

Aggie Robotics Parts List

Microcontrollers

Item	Unit Price	Quantity	Total Price	Purchase Link
Adafruit Motor/Stepper/Servo Shield	\$17.96	20	\$359.20	https://www.adafruit.com/product/1438
Arduino Uno	\$24.95	20	\$499.00	https://www.adafruit.com/product/50
Arduino Nano	\$3.95	40	\$158.13	https://www.amazon.com/Arduino-Elegoo-ATmega328P-compatible/dp/B0713XK923/ref=sr_1_3?s=electronics&keywords=arduino+nano

Boards

Item	Unit Price	Quantity	Total Price	Purchase Link
Solderless Breadboard	\$4.76	100	\$476.00	https://www.adafruit.com/product/239
Solderless Bread- board with Power	\$19.95	5	\$99.75	https://www.adafruit.com/product/443
Universal Perfboard	\$4.46	50	\$223.00	https://www.adafruit.com/product/2670

Components

Item	Unit Price	Quantity	Total Price	Purchase Link
Resistor Kit	\$7.95	1	\$7.95	https://www.sparkfun.com/products/10969
Capacitor Kit	\$6.95	1	\$6.95	https://www.sparkfun.com/products/13698
LED Starter Kit	\$29.95	5	\$149.75	https://www.sparkfun.com/products/13234
Thumb Joystick	\$3.75	50	\$187.50	https://www.sparkfun.com/products/9032

Item	Unit Price	Quantity	Total Price	Purchase Link
Tactile Button Assortment	\$4.95	10	\$49.50	https://www.sparkfun.com/products/10302
Magnetic Door Switch Set	\$2.95	10	\$29.50	https://www.sparkfun.com/products/13247
Rocker Switch	\$0.50	50	\$25.00	https://www.sparkfun.com/products/11138
Discrete Semiconductor Kit	\$8.95	5	\$44.75	https://www.sparkfun.com/products/13682
8 pin socket (3 pack)	\$0.75	5	\$3.75	https://www.adafruit.com/product/2202
16 pin socket (3 pack)	\$0.95	5	\$4.75	https://www.adafruit.com/product/2203
28 pin socket (3 pack)	\$1.25	5	\$6.25	https://www.adafruit.com/product/2205
40 pin socket (3 pack)	\$1.50	5	\$7.50	https://www.adafruit.com/product/2207
Header Pins	\$0.50	50	\$25.00	https://www.adafruit.com/product/3002
DC Motor	\$1.76	50	\$88.00	https://www.adafruit.com/product/711

Tools

Item	Unit Price	Quantity	Total Price	Purchase Link
Ethernet Crimping Tool	\$16.59	3	\$49.77	https://www.amazon.com/TRENDnet-RJ-45-RJ-12-RJ-11-TC-CT68/dp/B0000AZK4G/ref=sr_1_3?ie=UTF8&qid=13&keywords=ethernet+crimper
Craftsman Precision Screwdriver Set	\$57.47	3	\$172.41	https://www.amazon.com/Craftsman-9-41711-Screwdriver-Set-24-Piece/dp/B007KHEQ06/ref=sr_1_1?s=hi&ie=UTF8&qid=11&keywords=craftsman+9-41711

Item	Unit Price	Quantity	Total Price	Purchase Link
Greenlee PA1123	\$27.54	3	\$82.62	https://www.amazon.com/Greenlee-Communications-22-10-Strippers-Bundle/dp/B000X4X23U/ref=sr_1_1?s=hi&ie=UTF8&keywords=greenlee+Pa1123
Greenlee PA1176	\$12.79	3	\$38.37	https://www.amazon.com/Greenlee-PA1176-Electrical-Terminal-Crimper/dp/B007YXBUO6/ref=sr_1_1?s=hi&ie=UTF8&keywords=greenlee+Pa1176

Soldering

Item	Unit Price	Quantity	Total Price	Purchase Link
Weller WXP65 with Stand	\$273.00	6	\$1638.00	http://www.mouser.com/ProductDetail/Apex-Tool-Group/0052921299/?qs=sGAEpiMZZMsNAYL%252bvl
Weller WXDP120 with Stand	\$418.00	2	\$836.00	http://www.mouser.com/ProductDetail/Apex-Tool-Group/T0051320299N/?qs=sGAEpiMZZMve4%2fbfQk
Weller SP25NKUS	\$20.20	10	\$202.00	http://www.mouser.com/ProductDetail/Apex-Tool-Group/SP25NKUS/?qs=%2fha2pyFaduhTTPPUMl1Q
Weller WSA350 Smoke Absorber	\$72.70	3	\$218.10	http://www.mouser.com/ProductDetail/Apex-Tool-Group/WSA350/?qs=sGAEpiMZZMsgi4BqhxE1dFLg
Weller WSA250F Pads (3 pack)	\$7.60	2	\$15.20	http://www.mouser.com/ProductDetail/Apex-Tool-Group/WSA350F/?qs=sGAEpiMZZMsgi4BqhxE1dFLg
Spool 0.031"	\$7.55	30	\$226.50	https://www.sparkfun.com/products/9325
Solder Helping Third Hand	\$6.00	4	\$24.00	https://www.adafruit.com/product/291
PCB Vise	\$28.00	2	\$56.00	https://www.adafruit.com/product/151
Solder Sucker	\$4.50	10	\$45.00	https://www.adafruit.com/product/148
Solder Wick	\$2.70	12	\$32.40	https://www.adafruit.com/product/149

Item	Unit Price	Quantity	Total Price	Purchase Link
Solder	\$15.95	6	\$95.70	https://www.adafruit.com/product/2667
Flux	\$11.35	30	\$340.50	https://www.sparkfun.com/products/14232
Solder Stand Hookup Wire Set 22AWG	10	\$24.75	\$247.50	https://www.adafruit.com/product/3174

OtherMill

Item	Unit Price	Quantity	Total Price	Purchase Link
Double-sided Circuit Board Blanks (25 pack)	\$32.00	8	\$256.00	https://www.bantamtools.com/collections/materials/
Pulley Belt Set	\$3.00	2	\$6.00	https://www.bantamtools.com/collections/spare-parts/products/othermill-pulley-belts
0.0005" Engraving Bit (10-pack)	\$216.00	2	\$432.00	https://www.bantamtools.com/collections/end-mills-and-bits/products/pcb-engraving-bits?variant=41469245520
Scotch Double-sided Tape (2 pack)	\$6.10	10	\$61.00	https://www.amazon.com/Scotch-Double-Dispenser-Inches-137DM-2/dp/B002VLA5SI/ref=sr_1_3?ie=UTF8&qid=150663&keywords=double+sided+tape
12 Volt Vacuum	\$59.00	1	\$59.00	http://www.homedepot.com/p/Milwaukee-M12-12-Volt-Lithium-Ion-Cordless-Compact-Vacuum-Tool-Only-0850-20/205482386
12 Volt Battery w/ Charger	\$69.00	1	\$69.00	http://www.homedepot.com/p/Milwaukee-M12-12-Volt-Lithium-Ion-Compact-Battery-Pack-2-0Ah-and-Charger-Starter-Kit-48-59-2420/205846389

Prototype Computing

Item	Unit Price	Quantity	Total Price	Purchase Link
Raspberry Pi 3	\$35.00	20	\$700.00	https://www.adafruit.com/product/3055
16 GB Class 10 MicroSD Card	\$18.95	30	\$379.00	https://www.sparkfun.com/products/13833ad
Raspberry Pi 3 Case	\$11.95	20	\$239.00	https://www.adafruit.com/product/2619
Raspberry Pi Power Supply	\$7.50	25	\$187.50	https://www.adafruit.com/product/1995
Raspberry Pi Display	\$44.95	20	\$899.00	https://www.adafruit.com/product/2441
Keyboard, Mouse, HDMI for Raspberry Pi	\$22.95	20	\$459.00	https://www.adafruit.com/product/2129
USB SD Card Reader	\$9.99	5	\$49.95	https://www.amazon.com/Anker-Portable-Reader-RS-MMC-Micro/dp/B006T9B6R2/ref=sr_1_3?ie=UTF8&qid=13&keywords=micro+sd+card+reader

Office Supplies

Item	Unit Price	Quantity	Total Price	Purchase Link
Dymo Label Printer	\$10.68	1	\$10.68	https://www.amazon.com/DYMO-LabelManager-Handheld-Label-1790415/dp/B005X9VZ70/ref=sr_1_5?s=office-products&ie=UTF8&qid=1506654637&sr=1-5&keywords=label+printer
Cat6 Ethernet Cable Spool	\$325.74	1	\$325.74	http://www.mouser.com/ProductDetail/Belden-Wire-Cable/2412-008A1000/?qs=sGAEpiMZZMvo3LfgFpQA%252bPNw

Item	Unit Price	Quantity	Total Price	Purchase Link
16 Port Ethernet Switch	\$48.99	1	\$48.99	https://www.amazon.com/NETGEAR-ProSAFE-FS116NA-16-Port-Ethernet/dp/B000063UZW/ref=sr_1_4?ie=UTF8&qid=1506655327&keywords=netgear+16+port+ethernet+switch
CO2 Fire Extinguisher	\$134.57	1	\$134.57	https://www.amazon.com/Kidde-Dioxide-Electronic-Environmentally-Extinguisher/dp/B001ECQ5MA/ref=sr_1_2?ie=UTF8&qid=1506655327&keywords=co2+fire+extinguisher
ANSI First Aid Kit	\$27.88	1	\$27.88	https://www.amazon.com/gp/product/B01D1UFOPQ/ref=sr_1_3?ie=UTF8&qid=1506655327&keywords=first+aid+kit
Board Markers	\$7.98	2	\$15.96	https://www.amazon.com/Pilot-Master-Refillable-Markers-Assorted/dp/B003DC2MGC/ref=sr_1_1?ie=UTF8&qid=1506655327&keywords=refillable+board+markers
White Board Cleaning Cloth	\$4.34	2	\$8.68	https://www.amazon.com/EXPO-Microfiber-Whiteboard-Cleaning-Cloth/dp/B002JG0LEI/ref=sr_1_1?s=office-products&ie=UTF8&qid=1506655327&sr=1-1&keywords=white+board+eraser+cloth

Hardware

Item	Unit Price	Quantity	Total Price	Purchase Link
Spacer/Standoff Screw Sets	\$12.97	2	\$25.94	https://www.amazon.com/240Pcs-Brass-Spacer-Standoff-Assortment/dp/B00MNG2T6W/ref=pd_sim_328_2?ie=UTF8&qid=1506655327&keywords=brass+spacer+standoff
Electrical Tape (10 pack)	\$12.70	1	\$12.70	https://www.amazon.com/Industrial-Grade-Electrical-Tape-60/dp/B00CA1DHM0/ref=sr_1_2?s=hi&ie=UTF8&qid=1506655327&keywords=bulk+electrical+tape
Crimp Terminal Set	\$28.99	1	\$28.99	https://www.amazon.com/SOLOOP-Electrical-Connectors-Insulated-Assortment/dp/B0168G5YFA/ref=sr_1_2_sspa?s=hi&ie=UTF8&qid=1506655327&keywords=crimp+terminal+set&psc=1

Electrical Equipment

Item	Unit Price	Quantity	Total Price	Purchase Link
DC Power Supply	\$79.99	3	\$239.97	https://www.amazon.com/gp/product/B00ZBCLJSY/
function Generator	\$318.89	1	\$318.89	https://www.amazon.com/Siglent-SDG1025-Function-Arbitrary-Generator/dp/B00GQNNVH4/ref=zg_bs_5011665011
Digital Oscilloscope	\$379.00	3	\$1137.00	https://www.amazon.com/Siglent-Technologies-SDS1202X-Oscilloscope-Channels/dp/B06XZML6RD/ref=sr_1_1_sspa?s=industrial&keywords=digital+oscilloscope&psc=1

Robot Components

Item	Unit Price	Quantity	Total Price	Purchase Link
Vex Classroom Bundle	\$5299.99	1	\$5299.99	https://www.vexrobotics.com/vexedr/products/kits-and-bundles/278-3333.html
Vex Advanced Sensor Kit	\$99.99	6	\$599.94	https://www.vexrobotics.com/vexedr/products/accessories/1179.html