

## Project #6: Building a HAT (Hardware Attached on Top)

**Idea:** Design and build open hardware attached on top of a Raspberry Pi for a specific application/purpose (get some inspiration e.g. from the Raspberry Pi projects books).

**Goals:**

- Design and create hardware specification, build functioning hardware
- Learn about open hardware
- Learn about Raspberry Pi/Arduino ecosystem

**Difficulty:** Easy/Medium/Difficult/Research level

**Subjects:** open hardware, open software

**Deliverables:**

- Hardware specification
- Software and/or drivers (e.g. on GitHub)
- Documentation

**Requirements and costs:**

- Hardware, software, etc.

**Milestones:**

1. Define specification/purpose/application
2. Design and build hardware
3. Write drivers/software and experiment with interesting applications

**Estimation:**

**References:**

- Raspberry Pi Projects Book (<https://www.raspberrypi.org/magpi/issues/projects-1/>)



This work is licensed under a Creative Commons [Attribution-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/) License.