A new way to disrupt the datacenter

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When Opportunity Knocks

**Best-in-class** mobile processors are catching up with existing server CPUs

Extrapolating to the future promises much larger advantages

**Best-in-class server processors** are no longer driving meaningful advances in the data center because:

- Moore’s Law has slowed and limited scaling
- Process technology transitions have become more challenging
- Industry leaders have struggled with execution
- Complex architectures don’t meet core customer needs
Pushing the Performance Envelope

LAST 50 YEARS
- Process Node Improvements
- Architectural Innovation
- Heterogeneous Integration

NEXT 50 YEARS
- Process Node Improvements
- Architectural Innovation
- Heterogeneous Integration
Paradigm Shift in CPU Performance Leadership

5-year CPU Performance Improvement

- X86
- Leading ARM SoC
Paradigm Shift in CPU Performance Leadership

5-year CPU Performance Improvement

- X86
- Leading ARM SoC
- Rest of ARM SoCs
A NEW APPROACH
people who have delivered multiple mobile and high-performance processors and SOCs while working at a broad range of industry-leading companies.

NUVIA founders John Bruno, Gerard Williams III, Manu Gulati at our Santa Clara HQ
A Legacy of Industry Leadership

20+ years average experience in low-power, high-performance design and power delivery.

120+ people who have delivered multiple mobile and high-performance processors and SOCs while working at a broad range of industry-leading companies.
Our Vision

Our vision is to create the world’s best server processor that leads the industry in each and every important metric.

- PERFORMANCE
- ENERGY EFFICIENCY
- COMPUTE DENSITY
- SCALABILITY
- TOTAL COST OF OWNERSHIP
“The only barriers we support are those defined by the Arm Architecture” – NUVIA Software Philosophy
What you’ll see

Meaningful single thread performance leadership
- Industry disrupting across all architectures
No magic compiler, no software changes required
- Runs everything that’s out there already
Genuine engagement with developer ecosystem
- We want to work with YOU
What you’ll see

Embracing industry Arm-based server standards

- Fully SBSA/SBBR/ServerReady

Upstream Linux kernel support ahead of day one

- No hacks, no kludges, no nonsense

Support for all standards-based Operating Systems
What you'll see

Meaningful upstream engagement
- Building a world-class Arm software team

Removing barriers to collaboration
- Discussion and collaboration encouraged

Documentation
- We will provide useful documentation
What you’ll get

- Fully Open Source platform firmware
  - Trusted Firmware, Tianocore, etc.
- “Upstream First” Philosophy
  - Get it from upstream by default
- Hardware for developers
  - Details TBA, but we hear you
Summary

Full custom standards-based Arm server SoC delivering performance leadership with energy efficiency and ease of use for data centers.

Build a leadership server class design and reference platform.

Engage early with potential customers to identify all key areas of focus: networking, storage management, AI accelerators (NN), and GPU.