

Item	Qty.	Costs per Unit	Total Costs	Comments	Product Link	Shopping Link	
Chassis							
Traxxas TRX68077-4 Slash 4x4 Ultimate TQi 2,4GHz Link Wireless Modul, TSM	1	499,95 €	499,95 €		https://traxxas.com/pr	https://www.monsterhobby.com	
Traxxas TRX7437 Skidplate, Front	1	6,26 €	6,26 €		https://traxxas.com/pr	https://www.monsterhobby.com	
Traxxas TRX7436 Body Bumper, Foam	1	5,36 €	5,36 €		https://traxxas.com/pr	https://www.monsterhobby.com	
Traxxas TRX7415X Body mounts, front & rear/ body post, rear	1	8,06 €	8,06 €		https://traxxas.com/pr	https://www.monsterhobby.com	
Antenna Mount	1			self-print			
Platform Deck	1			self-print			
Depth Camera Mount	1			self-print			
Compute Module							
Computing Module: reComputer J4012 NVIDIA Jetson Orin NX Bundle 16 GB	1	977,90 €	977,90 €		https://www.seeedstudio.com	https://www.reichelt.de	
WLAN Kit: Shuttle WLN-M1	1	49,95 €	49,95 €		https://www.shuttle.electronic-components.com	https://www.reichelt.de	
Sensors							
Lidar: Hokuyo UST-20LN	1	3.337,18 €	3.337,18 €		https://hokuyo-usa.com	https://eu.robotshop.com	
Depth Camera: Intel RealSense D435i	1	369,00 €	369,00 €		https://www.reichelt.de	https://www.intelrealsense.com	
Electronics							
ESC: Trampa VESC 6 MkVI	1	267,17 €	267,17 €		https://trampaboards.com	https://trampaboards.com	
Controller: SONY Dualshock 4	1			for teleop		https://www.playstation.com	
Charger + LiPo Batteries: Traxxas TRX2990 Battery/Charger Complete Pack	1	249,95 €	249,95 €		https://traxxas.com/pr	https://www.monsterhobby.com	
LiPo Adapter: Traxxas TRX2938X Balance Lead Adapter	1	24,99 €	24,99 €		https://traxxas.com/pr	https://www.monsterhobby.com	
PPM Extension Cable: Trampa Maytech to VESC	1	2,97 €	2,97 €		https://trampaboards.com	https://trampaboards.com	
Barrel Jack to Pigtail 12V 5A	1	4,20 €	4,20 €	connect Jetson with Powerboard		https://www.reichelt.de	
USB to Micro-USB Cable	1			connect VESC with Jetson			
Power Adapter: 12V 5A	1			for Jetson			
TRX-XT90-Adapter	1			we soldered a TRX input to the lipo adapter instead of using the TRX-XT90-adapter			
Bullet Adapter (4mm Male to 3.5mm Female)	1	9,99 €	9,99 €	connect VESC with motor		https://www.amazon.de	
Misc							
LiPo Safety Bag: 230 x 300 mm	2	11,95 €	23,90 €			https://www.reichelt.de	
Header Pins	1	0,64 €	0,64 €	connect Servo with VESC		https://www.digikey.de	
Fasteners							
Standoff M3 FF 25mm							
Standoff M3 FF 35mm							
Standoff M3 FF 45mm							
Screw M3 10mm							
Screw M5 20mm							
Powerboard							
PCB: F1/10 Powerboard V4.0	1	27,77 €	27,77 €			https://oshpark.com/shop	
RES 560 OHM 5% 1/4W AXIAL	1	0,09 €	0,09 €			https://www.digikey.de	
CAP CER 0.33UF 100V X7R RADIAL	1	0,52 €	0,52 €			https://www.digikey.de	
CAP CER 0.1UF 50V X7R RADIAL	3	0,21 €	0,63 €			https://www.digikey.de	
CAP ALUM 100UF 20% 50V RADIAL	2	0,39 €	0,78 €			https://www.digikey.de	
CAP ALUM 10UF 20% 50V RADIAL	1	0,23 €	0,23 €			https://www.digikey.de	
IC REG LINEAR 5V 1A TO220CP-3	1	1,41 €	1,41 €	original product is not longer available: https://www.digikey.de/short/0jrzbw3b		https://www.digikey.de	
DC DC CONVERTER 12V 30W	1	39,32 €	39,32 €	BA7808CP-E2		https://www.digikey.de	
TERM BLK 2P SIDE ENT 2.54MM PCB	7	0,85 €	5,95 €			https://www.digikey.de	
SWITCH TOGGLE SPST 6A 125V	1	2,54 €	2,54 €			https://www.digikey.de	
CONN HEADER VERT 4POS 2.5MM	1	0,20 €	0,20 €			https://www.digikey.de	
LED RED DIFFUSED T-1 3/4 T/H	1	0,68 €	0,68 €			https://www.digikey.de	
TOTAL			5.917,59 €				



1. Introduction

2. Background

3. Methodology

4. Results

5. Discussion

6. Conclusion

7. References

8. Appendix