

BOM Puzzling robots

* parts of the box. They do not apply for a single robot, only on a set of 6 robots

Name	Package / Alternative Name	Online shop	Amount Per robot	Amount For 6 robots	Cost per Item	Total Cost For 1 robot	Total Cost For a Pack of 6
To be purchased							
Screw M3 12mm/ 10mm			8	48		0.00 €	0.00 €
Screw M3 16mm			1	6		0.00 €	0.00 €
Screw M3 electronics Height			8	48		0.00 €	0.00 €
Hex Nut stainless steel M3	91828A211	Digikey	17	102	0.05 €	0.80 €	4.82 €
Arcade button 32mm		Amazon	1	6	1.57 €	1.57 €	9.42 €
RGB LED	Through hole		1	6		0.00 €	0.00 €
	RC1206FR-07100R						
R 100 Ohm		Digikey	5	30	0.01 €	0.05 €	0.30 €
Seed Studio XIAO 2040	102010428	Digikey	1	6	5.40 €	5.40 €	32.40 €
Lipo Battery	3.7V 800mah	Amazon	1	6	3.50 €	3.50 €	20.99 €
Battery charger module		Amazon	1	6	1.23 €	1.23 €	7.39 €
Female Pin Header 2.52				0		0.00 €	0.00 €
Male Pin Header 2.52				0		0.00 €	0.00 €
Linear voltage regulator 3.3 V			1	6		0.00 €	0.00 €
	C3216X7R1H105K						
C 1uF		Digikey	2	12	0.07 €	0.14 €	0.84 €
	GRT31CC8YA106M						
C 10uF		Digikey	6	36	0.22 €	1.32 €	7.92 €
RFID stickers		Amazon	4	24	0.59 €	2.36 €	14.16 €
R 0 Ohm	RC1206FR-070RL	Digikey	7	42	0.01 €	0.07 €	0.42 €
USB C connector			*	1		*	0.00 €
Screw Terminal 1x 3			*	2		*	0.00 €
Screw Terminal 1x2			*	6		*	0.00 €
Cables ?m			*	1		*	0.00 €
Phone charger plug		Amazon	*	1	2.15 €		2.15 €

Sheet1

To be printed

Top	1	6	0.00 €	0.00 €
Bottom	1	6	0.00 €	0.00 €
Battery Lid	1	6	0.00 €	0.00 €
Half	2	12	0.00 €	0.00 €
Charging slider	1	6	0.00 €	0.00 €
Side plate	4	24	0.00 €	0.00 €

To be vinylcut

Anti Vbration Screws Filz	Amazon	16	96	0.11 €	1.72 €	10.30 €
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To be milled

PCB lower layer	1	6	0.00 €	0.00 €
PCB middle layer	1	6	0.00 €	0.00 €
PCB top layer	1	6	0.00 €	0.00 €
PCB charging plug	*	1	*	0.00 €
PCB charging connect charging	*	6	*	0.00 €

To be lasercut

Foam inlay box	Hard PE foam 20x30mm 20mm h	*	1	6.01 €	*	6.01 €
Foam bottom & top rest box	Hard PE foam 20x3Lasercut	*	1	4.86 €	*	4.86 €
Wood top plate box	Cherry Plywood 20 Bauhaus	*	1	3.35 €	*	3.35 €
Wood sides short box	Cherry Plywood 20 Bauhaus	*	2	1.68 €	*	3.35 €
Wood sides long box box	Cherry Plywood 20 Bauhaus	*	2	3.35 €	*	6.70 €
Wood bottom plate box	Cherry Plywood 20 Bauhaus	*	1	3.35 €	*	3.35 €

Total Cost for 6 robots

138.72 €

Total Cost per robot

18.16 €