# **Technical Newsletter**

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2024

## 2023

- Apr 27th, Volume 15 (riscv-tech-newsletter-20240427.pdf| GitH ub Release)
- Apr 13th, Volume 14 (riscv-tech-newsletter-20240413.pdf | Git Hub Release)
- Mar 30th, Volume 13 (riscv-tech-newsletter-20240330.pdf| Git Hub Release)
- Mar 15th, Volume 12 (riscv-tech-newsletter-20240315.pdf| Git Hub Release)
- Mar 01st, Volume 11 (riscv-tech-newsletter-20240301.pdf| GitH ub Release)
- Feb 16th, Volume 10 (riscv-tech-newsletter-20240216.pdf| Git Hub Release)
- Jan 29th, Volume 9 (riscv-tech-newsletter-20240130.pdf| GitH ub Release)
- Jan 12th, Volume 8 (riscv-tech-newsletter-20240112.pdf| GitH ub Release)

- All 2023 Volumes(RISCV\_Tech\_Newsletters\_2023.zip)
- Dec 29th, Volume 7+ (riscv-tech-newsletter-20231229.pdf| Git Hub Release)
- Dec 15th, Volume 7 (riscv-tech-newsletter-20231215.pdf| GitH ub Release)
- Dec 1st, Volume 6 (riscv-tech-newsletter-20231201.pdf| GitHu b Release)
- Nov 17th, Volume 5 (riscv-tech-newsletter-20231117.pdf | GitH ub Release)
- Nov 3rd, Volume 4 (riscv-tech-newsletter-20231103.pdf| GitHu b Release)
- Oct 13th, Volume 3 (riscv-tech-newsletter-20231013.pdf | GitH ub Release)
- Oct 6th, Volume 2 (riscv-tech-newsletter-20231006.pdf | GitHu b Release)
- Sep 29th, Volume 1 (riscv-tech-newsletter-20230929.pdf | GitH ub Release)
- Sep 15th, Pilot (riscv-tech-newsletter-20230915.pdf | GitHub Release)

### **Submission Guideline**

Contributions to our twice-monthly tech newsletter are strongly encouraged by chairs and vice-chairs of HCs, ICs, TGs, SIGs, and RISC-V staff.

To submit a new entry for the newsletter, ensure you are part of the "risc v-members" at GitHub. You can easily verify if you are part of that by clicking here (select GitHub, type your GitHub user and press Search).

### **Audience & Writing**

Considering our diverse audience, which includes both technical and non-technical individuals, all content should be concisely explained and, if appropriate, include a reference to where more information can be found. This ensures that the newsletter remains both accessible and valuable to all.

In other words, submissions should be crafted in a clear and concise manner, including links to external sources for additional context or indepth understanding.

### A 300-character limit submission is recommended

#### **Example Submissions for All**

- For the transactional security extension, two alternative proposals were introduced, one of which is closer to existing industry architectures while the other has a more novel architecture but might offer better future scalability. See lively discussion of the pros and cons of the two alternatives on the email thread here: ...
- Agreement was reached on the final set of extensions to include in the matrix crypto extension ratification package. See updated spec at Git Hub:
- The rotate-up instruction was removed from the draft nibble-manipulation extension as it was found to almost entirely duplicate existing functionality, and the few cases that were novel were not deemed important enough to justify inclusion. Thread at:...
- A backward-incompatible change to machine-mode register misa was proposed for priv 1.23. The change is considered unlikely to affect implementations or software but discussion is continuing at: thread...

#### **Example Submissions for Specification Owners**

- Work has started on the post quantum cryptography (PQC) extensions specification. Join us in PQC Task Group (link) if you'd like to participate.
- The post quantum cryptography extensions specification has been posted for internal review on September 15, 2023 to the tech-announce
  mailing list. The review ends on September 29, 2023. See the announcement post (link) for details on how to participate in the review or join
  us in the PQC Task Group (link).
- The Post Quantum Cryptography specification has completed Architecture Review, been Frozen, and was posted for Public Review review on January 7, 2024 to the tech-announce mailing list. The 30-day review ends on February 6, 2023. See the announcement post (link) for details on how to participate in the review or join us in the PQC Task Group (link).
- The Post Quantum Cryptography specification has been approved by all Committee Chairs, the TSC, and the RISC-V Board of Directors on June 3, 2024. Thank you to the PQC Task Group, the Security Horizontal Committee, the Unprivileged ISA Committee, and to all who contributed.

Please note that the RISC-V Staff will be ensuring that following events are submitted and included, space permitting:

• Task Group approval by the TSC

- Call for Candidates for all positions
- SAIL feature submission and acceptance
- Development Partner, Development Boards, and Labs accomplishments

### **Submissions**

Submit your entries during the opensubmission phase in the first week of each biweekly cycle. Ensure your contributions align with the twice-monthly publication schedule of the newsletter.

# **Topics**

Topics can vary widely, from key and/or contentious technical discussions and conclusions, to major specification releases, hot topics, notable updates, notable upcoming discussion topics, and AR reviews. These serve to keep our community updated on a range of relevant issues. These should not include mundane status updates or minutia.

The technical topics will be grouped by the relevant HC/IC committee to help readers find relevant material.

## **Moderation**

The entries will be moderated by the appropriate HC/IC committee chairs and RISC-V staff.