



# RISC-V opportunity, innovation, and collaboration igniting adoption

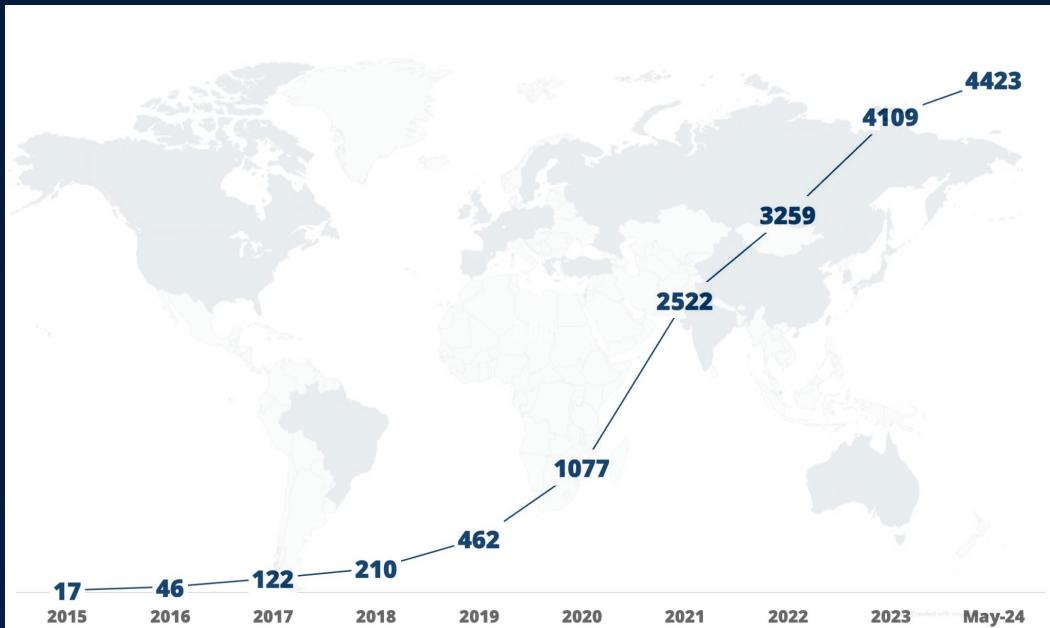
Calista Redmond  
CEO, RISC-V International

August 2024

RISC-V is the industry  
standard ISA that  
expands opportunity



# More than 4k RISC-V members across 70 Countries



May 2024 update

RISC-V membership up 28% in 2023

Will revise this closer to the talk with up to date numbers



Contributions from China  
members strengthen  
RISC-V for all

Choosing RISC-V has laid  
the foundation for  
compute in China

Collaboration yields  
greater success and  
global engagement

# Greater Chinese RISC-V Premier Members



**Incredible  
Market  
Potential**

**Unconstrained  
Technical  
Innovation**

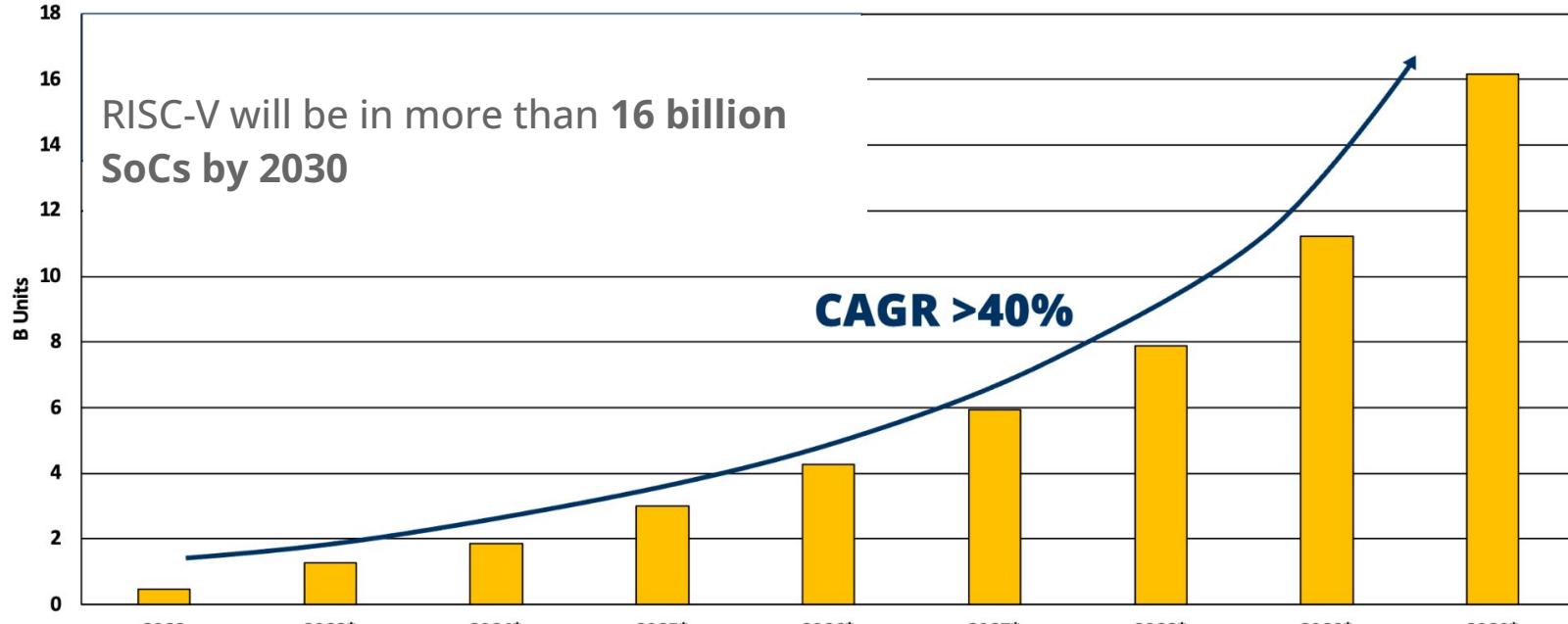
**Collaborative  
RISC-V Programs**

**Wild Commercial  
Success**

# Incredible Market Potential

# RISC-V is Inevitable

RISC-V expected to be included in billions of SoCs

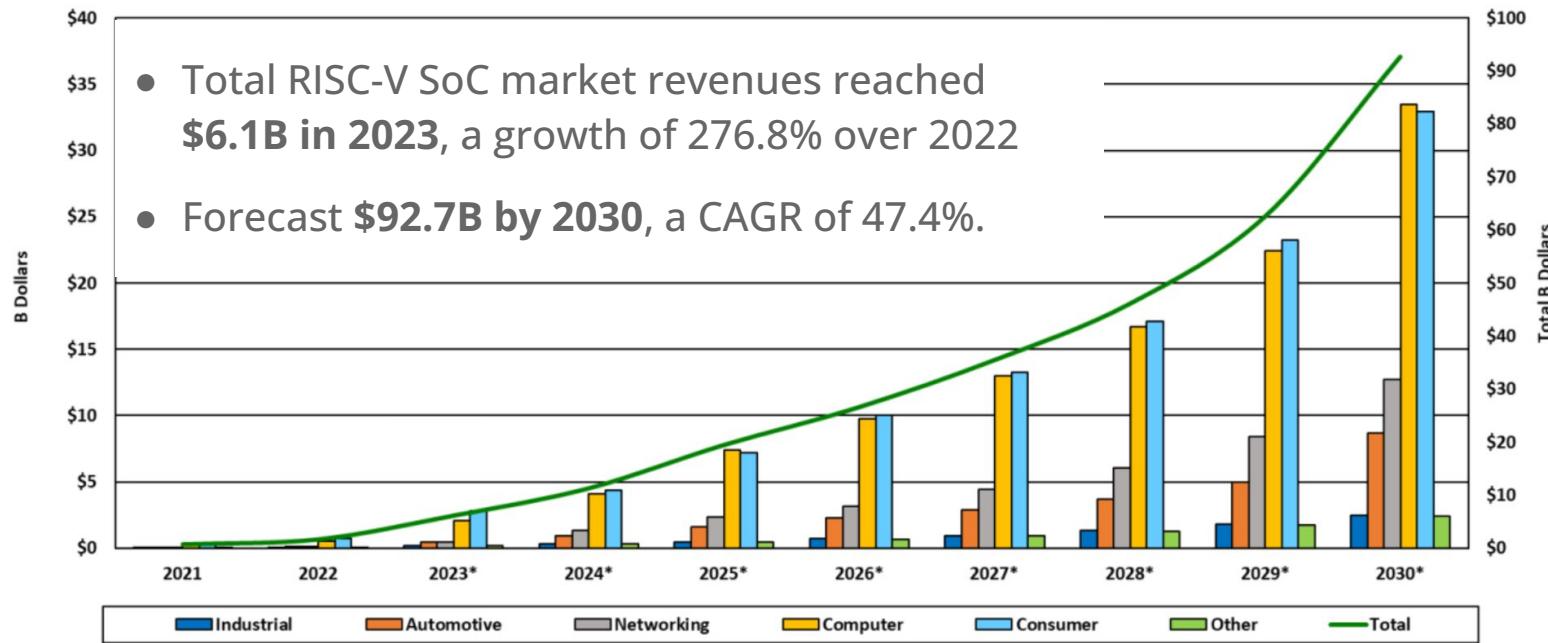


Source: The SHD Group, November, 2023

\*forecast

# RISC-V market revenues forecast \$92.7B by 2030

Market Revenues for All RISC-V SoCs by Application 2021–2030



\*Forecast

Source: The SHD Group, January 2024

# Unconstrained Technical Innovation



Average R&D Spend

10-20%



RISC-V ISA and Ecosystem



Your Innovation

# The technical foundation for lasting success

## Countries

- Tech sovereignty
- Accelerate local innovation and talent
- Incubate technology ecosystem from research to industry
- Access worldwide market

## Multinationals

- Control strategic roadmap
- New opportunities for innovation and influence
- Growth business models
- Avoid vendor lock-in

## Researchers

- Collaborative ISA thought leadership
- Enables innovative research
- Access global RISC-V research network
- Tech transfer addressing real world applications

## Startups

- Supercharge hardware and software co-design
- Accelerate strategic roadmap in greenfield applications
- Collaboration partners

# Collaborative RISC-V Programs

# RISC-V Programs

Working  
Groups

---

Learning

---

Software  
Enablement

---

Marketing

---

# 40

New technical specifications  
ratified in the past **two years**  
including 123 ratified extensions

# 75

Technical Working Groups  
collaborating together

# Greater Chinese Members are key contributors to RISC-V

- **AI/ML SIG** : Beijing OS Chip, Chair; Stream Computing, Vice-chair
- **Android SIG** : Alibaba, Chair
- **Architecture Test SIG** : Alibaba, Chair
- **Certification Steering Committee**: Alibaba, Chair
- **IOPMP** : Andes, Chair
- **Managed Runtimes SIG** : Alibaba, Chair
- **Packed SIMD TG**: Andes, Chair
- **Platform Management Interface TG** : StarFive, Chair
- **RISC-V Labs**: ISCAS / PLCT Labs
- **Server SOC** : Alibaba, Vice-chair
- **Unified Discovery** : Alibaba, Chair

Thank you to everyone who contributes to RISC-V!

# A robust software ecosystem is essential for RISC-V adoption



- Enable upstream software on ratified RISC-V ISA and extensions
- Contribute RISC-V hardware to strategic software projects
- Accelerate developer journey to RISC-V

# Enabling Developers with Hardware and Cloud Compute



In Process

**PLCT Lab**



# RISC-V Courses & RVFA Certification

- ★ FREE courses including Building a RISC-V CPU Core and Introduction to RISC-V
- ★ RISC-V Foundational Associate Certification and RISC-V Fundamentals to train new employees
- ★ Members receive a 30% discount on training and certification



Reach out to [learn@riscv.org](mailto:learn@riscv.org) for more information



The certification is also available [in Chinese](#).



The course is also available [in Chinese](#).

# Leverage the Power of RISC-V Marketing

## News and Blog



## RISC-V Exchange

The RISC-V Exchange hosts the hardware, software, services, and learning offerings in the RISC-V community. Browse the list or search for an offering below.

Alibaba T-Head TH1520 SoC  
beagleboard.org

## Worldwide RISC-V Summits



## Social Channels

Join Us at RISC-V Summit Europe | June 24-28

What's New

RISC-V International Newsletter - September 2023

RISC-V Community Newsletter | Announcements, What's New

Follow us on Twitter! Follow us on LinkedIn! Visit our YouTube channel! Join the conversation on Slack! Upgrade with RISC-V news! Interact with the RISC-V Community!

RISC-V Blog

In the News

Announcements

ACCELERATE YOUR RISC-V CAREER

Dr Tadej Murovič, Codasip | RISC-V and Codasip Revolutionizing the Future of Processor Design

Whether you're a student looking to complement your university studies or a professional looking to further your career in RISC-V, check out our Top 10 Educational Resources to Thrive!

HEAD MORE →

February 25, 2023 in the News

RISC-V International Newsletter - December 2023

Message from RISC-V International: As we look back on the year, we are grateful to the entire RISC-V community for all the work you have done. We witnessed groundbreaking developments, new products,

HEAD MORE →

## RISC-V Landscape

RISC-V Landscape

## Industry Events

Events

Discover the global presence of RISC-V International and the RISC-V Community. Join us either in-person or online to connect with the RISC-V Community. Check out the events below! Want to showcase your event on the RISC-V Events page? Submit your event here!

Search for events

Now - August 22

Global AUTOMATION CONFERENCE | June 23 - June 27, 2024

RISC-V SUMMIT 2024 | Europe | June 24 - June 28, 2024

Austin Hackathon (In-person) | June 25, 2024

Amplify news and knowledge

Promote solutions

Meet customers and partners

# Cultivating strategic relationships for success

A dark blue background featuring a network of glowing white dots connected by thin blue lines, resembling a starry sky or a complex data network.

- Work shoulder to shoulder with industry leaders
- Develop business and technical relationships
- Grow personal and organization visibility
- Accelerate your technical development roadmap

# Wild Commercial Success



RISC-V processors will  
account for **almost a quarter**  
of the global market by 2030

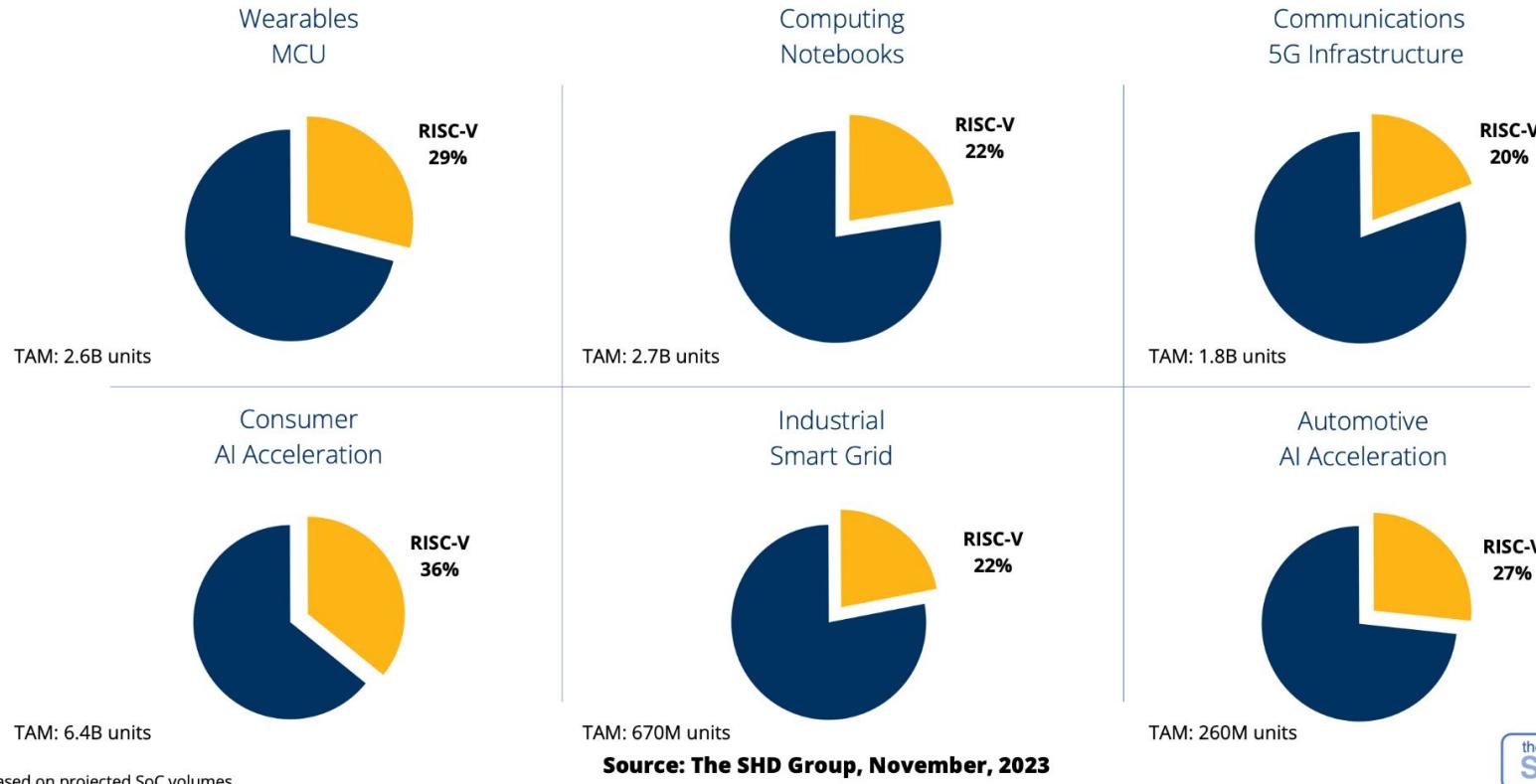
Source: Omdia

# China RISC-V SoC revenues forecast \$25B by 2030



Source - RISC-V Market Report: Application Forecasts in a Heterogeneous World (abridged version)  
The SHD Group, January 2024

# Market Share Projections for RISC-V in 2030



Source: The SHD Group, November, 2023



# Innovation based on RISC-V



Andes announce QiLai SoC and Voyager Development Board

**ESWIN**

ESWIN EIC77 Series Chips target Edge Computing, AI PCs and AI Acceleration



Banana Pi BPI-F3 industrial dev board features SpacemiT K1 8 core RISC-V SoC

**INNOGRIT**  
英 韧 科 技

Yingren YRS820 Gen5 SSD controller offers 14GB/sec+ reads

**DeepComputing**

RISC-V based products including laptop, AI speaker, tablet and workstation

 **MetaSilicon**

Andes and MetaSilicon announce the world's first automotive grade RISC-V CMOS image sensor

**達摩院**  
DAMO ACADEMY<sup>TM</sup>

Damo Academy to deliver the server-grade C930 processor in 2024



XiangShan open source processor targeting high performance application

**Incredible  
Market  
Potential**

**Unconstrained  
Technical  
Innovation**

**Collaborative  
RISC-V Programs**

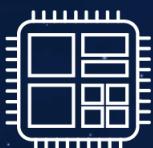
**Wild Commercial  
Success**

# A shared community that connects us all

Research



RISC-V®



Technology



Business

- Companies around the world are pinning their future to RISC-V
- Adoption is growing fast, it's a business and technical priority
- We collaborate and compete
- Let's make the opportunity larger and accelerate success for all

# Taking RISC-V to the next level

## Our top priorities

- 1 Technical Progress
- 2 Developer experience
- 3 Certification program



## Take action

- Join (and lead!) technical working groups
- Advance industry adoption
- Join marketing and market development groups
- Bring your customers and suppliers

Here and now: Make 5 new friends!

What are your asks of me and RISC-V?