Hardware Hacker Guide to Linux

Last Updated on May 19th, 1998

Hardware Hacker?

This page is dedicated to showing off some of the ingenious ways in which Linux was used in conjunction with either off-the-shelf or custom, one-off pieces of hardware hacked together by someone to create a unique device.

There are things out there like in-car MPEG Layer 3 (MP3) players, LCD panels that show off system statistics, LED guages to show system status and more.

If you've got a lead or created such a device, feel free to Email me to have it featured on this page!

Please note that this page is currently under serious development. I'll be adding pictures of these various devices, along with home page links and additional information in the next few days.

On to the Good Stuff!

LCDproc

This ingenious bit of code allows you to attach a Matrix Orbital 20x4 backlit LCD screen to a free serial port and output a slew of system statistics like uptime, load, memory, time and date, etc. As with most hardware projects, to use this you need to purchase the LCD display, but unlike most projects, is complete out of the box, save for actual installation. The LCD display itself averages $70US.

In-Car MP3

This guy has too much time on his hands it would seem, but what he managed to hack together is way cool. It's an in-car Linux box tuned to play MPEG Layer 3 (MP3) audio files through your sound system. Let's face it, CD changers are kind of a bum steer because you're not always going like like *every* song on each CD, and even then you're limited to*x* number of CDs. With this beauty, you can upload up to 2.1GB of your favorite MP3 files to the internal 2.5" laptop hard drive for your cruising enjoyment!

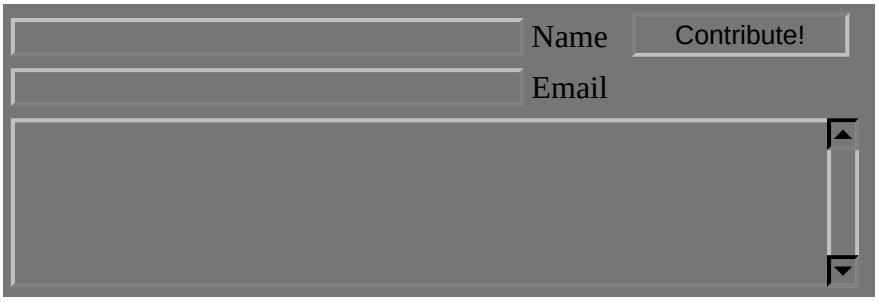
Wearable Computer

For the ultimate geek road warrior weapon, check this company out. They make a small, wearable computer that can run Linux. Their Web site doesn't offer much just yet (like a real picture!) but it's got the specs, etc. Pretty wild stuff.

Linux Controlled Car

Tired of driving? Aren't we all... Well, let Linux take the wheel on your next road trip with this neat setup! On one hand, it's good that Windoze isn't driving, or our insurance rates would go sky-high everytime it "crashed."

Living Web Page



Welcome t my **Living Web Page** The concep is to allow you to add the content so updates, new ideas and other contributio can be mad to it. This system doe not allow HTML!

Contributed by Michael Holve on 05/09/98

Hello everyone, welcome to the LWP - enjoy!

Contributed by Nameless on 05/11/98

My friend and I used Linux to grow pot! We hooked up the serial port of an old 386 to an off the shelf distributer device that controlled a water pump, a CO2 regulator, and a high pressure sodium light. We wrote an application in linux that allowed us to accurately schedule each device based on our targeted growth cycle. For example, during the first five weeks of vegetative growth, our linux box automatically turned the HPS light off for two hours a day. CO2 would be released for five seconds on the plants every two hours, and water/hydro solution pumped constantly until we would tell it to stop at the linux terminal (When it was time to change the solution). In our next crop, we plan to hook up a digital thermometer so that we can monitor the temperature in our grow room and have our linux gardener turn on fans to regulate the temp. Linux saved us a lot of manual labor, and helped produce a bumper harvest.

(MH NOTE) Now this is pretty cool. All you need now is an analog board to read the temperatures and other sensors, and have Gnuplot generate some nice graphs... :)

Contributed by Casey Dunn on 05/18/98

I've seen the MP3mobile - pretty sweet (a miata). I'm real interested in the LCD and the Grow system... I'd like to adapt it to my fish tank.

Contributed by Jonathan on 06/13/98

Hey nameless! I need to talk to you, i want to know some of the details of your project... Even though i dont smoke, that is the best use of linux I have ever seen.

Contributed by Justin Davies on 06/17/98

I'm thinking of building a small (PDA ?) running linux. I know this will be a big project, so I thought I could get some help from you guys, just email me if your interested or have any ideas to contribute. Jay

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