

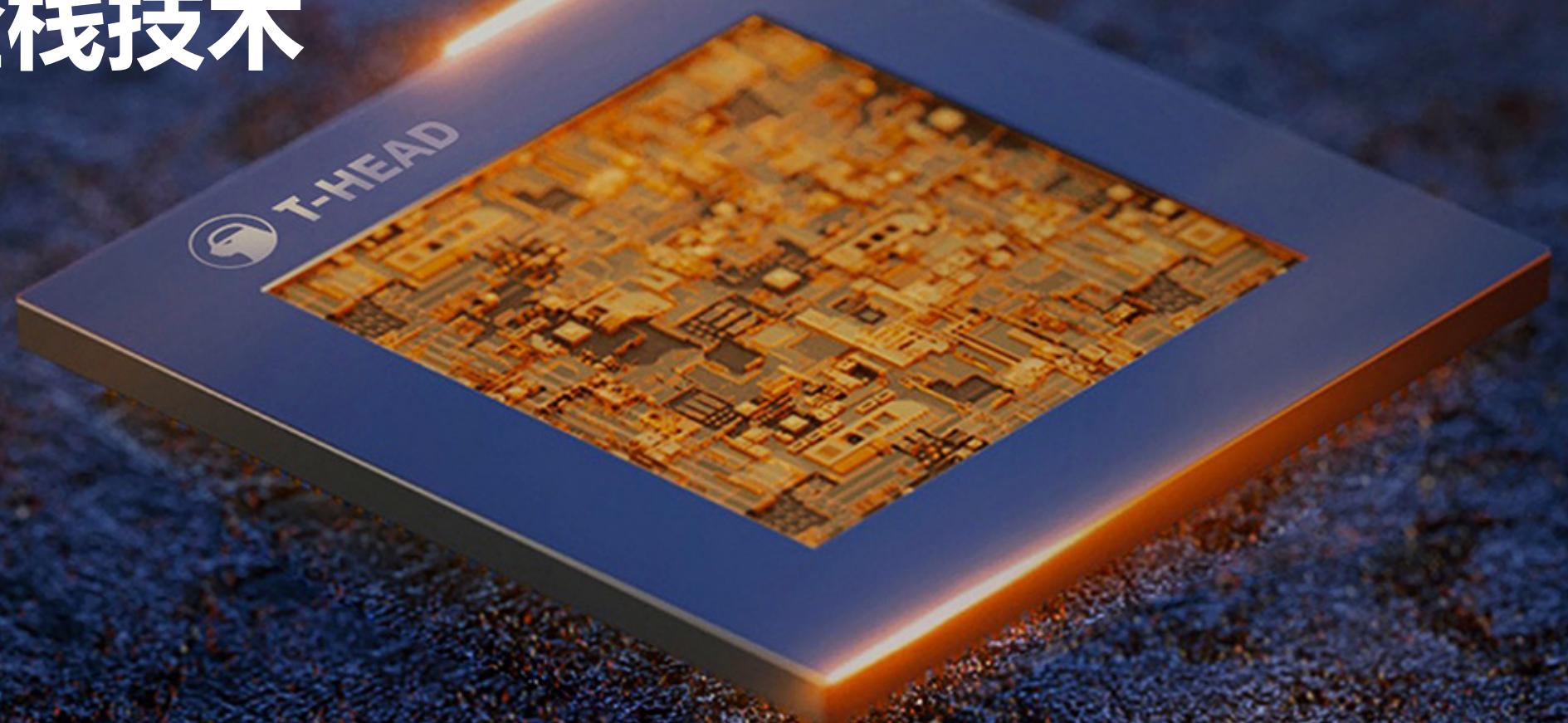


平头哥

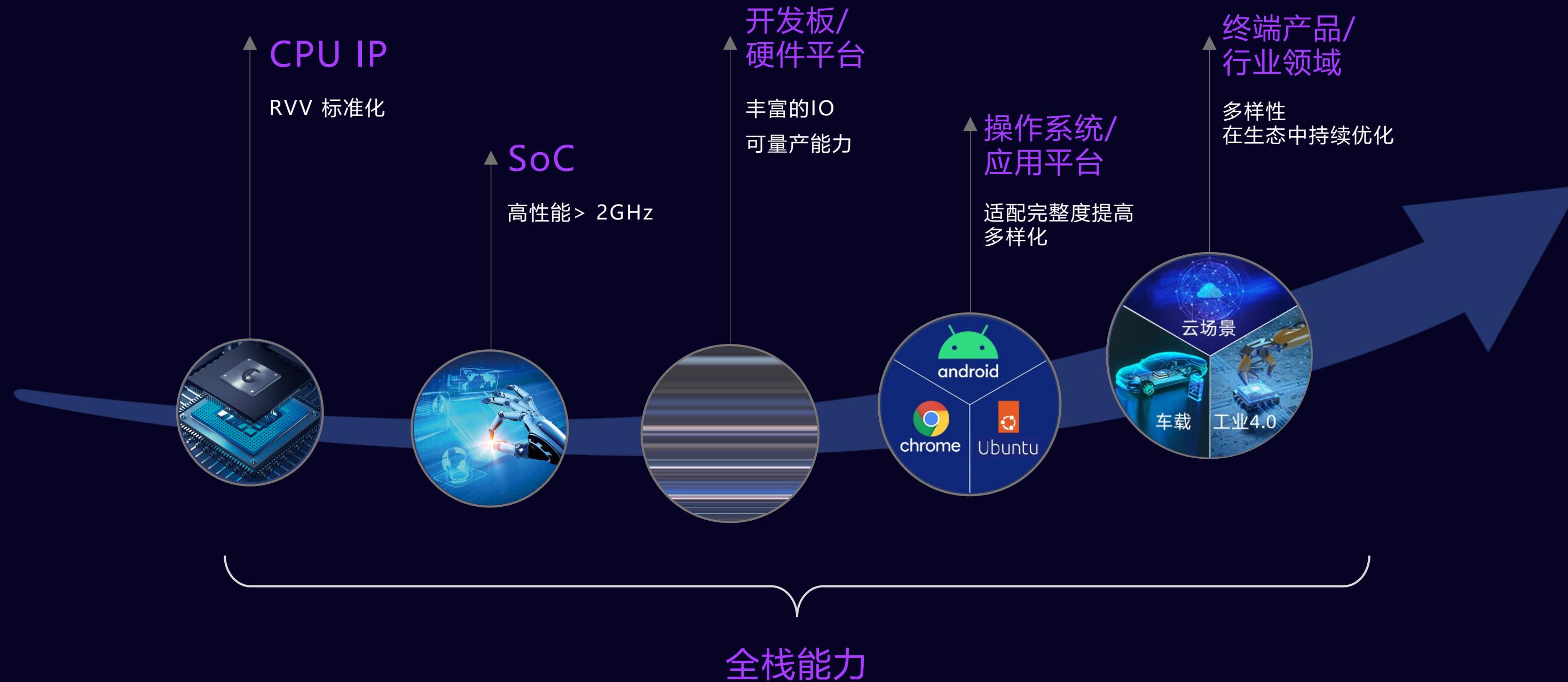
让高性能RISC-V软硬件全栈技术
触手可及

杨静

平头哥半导体 生态副总裁



RISC-V已具备进入复杂生态系统的的能力





In the News

Chip makers team up to take on Arm with RISC-V

Five companies that manufacture semiconductors for smartphones, automobiles and more have announced that they will...

August 4, 2023



In the News

MTIA v1:Meta's first-generation AI inference accelerator

AI workloads are ubiquitous at Meta – forming the basis for a wide range of...

May 18, 2023



In the News

Google wants RISC-V to be a “tier-1” Android architecture | Ron Amadeo,Ars Technica

Google’s keynote at the RISC-V Summit promises official, polished support. Over the holiday break, the footage from...

January 3,2023



2023或成RISC-V服务器出货元年

ChatGPT这类蹿红的应用，可谓帮原本略显黯淡的服务器市场再度点燃了一把火，在服务器领域竞争力相对薄弱的RISC-V又是否有机会分一杯羹呢？从已公布产品的路线图和发布来看，今年或许就是RISC-V服务器的元年。

2023,02,17



In the News

Esperanto Technologies Announces RISC-V Industry Milestone of Generative AI Models Running on ET-SoC-1; Access to be Made Available to the RISC-V Research Community

MOUNTAIN VIEW, Calif.--(BUSINESS WIRE)-- Esperanto Technologies™, the leading developer of high performance, energy-efficient artificial intelligence solutions...

April 19, 2023

正式为RISC-V进入车载
领域拉开帷幕

RISC-V进入数据中心
推理应用新阶段

安卓首次官方宣布支持
RISC-V

标志着RISC-V开始进入
服务器领域

RISC-V首次适配生成式
AI大模型

RISC-V Software Ecosystem——软件成为RISC-V生态发展的关键路径

A Standard hardware architecture with clear open standards



A thriving open source software ecosystem built on top of standardized hardware



厚重的软件和全栈是走向复杂生态系统的必经途径



Kernel & Virtualization	Linux Distro Integration	Simulator/ Emulators	Debug & Profiling Tools	Compilers & Toolchains	System Libraries	Language Runtimes	System Software
Linux	Ubuntu	QEMU	Performance Profiles	LLVM	Glibc	OpenJDK	UEFI
Android	Debian	SPIKE	...	GCC	OpenSSL	V8	...
...	Fedora	OpenBLAS	Python	...



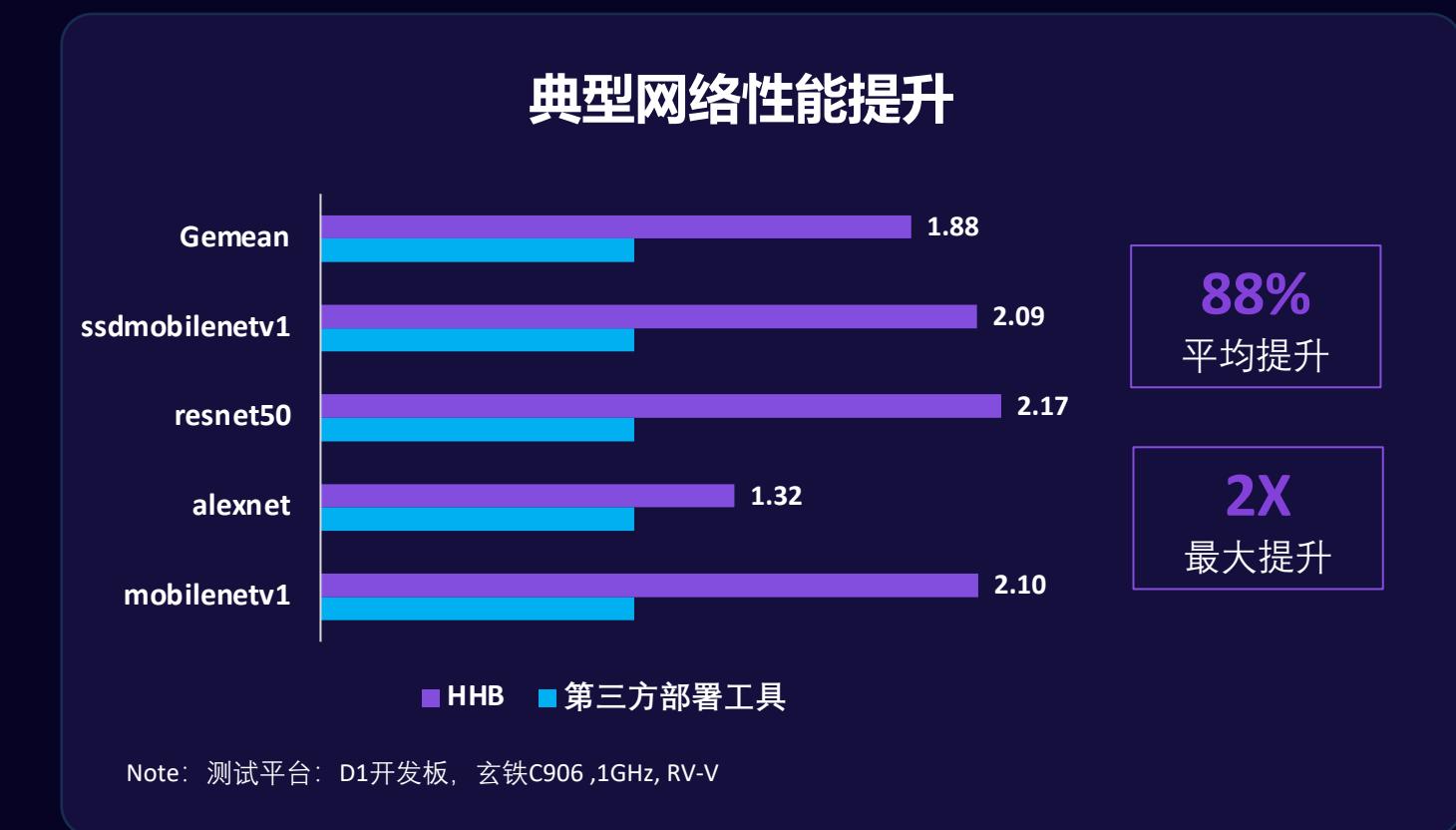
软硬件协同

操作系统适配

应用落地



AI是RISC-V超越传统架构的发力点



软硬件协同

操作系统适配

应用落地

Android

完成Android 13版本的移植
持续为社区做贡献

Linux

适配多款国际主流
国内开源社区操作系统

提供更多开发选择，为拓展应用领域打好基础

软硬件协同

操作系统适配

应用落地



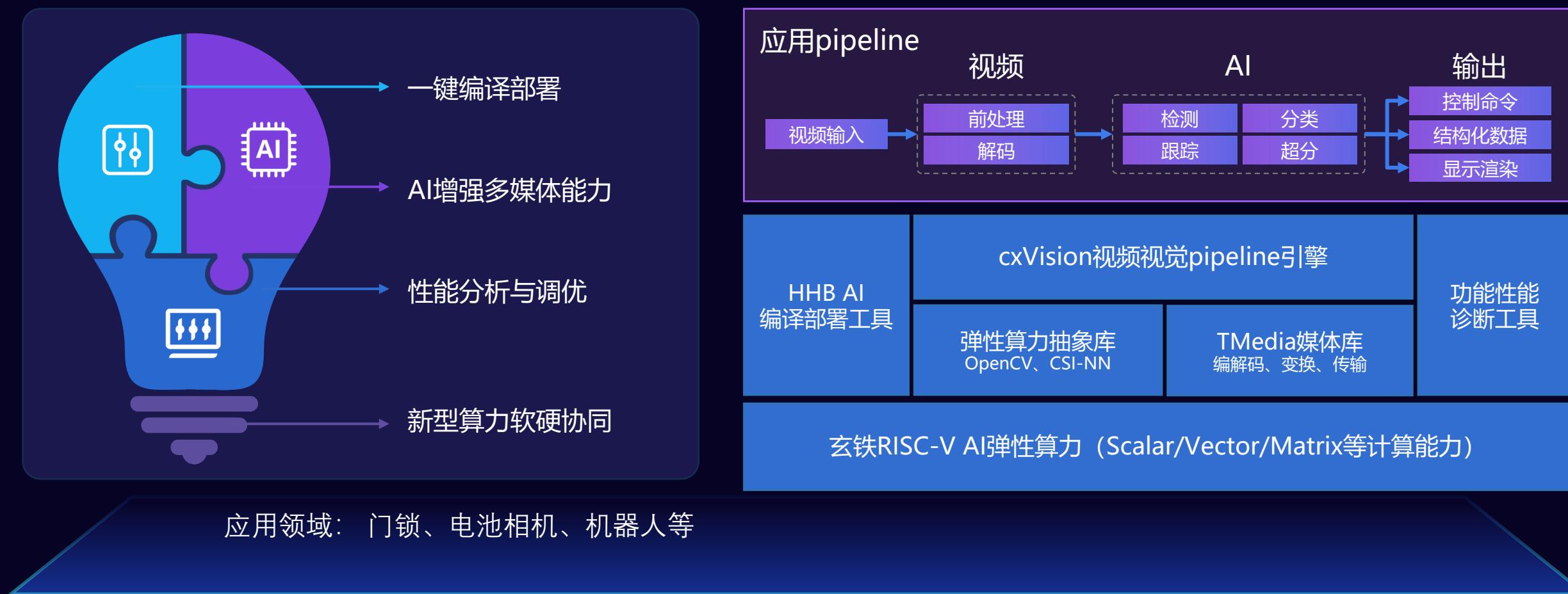
RISC-V+Android 带来无限想象空间



可商业化交付的RISC-V安卓SDK



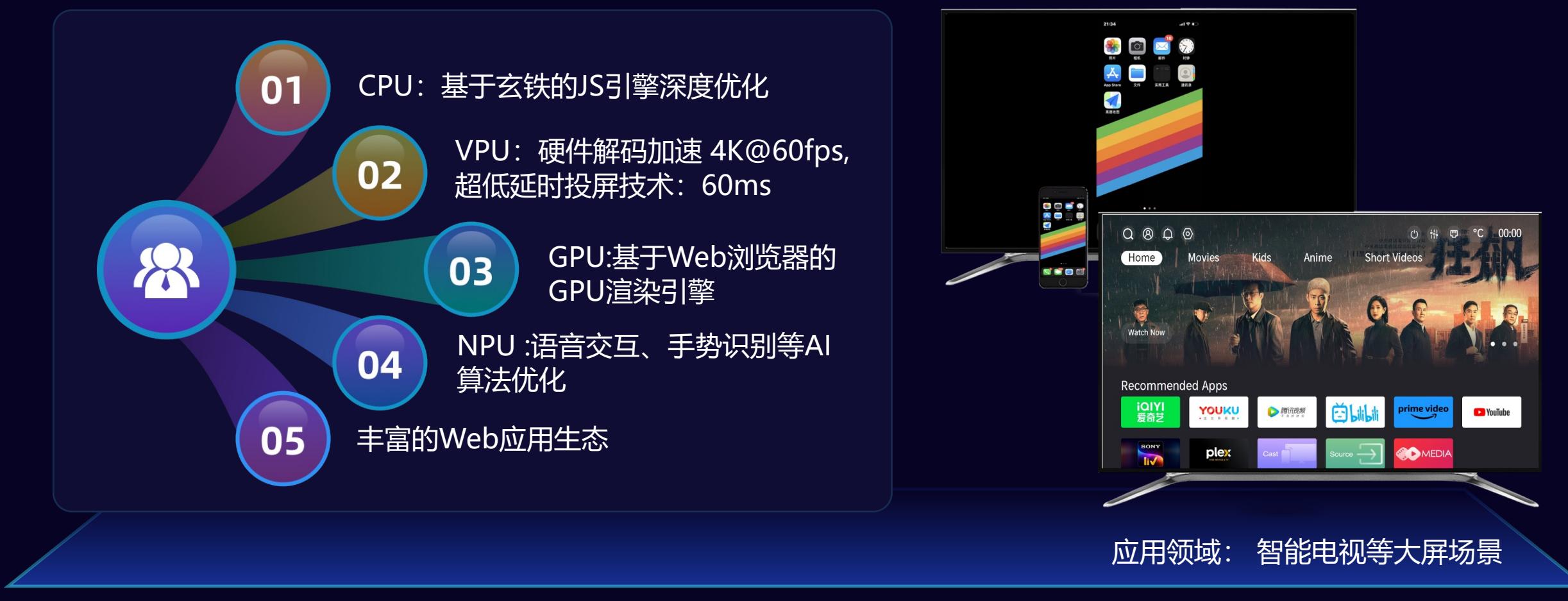
从算力到部署，打造全栈软件能力



玄铁多媒体AI软硬件融合平台



突破RISC-V在智能大屏WebOS及核心应用的关键技术



以玄铁CPU为核心，多IP协同优化能力



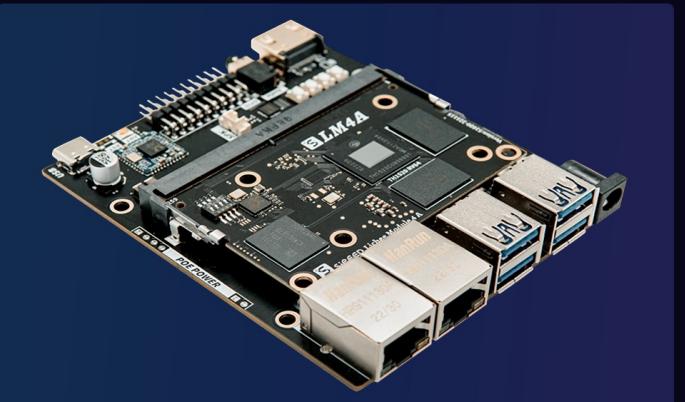
基于算能SG2042面向数据中心场景的全栈技术



数据中心场景全栈开始优化



为开发者提供触手可及的开发平台



矽速 · LicheePi 4A

玄铁C910

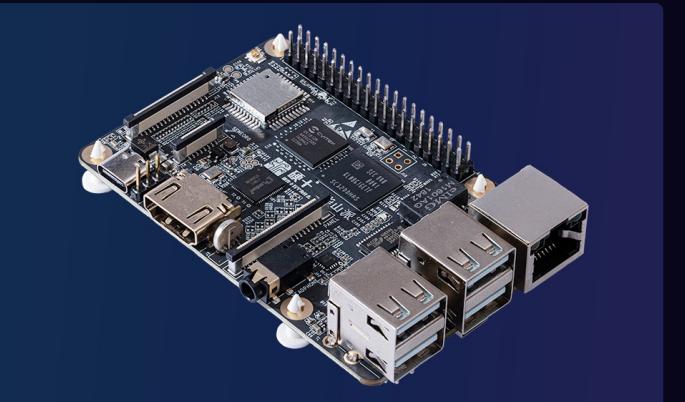
首款搭载RISC-V高性能模组的开发板



嘉楠 · 勘智K230

玄铁C908

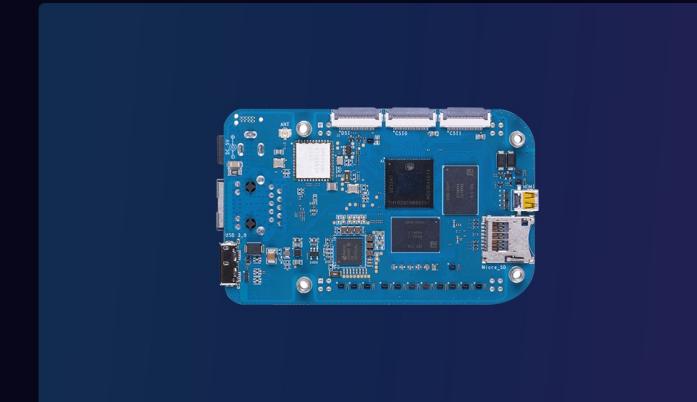
全球首款支持RISC-V Vector1.0标准的开发板



算能 · 华山派

玄铁C906

支持多模态语音视觉需求的全栈解决方案

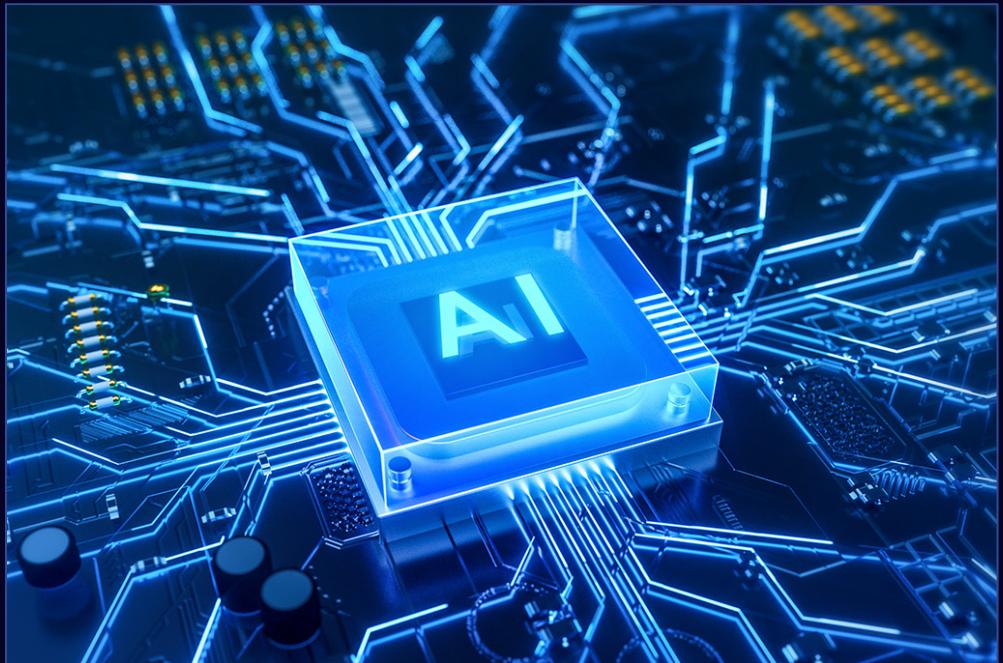


BeagleBoard · BeagleV AHead

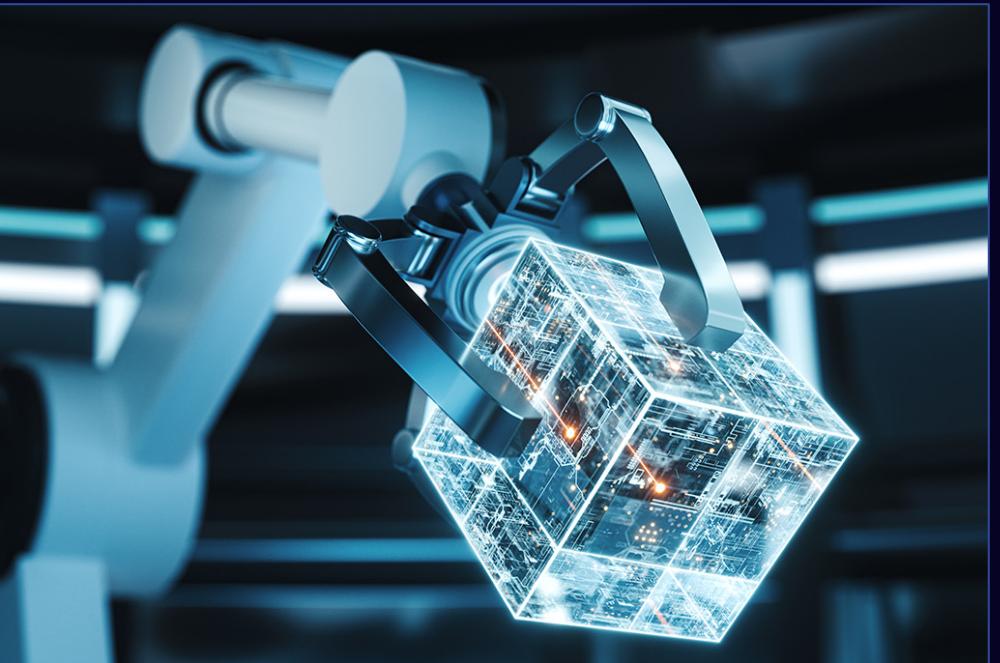
玄铁C910

首款高性能单板计算机

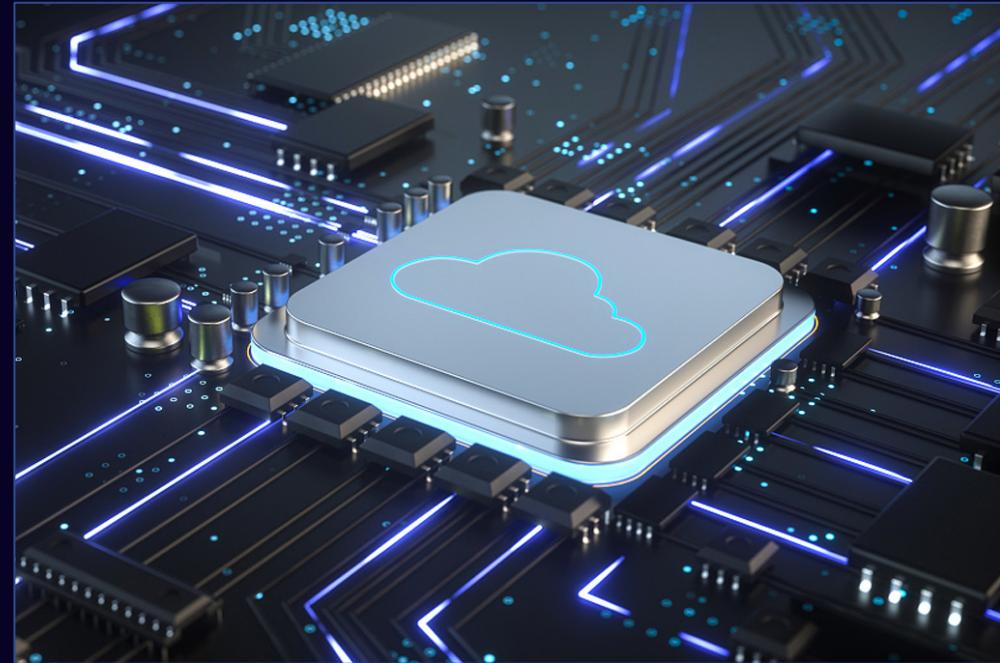
与开发者在具身智能、可穿戴设备、工业智能和新能源领域共同探索RV的潜能



AI时代的原生架构



与汽车、工业数字化同步



一云多芯基础设施



所有芯片
都值得用RISC-V做一次

T H A N K S



平头哥