甲辰计划 (Jiachen Project) RISC-V Prosperity 2036

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2024-Apr-16

A grand plan spanning 12 years



Vision

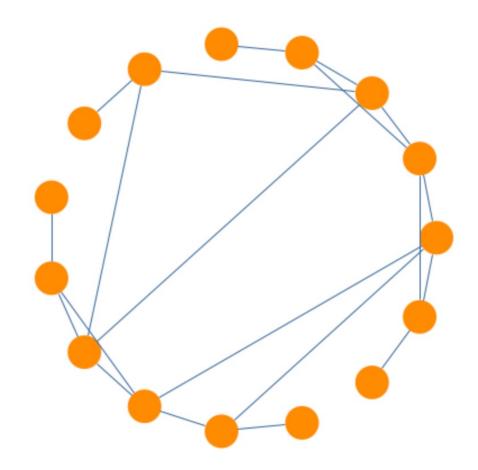
- RISC-V is the future.
- All areas involving ISA will be covered by RISC-V.
- Open standards and open source software and hardware ecosystem will become the cornerstone of business prosperity.
- RISC-V will achieve commercial prosperity in all fields within 12 years.

Mission & Goals

- Bringing a joint effort of over 100 chip and solutions manufacturers and over 500 software development firms, in order to port, optimize, and deploy over 1,000 key commercial software packages across all fields.
- Developing solutions suitable for commercial applications around high-performance RISC-V chips and IPs such as SG2380 and XiangShan, helping our target industries. These industries include AI acceleration, edge computing, storage, robotics, computer-assisted industrial simulation, computer-assisted medical solutions, and many more.
- Building a human resource development effort for RISC-V to network over 10,000 potential experts in RISC-V chip design, software development, community management, as well as education and training. This will allow us to enable a industry-wide human resource network.

How is Jiachen Project organized?

- Manifesto style: Any company that shares the vision is welcome to join.
- All members are equal.
- Members can invite each other and combine freely to accomplish a specific software or solution goal. Founding members need to raise funds themselves.
- The more you contribute, the greater your impact.



Governance and financial model

- No financial entity and no membership fees. No donations.
- There is no secretariat or board, only one manager, Wei Wu, is responsible for contacting and sharing information among members.
- No regular meetings (yet).

Portfolio:

- website: https://rv2036.org.
- GitHub organization: gh/rv2036.
- WeChat and X (Twitter) accounts.
- WeChat and YouTube video accounts.

(Wei as the manager of Project Jiachen is responsible for maintaining the above account resources.)

Project organization and funding

- Members don't pay for what they don't get.
- Members can initiate development projects according to their own needs and broadcast
 them among all members of the Jiachen Project. If other members are interested, they
 can directly negotiate to join, including providing financial support and human resources
 support.
- The manager will collect and summarize member needs and form a list of open projects for analysis and sponsorship by interested groups.
- As the starting momentum of Project Jiachen, PLCT Lab will provide engineers to help improve the open source software ecosystem of the RISC-V community.

Three major funding models

Single Dominant Player

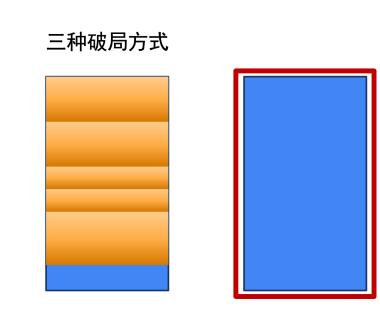
• A niche is dominated by one company's products or services. Then the software unique to this market segment is generally completed at the expense of this company.

• Combine the majority of players

• The market share of a segment is mainly covered by the products or services of 3-7 companies. Then the software unique to this market segment is generally funded by these companies collectively. Industry associations may also take the lead.

National institutional support

 When the players in a niche field are very dispersed, or when the support of a software has strong externalities, a nationally supported institution needs to come forward to provide financial or team support.



PLCT Lab in Jiachen Project

- Automated testing framework and services
 - RISC-V farm hosting
- Developer tools
 - DynamoRIO
 - RuyiSDK
- C/C++/Fortran toolchain support
 - GNU Toolchain
 - Clang/LLVM

- Language runtime support
 - JavaScript Engines: V8, Spidermonkey.
 - Java VM: OpenJDK/Hotspot
 - Others: LuaJIT, Box64
- Operating system adaptation and systemwide optimization and maintenance
 - Arch Linux, Gentoo, Deepin, Debian, openEuler, openKylin, RevyOS, etc.
- AI Stack
 - MLIR etc.

Welcome to join the Jiachen Project

Welcome to communicate on specific project cooperation goals