

TIVA BOM first prototype

		sum	amount	price	details
	magnets	36,64 €	16	2,29 €	price is per unit for a lot of 10
	copper	20,08 €	4	5,02 €	0,5mm, 300g Reichelt
	epoxy	12,80 €	1	12,80 €	
	discs	20,00 €	2	10,00 €	wood, steel, alu, lasered, milled...
	wooden boards	60,00 €	1	60,00 €	for the negative form for lamination, can be used multiple times
	screws	2,00 €	1	2,00 €	v2a
Sum	Generator	151,52 €			
	Achse	5,00 €	1	5,00 €	
	Rund für Lagersitze	10,00 €	2	5,00 €	
	bearings	6,00 €	2	3,00 €	
	arms	30,00 €	3	10,00 €	(no arms at V-rotor)
	Schrauben	4,00 €	1	4,00 €	M8, M10, M12 V2A...
	disc + wing base	60,00 €	1	60,00 €	(hole pattern?)
Sum	Rotor	115,00 €			
	wooden	54,00 €	3	18,00 €	(have to be waterproof, so painted)
	winglets	24,00 €	6	4,00 €	(painted, bolted, waterproof)
Sum	Wings	78,00 €			
	passive parts	2,00 €	1	2,00 €	
	cabling	2,00 €	1	2,00 €	
	MCU-board	27,98 €	1	27,98 €	
	AA rechargeable ba	7,44 €	4	1,86 €	
	PCB with Schottky r	4,00 €	1	4,00 €	
	(synchronous rectifi	0,00 €	1	0,00 €	(not for now)
	Step-down Conv	15,00 €	1	15,00 €	
	LED driver	12,00 €	1	12,00 €	PWM input, 3ch, 500mA peak, 350mA cont
	hp RGB LED	4,88 €	1	4,88 €	
Sum	Electronics	75,30 €			
	simple paint job	20,00 €	1	20 €	mandatory against rust/oxidation
	decals	0,00 €	1	0 €	(not for now)
	base stand	25,00 €	1	25 €	(plate with holes for wheel rims and adapter for main shaft)
Sum	Various	45,00 €			
Sum	overall	464,82 €			

Costs for the first prototype of TIVA, without work hours, materials only. Some parts, like the negative form for lamination, can be used multiple times. The aim is to provide a full kit for 128,00 €, which should be realistic if we buy or fabricate parts for many kits at once, have a look at the second sheet of this calculation.

