Week 7
Anesthesia Monitoring System

Client Contact: Dr. McIsaac
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Weekly Progress

- Kane contacted Analog Devices and National Instruments regarding the LCD screen and Blackfin integration
- Timothy focused on the Solar 8000i anesthesiology machine
  - Began to modify a BIS LabVIEW program to suit our needs
- Nathan focused on the PDA and its integration with LabVIEW, and the control of the LCD screen by microprocessors
Weekly Progress, cont.

- National Instruments informed us that the LabVIEW front panel cannot be displayed on an LCD once the program is embedded on Blackfin.
- Began to look into alternate methods of displaying our data on an LCD
  - Multiple microprocessors to drive LCD screen
  - LCD display drivers
Weekly Progress, cont.

- Nathan began research into the timing of the LCD display and how to read timing diagrams.
- Important for programming LCD and ensuring that it is synchronized.
Weekly Progress, cont.

- Nathan also researched wireless communication with a PDA
  - IrDA is the most common wireless method used by PDAs
- Researched VIs that can integrate with PDAs
Timothy worked on new data acquisition program in LabVIEW
  - Adapted from BIS LabVIEW program

Determined that we need an RS422/RS232 converter.
  - $49.99 online

Timothy also worked with Biopac, but encountered problems with the software.
Future Work

- Use RS422/232 converter and the new LabVIEW programs to retrieve data from the Solar 8000i machine
- Obtain a PDA from Joseph McIsaac and integrate it with LabVIEW
- Obtain an LCD display and decide the best option for displaying information from Blackfin
Hours Worked

- Kane - 15
- Nathan - 18
- Timothy - 18