Power Budget

Team Number: 205
Project Name: sound and motion light
Version: 1

All Major Components	Component Name	Part Number	Supply Voltage Range	Qty.	Absolute Maximum Current (mA)	Total Current (mA)	Unit
	Microphone	RS PRO 7542100	+2 - 10V	1	0.5	0.5	mA
	Op-amp	MCP6004	+1.8 - 6V	1	2	2	mA
	Curiosity nano	PIC18F57Q43	+5 V	1	500	500	mA
	5V regulator	L7805CV	+5 - 24V	1	1500	1500	mA
			Supply		Absolute	Total	
+5V Power Rail	Component Name	Part Number	Voltage Range	Qty.	Maximum Current (mA)	Current (mA)	Unit
+5V Power Rail	Component Name Microphone	Part Number RS PRO 7542100		Qty.			Unit mA
+5V Power Rail	·		Range		Current (mA)	(mA)	
+5V Power Rail	Microphone	RS PRO 7542100	Range +5V	1	Current (mA) 0.5	(mA) 0.5	mA
+5V Power Rail	Microphone Op-amp	RS PRO 7542100 MCP6004	Range +5V +5V	1 1 1	0.5 2	(mA) 0.5 2	mA mA
+5V Power Rail	Microphone Op-amp	RS PRO 7542100 MCP6004	+5V +5V +5 V	1 1 1	0.5 2 500	(mA) 0.5 2 500	mA mA
+5V Power Rail Regulator	Microphone Op-amp	RS PRO 7542100 MCP6004	+5V +5V +5 V	1 1 1	Current (mA) 0.5 2 500 Safety Margin	(mA) 0.5 2 500 25%	mA mA mA

External Power Source 1	Component Name	Part Number	Supply Voltage Range	Output Voltage	Absolute Maximum Current (mA)	Total Current (mA)	Unit
Power Source 1 Selection	Wall power adapter	WSU060-2000	100-240 VAC	5.9	2000	2000	mA
Power Rails Connected to							
External Power Source 1	+5V Regulator	L7805CV	5		1500	1500	mA
	Total	Remaining Current	Available on E	xternal P	ower Source 1	500	mA