Seial Number	Part Description	Sub-parts	Category	Quantity	Unit Cost	Total Cost
1	ESP32Breakout Board					2340.57
		ESP-DevKitC	Electronic	1	799	799
		Male Header pins 3*8	Electronic	3	60	180
		Capacitors	Electronic	9	2.5	22.5
		Resistors	Electronic	9	1.05	9.45
		Male Header pins 1*2	Electronic	1	2.36	2.36
		Male Header pins 1*3	Electronic	1	3.54	3.54
		Male Header pins 1*6	Electronic	1	7.08	7.08
		Male Header pins 1*4	Electronic	6	4.72	28.52
		Male Header pins 1*5	Electronic	1	5.9	5.9
		Push Button	Electronic	1	4	4
		IC TCA9406DCTR	Electronic	1	84.73	84.73
		IC CAT24C64WI-GT3	Electronic	1	36	36
		Terminal 2 pin	Electronic	2	6.01	12.02
		IC M7_C2760387	Electronic	1	699	699
		IC NJM7805DL1A-TE1	Electronic	1	132.61	132.61
		IC TC1262-3.3VDBTR	Electronic	1	113.64	113.64
		IC MAX485CSA+	Electronic	1	130	130
		Berg 2 pin	Electronic	1	6	6
		IC SM712	Electronic	1	64.22	64.22
2	Universal Control Board					
		Resistors (0kΩ, 220Ω, 330Ω, 20kΩ)	Electronic	26	1.05	27.3
		Capacitors (0.1µF, 0.47µF, 33µF, 47µF, 470µF)	Electronic	10	2.5	25
		M7 diode	Electronic	1	1.97	1.97
		WS2812B LEDs	Electronic	1	8	8
		General LEDs	Electronic	6	1.64	9.84
		Headers (Male)	Electronic	16	1.18	18.88

Seial Number	Part Description	Sub-parts	Category	Quantity	Unit Cost	Total Cost	
		Limit Switches	Electronic	4	22	88	
		Jumper pins	Electronic	1	0.8	0.8	
		IC PCA9685	Electronic	1	330	330	
		IC LM3940IMP-3.3	Electronic	1	110	110	
		IC SN74LVC1G126	Electronic	1	7.59	7.59	
		IC SN74LVC1G125	Electronic	1	9.28	9.28	
		MMBT3906 (PNP transistor)	Electronic	1	1.5	1.5	
		Step-down Voltage regulators	Electronic	2	315	630	
		Transistor AOD417	Electronic	1	25.3	25.3	
		Waveshare Serial Servo Controllers	Electronic	1	380	380	
		TMC2209 Motor Drivers	Electronic	4	389	389	
		UART interface	Electronic	1	79	79	
3	Waveshare SC15 Servo		Electronic	1	1500	1500	
4	DC Stepper Motor		Electronic	2	1700	3400	327
5	VL53L0X Ultrasonic Sensor		Electronic	1	111	111	999
6	HX711 ADC for Weight Scales		Electronic	1	38	38	
7	Central bearing Plate		Mechanical	2	55	110	
8	Base Part Top		Mechanical	1	49	49	
9	Base Part Bearing		Mechanical	1	39	39	
10	Ball Bearing		Mechanical	1	25	25	
11	Central Motor Clamp		Mechanical	1	35	35	
12	Arm Mount		Mechanical	1	14	14	
13	Base Side part		Mechanical	4	49	196	
14	Actuator Arm		Mechanical	1	15	15	
15	End effector top plate		Mechanical	1	23	23	
16	Steel Arms of the Robot		Mechanical	4	15	60	
17	Lifting Lever		Mechanical	3	12	36	
18	Base Part Bottom		Mechanical	1	39	39	

Seial Number	Part Description	Sub-parts	Category	Quantity	Unit Cost	Total Cost
19	Motor Clamp		Mechanical	2	19	38
20	Bell Crank		Mechanical	1	12	12
21	Generic Servo Horn		Mechanical	2	24	48
				Final Total Cost		10279.03
					7622.17	20549.06

Tᴛ Seial Number	Part Description	Sub-parts	Category	Tᴛ Quantity	# Unit Cost	# Total Cost	