

Self-Balancing Unicycle						
ORDERED	VENDOR	ITEM	UNIT PRICE	QUAN	LINK	COMMENT
X	Pololu	5.7" OD Wheel	\$ 5.95	2	https://www.pololu.com/product/3281	no free shipping
	Pololu	Wheel hub for 1/4" shaft	\$ 4.95	1	https://www.pololu.com/product/2675	
X	Pololu	25mm M3 screws for wheel hub	\$ 1.75	1	https://www.pololu.com/product/1077	no free shipping
X	McMaster	0.2" pitch, 5/16" width, 70 tooth timing belt	\$ 3.96	1	https://www.mcmaster.com/1679K125/	
	McMaster	1/2" flanged bearing for 1/4" shaft	\$ -	2	https://www.mcmaster.com/57153K323/	replaced w/ Digi-Key
X	McMaster	6" of 1/4" D-Shaft	\$ 6.79	1	https://www.mcmaster.com/8632T132/	
X	McMaster	Clamping collar for 1/4" shaft	\$ 2.40	2	https://www.mcmaster.com/6435K12/	
	McMaster	7mm OD M3 washer	\$ -	1	https://www.mcmaster.com/93475A210/	replaced w/ Digi-Key
X	Digi-Key	1/4" ID, 1/2" OD, 3/16" wide ball bearing	\$ 2.16	2	https://www.digikey.com/product-detail/en/60020-10020-3/29352288	
X	Digi-Key	7mm OD nylon M3 washer	\$ 0.10	30	https://www.digikey.com/product-detail/en/60020-10020-3/29352288	
	Pololu	12V, 1000RPM, BDC motor with encoder	\$ 39.95	1	https://www.pololu.com/product/4758	
X	Pololu	10mm M3 screws for motor	\$ 1.29	1	https://www.pololu.com/product/2695	no free shipping
X	Folk Battery	12V, 60W, 10AH Li-ion battery with charger	\$ 39.90	1	https://www.folkbatteries.com/products/12v-60w-10ah-li-ion-battery-with-charger	under "color*" select "US charger"
	Pololu	5V 1A step-down voltage regulator	\$ 7.49	1	https://www.pololu.com/product/2831	
	Pololu	Wheel hub for 6mm shaft	\$ 4.95	1	https://www.pololu.com/product/2674	
	Pololu	12V, 1600RPM, BDC motor with encoder	\$ 39.95	1	https://www.pololu.com/product/4757	
X	PJRC	Teensy 4.1 with pins	\$ 30.85	1	https://www.pjrc.com/store/teensy41_pins.html	
X	PJRC	0.1" pitch, 24 pin female headers	\$ 1.05	2	https://www.pjrc.com/store/socket_24x1.html	
	Kauai Labs	navX2-Micro IMU	\$ -	1	https://www.kauailabs.com/nav-micro/	replaced w/ Adafruit
X	Adafruit	BNO085 IMU	\$ 19.95	1	https://www.adafruit.com/product/4754	
	Pololu	12V 5A peak BDC motor driver	\$ 4.95	2	https://www.pololu.com/product/2950	
	Pololu	±5A current sensor	\$ 9.95	2	https://www.pololu.com/product/4041	
	Pololu	0.1" pitch male headers	\$ 0.75	4	https://www.pololu.com/product/965	
X	Honors	protoboard	\$ -	1	https://www.honors.com/25000-Protoboard-Solder-Compsite-646x64x2100/	check honors inventory!
X	Digi-Key	4A resettable fuse	\$ 0.86	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
X	Digi-Key	Pushbutton	\$ 1.10	3	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
X	Honors	1uF capacitor	\$ -	5	https://www.honors.com/product-detail/en/1206SMD-4A-16V-250/2928448	check honors inventory!
X	Honors	0.1uF capacitor	\$ -	5	https://www.honors.com/product-detail/en/1206SMD-4A-16V-250/2928448	check honors inventory!
X	Digi-Key	2.6V - 30V LED readout voltmeter	\$ 2.45	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
X	Digi-Key	6.19 kOhm ±1% resistor for Vbat measurement	\$ 0.10	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
X	Digi-Key	3.83 kOhm ±1% resistor for Vbat measurement	\$ 0.10	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
	Digi-Key	I2C LCD Display	\$ -	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	replaced w/ Honors
	Digi-Key	9.09 kOhm resistor for LCD backlight	\$ -	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
	Digi-Key	1 kOhm resistor for LCD backlight	\$ -	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
X	Digi-Key	10A ON-OFF rocker switch	\$ 0.65	1	https://www.digikey.com/product-detail/en/1206SMD-4A-16V-250/2928448	
X	Honors	Weights	\$ -	1		check honors inventory!
	TOTALS		\$ 268.26			
	HONORS FUND		\$ 138.17	out of	\$ 150.00	
	PERSONAL COST		\$ 130.09			