



Hacking USB on the Cheap with

USB-Tools with Kate Temkin, Mikaela Szekely, Great Scott Gadgets, and Friends

Current iteration: See CTF System

Getting Started & Materials

- Environment setup: setting up your machine to hack USB -- and run the exercises
- · Quick guide: flashing your target ('victim') boards
- Workshop Exercises and Mini-CTF Challenges

Workshop Materials

Differing events and timeslots mean we won't always make it through this list, but here's a rough order:

- 1: Slides: Introduction
- 2: Tutorial: Setting Up Your Environment
- 3: Demo: \$4 USB Analysis with Sigrok & PulseView
- 4: Slides: USB Control Requests: a firmware-ish view
- 5: Demo: Asking Devices to Describe Themselves
- 6: Exercise 1: Exploring Vendor Requests
- 7: Demos: A single solution to Excercise 1 and some more techniques.
- 8: Exercise 2: Mis-using USB
- 9: Demos: Demo buffet! As many cool things as we can show you in the time left.

Reference

- BeyondLogic's USB in a Nutshell
- USB 2.0 Specification
 - Chapter 9 (USB Device Framework) by itself, for your convenience
 - USB Document Search (can easily find classes+addenda)

Hardware and Software Tools

- GreatFET One/Azalea
- · USB Tools Repository
- · ViewSB USB Analyzer

- FaceDancer
- Sigrok: Logic Analyzer Software