

WaitLess Bus Tracking System DK-2 Group status email: Due 2009 February 18

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Current Status

- We ordered a different WiFi module, which is more capable.
- We ordered case to hold everything.
- PCB design is almost complete. Bob House agreed to make the board for us.
- We are writing code and developing logic to light LEDs.
- We began putting together the battery and solar panel. Decided not to use the solar controller because it was rated at too high of current.
- Solar Panel is not providing the current it is advertised to provide so we are looking into that.

Task Status: Actions on last week's Action Items

1. Daniel is going to talk to Bob House about manufacturing our custom PCB.
 - Bob House agreed to do the board.
2. Matt will continue trying to reliably communicate with the Wi-Fi module. Will try to solder I2C LED Driver to DIP package so initial programming can be made to talk to it.
 - Soldered pins to LED Driver and made initial code that blinked the LEDs.
3. Josh will select a case and a vinyl sticker manufacture.
 - Selected a case from Fibox, and is on order.
4. Chris will look into ordering a different Wi-Fi module so that we can start programming it instead, because it might be easier.
 - Selected the Nano WiReach from Connect One, to replace the previous Roving Networks RN-111b wireless module. This should be a better module to program with better support for getting the XML feed.

Planned Tasks: Action Items for the upcoming week

- Daniel is going to finish the PCB layout on Thursday.

- Matt will continue programming the LED Drivers and figuring out how we are going address all the LEDs.
- Josh will select a vinyl sticker manufacture and update the LED location excel spreadsheet.
- Chris will write code for the new wireless module, so when it arrives some code is ready to try out.
- All of us plan to meet Tuesdays and Thursdays, at 4:30 to work on the project.

Problems

The Solar panel we have is rated at 5.5Watts at 12 Volts. However, initial testing in the lab showed the panel only providing 10mA of current at ~9Volts. We are not sure why it does not provide the correct current. We expected 450mA at 12 Volts since it is 5.5 Watts. We are going to try it outside when it is sunny and see what kind of current readings we get.

Because of the problems with the Wi-Fi module from Roving Networks, we selected a new Wi-Fi module and is on order.