

Project:

BallBot 4x4 ESP32

Issued: 15/10/2024

Part	Qty	Unit Price (£'s)	Cost (£'s)	Supplier	Comments	Link
2mm x 10mm Steel Pozi Screws - silver	18	£0.03	£0.47	ebay	Can be re-used on other projects	Link
48mm Omni Wheel for LEGO NXT and Servo Motor	4	£6.60	£26.40	Active Robots	Can be re-used on other projects	Link
Batteries 18650 Lithium 30Q 3.7v 3000mAh	2	£6.71	£13.42	AliExpress	Can be re-used on other projects	Link
Battery 18650 spring contacts, sourcing map	2	£0.31	£0.62	Amazon	Sunk cost - glued in	Link
Button Switch 6x6x5mm 4 pin tactile	2	£0.03	£0.06	Amazon	Sunk cost - glued in	Link
DC 6v 130rpm JGA25-370 motor with gearbox, 25mm extended shaft	4	£13.10	£52.40	Amazon	Can be re-used on other projects	Link
DC Power Socket 5.5mm Ø2.1	1	£0.38	£0.38	ebay	Sunk cost - glued in	Link
Display 1.28" TFT Round Display RGB 240x240 GC9A01 Driver SPI	1	£5.66	£5.66	AliExpress	Can be re-used on other projects	Link
DRV8833 Motor Drive Module H-bridge	4	£1.21	£4.85	Amazon	Can be re-used on other projects	Link
ESP32 DevKitC NodeMCU ESP-WROOM-32S	1	£4.48	£4.48	AliExpress	Can be re-used on other projects	Link
ICM-42607-P 6-axis motion sensor	1	£6.05	£6.05	AliExpress	Can be re-used on other projects	Link
M3 x 30mm Nylon C-Sunk screws	8	£0.07	£0.55	RS Components	Can be re-used on other projects	Link
M4 x 25mm Nylon countersunk screws	8	£0.10	£0.76	RS Components	Can be re-used on other projects	
M4 x 30mm Pozi Pan Machine Screw - stainless steel	4	£0.26	£1.05	Amazon	Can be re-used on other projects	Link
Mini 3A DC-DC Converter step down	1	£0.80	£0.80	AliExpress		Link
Pin Header Strips Female 1 x 40	2	£0.90	£1.80	ebay	Sunk cost - glued in	Link
Pin Header Strips Male 1 x 40	2	£0.80	£1.60	ebay	Sunk cost - glued in	Link
Resistors 1/4 W	2	£0.03	£0.05	RS Components	Sunk cost - glued in	
Toggle Switch SPDT 5A@250 AC	1	£0.79	£0.79	Amazon	Sunk cost - glued in	Link
WS2812B RGB LED chips, white 5050SMD	12	£0.15	£1.80	Amazon	Sunk cost - glued in	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:			£128.08			
Re-use:			£116.89		Can be re-used on other projects	
Sunk:			£11.19		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 expire, not be available long term

Rechargeable batteries will require a charger - not included

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

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

