

D009 – 1

To: Senior Management
From: Senior Design Class
Date: February 3, 2008
Subject: Weekly Status Letter 1

STATUS REPORT

The items completed were mostly research and organization. We created basic block diagrams of what the system should look like (see attached). We organized into three basic groups the software group, the networking group, and the low-level hardware group. We also created a basic timeline of the critical project dates.

Overall the main task for next week is to prepare for the PDR. This includes deciding what hardware to use, creating an interface document to know what signals are needed, and organizing subtasks for each group.

MEETING MINUTES

See attached for meeting minutes

ACTION ITEMS

For the low-level hardware group, the first weeks schedule consisted of two main action items. The first was to come up with an overall circuit topology consisting of block diagrams of the low level circuitry that will be the medium between the FPGA's and the actual track. The second action item was to start assigning requirements that needed to be met with different blocks in the topology. The first action item was met within the first week of work and meetings. The second action item is still in progress and will continue into the next week of work.

The next week's action items for the low level circuitry will consist of working on and completing the PDR, including a completed block diagram and testing plan. Also getting familiar with the different components of the track will be an action item for the coming up week. The last open action item is making a gant chart for the low level circuitry.

The action items completed by the networking group were mostly research oriented. The networking group researched possible network solutions (UDP vs. TCP) and hardware (FPGA vs. microcontroller).

For the networking group the main action item is deciding on hardware. We need to decide whether to use an FPGA or a microcontroller and from there specifically what

to use. Some ideas include the Spartan-3E, Ethernet, and Spartan-3E with microblaze. Once we decide hardware we will be able to break down the tasks and create a timeline.

As a group the software group decided our two major overall tasks are to design the user interface and to send out signals over the network. Some action items that need to be completed are to organize the interface to control the direction, speed and train position then sketch a working interface, to research different ways of sending packets and the standards associated, and to research the capabilities of FPGA.

LABOR HOUR REPORTS

Labor was broken down between the groups. The networking group spent 36 hours on researching products. The software group spent 25 hours. The low-level hardware group spent 41 hours.

Totals Per Individual:

Taha:	7 hours
Eric:	7 hours
Shrijan:	7 hours
Serdar:	8 hours
Emily:	7 hours
Tom:	7 hours
Evan:	7 hours
Mumo:	7 hours
Dan:	7 hours
Jeff:	7 hours
Alex:	6 hours
Jimmy:	7 hours
Hasan:	6 hours
Kelly:	6 hours
Austin:	6 hours