Hacking with Hackerboxes

Category: Projects
May 3, 2026
Do you miss your soldering iron? Let’s face it, you know where it is, it just doesn’t get much use.

What if you could get a different kit every month that was simple to build, did something interesting, and was a microcontroller learning opportunity?

Hackerboxes.com is like a magazine. You can subscribe to it and rather than something to read, you get a small kit with all the parts. The kits involve firmware which is built on the commonly available (free) Arduino platform. Instructions guide you through everything you need to do to get the code loaded. You don’t have to write the code, but you can modify it to your specific wants.

These are some of the “issues” I’ve really enjoyed.

- An AI lab where a camera and LCD display are used to experiment with AI image recognition. The CPU includes vector instructions that accelerate AI processing.
- Do you know what the first personal computer was ever offered for sale. You’re wrong! It was the KENBAK-1. A reproduction (simulated) version of the computer was provided in Kit #101.
- #102 is a USB-based oscilloscope. It comes with parts to help experiment with analog circuits.
- #105 experimented with 2.4 GHz, 433, and 915 MHz radios.
- Learn about Bluetooth with kit #109. It uses the NRF52840 and ESP32 to implement audio streaming or digital control.
- #111 experiments with LoRa communication. It has two radios. One of which has an OLED display.

- #112 experiments with Circuit Python It implements an NES emulator with HDMI outputs.
- I liked #114, WOPR. The kit was meant to emulate the WOPR computer from the movie War Games. It's the width of a 19" rack. However, I use it as a Wi-Fi based sign where I can update the text with a web browser.
- #115 is a "war driving" module. What's that? It's a set of radios, along with GPS, that scan for Wi-Fi and Bluetooth signals. The information is then downloaded to a computer. They also include a Li-Ion 18650 batter board to power it or other things.
- Want to play with RFID? You need #107.
- The MCU lab, #121, is a nice little kit consisting of a base interface board and four different microprocessors with which to experiment.
- How's your health? #122 measures your ECG.
- #124 teaches you how to hack electronics.

A lot of the kits involve the Raspberry Pi Pico boards, my personal favorite. Many also involve versions of the ESP32 which is an absolutely amazing series of controllers. My career started with designing products using microcontrollers and microprocessors and yet I've learned a lot from these kits. Technological advancements in the past 15 years has resulted in impressive capabilities at very low costs.

Some of these kits are still available for $59. Subscribers pay $44 per month to receive their monthly kit.

It would be great fun if some FusionTechers joined up. That way we'd have something in common to discuss and help each other out. Just to level expectations, not all the kits have gone without issues. Some were my fault, others were not. There is a discussion board to post and answer questions. It would be even better to bring them up on FusionTech.

Check it out at HackerBoxes.com.