

prism

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# PROGRESS MEETING 2

To: Dylan Saunders  
*Southern Alberta Institute of Technology*

From: George Gueorguiev, Ben Chu, Steve Bergen, and Scott Hunter  
*insomnia design*

Prepared on Wednesday, March 7, 2007

**AGENDA**

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In this progress meeting we will discuss the following topics:

- Milestones reached:
  - ◆ Received PCB, began soldering
  - ◆ MAX7313 test board done
  - ◆ Atmel TWI programming for I<sup>2</sup>C mostly done
  - ◆ Final schematic almost ready to submit (microprocessor board)
- Milestones yet to be reached:
  - ◆ Complete soldering LED board
  - ◆ Receive and solder microprocessor board
  - ◆ Finalize AVR programming
  - ◆ Testing and debugging
  - ◆ Optional:
    - Design a decent variety of patterns for the show
    - Build an aluminum case to house the display

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**MILESTONES REACHED**

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So far, we have completed the LED board design, and have begun soldering it. This board should be good to go by the end of the day. Scott has been busy working on coding the ATmega16, and it seems to be at the point where it can communicate over the Two-Wire Interface (TWI) bus. Steve has been working on the final schematic, the one with the microprocessor and LED drivers. This design is about 90% done, and will be submitted by the end of this week. Ben has been actively updating the website on an almost weekly basis, and will continue to do so. George has been doing a seemingly unending amount of odd jobs and tasks, working in between the other group members, and offering assistance in whatever areas possible. Starting with next week, George should be more focused on working with Scott on programming the ATmega16.

Overall, we have had a few setbacks and slow work periods, but now that we have half of our boards, we're working at full speed again.

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**FUTURE MILESTONES**

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Steve has been soldering the LED board today, and as mentioned, it will hopefully be done by the end of the day. The 2<sup>nd</sup> board will be designed and submitted by the end of this week, with the intention of getting the board and soldering it next Wednesday. Scott says he is theoretically able to communicate on the TWI, and is currently resolving a way to send signals to the LED drivers, triggering LEDs to turn on and off. Of course, after we have a basic working program, we will spend time testing and debugging our device, ensuring it is ready for presentation. As for optional tasks, we are planning to leave much room in our project for expansion. Our physical design is modular, so other boards with different colored LEDs can be swapped in. The code will work the same way, so that more functionality can be added later, such as a variety of built in patterns, other than random. Also, Steve is hoping to have time left over to build a nice aluminum case for the project, making it even more presentable and closer to a ready-to-release product. As it stands, these optional jobs are not our focus, but getting it to work is.

With only a month left to go, time is getting increasingly precious, and stress levels are going up. Right now it feels as if we are a bit behind the level at which we want to be, but as long as we continue working at a full pace and experience few roadblocks, we'll have this project ready to unveil in April.

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