Component (VEHICLE)	Voltage (V)	Max Current (A)	Qty	Max Total Power (W)	Duty Cycle	Avg Total Power (W)		V notes	A notes
Arduino Mega	5	0.1	2	1.0	100.00%	1.0			est
Arduino Uno	5	0.1	5	2.5	100.00%	2.5			est
Motor Controller 1	24	1	1	24.0	100.00%	24.0			est
Motor Controller 2	12	1	1	12.0	100.00%	12.0			est
Steering Actuator	24	18	1	432.0	50.00%	216.0			
Brake Actuator	24	7.9	1	189.6	20.00%	37.9			
Transmission Actuator	24	1.8	1	43.2	10.00%	4.3			
E-brake Actuator	12	7	1	84.0	5.00%	4.2			
Throttle Actuator	24	0.79	1	19.0	80.00%	15.2			
Warning Beacon	12	1.3	1	15.6	100.00%	15.6		10-30V	10A fuse
LED sign	7.5	3.25	1	24.4	100.00%	24.4			
xBee	3.3	0.245	1	0.8	100.00%	0.8		2.1-3.6V	
Tach	12	0.25	1	3.0	100.00%	3.0		8-30V	est
Brake Pressure Transducer	12	0.25	1	3.0	100.00%	3.0		8-28V	est
GPS	5	0.1	1	0.5	100.00%	0.5			
Horn	12	5	1	60.0	1.00%	0.6			est
LMS 221	24	1	1	24.0	100.00%	24.0			typ
LMS 111	12	0.66	1	7.9	100.00%	7.9			typ
Lidar Gimbal	24	6	1	144.0	50.00%	72.0			rough est.
Sensor Packages	12	1	3	36	100.00%	36.0			rough est.
STOCK ITEMS:									
Tail lights				5	100.00%	5.0			
Brake lights				5	20.00%	1.0			
Headlights				35	100.00%	35.0			
Indicator				1	0.00%	0.0			
Total				1,172.5		545.9			

Component (CONSOLE)	Voltage (V)	Max Current (A)	Qty	Max Total Power (W)	Duty Cycle	Avg Total Power (W)		V notes	A notes
Arduino Mega	5	0.1	1	0.5	100.00%	0.5			est
Switches/buttons	5	0.1	1	0.5	100.00%	0.5			
Joystick	5	0.05	1	0.25	100.00%	0.25			
LCD screen	5	0.2	1	1	100.00%	1			
LEDs	5	0.013	20	1.3	70.00%	0.91			13 mA: need resistor?
xBee	3.3	0.245	1	0.8	100.00%	0.8			
Total				4.4		4.0			
ALTERNATOR OUTPUT				250					

Battery Capacity	Individual Battery Capacity (Ah)	Number of Batteries	Power Capacity (VAh)	Avg Power	Avg Time	Peak Power	Min Time		
	85	3	3060	545.9	5.60530416	1,172.5	2.60988935		