LED Backlight and Driver Project Overview

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Project Goals

- Continue development of an LED backlight and control system (from 2007-2008)
  - Review prior project to understand lessons learned and RGB color mixing
  - Define requirements for 7” and 19” LED back light units (BLUs) using white and RGB LEDs
  - Schematic capture and PWB layout for BLUs, including standard control interface
  - Modify existing PIC firmware for color mixer
  - Test boards

Project Status

This project is a continuation of a project from the 2007-2008 year.

- Color mixer firmware running in PIC
- Hand wired LED board made and tested
- Need to extend this to PWBs that can fit known LCD panels
- Need to build a controller on PWB that can handle standard 0-5V on/off and dimming controller 0-5V and PWM

Functional Positions

- System Architect / project lead – Understand our Djehuty™ system and LED issues; define design requirements and test parameters; assist other functions as needed
- Circuit Designer – Utilize DipTrace to perform schematic capture; define Bill of Materials
- Layout – Utilize DipTrace to layout a printed wiring board to implement design
- Firmware Engineer – Learn existing PIC firmware and extend it to handle control functions