



Introduction to Hardware Hacking (Virtual) Workshop Agenda

Last updated: February 9, 2021

This half-day (4 hour) virtual workshop explores the hardware hacking process and the possibilities that exist to reverse engineer, manipulate, and/or compromise electronic systems. It combines material from [Joe Grand's Hardware Hacking Basics](#) training course and his most popular [hardware hacking presentations](#). Joe will provide live demonstrations of hardware hacking tools and techniques.

The workshop is intended to lay the foundation into the world of hardware hacking and reverse engineering. No prior hardware, electronics, or security knowledge is required.

A. Hardware Hacking Overview

1. Security concepts
2. Process and approaches

B. Product Teardown

1. Opening housings
2. Anti-tamper mechanisms
3. Component identification

C. Buses and Interfaces

1. Signal monitoring and analysis
2. Debug interfaces
3. Advanced techniques (fault injection, side channels)

D. Memory and Firmware

1. Data extraction
2. Bypassing security/code protection
3. Firmware analysis

E. Supply Chain and Espionage

1. Overview of threat vectors
2. Hardware implants
3. Covert channels/data exfiltration