Imagination

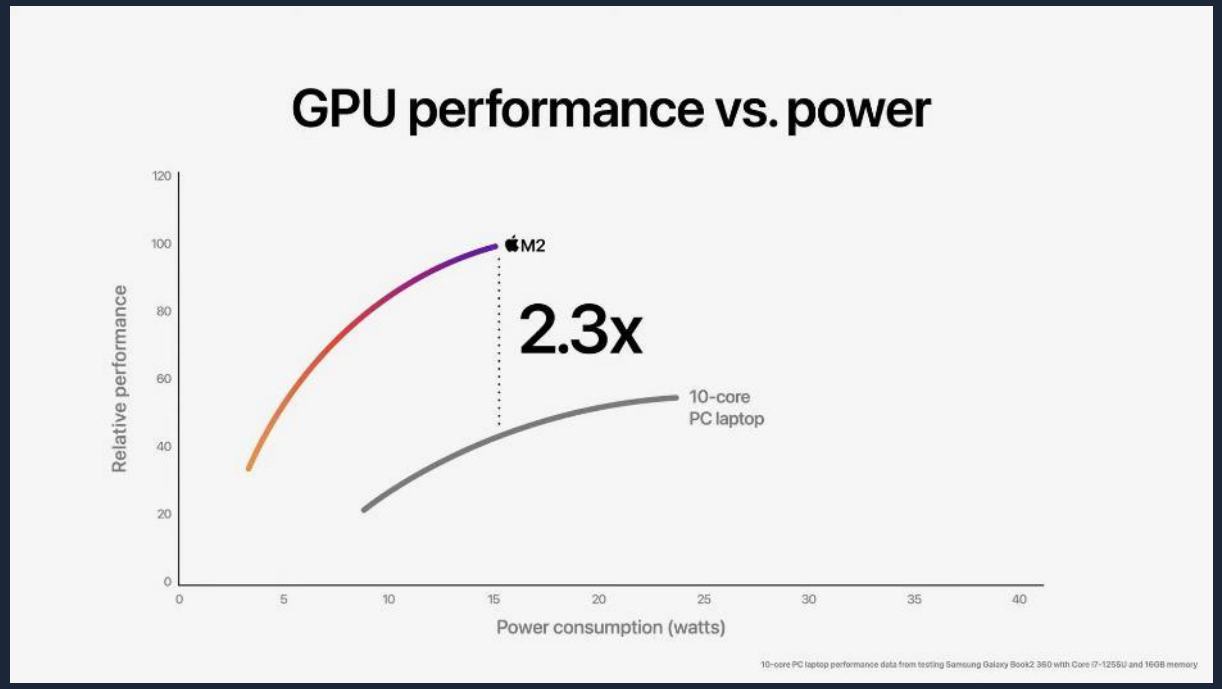
REVOLUTIONIZING RISC-V ADOPTION

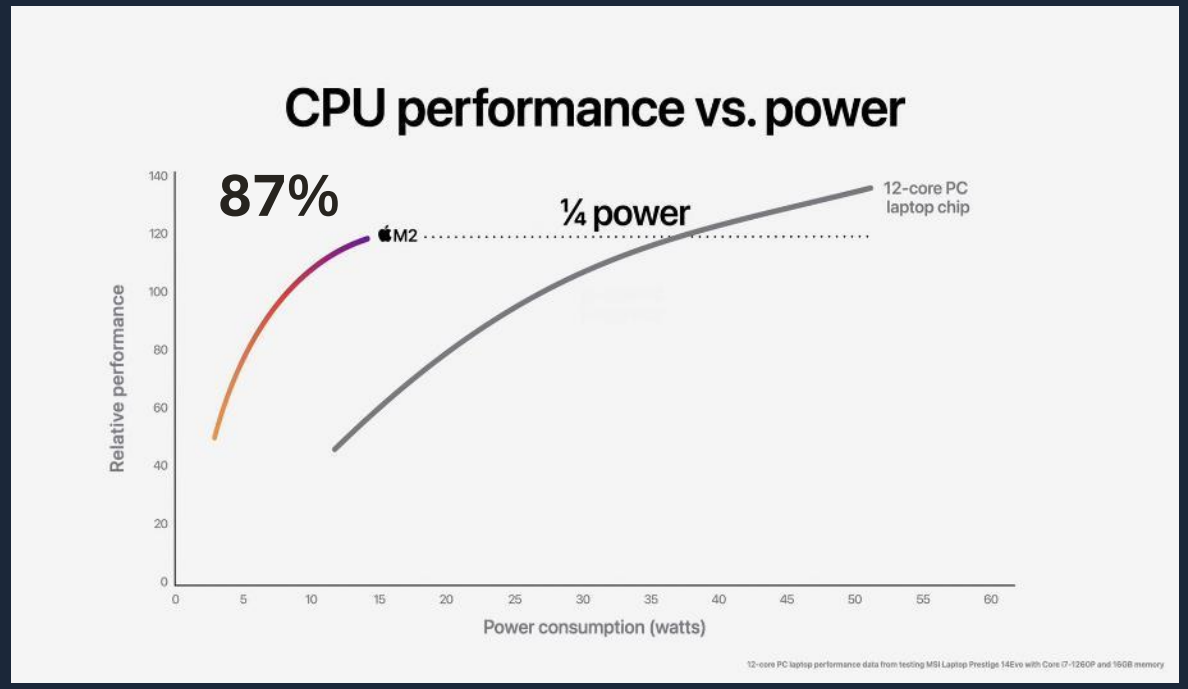
Integrated Solution

GPU + CPU + AI

NEW COMPUTE PLATFORMS

Proven benefit from system approach – Apple Silicon





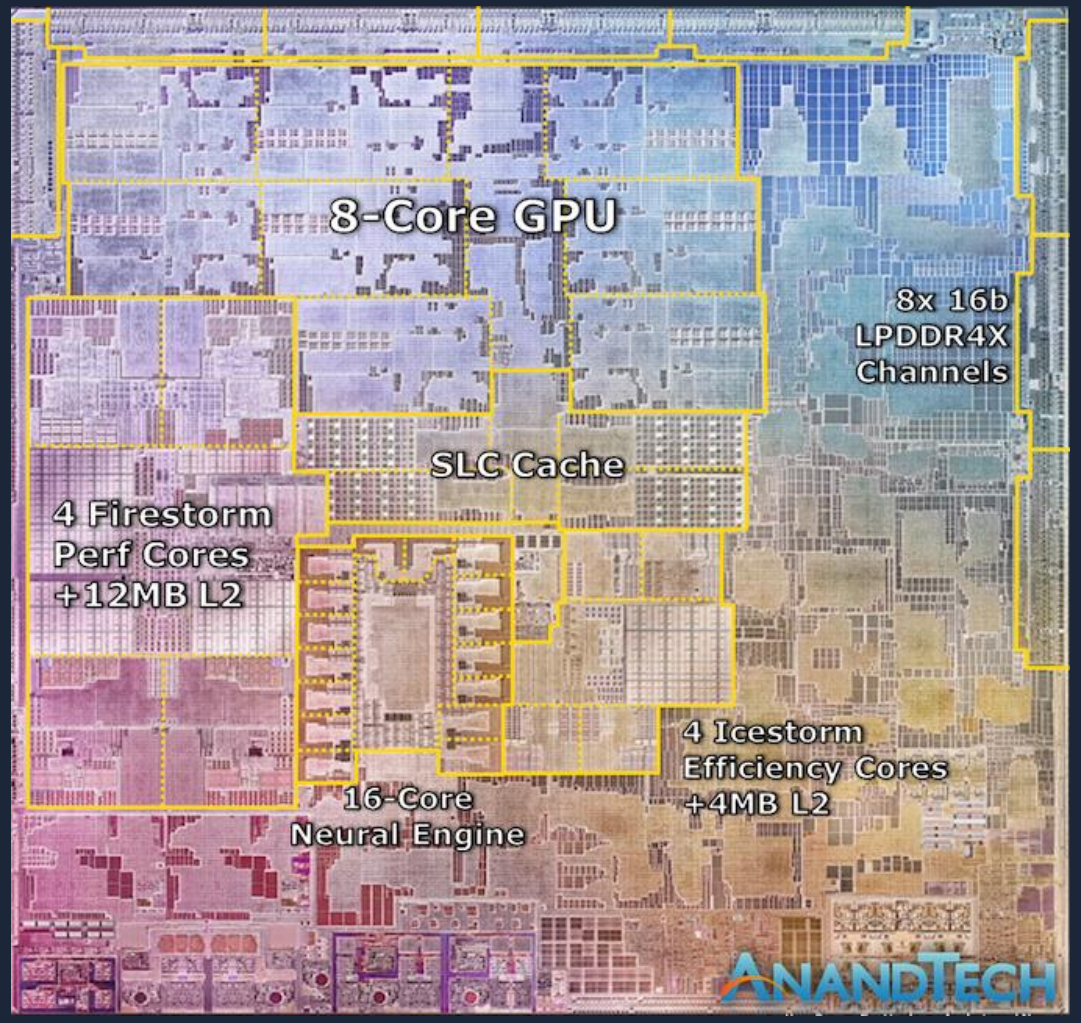
Efficient use of Memory – Scaling challenge

Optimisation at a system level – Bandwidth and system data congestion

System level design drives ecosystem – Faster adoption of RISC-V

NEW COMPUTE PLATFORMS

Proven benefit from system approach – Apple Silicon



M1 Chip	Area (^2 mm)	Percentage
Total Die	**118**	**100%**
Total CPU	21	18%
Total GPU	23.5	20%
Total AI	6.6	6%
SLC	6	5%

49%

COMPUTE SUBSYSTEM ACCOUNTS FOR HALF OF THE SOC AREA

GRAPHICS IS CRITICAL TO COMPUTE PLATFORM

GPU IN 44% OF SEMICONDUCTOR TAM

RISC-V WILL NOT DISRUPT THE ANDROID MARKET WITHOUT A CAPABLE AND CREDIBLE GPU

In 2022, Semiconductors containing GPUs contributed $96B to the overall Semiconductor market. This is ~44% of the $216B market excluding memory, optoelectronics, Analog, connectivity, RF, discrete components, power management and sensors Source: Gartner

GPU IS CRITICAL TO AI

GPU is the right architecture for AI

GPU IS THE PLATFORM FOR AI

- CPU does not meet the level of compute density needed
- GPU programming model is established and deals well with varied parallel tasks (e.g. NVIDIA with CUDA, UXL and SYCL)
- Algorithms move too quickly for dedicated hardware alone – need some flexibility with a direct programming model
- Array-like approaches do not deliver a direct programming model and struggle with multiple workloads

Imagination

YOUR ONE-STOP SOLUTION FOR EMBEDDED COMPUTE

GPU, CPU and AI

IMAGINATION

Market Leadership

#1
Position in GPU for Automotive and Mobile

>13 Billion
Cumulative chip shipments with Imagination IPs

Advanced Technology

>3300
Patents and applications

84%
Employees involved in R&D and engineering

Massive and Diversified Key Markets

4
Key markets

$62bn
Mobile (2025E)

$96.8bn
Consumer (2025E)

$94.5bn
Automotive (2025E)

>300m
DCD GPUs shipped p.a.

Strong Financial Performance

$153mn
2021 Revenue

33%
2019-21 Revenue CAGR

Diversified Business

- Segment
- Product
- Customer
- Geography

Imagination

Industry-leading product portfolio: **one-stop solution for embedded GPU, CPU and AI**

AI/Compute Solutions

GPU

Graphics and GPU Compute Scaling Across All Markets

CPU

High Quality RISC-V CPUs

XE/XM GPU
Cost and Efficiency Focus

XT GPU
Performance Efficiency, Ray Tracing

XD GPU
High Performance, DirectX®

XS GPU
Safety Critical (Automotive)

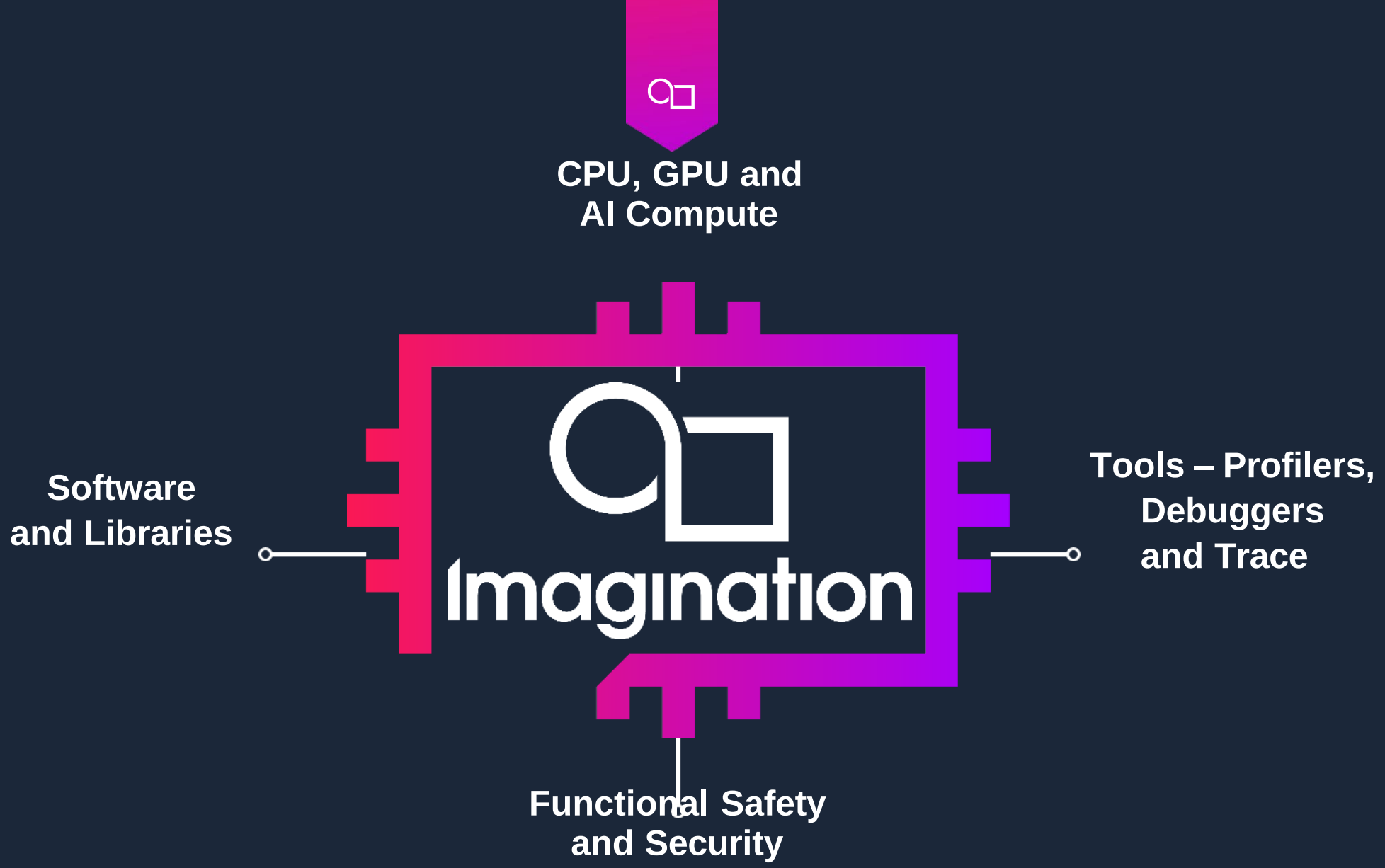
Real Time CPU Family
Balance Efficiency and Performance

Performance Dense CPU Family
High Performance

High Performance CPU Family
High Performance

Functional Safety

Software, Tools and Support



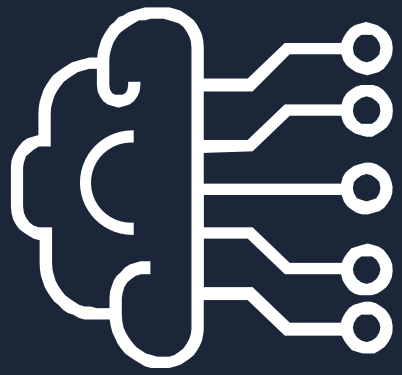
IMAGINATION INTEGRATED SOLUTION


Imagination
IMAGINATION'S INTEGRATED COMPUTE SOLUTIONS FOR CONSUMER AND IOT

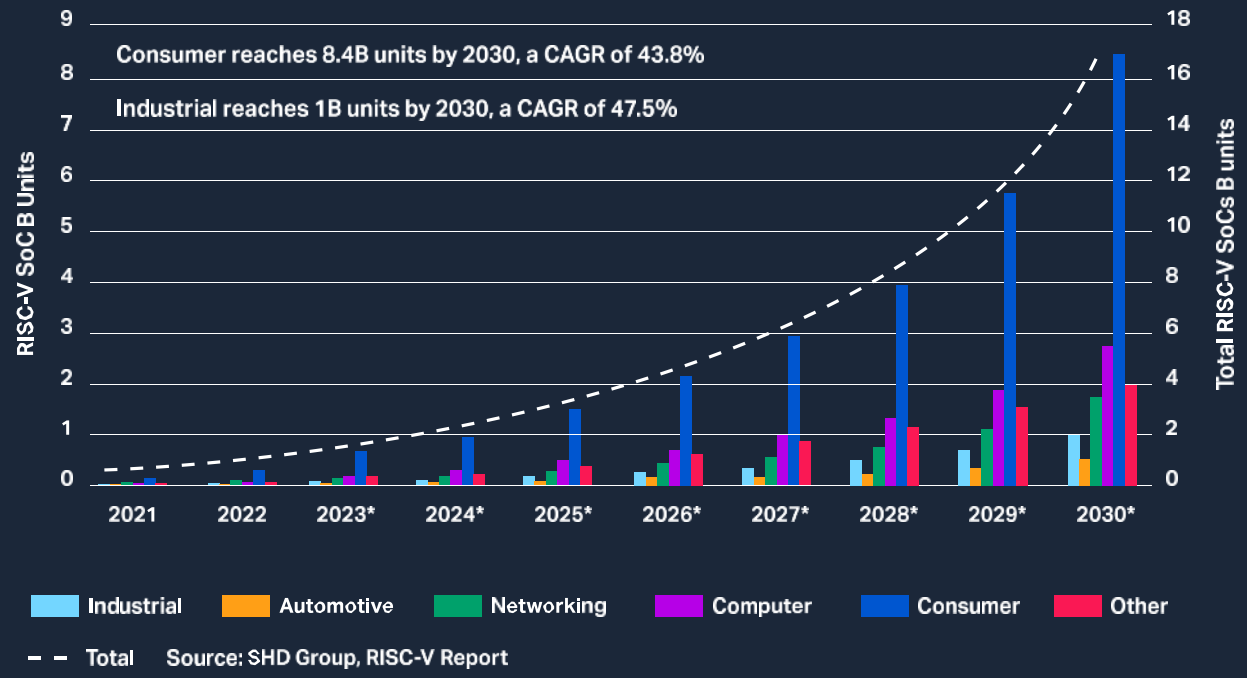
TRENDS IN CONSUMER AND IOT

ENHANCED USER EXPERIENCE

- Pervasive deployment of sensors, notably in IoT, consumer applications
- Extensive deployment of AI
- Increasing complexity of user experiences driving the need for integrated graphics
- Silicon cost and efficiency very important



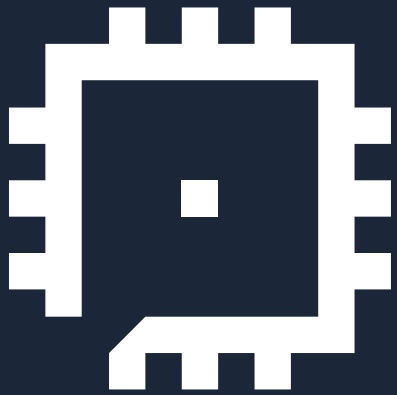
SIGNIFICANT GROWTH OF RISC-V IN CONSUMER AND INDUSTRIAL APPLICATIONS

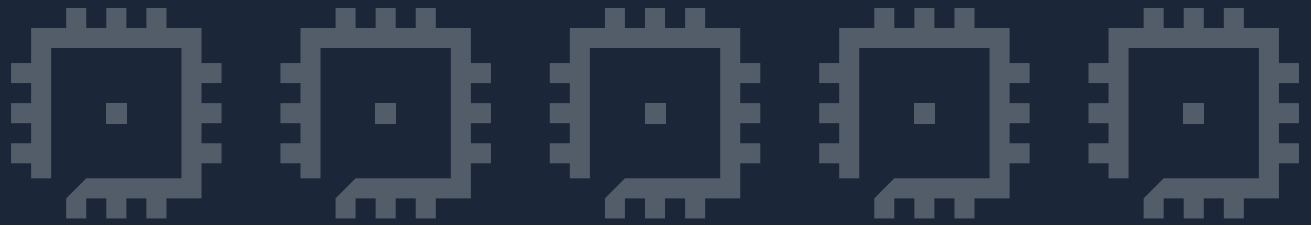


the SHDgroup

Imagination

IMAGINATION APXM-6200 CPU





Imagination's first RISC-V application processor and the second CPU in our Catapult line of products

A secure CPU that delivers on every customer expectation of performance and trust.

APXM-6200 ADVANTAGES:
PERFORMANCE MEETS TRUST

Performance density

Integrated system (CPU + GPU + Software & Tools + Security)

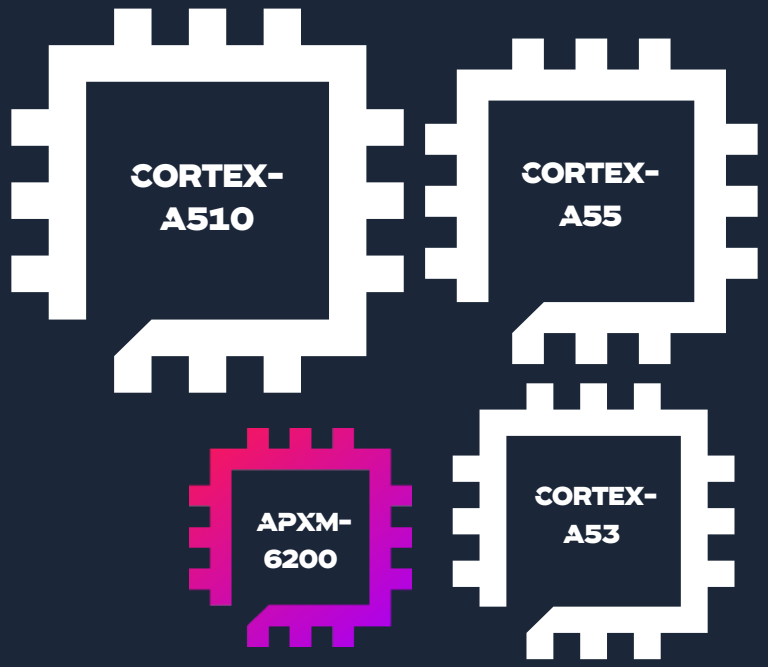
PERFORMANCE

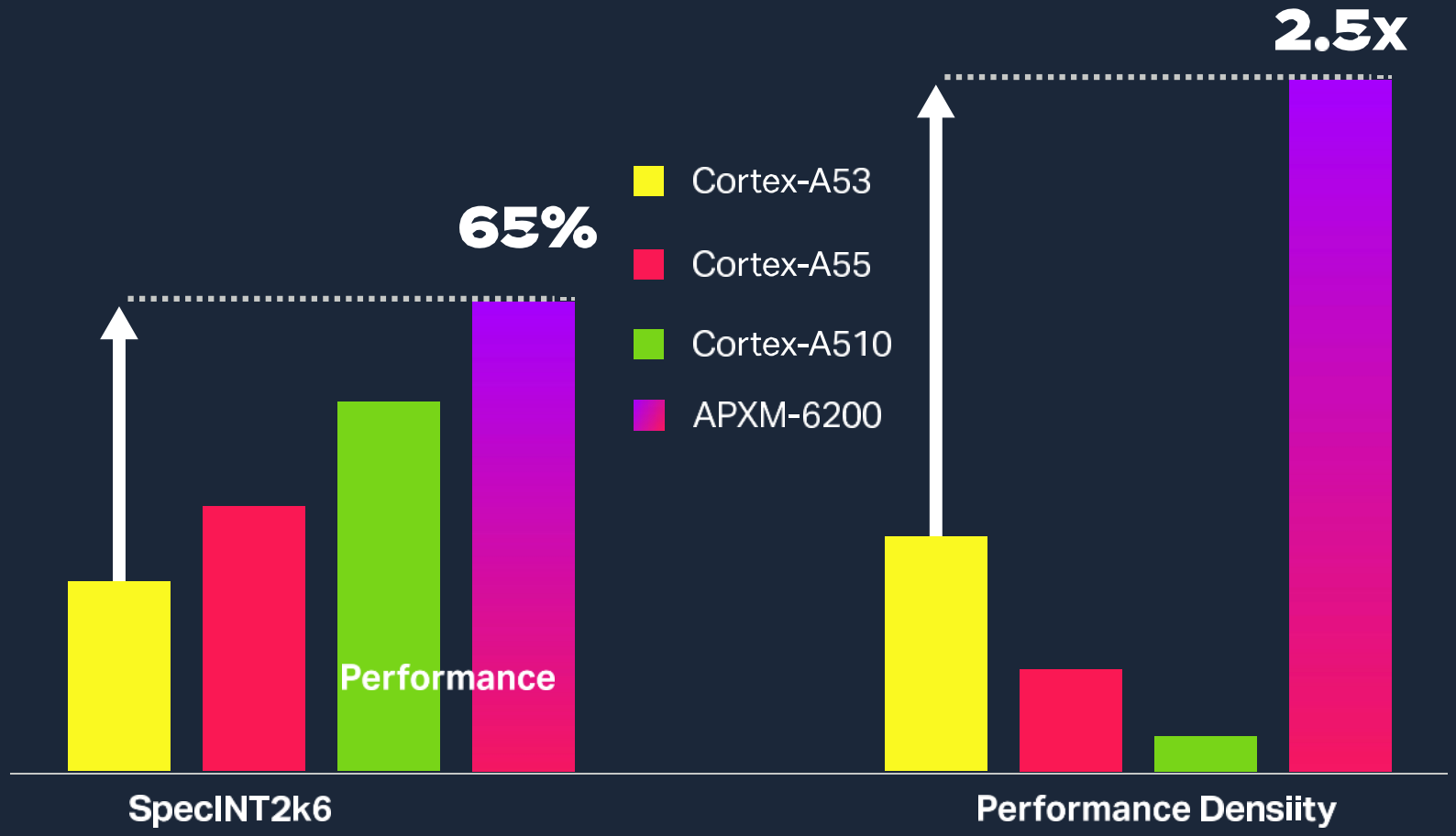
Ease of migration from Arm based designs

RISC-V profile compliance

TRUST

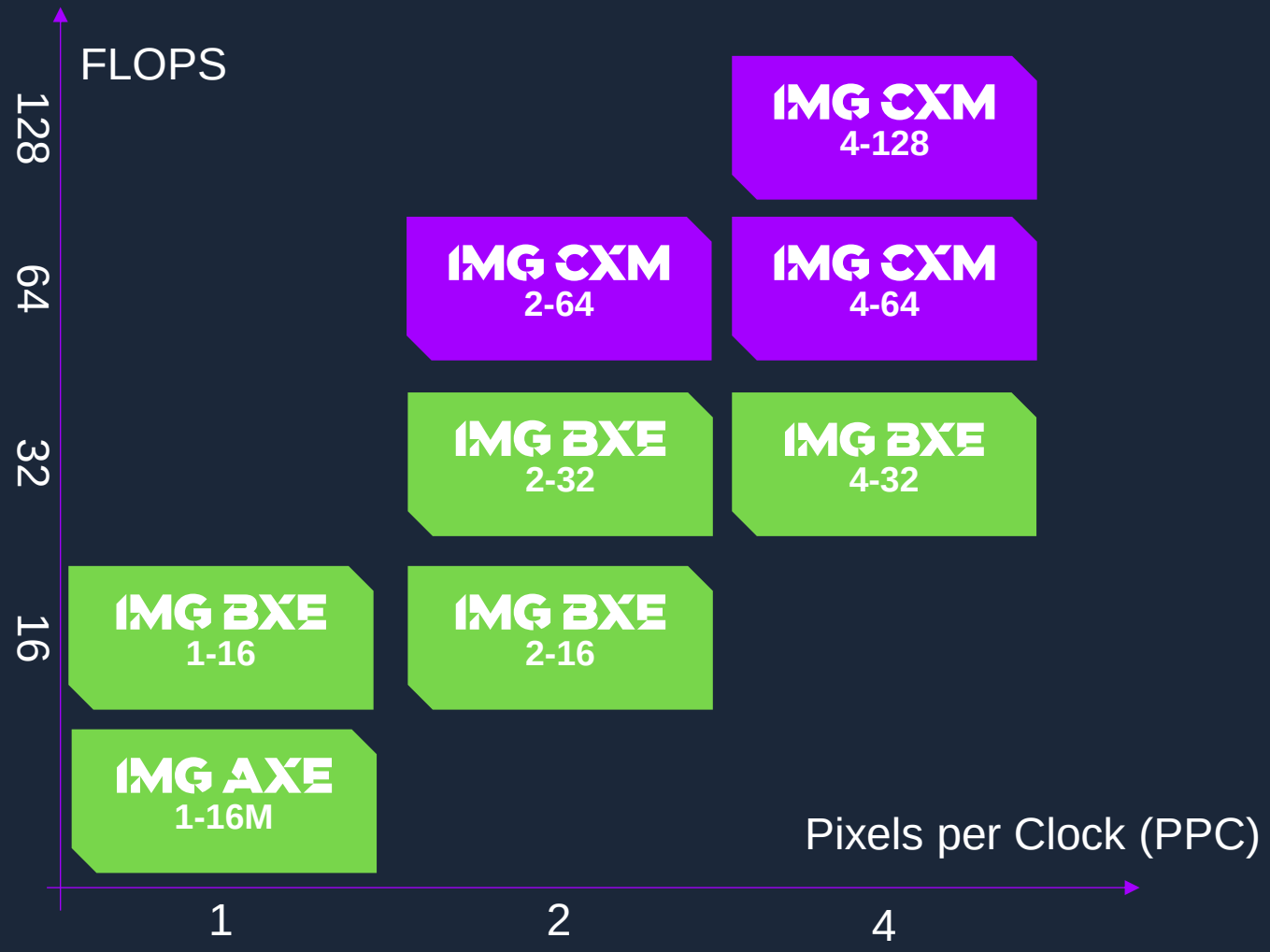
APXM-6200 – PROVIDING MARKET LEADING PERFORMANCE AT A FRACTION OF THE SILICON COST





Ratioed areas of cores at fixed node
Single core with Caches

RANGE OF EFFICIENT GPU FAMILY FROM IMAGINATION

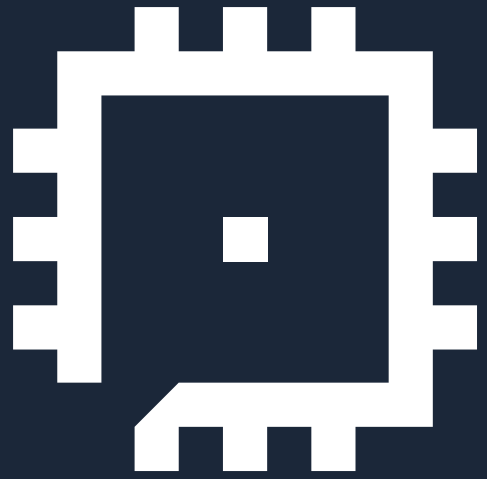


Full range performance points covering entry to flagship consumer /IOT devices

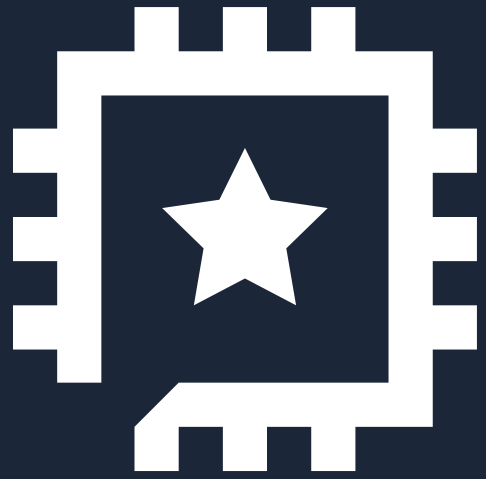
- Fine tuned base configuration for area efficiency
- Support for full HDR plus lossy/lossless compression
- Reduced memory bandwidth and footprint
- Power efficient and cost effective

Proven Android Experience

INTEGRATED CONSUMER & IOT SOLUTION



IMAGINATION GPU



IMAGINATION CPU

2x

- ✓ Increase in bus utilisation
- ✓ Reduction in memory traffic

GPU SOFTWARE AND DRIVERS PORTED TO RISC-V AND OPTIMISED FOR APXM-6200


CPU + GPU LIVE
DEMO @
BOOTH B5


THANK
YOU