Linux Plumbers Conference 2025



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RISC-V MC

We'd like to propose bringing back the RISC-V Microconference at Linux Plumbers 2025. As the RISC-V ecosystem continues to grow, so does the importance of having a space where developers, hardware vendors, toolchain maintainers, and distro folks can come together to solve real-world problems. This microconference has always been a great venue for open, technical discussions that help move RISC-V Linux support forward —from core architecture work to platform enablement and userspace coordination. In general, anything that touches both Linux and RISC-V is fair game, but the conversation often centers around a few common themes we have been following:

Supporting new RISC-V ISA features in Linux, especially vendor-specific or upcoming standardized extensions Enabling RISC-V-based SoCs, which often involves working across various Linux subsystems in addition to the core arch/riscv code

Coordinating with distributions and toolchains to ensure consistent and correct userspace-visible behavior Possible Topics

It's still early to lock down a full agenda, but a number of topics have been circulating on the various mailing lists lately are:

The issues with WARL discovery

Why CFI is not merged yet (if not merged by then)

ACPI enablement progress and remaining gaps (e.g ACPI WDAT watchdog)

How to handle RVA profiles in Linux kernel ? QoS

Key Stakeholders

Sorry if I missed anyone, but here's a quick list of folks who've regularly shown up and helped keep the conversation moving at past RISC-V MC:

RISC-V contributors: Palmer, Atish, Anup, Conor, Sunil, Charlie, Bjorn, Alex, Clément, Andrew, Deepak — and probably a few more I'm forgetting.

SoC folks: Arnd, Conor, Heiko, Emil, Drew —with more SoC families bringing up RISC-V support, this group keeps expanding.

We've also consistently had great input from contributors across other architectures like arm, arm64, ppc, mips, and loongarch. Since we all end up touching shared code (especially in areas like drivers or platform support), these cross-arch discussions have been super valuable —and we expect even more of that this year as shared SoC platforms become more common.

Accomplishments post 2024 Microconference

Ftrace improvements [1]

System MSI support [2]

RIMT patches available on lore[3]

CFI series is at v17 [4]

 $\label{eq:linear} \ensuremath{\left[1\right]} https://lore.kernel.org/linux-riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.git-patchwork-notify@kernel.org/#riscv/174890236299.git-patchwork-notify@kernel.org/#riscv/174890236299.git-patchwork-notify@kernel.org/#riscv/174890236299.925497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.92497.5731685320676689356.git-patchwork-notify@kernel.org/#riscv/174890236299.git-patchwork-notify@kernel.org/#riscv/174890236299.git-patchwork-notify@kernel.org/#riscv/#ris$

[2] https://lore.kernel.org/linux-riscv/20250611062238.636753-13-apatel@ventanamicro.com/

[3] https://lore.kernel.org/linux-riscv/20250610104641.700940-1-sunilvl@ventanamicro.com/

[4] https://lore.kernel.org/linux-riscv/20250604-v5_user_cfi_series-v17-0-4565c2cf869f@rivosinc.com/#r

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