

Team Number:	103	
Project Name:	Automatic Door Opener (motor)	
Team Member Names:	Isaac Smith	
Version:	1	

All Major Components	Component Name	Part Number	Supply Voltage Range	#	Absolute Maximum Current (mA)	Total Current (mA)
Potentiometer	PTA3043-2010CIB104	PTA3043-2010CIB104	0-350	1	0	0
H-bridge	L9110H H-Bridge Motor Driver for DC Motors - 8 DIP	4489	2.5V-12V	1	800	800
Motor	High Torque 12V DC Worm Gear Motor, 15 RPM	5840WG-555PM-590 12V	0-12V	1	650	650
						0
					Subtotal	1450
					Safety Margin	15%
					Total Current	1667.5
SOURCE						
					Total Remaining	3332.5
(+)12V Rail	Component Name	Part Number	Supply Voltage Range	#	Absolute Maximum Current (mA)	Total Current (mA)
Potentiometer	PTA3043-2010CIB104	PTA3043-2010CIB104	0-350	1	0	0
H-bridge	L9110H H-Bridge Motor Driver for DC Motors - 8 DIP	4489	2.5V-12V	1	800	800
Motor	High Torque 12V DC Worm Gear Motor, 15 RPM	5840WG-555PM-590 12V	0-12V	1	650	650
					Subtotal	1450
					Safety Margin	15%
					Total Current	1667.5
SOURCE	12V 5A switching power supply	352	110V-220V	1		5000
					Total Remaining	3332.5
(+)5V rail	Component Name	Part Number	Supply Voltage Range	#	Absolute Maximum Current (mA)	Total Current (mA)
	Microcontroller	PIC18F57Q43-CNANO	+1.8 - 5.5V	1	350	350
					Subtotal	
					Safety Margin	
					Total Current	
SOURCE	+5V Regulator	LM7805	+5 - 35V	1	1500	1500
					Total Remaining	
External Power Source 1	Component Name	Part Number	Supply Voltage Range	#	Absolute Maximum Current (mA)	Total Current (mA)
Power Supply	12V 5A switching power supply	352	110V-220V	1	5000	5000