

<u>System</u>	<u>Part</u>	<u>Quantity</u>	<u>Cost Each</u>	<u>Cost Per Kart</u>	<u>Source</u>
Servo	5V Servo	2	\$14.00	\$28.00	Radio Shack
Servo	Servo Mounting Plate	2		\$0.00	Built
Servo	Mounting Bolt/Nut	2	\$2.50	\$5.00	Home Depot
Servo	Connecting Wire	2		\$0.00	Supply
Servo	Connecting Clips	4	\$0.50	\$2.00	Walmart
Servo	Servo 3 Pin Leads	2	\$1.50	\$3.00	Hobby Store
Servo	Governer Extender	1		\$0.00	Built
Computer	MSP430	1	\$2.50	\$2.50	DigiKey
Computer	Socket	1	\$0.50	\$0.50	Radio Shack
Computer	PCB	1	\$10.00	\$10.00	Osh Park
Computer	Computer Case	1	\$5.00	\$5.00	Radio Shack
Computer	Connector Sockets	6	\$0.50	\$3.00	Mouser
Computer	Resistor	1	\$0.07	\$0.07	Supply
Computer	FET	1	\$1.00	\$1.00	DigiKey
Pickup	TI TLC555CP Timer	1	\$0.74	\$0.74	Element14
Pickup	TI TLC272ACP Op-amp	1	\$0.45	\$0.45	Element14
Pickup	1W Pro-Light UV LED	1	\$7.00	\$7.00	SuperBrightLEDs.com
Pickup	1M ohm Resistor 1/4W	2	\$0.07	\$0.14	Supply
Pickup	100k ohm Resistor 1/4W	1	\$0.07	\$0.07	Supply
Pickup	68k ohm Resistor 1/4W	3	\$0.07	\$0.21	Supply
Pickup	1k ohm Resistor 1/4W	1	\$0.07	\$0.07	Supply
Pickup	4.3 ohm Resistor 1W	2	\$0.03	\$0.06	Element14
Pickup	470uF Electrolytic Cap	1	\$1.04	\$1.04	Digikey
Pickup	10uF Electrolytic Cap	2	\$0.10	\$0.20	Supply
Pickup	0.1uF Ceramic Cap	2	\$0.10	\$0.20	Supply
Pickup	0.01uF Ceramic Cap	4	\$0.10	\$0.40	Supply
Pickup	IRLU024N Mosfet	1	\$0.35	\$0.35	Element14
Pickup	1N4728 3.6V Zener Diode	1	\$0.03	\$0.03	Element14
Pickup	1N4148 Diodes	2	\$0.05	\$0.10	Supply
Pickup	TEFD4300 Photodiode	1	\$0.25	\$0.25	Element14
Pickup	8-pin IC Socket	2	\$0.12	\$0.24	Element14
Pickup	2"x2" PerfBoard	1	\$2.50	\$2.50	Radio Shack
Pickup	3"x2"x1" Project Box	1	\$3.50	\$3.50	Radio Shack
Power Supply	GBU601 Bridge Rectifier	1	\$1.33	\$1.33	DigiKey
Power Supply	220 uH Inductor PE-53116NL	1	\$4.11	\$4.11	DigiKey
Power Supply	Schottky Diode MBR360G	1	\$0.55	\$0.55	DigiKey
Power Supply	Buck Regulator LM2576HVT-12	1	\$5.80	\$5.80	DigiKey
Power Supply	5V Regulator LM1084IT-5	1	\$2.79	\$2.79	DigiKey
Power Supply	1000 uF Capacitor P11280	3	\$1.70	\$5.10	DigiKey
Power Supply	10 uF Capacitor P5148	4	\$0.20	\$0.80	DigiKey
Power Supply	470 uF Capacitor	2	\$1.04	\$2.08	DigiKey
Power Supply	LED	1	\$0.25	\$0.25	Radio Shack
Power Supply	Switch	1	\$3.00	\$3.00	Radio Shack
Dashboard	90 Degree EMT Conn.	1	\$2.50	\$2.50	Home Depot
Dashboard	1/2" Red Momentary Button	1	\$2.00	\$2.00	Skycraft
Dashboard	3" Corner Brace	2	\$3.50	\$7.00	Home Depot
Dashboard	5mm RGB LED	4	\$2.00	\$8.00	Radio Shack
Dashboard	5mm Red Led	5	\$1.00	\$5.00	Radio Shack
Dashboard	6"x4"x2" Project Box	1	\$6.50	\$6.50	Radio Shack

Dashboard	3"x2" PerfBoard	1	\$2.25	\$2.25 All Electronics
Dashboard	IRLU024N MOSFET	3	\$0.35	\$2.10 Element14
Dashboard	5mm LED Holders	9	\$0.20	\$1.80 Radio Shack
IR System	IR LED TSAL6100	1	\$0.55	\$0.55 Element14
IR System	220ohm resistor	1	\$0.07	\$0.07 Element14
IR System	IRLU024N MOSFET	2	\$0.35	\$0.70 Element14
IR System	IR Rec. TSOP4856	1	\$0.95	\$0.95 Mouser
IR System	1uF Tantalum Capacitor	1	\$0.25	\$0.25 Supply
IR System	2k Resistor	1	\$0.07	\$0.07 Supply
IR System	3k Resistor	1	\$0.07	\$0.07 Supply
IR System	10k Resistor	1	\$0.07	\$0.07 Supply
IR System	2"x3" PerfBoard	1	\$2.25	\$2.25 All Electronics
Brake Light	IRLU024N MOSFET	1	\$0.35	\$0.35 Element14
Brake Light	1 Watt White LED	2	\$4.00	\$8.00 Skycraft
Brake Light	4.7 ohm resistor	2	\$0.25	\$0.50 Skycraft
Brake Light	470uF	1	\$1.04	\$1.04 Digikey
Brake Light	Custom Switch	1	\$1.00	\$1.00 Self-Made
Brake Light	PVC enclosure	1	\$2.25	\$2.25 Lowe's
Brake Light	25mm Diam. 55mm Focal Length	1	\$4.00	\$4.00 Surplus Shed
Brake Light	3"x5" Project Box	1	\$5.50	\$5.50 Radio Shack
Brake Light	Various Mounting Supplies	1	\$3.00	\$3.00 Lowe's
Brake Light	Brake Light Enclosure	1	\$3.50	\$3.50 Lowe's
Miscellaneous	Solder	1	\$10.00	\$10.00 Radio Shack
	18ga Wire (Red, Green, Black)	1	\$8.00	\$8.00 Radio Shack
Total			\$143.30	