

	actual	optimized
drivers	\$177.50	\$102.00
hardware	\$58.12	\$64.68
arduino	\$-	\$20.00
power	\$-	\$10.00
router	\$-	\$-
total	\$235.62	\$196.68

Part	Value	Package	Library	Position (inch)	Orientation	supplier	price	qty	pc/unit	s/h	per board	#used	left over	
C1	22pf	C025-024X044	resistor	(1.05 2.6)	R0	\$- sparkfun	\$4.50	1	20	\$1.00	\$0.28	2	8	12
C2	22pf	C025-024X044	resistor	(1.05 2.45)	R0	\$-					\$0.28			
C3	470uf	E3,5-8	rcl	(0.7 2.95)	R180	\$0.25 lpfix	\$4.00	2	10	\$-	\$0.40	3	12	8
C4	470uf	E3,5-8	rcl	(0.7 2.45)	R180	\$0.25					\$0.40			
C5	0.1uf	C025-025X050	rcl	(0.4 3)	R270	\$0.43 sparkfun	\$3.50	1	20	\$1.00	\$0.23	3	12	8
C6	0.1uf	C025-025X050	rcl	(0.4 2.5)	R270	\$0.43					\$0.23			
C7	470uf	E3,5-8	rcl	(2.45 2.95)	R270	\$0.25					\$0.40			
C8	0.1uf	C025-025X050	rcl	(2.21 2.95)	R270	\$0.43					\$0.23			
D1	1N4004	DO41-10	diode	(2.8 2.9)	R270	\$0.10 ebay	\$1.00	1	50	\$2.00	\$0.06	8	32	18
D2	1N4004	DO41-10	diode	(2.95 2.9)	R270	\$0.10					\$0.06			
D3	1N4004	DO41-10	diode	(3.1 2.9)	R270	\$0.10					\$0.06			
D4	1N4004	DO41-10	diode	(3.25 2.9)	R270	\$0.10					\$0.06			
D5	1N4004	DO41-10	diode	(3.1 2.21)	R270	\$0.10					\$0.06			
D6	1N4004	DO41-10	diode	(3.24 2.21)	R270	\$0.10					\$0.06			
D7	1N4004	DO41-10	diode	(2.8 2.21)	R270	\$0.10					\$0.06			
D8	1N4004	DO41-10	diode	(2.95 2.21)	R270	\$0.10					\$0.06			
IC1	ATTINY2313V-10P	DIL20	avr	(1.6 2.55)	R270	\$3.00 sparkfun	\$14.50	1	5	\$1.00	\$3.10	1	4	1
IC2	L298	MULTIWATT-15	st-microelectronics	(2.48 2.39)	R270	\$4.00 dipmicro	\$15.00	1	5	\$2.00	\$3.40	1	4	1
IC3	78105	78LXX	v-reg	(0.4 2.75)	R90	\$0.50 ebay	\$2.00	1	10	\$2.00	\$0.40	1	4	6
LED1		LED5MM	led	(0.58 2.03)	R90	\$0.10 have part?								
LED2		LED5MM	led	(1.86 1.96)	R90	\$0.10 have part?								
Q1	16mHz	QS	special	(1.25 2.5)	R90	\$1.50 ebay	\$11.00	1	50	\$-	\$0.22	1	4	46
R1	4k7	0204/7	resistor	(1.85 2.75)	R270	\$0.05 have part?								
R2		0204/7	rcl	(1.3 2.9)	R270	\$0.05								
R3	4k7	0204/7	resistor	(1.96 2.75)	R270	\$0.05								
R4		0204/7	rcl	(0.9 2.13)	R0	\$0.05								
R5		0204/7	rcl	(1.54 1.98)	R0	\$0.05								
S1	reset	B3F-10XX	switch-omron	(1.05 2.9)	R180	\$0.25 have part?								
SV1	+12v	MA03-1	con-lstb	(0.1 2.85)	R90	header?								
SV2	i2c	MA03-1	con-lstb	(1.98 3)	R0	header?								
SV3	Mot	MA04-1	con-lstb	(3.1 2.54)	R0	header?								
SV4	home	MA03-1	con-lstb	(1.2 2.05)	R180	header?								
SV5	end	MA03-1	con-lstb	(1.2 2.21)	R180	header?								
motor						\$2.80 eBay	\$18.00	1	5	\$-	\$3.60	1	4	1
board						\$14.00 frys	\$80.00	1	8	\$15.00	\$11.88	1	4	4

\$29.33 /pc
5 pieces

\$177.50 actual

\$25.50 /pc optimized
4 pieces

\$146.63

\$102.00 optimized total

\$64.50 spent actual
\$12.90 /driver actual

\$10.03 /board components
\$20.03 cost incl. board

versus sparkfun \$15 EasyDriver V3

Part	Value	supplier	price	qty	pc/unit	s/h		per board	#used	left over	optimized
threaded rod	5/16"-18 x 24"	Home Depot	\$2.33	4	1	\$-	\$9.32	4	4	0	\$9.32
Alum. Rails	36"	Home Depot	\$4.11	3	1	\$-	\$12.33	3	3	0	\$12.33
screw	1/4" x 3/4"	Home Depot	\$0.25	30	1	\$-	\$7.50				\$7.50
screw	small wood screw	in stock	\$-	0	1	\$-	\$-				\$-
bearings		in stock	\$-	40	1	\$-	\$-				\$-
bolt	1/4" x 1.5"	Home Depot	\$0.30	16	1	\$-	\$4.80				\$4.80
bolt	5/16" x 2"	Home Depot	\$0.30	16	1	\$-	\$4.80				\$4.80
bolt	1/4" x 4" long	Home Depot	\$1.25	1	1	\$-	\$1.25				\$1.25
nut	1/4"	Home Depot	\$0.10	36	1	\$-	\$3.60				\$3.60
nut	5/16"	Home Depot	\$0.10	96	1	\$-	\$9.60				\$9.60
particle board	5/8" x 48" x 96"	Home Depot	\$18.00	1	3	\$-	\$-	1	1	2	\$6.00
particle board	Recycled IKEA	On the curb	\$-	1	2	\$-	\$-				

\$53.20 subtotal

\$58.12 total

\$26.27 nuts&bolts

\$59.20 optimized subtotal

\$64.68 optimized total

