

Technical Newsletter 2024-03-01

Volume: 11

News from TSC, ARC, ICs, HCs, SIGs and TGs

Architecture Review Committee (ARC)

Meeting Minutes

• The ARC met on February 20th, 2024. The minutes are available here.

News from the CTO Office

RISC-V Software Ecosystem Dashboard

We here within the RISC-V International team together with our partners have made the Enablement of the Software Ecosystem one of our top priorities. To that end we have created a Software Ecosystem Enablement Dashboard whereby we are tracking the top applications that are pivotal to the success of a robust software ecosystem that will meet end customer needs. This is the first draft of this list which isn't the definitive list of what is enabled at this point. Over time this list is going to be expanded to cover all of the important important software applications that are required in order to build out a healthy and robust software ecosystem.

This dashboard is live and available for your review at tech.riscv.org/software-ecosystem.

If you have suggestions around applications that should be considered for future inclusion please submit them here.

RISC-V Labs

The RISC-V Labs Program is pleased to announce that 10xEngineers have met the Labs Policy criteria to become the first partner to be fully certified and display the logo. 10xEngineers have created the Cloud-V Lab which offers both sandboxes and CI infrastructure.

To learn more about other cloud resources available to RISC-V software developers and explore becoming a Lab Partner, visit RISC-V Labs.

Congratulations, 10xEngineers and thank you for all of your RISC-V contributions.

Groups

New Groups

• The formation of the Platform Management Interface (RPMI) Task Group was approved by the TSC. The TG will now prepare to present its Plan to Tech Chairs.

Call for Candidates

The following are the open calls for Chair/Vice-Chair candidates:

SIGs

- Android
- · Debug, Trace and Performance Monitoring

- Documentation
- Functional Safety
- HPC
- HyperVisor
- Microarchitectural Side Channels
- Performance Analysis
- · Performance Modeling
- Runtime Integrity
- SoftCPU
- Toolchain
- Trusted Computing

TGs

- CoVE (AP-TEE)
- Control Transfer Records (CTR)
- Fast Interrupt
- Integrated Matrix Extension
- | Extension
- IOPMP
- Microarchitecture Side-Channel Resistant Instruction Spans
- N-Trace (Nexus)
- Platform Runtime Services (PRS)
- S-Mode Physical Memory Protection (SPMP)
- Shadow Stack and Landing Pads
- Security Model

Target Dates

Here are the target dates for the election process:

- All calls must have commenced by Friday, February 23rd.
- Closure of Calls: Friday, March 8th.
- Completion of Voting/Selections: Friday, March 29th.

Nominations

If you want to nominate yourself or someone else, please email help@riscv.org.

Extensions

Recently Approved Plans

• Fast-Track: Zalasr, Load-Acquire/Store-Release Plan was approved by Chairs on Feb 14th, 2024. The extension is now under development.

Extensions Under Public Review

- Byte and Halfword Atomic Memory Operations. End date: **2024-03-06**. The link to the announcement can be found here.
- B Extension Components. End date: **2024-03-22**. The link to the announcement can be found here.
- A Extension Components. End date: **2024-03-27**. The link to the announcement can be found here.
- RAS Error Record Interface (RERI). End date: **2024-03-29**. The link to the announcement can be found here.

Extensions Ratified

• Indirect Control and Status Register (CSR) Access. The extension was ratified on Feb 22nd, 2024.

Votes

TSC

• Send the May-Be-Ops Fast Track Extension to the Board for Ratification. Jira. End date: 2024-03-13. The link to the text of the voting can be found here. The OpaVote can be found here.

HC & IC Committees

• Freeze Milestone for Eliding Memory-management Fences Fast Track Extension. Jira. End date: 2024-03-06. The link to the text of the voting can be found here. The OpaVote can be found here.

Technical Resources

Active ICs, HCs, SIGs and TGs

You can find the list of active ICs, HCs, SIGs and TGs at tech.riscv.org/groups.

Extensions Under Developmment

The status of extensions under development is available at tech.riscv.org/extensions.

Jira@RISC-V

We are moving to Jira to manage the specification development process and groups lifecycle. The Jira@RISC-V instance is available at jira.riscv.org. We are currently in the process of migrating the existing issues to Jira but would like to invite you to access it using your Linux Foundation account. No other action is required at this time.

Technical Meetings Calendar Adjusted to Your Local Time Zone

The RISC-V Technical Meetings Calendar is available in your own timezone here.

One-stop-shop for RISC-V Technical Meetings

The RVI Technical Staff is consolidating all key information for meetings in a single place. The RISC-V Technical Meetings page is a one-stop-shop for all RISC-V technical meetings. It includes guidelines, tutorials, and more. The page is still under development, so please send us your feedback via help@riscv.org.

Etherpad

Etherpad, a real-time browser-based editor where users can co-edit documents instantly, is available. No login needed. Etherpad should not store permanent content. To access Etherpad, click on the here. Pads are reusable, so feel free to use the same pad for multiple meetings.

Technical Sessions

Tech Sessions on YouTube

We are uploading all Technical Sessions to the RISC-V YouTube channel. You can find the playlists for the 2023 Sessions here. The 2024 Sessions are available here.

Upcoming Events

 Hot Chips 2024. The Hot Chips 2024 Call for Presentations info just went live on the Hot Chips web site.

The event will be held as a hybrid conference with in-person attendance at Memorial Auditorium, Stanford University from August 25 to 27, 2024.

The nominal submission deadline (March 22nd) will almost certainly be extended. Please contact Dave Weaver (david.weaver@akeana.com) if you want to specifically request an extension.

Note that **having silicon** is not a requirement for a Hot Chips presentation. In fact, presentations about IP products, cooling technology, software tools, etc, etc are welcome (see suggested topic list, which is not meant to be exhaustive, on the web page). Any topic that "sounds interesting & relevant to the Program Committee" can be accepted.

- RISC-V Summit Europe: June 24-28, 2024, Munich, Germany.
- Open Source Summit North America: April 16-18, 2024, Seattle, Washington.

Glossary

• TSC: Technical Steering Committee

• ARC: Architectural Review Committee

• IC: ISA Committee

• HC: Horizontal Committee

• **SIG**: Special Interest Group

• TG: Task Group

Newsletter Contributions

To submit a topic for the Technical Newsletter, click here. Be sure to carefully read the submission guidelines!

Contact Information

For any queries, visit help.riscv.org or email us at help@riscv.org.



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