ISCAS 中国科学院软件研究所 Institute of Software Chinese Academy of Sciences

OpenEuler

Discord

The Road to Making openEuler a RISC-V Server Platform Distro

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About Us

OpenAtom openEuler is an open-source OS for digital infrastructurethat fits into any server, cloud, edge, and embedded environment.

The RISC-V SIG, led by the Institute of Software, Chinese Academy of Sciences (ISCAS), drives growth in the openEuler RISC-V software ecosystem, with a focus on HPC and server environments.

Hardware Support

LicheePi 4A Adaptation

Adapt TH1520 GPU and VPU for hardware decoding, supporting smooth 4K video playback.
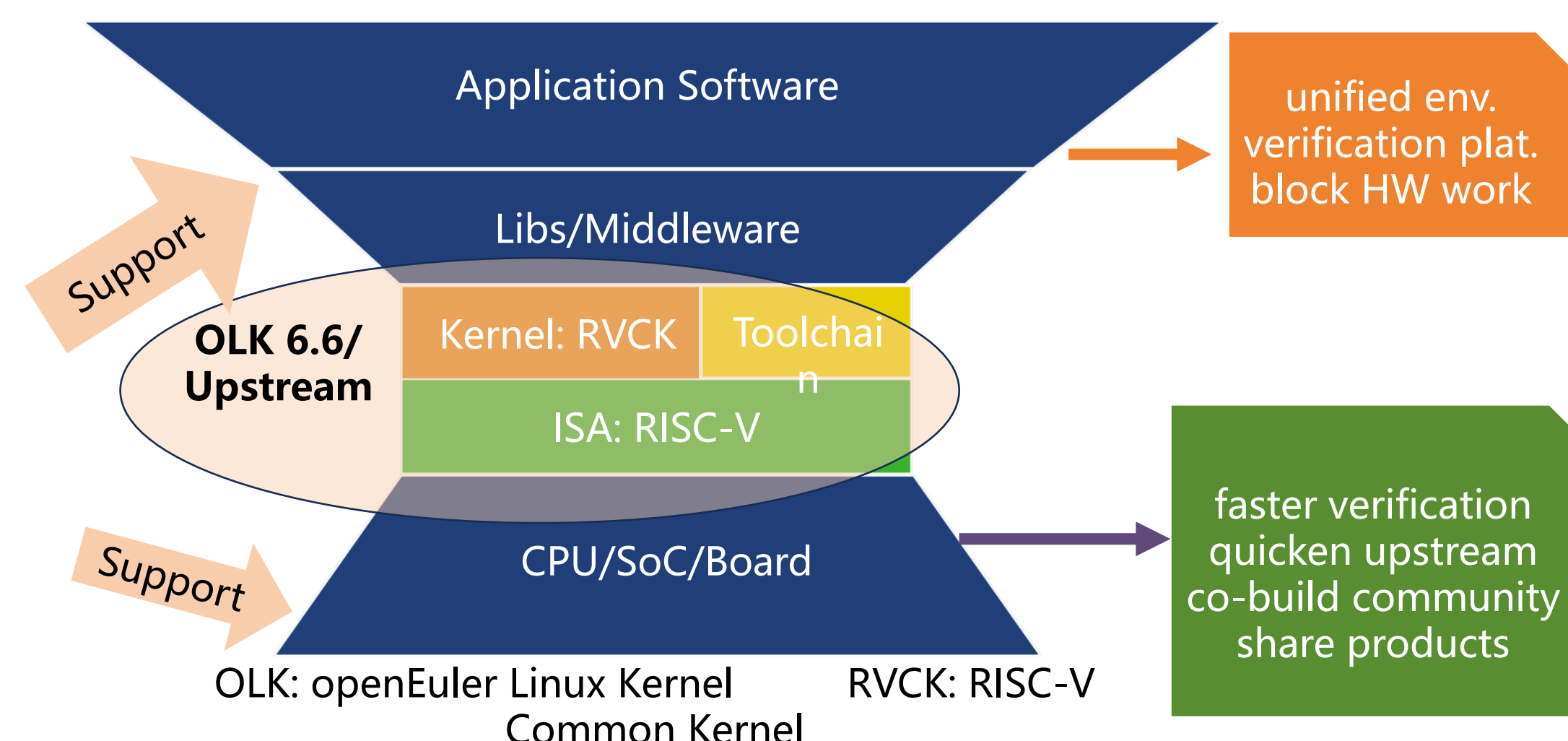
Pioneer Box Adaptation

Adapt SG2042 for native RISC-V compilation, accelerating large software package builds like the Linux Kernel by over 5 times.
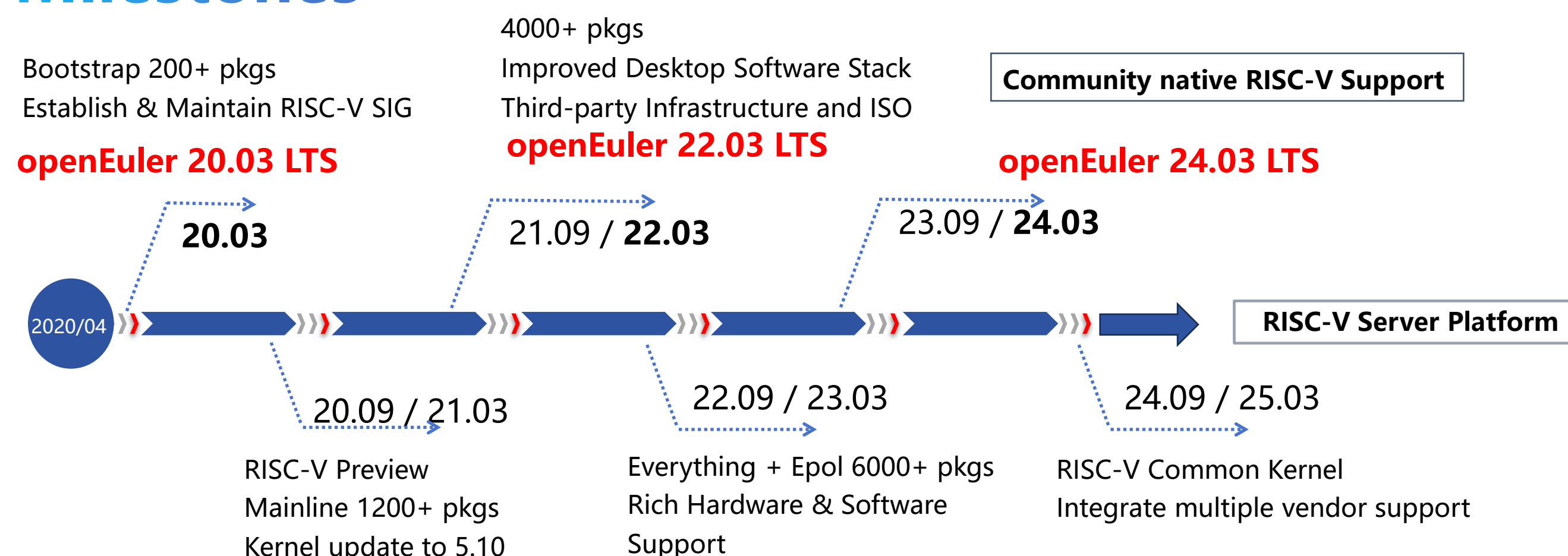
Contact Info

Github: https://github.com/openEuler-RISCV
Email: wangjingwei@iscas.ac.cn
Download: https://www.openeuler.org/en/download
Build Service: https://build.tarsier-infra.com

RISC-V Common Kernel Project

Application Software

unified env. verification plat. block HW work

Libs/Middleware

Support

OLK 6.6/ Upstream

Kernel: RVCK   Toolchain

ISA: RISC-V

CPU/SoC/Board

Support

faster verification quicken upstream co-build community share products

OLK: openEuler Linux Kernel Common Kernel   RVCK: RISC-V

Unify baseline to benefit upstream and downstream ecosystems

Milestones

Bootstrap 200+ pkgs
Establish & Maintain RISC-V SIG
openEuler 20.03 LTS

4000+ pkgs
Improved Desktop Software Stack
Third-party Infrastructure and ISO
openEuler 22.03 LTS

Community native RISC-V Support

20.03   21.09 / **22.03**   23.09 / **24.03**   **openEuler 24.03 LTS**

2020/04

RISC-V Server Platform

20.09 / 21.03
RISC-V Preview
Mainline 1200+ pkgs
Kernel update to 5.10

22.09 / 23.03
Everything + Epol 6000+ pkgs
Rich Hardware & Software Support

24.09 / 25.03
RISC-V Common Kernel
Integrate multiple vendor support

Infrastructure

FTP Server
RVCK   kernel image   OBS rootfs   LAVA Test Case   openQA Test Case   openQA

VNC

RAVA CI
Jenkins   SQUAD   LAVA Server

LAVA Worker

RISC-V Qemu
Qemu1 Qemu2
Qemu3 Qemu4

RISC-V Hardware Lab Power Management
NanoKVM   NanoKVM
LicheePi4A   Pioneer Box

Test Requirement
Common   openQA   Compliance   Security   Performance