

# # CircuitPython Weekly Meeting for September 30, 2024

*Welcome to the CircuitPython Weekly meeting notes! Feel free to add your Hug Reports and Status Updates before the meeting, alphabetically by your username. During the meeting, we go through them in order. If you can't make the meeting and would still like to participate, add your notes with a "(missing meeting)" after your username and we'll read them off for you.*

*Add any longer-form discussion topics or general questions you have to the "In the weeds" section.*

*Thanks! We hope to see you in the meeting!*

**Scott is hosting.**

Video is available [on YouTube]().

Join here for the chat all week: <http://adafru.it/discord>.

The CircuitPython Weekly Meeting normally is held at 2pm US ET/11am PT on Mondays. Check the #circuitpython channel on Discord for notices of change in time and links to past meetings. Meeting times are also available in [iCal format](<https://raw.githubusercontent.com/adafruit/adafruit-circuitpython-weekly-meeting/master/meeting.ical>) for use with standard calendar applications and can also be viewed [in your browser](<https://open-web-calendar.hosted.quelltext.eu/calendar.html?url=https%3A%2F%2Fraw.githubusercontent.com%2Fadafruit%2Fadafruit-circuitpython-weekly-meeting%2Fmain%2Fmeeting.ical&title=CircuitPython%20Meeting%20Schedule&tab=agenda&tabs=month&tabs=agenda>).

If you want to be able to participate in the meeting by speaking, you will need to be added to the @circuitpythonistas role on Discord. Please ask any of the moderators or admins to add you if you'd like to join.

CircuitPython development is sponsored by Adafruit. Please support them by purchasing hardware from <https://adafruit.com>.

Reminders: Podcast available on most services. Let us know if we're missing some. The canonical URL for the podcast version is [https://adafruit-podcasts.s3.amazonaws.com/circuitpython\\_weekly\\_meeting/audio-podcast.xml](https://adafruit-podcasts.s3.amazonaws.com/circuitpython_weekly_meeting/audio-podcast.xml) which you may be able to enter directly into compatible podcast apps.

## ## Community News

### ### Adafruit Grand Opening in Industry Center, Brooklyn, New York

On September 20th, Adafruit had a grand opening in their new Brooklyn, New York factory at [Industry City](<https://blog.adafruit.com/2024/08/08/adafruit-industry-city/>). A special thanks to the President of the Brooklyn Chamber of Commerce, the Managing Director of Industry City, and the Vice President of Partnerships at the NYC EDC - [X](<https://x.com/adafruit/status/1837876968366239774>).

\*A quick reminder that Adafruit doesn't have a store or tours, they're just making cool products in their factory that you order online.\*

### ### 3:50 MicroPython Memory Profiler

[Planet Innovation](<https://planetinnovation.com/>) has released the MicroPython Memory Profiler under an open MIT license. It's an in-house tool originally written mostly by Damien George (MicroPython's creator) for a project where fragmented memory was an issue when running a device for many hours/days - [GitHub](<https://github.com/pi-mst/micropython-memory-profiler>).

### ### Adafruit on the Open Source Hardware Association Show and Tell event – Oct 2nd, 6:40 PM US Eastern

Adafruit will be part of the [Open Hardware Association](<https://www.oshwa.org/>)'s Show and Tell on Wednesday, October 2nd, 2024, at 6:40 PM US Eastern time! Right before the Adafruit weekly Show and Tell, and ASK an Engineer! It's a triple header of open-source! You'll be able to watch and participate live - [video](<https://youtu.be/L6jIMzSJioc>) and [blog post](<https://blog.adafruit.com/2024/09/24/adafruit-on-the-open-source-hardware-association-show-and-tell-event-oct-2nd-640-pm-edt-openoct/>).

Join the Adafruit team live as they discuss latest projects, share how open-source has shaped their cause and business, and showcase some of the incredible things that have been open-source hardware certified. You'll also get a behind-the-scenes look at the new Adafruit factory in Industry City, Brooklyn, NY – USA and the tools in use - [Adafruit](<https://www.adafruit.com/press>).

This will part of the [OSHW open-hardware month](<https://ohm.oshwa.org/>) 24 hour livestream, where you can check in with open-source creators and groups around the world to celebrate all things open! Lee and Sid will be there from OSHWA to host, and answer any viewer OSHWA related questions - [Open Hardware Month](<https://ohm.oshwa.org/>).

### ### 5:20 Newsletter Details

The Python on Microcontrollers Weekly Newsletter is a CircuitPython-community-run newsletter emailed every Monday. The complete archives are [here](https://www.adafruitdaily.com/category/circuitpython/). It highlights the latest Python on hardware related news from around the web including CircuitPython, Python and MicroPython developments.

To contribute your own news or project, edit next week's draft [on GitHub](https://github.com/adafruit/circuitpython-weekly-newsletter/tree/gh-pages/\_drafts) and [submit a pull request](https://help.github.com/articles/editing-files-in-your-repository/) with the changes. You may also email [cpnews@adafruit.com](mailto:cpnews@adafruit.com), or tag a post with #CircuitPython on Mastodon, Bluesky, or X (formerly known as Twitter),.

## ## 6:02 State of CircuitPython, Libraries and Blinka

**\*\*This report contains information from the previous seven days. Any changes (PRs merged, etc.) made today are not included in this report.\*\***

### ### 6:20 Overall

- \* 15 pull requests merged
  - \* 12 authors - FoamyGuy, samblenny, tannewt, andibing, dhalbert, sanhu88, RetiredWizard, SeanCline, eric321, wtuemura, jepler, weblate
  - \* 4 reviewers - jepler, FoamyGuy, tannewt, dhalbert
- \* 7 closed issues by 4 people, 16 opened by 15 people
- \* Assigned Hacktoberfest label to 0 issues.

### ### 6:55 Core

- \* 9 pull requests merged
  - \* 10 authors - **samblenny**, tannewt, andibing, **sanhu88**, RetiredWizard, **SeanCline**, **eric321**, wtuemura, jepler, weblate
  - \* 3 reviewers - dhalbert, jepler, tannewt
- \* 22 open pull requests
  - \* <https://github.com/adafruit/circuitpython/pull/7675> (Open 576 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/7811> (Open 550 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/8233> (Open 428 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/8457> (Open 363 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/8647> (Open 313 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/9009> (Open 208 days)
  - \* <https://github.com/adafruit/circuitpython/pull/9094> (Open 187 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/9238> (Open 141 days) (draft)
  - \* <https://github.com/adafruit/circuitpython/pull/9245> (Open 138 days) (draft)

- \* <https://github.com/adafruit/circuitpython/pull/9349> (Open 103 days)
- \* <https://github.com/adafruit/circuitpython/pull/9385> (Open 91 days)
- \* <https://github.com/adafruit/circuitpython/pull/9483> (Open 54 days) (draft)
- \* <https://github.com/adafruit/circuitpython/pull/9550> (Open 38 days)
- \* <https://github.com/adafruit/circuitpython/pull/9559> (Open 37 days)
- \* <https://github.com/adafruit/circuitpython/pull/9581> (Open 30 days) (draft)
- \* <https://github.com/adafruit/circuitpython/pull/9640> (Open 12 days) (draft)
- \* <https://github.com/adafruit/circuitpython/pull/9650> (Open 7 days)
- \* <https://github.com/adafruit/circuitpython/pull/9656> (Open 6 days)
- \* <https://github.com/adafruit/circuitpython/pull/9659> (Open 5 days) (draft)
- \* <https://github.com/adafruit/circuitpython/pull/9667> (Open 2 days)
- \* <https://github.com/adafruit/circuitpython/pull/9672> (Open 0 days)
- \* <https://github.com/adafruit/circuitpython/pull/9671> (Open 0 days)
- \* 3 closed issues by 2 people, 7 opened by 7 people
- \* Assigned Hacktoberfest label to 0 issues.
- \* 743 open issues
  - \* <https://github.com/adafruit/circuitpython/issues>
- \* 8 active milestones
  - \* 10.0.0: 11 open issues
  - \* 9.1.x: 1 open issues
  - \* 9.2.0: 9 open issues
  - \* 9.x.x: 36 open issues
  - \* Libraries: 22 open issues
  - \* Long term: 633 open issues
  - \* Support: 16 open issues
  - \* Third-party: 14 open issues
  - \* 1 issues not assigned a milestone

### ### 8:00 Libraries

- \* 5 pull requests merged
  - \* 3 authors - dhalbert, jepler, FoamyGuy
  - \* 3 reviewers - dhalbert, jepler, tannewt
  - \* Merged pull requests:
    - \* [https://github.com/adafruit/Adafruit\\_CircuitPython\\_PIOASM/pull/72](https://github.com/adafruit/Adafruit_CircuitPython_PIOASM/pull/72) (Days open: 4)
    - \* [https://github.com/adafruit/Adafruit\\_CircuitPython\\_MIDI/pull/58](https://github.com/adafruit/Adafruit_CircuitPython_MIDI/pull/58) (Days open: 1)
    - \* [https://github.com/adafruit/Adafruit\\_CircuitPython\\_PyCamera/pull/41](https://github.com/adafruit/Adafruit_CircuitPython_PyCamera/pull/41) (Days open: 1)
    - \* [https://github.com/adafruit/Adafruit\\_CircuitPython\\_ESP32SPI/pull/213](https://github.com/adafruit/Adafruit_CircuitPython_ESP32SPI/pull/213) (Days open: 1)
    - \* [https://github.com/adafruit/Adafruit\\_CircuitPython\\_ESP32SPI/pull/212](https://github.com/adafruit/Adafruit_CircuitPython_ESP32SPI/pull/212) (Days open: 1)
  - \* 41 open pull requests (Oldest: 774, Newest: 1)
- \* 4 closed issues by 3 people, 7 opened by 7 people
- \* Assigned Hacktoberfest label to 0 issues.
- \* 891 open issues
- \* 102 good first issues

\* <https://circuitpython.org/contributing>

#### #### 11:15 Library PyPI Weekly Download Stats

##### \* \*\*Total Library Stats\*\*

\* 399896 PyPI downloads over 333 libraries

##### \* \*\*Top 10 Libraries by PyPI Downloads\*\*

\* Adafruit CircuitPython Requests (adafruit-circuitpython-requests): 19362

\* Adafruit CircuitPython BusDevice (adafruit-circuitpython-busdevice): 17756

\* Adafruit CircuitPython ConnectionManager (adafruit-circuitpython-connectionmanager):  
16032

\* Adafruit CircuitPython MiniMQTT (adafruit-circuitpython-minimqtt): 4060

\* Adafruit CircuitPython Wiznet5k (adafruit-circuitpython-wiznet5k): 3853

\* Adafruit CircuitPython Register (adafruit-circuitpython-register): 3837

\* Adafruit CircuitPython ESP32SPI (adafruit-circuitpython-esp32spi): 3762

\* Adafruit CircuitPython Display Text (adafruit-circuitpython-display-text): 3568

\* Adafruit CircuitPython Seesaw (adafruit-circuitpython-seesaw): 2705

\* Adafruit CircuitPython ADS1x15 (adafruit-circuitpython-ads1x15): 2663

#### #### 11:33 Library updates in the last seven days:

##### \* \*\*Updated Libraries\*\*

\*

[adafruit/Adafruit\_CircuitPython\_Register]([https://github.com/adafruit/Adafruit\\_CircuitPython\\_Register](https://github.com/adafruit/Adafruit_CircuitPython_Register))

\* [buildwithpiper/PiperBlocklyLibrary](<https://github.com/buildwithpiper/PiperBlocklyLibrary>)

#### ### 11:42 Blinka

\* 1 pull requests merged

\* 1 authors - tannewt

\* 1 reviewers - FoamyGuy

\* 8 open pull requests

\* [https://github.com/adafruit/Adafruit\\_Blinka\\_bleio/pull/40](https://github.com/adafruit/Adafruit_Blinka_bleio/pull/40) (Open 1088 days)

\* [https://github.com/adafruit/Adafruit\\_Python\\_PlatformDetect/pull/335](https://github.com/adafruit/Adafruit_Python_PlatformDetect/pull/335) (Open 276 days) (draft)

\* [https://github.com/adafruit/Adafruit\\_Blinka/pull/884](https://github.com/adafruit/Adafruit_Blinka/pull/884) (Open 47 days) (draft)

\* [https://github.com/adafruit/Adafruit\\_Blinka\\_Displayio/pull/140](https://github.com/adafruit/Adafruit_Blinka_Displayio/pull/140) (Open 43 days)

\* [https://github.com/adafruit/Adafruit\\_Blinka/pull/888](https://github.com/adafruit/Adafruit_Blinka/pull/888) (Open 30 days)

\* [https://github.com/adafruit/Adafruit\\_Blinka/pull/894](https://github.com/adafruit/Adafruit_Blinka/pull/894) (Open 12 days)

\* [https://github.com/adafruit/Adafruit\\_Blinka/pull/897](https://github.com/adafruit/Adafruit_Blinka/pull/897) (Open 6 days)

\* [https://github.com/adafruit/Adafruit\\_Python\\_PlatformDetect/pull/369](https://github.com/adafruit/Adafruit_Python_PlatformDetect/pull/369) (Open 6 days)

\* 0 closed issues by 0 people, 2 opened by 2 people

\* Assigned Hacktoberfest label to 0 issues.

- \* 109 open issues
  - \* [https://github.com/adafruit/Adafruit\\_Blinka/issues](https://github.com/adafruit/Adafruit_Blinka/issues)
  - \* PyPI downloads in the last week: 29530
  - \* Piwheels Downloads in the last month: 18993
- Number of supported boards: 146

## ## 12:40 Hug reports

12:56 @tannewt

- @Brandon-Hurst at ADI for making a PR to CircuitPython for MAX32690 support.

13:26 @danh

- @tannewt for doing most of the work of updating to the new ESP-IDF I2C driver.
- @jepler for careful review of my i2C driver update PR
- @samblenny for core contributions
- @RetiredWizard for code cleanups

14:14 @foamyguy

- @johnnohj for sharing some good resources on finding points along a line
- @danh for cleaning up some leftover server files in the esp32spi library

14:44 @jepler

- @danh for working on the espressif i2c update and everything that touches
- Group hug

15:09 @samBlenny (text only)

- @tannewt and @danh for help with PRs for USB stuff

## ## 15:28 Status Updates

15:40 @tannewt

- Continuing work on CircuitMatter. Currently establishing a \*certificate\* based secure channel. This is the (hopefully) later part of commissioning a new device. This is the same process as re-joining after a reset.
- Attestation and node operational credentials are being received.
- Added IO4 and IO7 to Feather RP2350 board to match silk screen.

17:08 @danh

- I made a PR for Espressif to update to the new I2C driver. Scott had written most of the code already. The esp32-camera library had just been updated to support the new library. But the camera did not work after putting both updates together. After a lot of

debugging, found out the problem was a bug in the updated camera driver, not any bug in the new I2C driver. A 16-bit value was being byteswapped twice instead of once.

- The new I2C driver also appears to fix several open Espressif I2C issues, including with seesaw.
- There are about eight more issues to address for CircuitPython 9.2.0.

19:50 @foamyguy

- Working on Adabot actions to skip pushing updates to bundles if the bundles aren't able to be built successfully. Can't easily test it in the "real" environment, but in the testing I can do it seems to be successfully blocking now in the PR that I submitted.
- Adabot PR is failing actions from some of the tests failing. I believe it's unrelated to the bundle build test job but I am digging further to try understand the root cause and get the tests back to passing.
- Started displayio based Spirit Board project, well known by the trademarked name "Ouija" board.
  - Instead of spirits, the messages are received from adafruit.io. You can set your message ahead of time and then play with friends and family
  - Current version is on PyPortal Titano, but I intend to make versions for the standard Pyportal, and perhaps for the TFT Featherwings that have the same sizes as those respective pyportals
  - Implemented some displayio helpers for it to make use of: AnchoredTilegrid which has anchor\_point and anchored\_position like the ones from display\_text. And a slide() function that moves a tilegrid from one location to another along a line.

22:12 @jepler

- Finished my long rp2350 checklist. Things are in good shape for this new mcu
- Working on ps2io
- On deck is working on an "audio fx" like code.py for circuitpython
- Did a countdown project for myself to exercise e-ink & deep sleep (esp32-s3 feather)

24:57 @Mark[gamblor] (may be missing)

- Did a lot of clean-up on audio effect processing so I have a template for other effects
- Starting adding more commenting to guide others if they want to add an effect
- Plan to review everything again. Close to coming out of draft.

25:48 @samBlenny (text only)

- Working on improving exception handling for quirky USB devices

## 26:02 In The Weeds

## ## 26:10 Wrap-Up

- Next meeting as usual on 10/7.