Accessible Infusion Pump User-Interface
Week 6/7
March 12, 2007
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Work Completed

Careful discussion was down within our design team in determining the appropriate choice for our recharging circuit. Instead of taking the Flatpac and BatMod module, and purchasing the Automatic 12V Battery Charger shown below (see Fig. 1). Since the DC output is 0.5 A, the recharging time would the 12V (3.4Ah) battery will be at least 4 hours.

![Automatic 12V Battery Charger](image)

Past two weeks our team has come to a difficult problem of determining a way of displaying the front panel of our LabVIEW program. My talk with Prof. Anastasio suggested going towards a cheaper approach and purchasing a daughter board for the ADSP-BF537 EZ-Kit Lite to allow the accessibility of displaying the front panel. The daughter board found for this feature is the Blackfin® EZ-Extender™ (see Fig. 2), which allows developers to connect the Parallel Peripheral Interface (PPI) on the ADSP-BF537 EZ-Kit Lite board via 32-pin, right angle FLZ-type connector.
Figure 2: Blackfin EZ-Extender™

Figure 3: ADSP-BF561 Blackfin EZ-Kit Lite Processor
Given the Blackfin EZ-Extender™ as one option, our other option is to purchase the ADSP-BF561 Blackfin EZ-Kit Lite Processor (see Fig. 3 - previous page), which will provide 3 RCA jacks for composite (CVBS), differential component (YUV) or S video (Y/C) input/output. This will potentially provide the video composite we need to display into our colored LCD display.

**Future Work**

After obtaining the ADSP-BF561 Blackfin EZ-Kit Lite Processor, which I believe will be easier for our application needed, we will be able to hopefully display our application after burning our LabVIEW program onto the Blackfin Processor. External inputs will need to be incorporated into the board via tactile buttons and our joystick. Finally, allowing the board to interface with the infusion pump stepper motor will need to be done.

**Project Review**

Once the needed processor is obtained, a lot of work need to be done in integrating all the features we need to successfully complete our project description. LabVIEW program is upon completion and burning the program onto the Blackfin processor will need to be done to progress with incorporating external inputs.

**Hours Worked**

15 hours