

Project:

MandalBot BLE

Issued: 29/10/2023

Part	Qty	Unit Price (£'s)	Cost (£'s)	Supplier	Comments	Link
1N4006 Rectifier Diode 800V	1	£0.04	£0.04	Amazon	Sunk cost - cost per cm	Link
2mm x 10mm Steel Pozi Screws - silver	35	£0.03	£0.91	ebay	Can be re-used on other projects	Link
Batteries 18650 Lithium 3.7v 3000mAh	2	£2.85	£5.70	AliExpress	Can be re-used on other projects	Link
Battery 18650 spring contacts, sourcing map	2	£0.31	£0.62	Amazon	Sunk cost - cost per cm	Link
Battery Charger - 2 slot Lii-202 18650	1	£13.99	£13.99	ebay	Can be re-used on other projects	Link
Button Switch 6x6x5mm 4 pin tactile	2	£0.03	£0.06	Amazon	Sunk cost	Link
DC-DC MP1584 Step Down Power Supply Module 3A Adjustable	1	£0.73	£0.73	AliExpress	Sunk cost	Link
DC Power Socket 5.5mm Ø2.1	1	£0.38	£0.38	ebay	Sunk cost	Link
DRV8825 Stepper motor driver	2	£2.20	£4.40	Amazon	Can be re-used on other projects	Link
ESP32 DevKitCNodeMCU ESP-WROOM-32S	1	£4.48	£4.48	AliExpress	Can be re-used on other projects	Link
LM386 mono audio amplifier	1	£1.10	£1.10	Amazon	Can be re-used on other projects	Link
M3 x 30mm Nylon C-Sunk screws	10	£0.07	£0.68	RS Components	Can be re-used on other projects	Link
MPU-6050 3-axis accelerometer GY-521	1	£1.88	£1.88	ebay	Can be re-used on other projects	Link
Nema 14 35mm body Stepper Motor 1.8 Deg	2	£13.99	£27.98	ebay	Can be re-used on other projects	Link
Pencil rubbers, 5x25mm Electric Eraser Refill	6	£0.20	£1.20	Amazon	Can be re-used on other projects	Link
Pin Header Strips Female 1 x 40	3	£0.90	£2.70	ebay	Sunk cost	Link
Pin Header Strips Male 1 x 40	2	£0.80	£1.60	ebay	Sunk cost	Link
Resistors 1/4 W - 1k, 3k3, 10k, 10k	4	£0.03	£0.11	RS Components	Sunk cost	
Robot wheels, for tyres	2	£1.00	£2.00	PiHut	Can be re-used on other projects	Link
Speaker 8 ohm 2W 28mm	1	£3.94	£3.94	Amazon	Can be re-used on other projects	Link
Toggle Switch SPDT 5A@250 AC	1	£0.79	£0.79	Amazon	Can be re-used on other projects	Link
VL53L1X time of flight laser range finder	1	£4.22	£4.22	AliExpress	Can be re-used on other projects	Link
WS2812B RGB LED	10	£0.15	£1.50	Amazon	Sunk cost	Link
1.75mm PLA Filament 1kg reel - Voxelab +/- 0.02mm	0.125	£14.00	£1.75	Amazon	Sunk cost	Link
2-part epoxy glue 30ml tubes	0.5	£3.90	£1.95	ScrewFix	Sunk cost	Link
Wire wrapping wire, 30AWG 8 colours, 250m spools	0.05	£8.00	£0.40	Amazon	Sunk cost - cost per spool	Link
			Total:			
			Optional:		Can be re-used on other projects	
			Re-use:		Can be re-used on other projects	
			Sunk:		Sunk cost	

Notes:

Prices are indicative, postage not included. Bulk purchases may be required to achieve figures. ie. LEDs, screws, etc

Web links are used as a product search guide, may not be available long term, look for better options

Rechargeable batteries will require a charger

Consumables like solder, flux, hook-up wire, etc are not included here, but are needed.

3-D printer is an estimate, but 1kg reel will easily do the job.