

University	University of Assuit
Competition Code	EVER V
Year	2024
No. #	

The cost of assemblies on this chart should not include the cost of the parts in the assembly but only the materials, processes, fasteners and tooling in the assembly level.

Line Num.	Area of Commodity	Asm/Prt #	Component	Description	Unit Cost	Quantity	Material Cost	Process Cost	Fastener Cost	Tooling Cost	Total Cost
	sensor	part	LIDAR	Velodyne LIDAR VLP-16 Puck 3D - Real Time - LIDAR	\$ 399.99	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 399.99
	sensor	part	cliff sensor	Sharp GP2Y0A51SK0F	\$ 9.99	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ 19.98
	sensor	part	Bumper sensor	Car Reverse Parking Sensor Audio Buzzer	\$ 2.99	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ 5.98
	sensor	part	Absolute encoder	DFS60B-S4PA10000 Sick-1036720 Encoder	\$ 371.07	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 371.07
	sensor	part	Wheel encoders	E40S6-100-3-T-24 AUTONICS incremental encodersspecifications:	\$ 76.50	\$ 4.00	\$ -	\$ -	\$ -	\$ -	\$ 306.00
	sensor	part	IMU	VN-100 Rugged IMU/AHRS	\$ 950.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 950.00
	sensor	part	GPS	Car Automotaive radar &GPS	\$ 10.36	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 10.36
	sensor	part	Main Controller	NVIDIA® Jetson AGX	\$ 1,999.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 1,999.00
	sensor	part	Controller	STM32 Development	\$ 9.00	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ 18.00
	sensor	part	Can Converter	MCP2515 CAN Bus	\$ 4.67	\$ 2.00	\$ -	\$ -	\$ -	\$ -	\$ 9.34
	sensor	part	Wi-Fi Module	Wireless Network Card	\$ 39.66	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 39.66
	sensor	part	Auto screen	9.26" CarPlay Android	\$ 162.52	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 162.52
	sensor	part	camera	Intel RealSense Depth camera -D435	\$ 314.00	\$ 8.00	\$ -	\$ -	\$ -	\$ -	\$ 2,512.00
	sensors		Area Total				\$0.00	\$0.00	\$0.00	\$0.00	\$6,803.90
	material	fixation	Mounting Bracket	Aluminum 6063 Bracket	\$ 38.70	\$ 1.00	\$ 12.50	\$ 25.00	\$ 1.20	\$ -	\$ 38.70
	material	fixation	Mounting pole	Aluminum 6063 Bracket	\$ 30.70	\$ 1.00	\$ 5.00	\$ 25.00	\$ 0.70	\$ -	\$ 30.70
	material	fixation	Mounting Bracket	Aluminum 6063 Bracket	\$ 22.50	\$ 1.00	\$ 6.00	\$ 15.00	\$ 1.50	\$ -	\$ 22.50
	material	fixation	Mounting plate	Aluminum 6063 Bracket	\$ 10.80	\$ 1.00	\$ 3.00	\$ 7.00	\$ 0.80	\$ -	\$ 10.80
	material	fixation	Sensor Mounts	ABS plastic	\$ 5.00	\$ 1.00	\$ 4.00	\$ -	\$ 1.00	\$ -	\$ 5.00
	material	fixation	Sensor Housing	ABS plastic	\$ 1.95	\$ 1.00	\$ 0.75	\$ -	\$ 1.20	\$ -	\$ 1.95
	material	fixation	Controller Housing	ABS plastic	\$ 11.20	\$ 1.00	\$ 10.00	\$ -	\$ 1.20	\$ -	\$ 11.20
	material	fixation	Sensor Housing	ABS plastic	\$ 3.75	\$ 1.00	\$ 3.00	\$ -	\$ 0.75	\$ -	\$ 3.75
	material	fixation	Sensor Housing	ABS plastic	\$ 0.50	\$ 1.00	\$ 0.50	\$ -	\$ -	\$ -	\$ 0.50
	material	fixation	Sensor Housing	ABS plastic	\$ 9.20	\$ 1.00	\$ 8.00	\$ -	\$ 1.20	\$ -	\$ 9.20
	material		Area Total				\$52.75	\$72.00	\$9.55	\$0.00	\$134.30
	Steering/Braking assembly	asm	steering system	BLDC Motor	\$ 300.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 300.00
	Steering/Braking assembly	asm		Mounting Bracket	\$ 50.00	\$ 1.00	\$ 50.00	\$ 100.00	\$ 34.00	\$ 30.00	\$ 214.00
	Steering/Braking assembly	asm		Gearbox	\$ 150.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 150.00
	Steering/Braking assembly	asm	Brakes Pedal Actuator	Linear Actuator	\$ 200.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 200.00
	Steering/Braking assembly	asm	Area Total	Mounting Bracket	\$ 50.00	\$ 1.00	\$ 50.00	\$ 90.00	\$ 34.00	\$ 30.00	\$ 204.00
	Steering/Braking assembly	asm		Force Sensor	\$ 70.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -	\$ 70.00
	Steering/Braking assembly		Area Total				\$ 100.00	\$ 190.00	\$ 68.00	\$ 60.00	\$ 1,138.00
	Vehicle Total			Total			\$ 152.75	\$ 262.00	\$ 77.55	\$ 60.00	\$ 8,076.20
	System total		\$8,076.20								

Total Cost	\$399.99
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