

RBE 200x Kit (Foisie 2018)

1.0 Unit(s)

Cost Structure

Raw Materials	Quantity	Unit Cost	Total Cost
Small BreadBoard	1.0 Unit(s)	\$ 4.50	\$ 4.50
0.5 Ohm Resistor	1.0 Unit(s)	\$ 0.94	\$ 0.94
22 Ohm Resistor	1.0 Unit(s)	\$ 0.01	\$ 0.01
91 Ohm Resistor	6.0 Unit(s)	\$ 0.01	\$ 0.06
330 Ohm Resistor	1.0 Unit(s)	\$ 0.01	\$ 0.01
1k Ohm Resistor	4.0 Unit(s)	\$ 0.01	\$ 0.04
2.2k Ohm Resistor	1.0 Unit(s)	\$ 0.01	\$ 0.01
4.7K OHM 1/4W 5% AXIAL	1.0 Unit(s)	\$ 0.01	\$ 0.01
10k Ohm Resistor	3.0 Unit(s)	\$ 0.01	\$ 0.03
68k Ohm Resistor	2.0 Unit(s)	\$ 0.01	\$ 0.02
100k Ohm Resistor	1.0 Unit(s)	\$ 0.01	\$ 0.01
10k Breadboard Potentiometers	3.0 Unit(s)	\$ 2.90	\$ 8.70
1 uF Capacitor	1.0 Unit(s)	\$ 0.27	\$ 0.27
10 uF Capacitor	1.0 Unit(s)	\$ 0.24	\$ 0.24
2mH Inductor	1.0 Unit(s)	\$ 0.72	\$ 0.72
Diode	1.0 Unit(s)	\$ 0.01	\$ 0.01
LED - Super Brights	1.0 Unit(s)	\$ 0.95	\$ 0.95
NPN Transistor 2N2222A	1.0 Unit(s)	\$ 2.23	\$ 2.23
Single Contact Relay	1.0 Unit(s)	\$ 2.95	\$ 2.95

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Lm 358 Op Amp	1.0 Unit(s)	\$ 0.47	\$ 0.47
MC1458 Op Amp	1.0 Unit(s)	\$ 0.57	\$ 0.57
IC OPAMP INSTR 1MHZ 8DIP	1.0 Unit(s)	\$ 11.26	\$ 11.26
RIB: Robot Interface Board Assembly	1.0 Unit(s)	\$ 36.85	\$ 36.85
USB extension Cable A Female to A Male (1.00m)	1.0 Unit(s)	\$ 2.57	\$ 2.57
SparkFun Load Cell Amplifier - HX711	1.0 Unit(s)	\$ 9.95	\$ 9.95
Pololu IR Line Tracker QTR-8A Reflectance Sensor Array	2.0 Unit(s)	\$ 9.95	\$ 19.90
LV-MaxSonar-EZ1 Ultrasonic maxbotics	1.0 Unit(s)	\$ 25.95	\$ 25.95
Sharp Infrared Range Finder	1.0 Unit(s)	\$ 13.95	\$ 13.95
IR POSITIONING CAMERA	1.0 Unit(s)	\$ 23.79	\$ 23.79
BREAKOUT BOARD 9-DOF IMU BNO055	1.0 Unit(s)	\$ 34.95	\$ 34.95
12V Pololu 50:1 GearMotor 12V with Encoder	1.0 Unit(s)	\$ 38.95	\$ 38.95
Pololu MC33926 H-Bridge Motor Driver Carrier	3.0 Unit(s)	\$ 17.95	\$ 53.85
Voltage Regulated Servo	1.0 Unit(s)	\$ 18.24	\$ 18.24
Self-Adjusting Wire Stripper & Cutter	1.0 Unit(s)	\$ 19.97	\$ 19.97
Hex Key 2.5 mm	1.0 Unit(s)	\$ 0.80	\$ 0.80
Hex Key 4 mm	1.0 Unit(s)	\$ 0.16	\$ 0.16
RBE 2001 Four Bar Lab Kit	1.0 Unit(s)	\$ 111.39	\$ 111.39
100 uF Capacitor	1.0 Unit(s)	\$ 0.24	\$ 0.24

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USB extension Cable A Female to A Male (1.00m)	1.0 Unit(s)	\$ 2.57	\$ 2.57
LOGIC LEVEL CONVERTER - BI-DIREC	2.0 Unit(s)	\$ 2.95	\$ 5.90
Hook-up Wire - Black (22 AWG)	1.0 Unit(s)	\$ 2.50	\$ 2.50
Hook-up Wire - White (22 AWG)	1.0 Unit(s)	\$ 2.50	\$ 2.50
Hook-up Wire - Red (22 AWG)	1.0 Unit(s)	\$ 2.50	\$ 2.50
22-24AWG Wire Wrap Tool	1.0 Unit(s)	\$ 12.99	\$ 12.99
Wire Wrap Tool for 28 Gauge and 30 Gauge	1.0 Unit(s)	\$ 19.99	\$ 19.99
Copper Wire 30 AWG gauge Cable Roll (8 Colors) wire wrap	1.0 Unit(s)	\$ 9.99	\$ 9.99
RBE 2000 BaseBot	1.0 Unit(s)	\$ 27.67	\$ 27.67
Zip Tie Adhesive Cable Tie Mount	13.0 Unit(s)	\$ 0.07	\$ 0.91
1uF capacitor 0402	1.0 Unit(s)	\$ 0.31	\$ 0.31
Zip Ties	22.0 Unit(s)	\$ 0.02	\$ 0.44
Break Away Strip Male Headers 17mm Long Pins	1.0 Unit(s)	\$ 1.40	\$ 1.40
JUNK	5.0 cm	\$ 0.36	\$ 1.80
Strain gauge Load Cell - 0.5kg, Straight Bar	1.0 Unit(s)	\$ 9.95	\$ 9.95
Pair Emitters/Detector IR Infrared	1.0 Unit(s)	\$ 1.95	\$ 1.95
12V 3AH Sealed Lead Acid Battery	1.0 Unit(s)	\$ 13.99	\$ 13.99
12V Sealed Lead Acid (SLA) Battery Charger 1300mA	1.0 Unit(s)	\$ 24.99	\$ 24.99
Jumper Wire Kit - 140pcs	1.0 Unit(s)	\$ 5.95	\$ 5.95

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TDOK TD-109 Wire Cutter Flush Cut	1.0 Unit(s)	\$ 7.99	\$ 7.99
Measuring Tape	1.0 Unit(s)	\$ 4.58	\$ 4.58
Total Cost of Raw Materials			\$ 606.39