

Linux Plumbers Conference 2024



Contribution ID: 34

Type: **not specified**

Complex Cameras MC

CFP closes on July 15th.

The camera hardware landscape has undergone a dramatic transformation, moving from simple frame producers to highly configurable and programmable systems. Unfortunately, open-source camera software has struggled to keep pace, creating a bottleneck that hinders innovation and limits the potential of modern camera technology.

This microconference will bring together key stakeholders to address the urgent challenges and opportunities in open-source camera software development.

Call for Proposals:

We invite proposals for topics in the following and related areas:

- What kind of Kernel API is required for Complex Cameras?
- What level of hardware documentation do we require from vendors?
- In which kernel subsystems should Complex Cameras reside?
- How shall the camera stack interact with other subsystems like NPUs/GPUs?
- What does the perfect camera software stack look like?
- How can we support dual camera stacks (open and proprietary) on top of a single upstream kernel driver? Can we support non-open features?
- How can we allocate/share memory efficiently between the different subsystems?

Who Should Attend:

- Kernel developers
- ISP vendors
- OEMs
- Camera software developers
- Linux distribution maintainers

Microconference Format:

The microconference will consist of short discussion topics, introduced and moderated by the participants. Each topic lead is expected to prepare a short presentation that will be shared with all the attendees in advance so we can use the Micro Conference for questions and face to face discussions.

After the conference we will divide in smaller working groups.

Submission Deadline: 15th July 2024

We look forward to your contributions in making complex cameras a reality in Linux!

Primary authors: RIBALDA, Ricardo (Google); PINCHART, Laurent (Ideas on Board Oy)

Track Classification: LPC Microconference Proposals