

ID	Risk Item	Effect	Cause	Likelihood	Severity	Importance	Action to Minimize Risk	Owner	Date?
	Describe the risk briefly	What is the effect on any or all of the project deliverables if the cause actually happens	What are the possible causes of this risk(s)	Score 1-3	Score 1-3	L*S	What actions will you take, and by when, to prevent, reduce the impact of or transfer the risk of this occurring	Who is responsible for following through on mitigation	
1	Project Scope too large	Project not completed on time	Undertaking too many functions, unfocused planning	3	3	9	Focus on main goals of project, discuss and research feasibility of optional functionality. Discuss goals of project with guide and experts to determine feasibility	Team Lead, Engineering Leads	drop dead date - if we cannot prove feasibility, we are dropping extra functions
2	Slight Digital Signal Processing expertise	Hearing aid does not work	Trying to do too much without a lot of prior experience	2	3	6	Research DSP programming, discuss with experts what they feel is appropriate for the project time constraints	Lead Electrical Engineer	
3	Parts ordered too late	Do not have the parts required to assemble hearing aid	Parts not ordered in time, parts needed unknown, components/parts backordered	3	2	6	Determine parts as soon as possible, identify possible long lead parts early	Team Lead, Engineering Leads, Budgeter	
4	Design does not meet needs	Project failure, unhappy customers	Missed functionality, poor planning, run out of time to implement	2	2	4	Ensure all customer needs defined and planned for. Make sure all needs and specs are in scope and feasible. Modify needs and specs where needed	Engineering Leads	
5	Difficulty getting electronics small enough for hearing aid	Prototype is larger than originally intended, some functionality is dropped to be able to reach size requirement, unhappy customer and design team	Components chosen too large, not enough space left for electronics in main hearing aid shell. System integration not thought of before mechanical and electrical systems are built	3	3	9	Keep small form factor in mind when choosing technologies and functionality	Lead Electrical Engineer / System Integration Engineer	
							Design shell as small as possible while keeping electronics size in mind	Lead Mechanical Engineer Team	
							Facilitate communication between ME, EE/CE and how systems will integrate	Lead/Systems Engineer	
7	Parts break during system integration	schedule is pushed back; possibility of meeting Imagine RIT deadline	rushed engineering; poor materials, poor communication between electrical and mechanical teams	2	3	6	print multiple enclosures; order multiple electrical parts (if budget allows); start building far in advance	Systems Engineer	
8	Activity test failure	Fails to meet customer need	Test not clearly specified	1	2	2	clearly define test and analyze if it is (a) necessary for customer and (b) obtainable	Lead Mechanical Engineer	
9	part do not assemble	cannot assemble system; pushes schedule	poor tolerance analysis / drawings, poor communication between electrical and mechanical teams	2	3	6	double check toleranced analysis; inspect in CAD	Lead Mechanical Engineer	

10	No experience/expertise with ON Semi chip DSP Hybrid chip	If chosen, could run out of time, not have a happy customer, potential product failure	Too difficult to implement, Run out of time trying to learn new product	3	3	9	Seek advice from experts at ON Semi, Plan for difficult implementation and put a large amount of scheduled time	Lead Electrical Engineer/ Systems Engineer
11	"Dummy" piece incomplete loss of team member over budget	incomplete visual design	low priority, difficulty designing connection	1	2	2	Design both parts (stationary module and dummy piece) simultaneously with same priority Cross training/document work/ideas Track expenses and purchase items	Lead Engineer Eric