

Risk Assessment (as of Dec 28)

| 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 | 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 | 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 | Team Lead, Engineering Leads | drop dead date - if we cannot prove feasibility, we are |
| 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 | Lead Electrical Engineer | |
| 3 | Parts ordered too late | Do not have the parts required to assemble hearing | Parts not ordered in time, parts needed unknown, components/parts | 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 | Engineering Leads | |
| 5 | Difficulty getting electronics small enough for hearing aid | Prototype is larger than originally intended, some | Components chosen too large, not enough space left for electronics in main | 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 | |
| | | | | | | | Facilitate communication between ME, EE/CE and how systems will integrate | Team Lead/Systems Engineer | |
| 7 | Parts break during system integration | schedule is pushed back; possibility of meeting Imagine RIT | rushed engineering; poor materials, poor communication between | 2 | 3 | 6 | print multiple enclosures; order multiple electrical parts (if budget allows); start building far | 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 | 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 | 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 | Lead Electrical Engineer/ Systems Engineer | |
| 11 | "Dummy" piece incomplete | incomplete visual design | low priority, difficulty designing connection | 1 | 2 | 2 | Design both parts (stationary module and dummy piece) simultaneously with same | Lead Engineer | |
| | loss of team member | | | | | | Cross training/document work/ ideas | | |
| | over budget | | | | | | Track expenses and purchase items | Eric | |