*Projects and Stuff*

Chron

Project Log

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# 2012/05/19

This project is based loosely on work I did a few years ago. I made a clock from Hard Drive platters and LEDs. I loved the overall effect, but recently I was thinking that there are tons of similar materials that might make nice clocks, such as:

* Records
* Square or round sheets of plastics or metals
* Books
* Etc, etc

So I’m setting out to make a kit that will simplify making delightful LED clocks.

There will be at least two PCB variants: square and round, though I may make more than one size in either shape, depending on economics.

# 2012/07/03

The idea isn’t especially new, but it’s something I like, so I’ll make it.

The display will consist of an outer ring (or square) of 12 LEDs representing hours, and an inner ring (or square) of LEDs representing 5 minutes.

I have not yet decided whether to use battery or wall power. Also, would a specific LED color be ideal, or should I use RGB LEDs?

I’ll go ahead and make the determination now:

* LEDs will be single-color, though a future iteration may use RGB
* The colors chosen can be changed by the person populating the PCB. Just change out the current limiting resistors
* The clocks will be wall-powered via a standard wall-wart adapter or use USB power. Input power will likely be in the 7-12V range, using an LDO and filter caps.

Because nobody likes reinventing the wheel, the project will be based somewhat upon Mike Szczys’ Binary Burst Clock (<https://github.com/szczys/Binary-Burst-Clock>). I’ll be using the same basic components (MCP7940 Real time clock, ATTiny44 [one of my favorite AVRs], and the STP16CP05 LED Driver).

Unlike his project, though, mine will:

* not be restricted to USB
* have a more simple display
* contain the entire display on a board, rather than utilizing proprietary cables

Once again, this particular project is less about the technology, and more focused on being a platform for expression. For many years basic analog clock modules were available, and people made clocks from every material available. Some were better looking than others, but regardless, anyone could make a clock. That’s the idea here. Make a basic clock that can then be used in a number of projects and with a number of materials.