

D009 – 8

To: Senior Management  
From: Senior Design Class  
Date: March 24, 2008  
Subject: Weekly Status Letter

### **Tasks Completed Last Week**

Last week we delivered the CDR presentation and submitted the CDR report. We also submitted the Draft ATP and Draft User's Manual to management. The CDR needed a few revisions therefore for the remainder of the week we worked on making the necessary changes to get the report approved. Please see the attached meeting minutes from the CDR Presentation for a detailed list of what needed to be updated or revised.

Along with the CDR requirements, we created a critical path in the schedule which included time for PCB fabrication and testing. We asked for a deadline extension to test our second round of boards assuming the first batch does not function properly and we need to order a new design. We set a deadline for sending out the PCB designs to get fabricated on Friday, March 14<sup>th</sup>. This deadline was not met, because we were not finished with them on time and when they were finished, the management did not approve some of the designs, so it was subsequently sent out Wednesday, March 19<sup>th</sup>. The boards should arrive no later than Wednesday, March 26<sup>th</sup>. We also found out that the company manufacturing our boards were out of PIC's but we have plenty that we've been using over the past couple of weeks to test our circuits so this should not cause any delay in our project schedule. We also completed our bill of materials and sent it out to the department get all of our parts ordered. They should come in this week and will be tested accordingly. The octopus was ordered earlier and arrived last week. A power analysis was done on the heat dissipation and the current drawn. Also, the UI group worked on implementing the main class with the builder decoder and ran all test benches on the system.

### **Tasks to Be Completed This Week**

Over the next week our biggest task will be assembling the circuit boards when they arrive and begin testing them. We are going to improve the board layout for the second batch of boards as well as test the switching circuit and short circuit prevention system on breadboards before sending out our second board design. The switching circuit will also be integrated with the PIC and tested. The octopus will be installed and tested this week. Also, we will work on analyzing the sustainability of the overall system and assign someone to be responsible to make sure we are following the proper requirements. We will also revise and finalize the reliability and maintainability requirements and determine how they will be analyzed. There will be individuals assigned to oversee these tasks as well. Design for the incremental PWM system will begin this week to meet the ethics requirement ER002. The UI group will continue with their tasks as scheduled on the WBS. The Low Level group will begin testing the fans and will design the short

circuit prevention system as mentioned above. Also, we will meet with management to discuss how to revise the draft ATP. The UI group has a plan to design a possible error handling strategy. Lastly, we will look into shipping cost and how this might affect our budget.

### **Tasks Not Completed Last Week**

The tasks that were not completed on time were as follows. The PCB layouts were submitted a few days later than we expected. The time constants were not determined for the sensor circuits. And some of the low level circuits were not tested fully before the design was finalized and put on the PCB layout.

Please see the attached Labor Hours spreadsheet and meeting minutes.