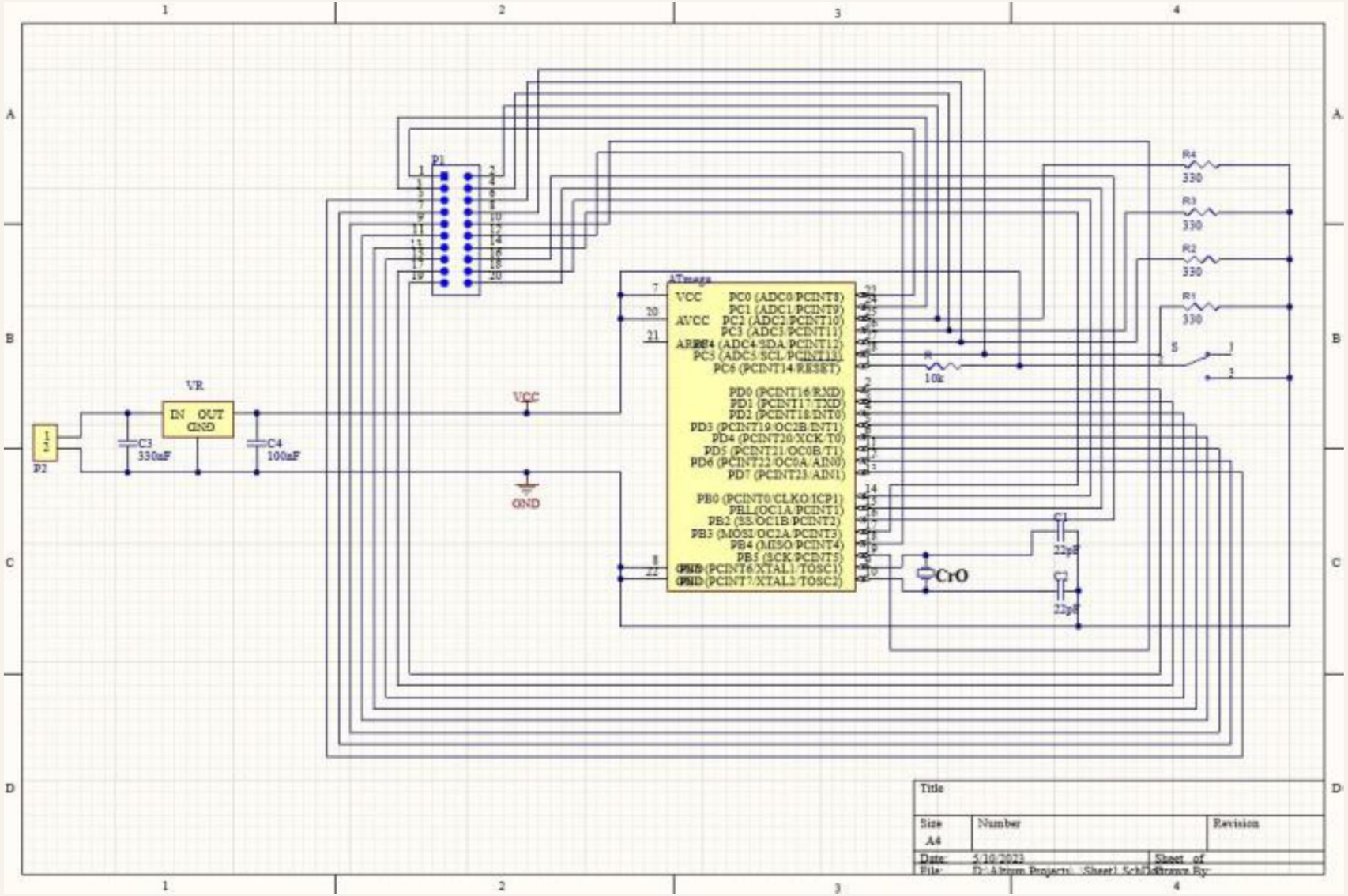
P2
SW1
P3
P4
P5
P6
C1
ATmega
R1
R2
R3
R4
R6
VR
C5
C2
R5
C3
C6
LS
SW2
Cr0
C4
T1
T2


P1
P2
SW1
ATmega
R1
R2
R3
R4
R6
C1
C2
R5
C3
LS
SW2
Cr0
C4
T1
T2

Circuit Diagram



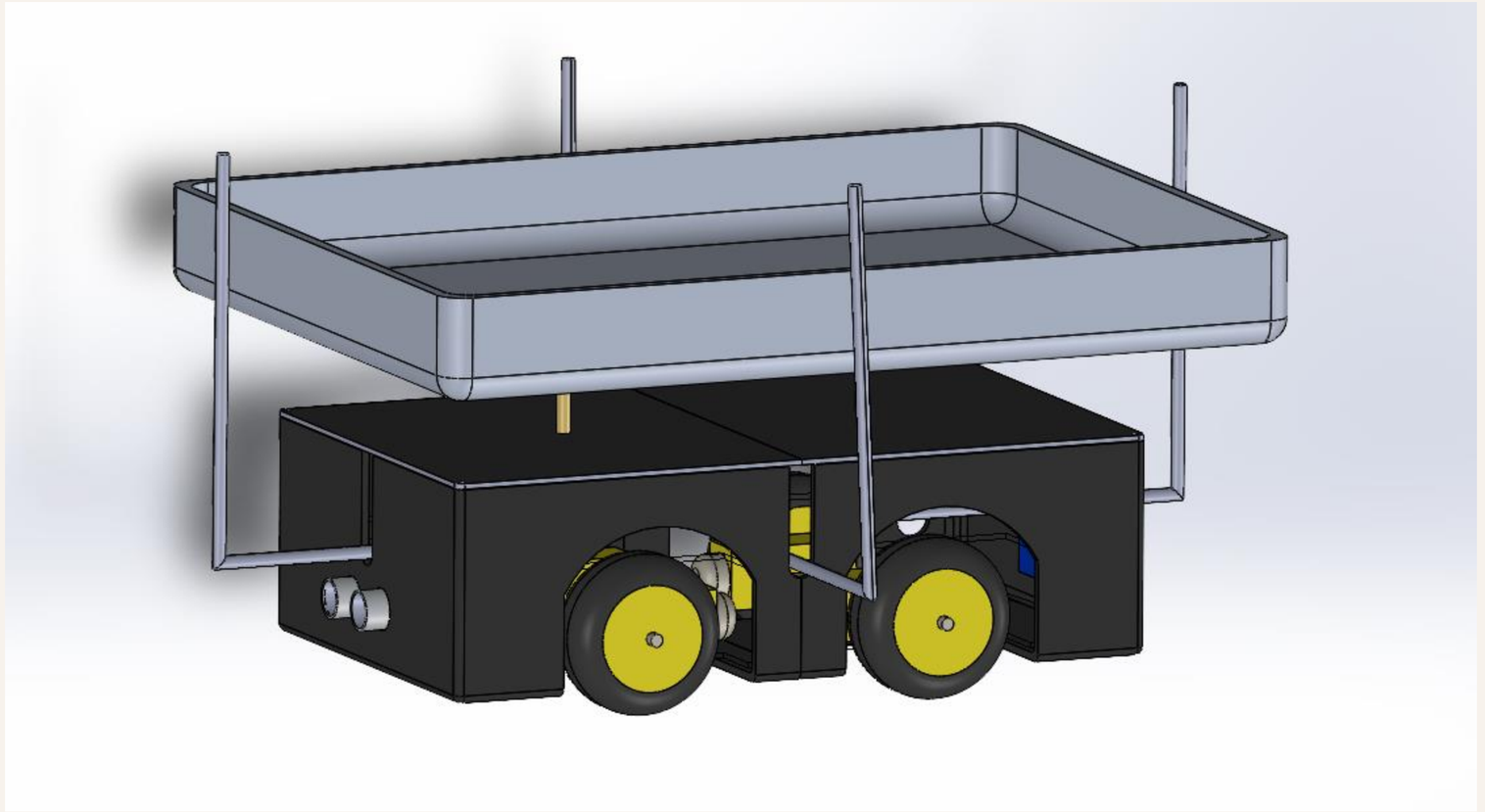
Budget with BOQ

Sun Seeking Dryer Robot - Budget Plan

Component	Unit price(LKR)	Quantity	Amount(LKR)
Wheel with DC gear motor	280	4	1120
ATMEGA 328P microcontroller	1800	1	1800
Ultrasonic sensors	280	2	560
16 MHz oscillator	40	1	40
Motor driver	500	1	500
BMS	500	1	500
IC holder	8	1	8
3.7V 4000MA battery	450	2	900
Battery holder - 2 cell	120	1	120
220 Ω resistor	3	4	12
330 Ω resistor	3	4	12
1kΩ resistor	3	4	12
LDR	15	4	60
0.1 µF capacitor	2	1	2
22 pF capacitor	3	2	6
0.33 µF capacitor	3	1	3
2 Pole ON/OFF switch	50	1	50
7806 voltage regulator	60	1	60
Tray	930	1	930
		Total(LKR)	6695

Price of components	6695
PCB printing	580
3D printing	3240
Other expenses	150
Total Expense	10665
Profit	4334
Total Product Price	Rs.14999

Final Design



Final Product

Sample demo

Group Members

Induwara Gayashan

Nilupulee Amarathunga

Samudra Uduwaka

Mihiraja Kuruppu

Task Allocation

Member	Task
Nilupulee Amarathunga	PCB Design
Induwara Gayashan	Enclosure Design
Mihiraja Kuruppu	Coding, Circuit Design
Samudra Uduwaka	Coding , Circuit Design

MINS

THANK YOU ...