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Qualcomm

INVESTOR DAY 2024

Note Regarding Forward-Looking Statements

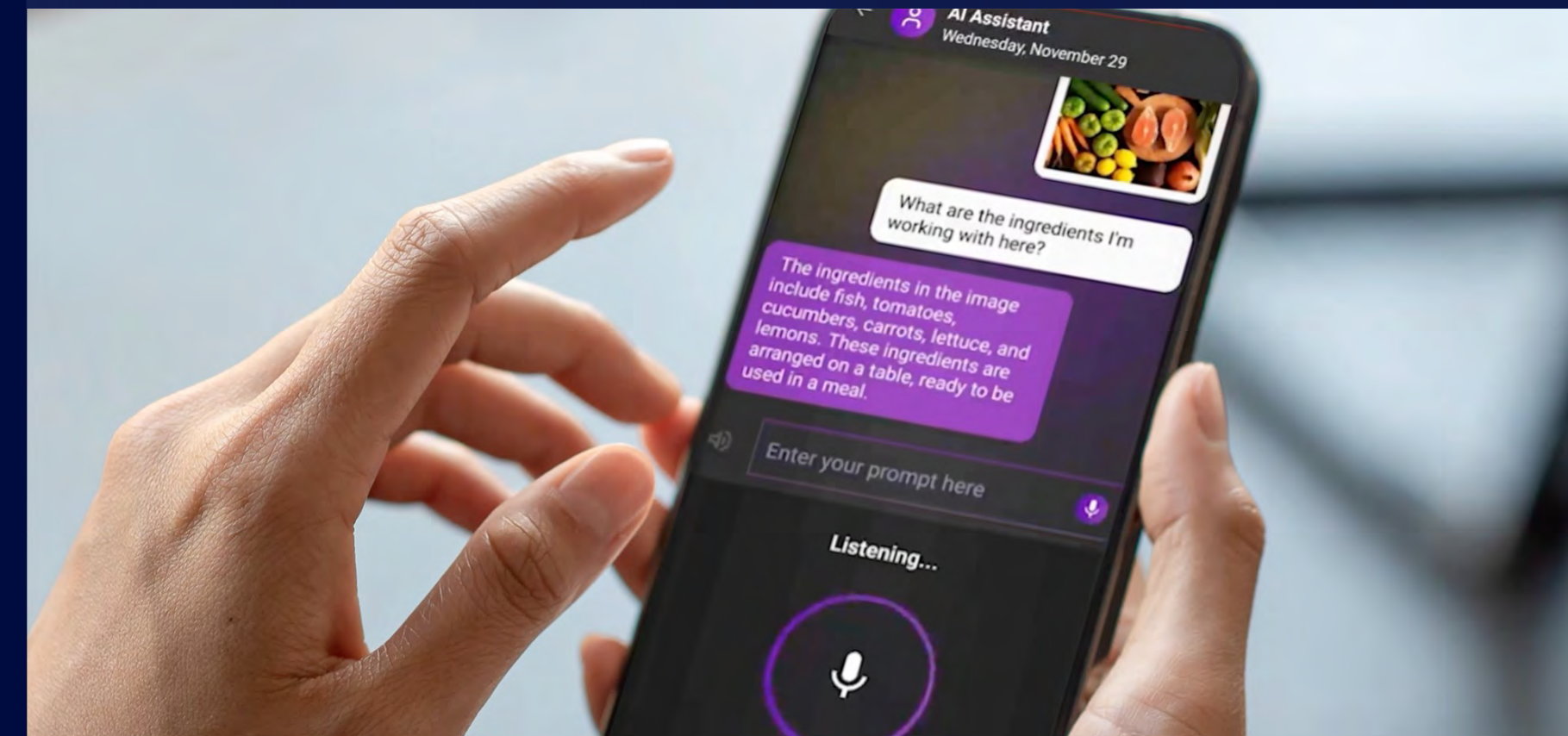
In addition to historical information, this presentation contains forward-looking statements that are inherently subject to risks and uncertainties, including but not limited to statements regarding: our growth and diversification opportunities, including those in automotive and the internet of things (IoT), and opportunities arising from the continued adoption of artificial intelligence (AI) technologies; our business, product and technology strategies, including our diversification strategy; our technologies, technology leadership, technology differentiation and technology roadmap; our products, product performance, product leadership, product pipeline, product mix and product roadmap; new product releases, announcements and design wins; our automotive design-win pipeline; the benefits of our technologies, products and research and development efforts; our business and share trends, as well as market and industry trends, such as on-device Generative AI, and their potential impact on our business and our positioning to take advantage thereof; our TAM and/or SAM expansion in various industries; acquisitions, collaborations or other strategic transactions, including the anticipated benefits thereof; anticipated demand for our products and technologies; our capital allocation strategy, including anticipated dividend growth and share repurchases; our business outlook; and our estimates, guidance, targets and planning assumptions related to financial performance, including our various five-year revenue targets. Forward-looking statements are generally identified by words such as “estimates,” “guidance,” “forecast,” “target,” “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks” and similar expressions. Actual results may differ materially from those referred to in the forward-looking statements due to a number of important factors, including but not limited to: our dependence on a small number of customers and licensees, and particularly from their sale of premium-tier handset devices; our customers vertically integrating; a significant portion of our business being concentrated in China, which is exacerbated by U.S./China trade and national security tensions; our ability to extend our technologies and products into new and expanded product areas, and industries and applications beyond mobile handsets; our strategic acquisitions, transactions and investments, and our ability to consummate strategic acquisitions; our dependence on a limited number of third-party suppliers; risks associated with the operation and control of our manufacturing facilities; security breaches of our information technology systems, or other misappropriation of our technology, intellectual property or other proprietary or confidential information; our ability to attract and retain qualified employees; the continued and future success of our licensing programs, which requires us to continue to evolve our patent portfolio and to renew or renegotiate license agreements that are expiring; efforts by some OEMs to avoid paying fair and reasonable royalties for the use of our intellectual property, and other attacks on our licensing business model; potential changes in our patent licensing practices, whether due to governmental investigations, legal challenges or otherwise; adverse rulings in governmental investigations or proceedings or other legal proceedings; our customers’ and licensees’ sales of products and services based on CDMA, OFDMA and other communications technologies, including 5G, and our customers’ demand for our products based on these technologies; competition in an environment of rapid technological change, and our ability to adapt to such change and compete effectively; failures in our products or in the products of our customers or licensees, including those resulting from security vulnerabilities, defects or errors; difficulties in enforcing and protecting our intellectual property rights; claims by third parties that we infringe their intellectual property; our use of open source software; the cyclical nature of the semiconductor industry, declines in global, regional or local economic conditions, or our stock price and earnings volatility; geopolitical conflicts, natural disasters, pandemics and other health crises, and other factors outside of our control; our ability to comply with laws, regulations, policies and standards; our indebtedness; and potential tax liabilities. These and other risks are set forth in our Annual Report on Form 10-K for the fiscal year ended September 29, 2024 filed with the Securities and Exchange Commission (SEC). Our reports filed with the SEC are available on our website at www.qualcomm.com. We undertake no obligation to update, or continue to provide information with respect to, any forward-looking statement or risk factor, whether as a result of new information, future events or otherwise.

This presentation includes “Non-GAAP financial measures” as that term is defined in Regulation G. Further discussion regarding our use of Non-GAAP financial measures, as well as the most directly comparable GAAP (accounting principles generally accepted in the United States) financial measures and information reconciling these Non-GAAP financial measures to our financial results prepared in accordance with GAAP, are included in this presentation.

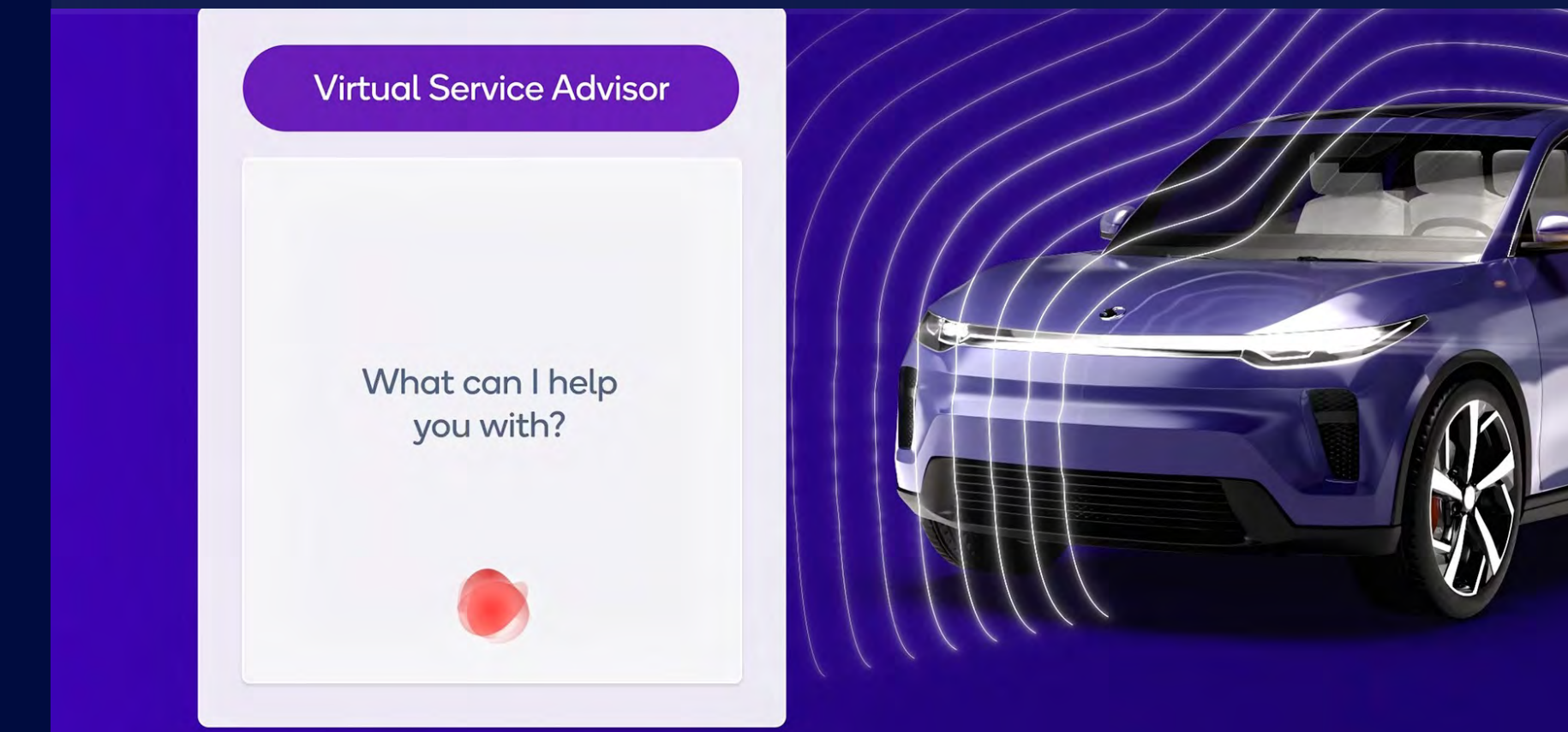
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AI is changing the future

HANDSETS



AUTOMOTIVE



PC



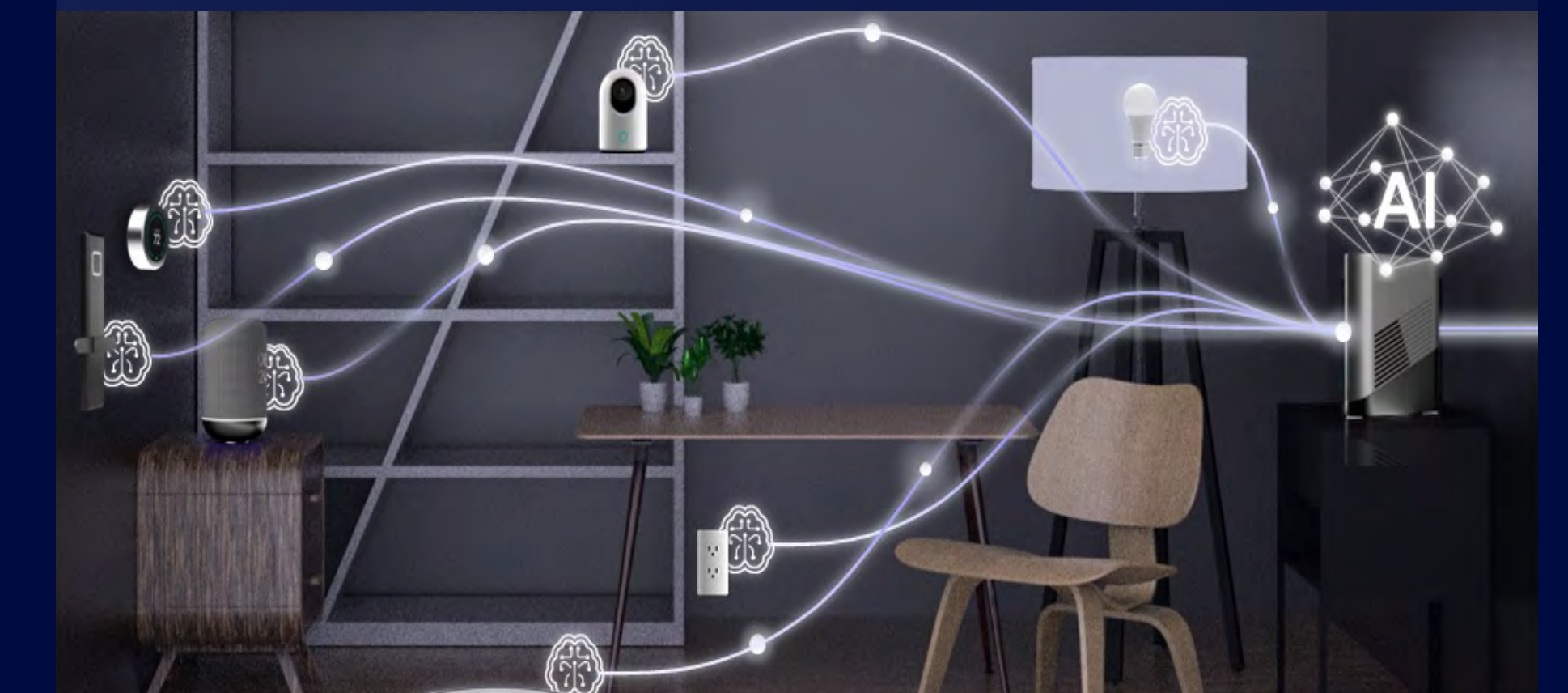
XR



INDUSTRIAL



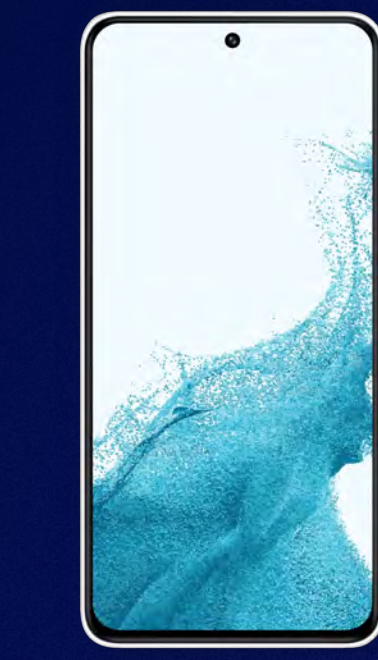
NETWORKING



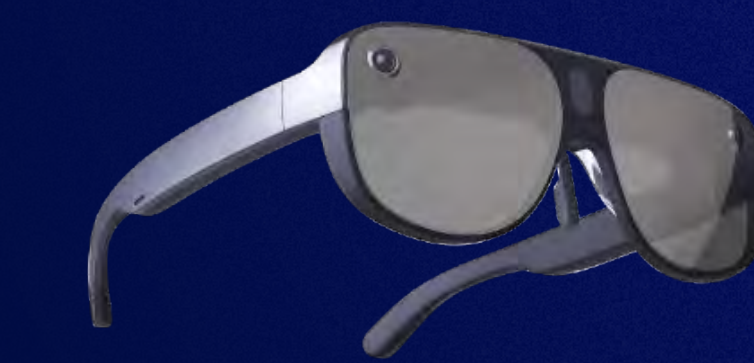


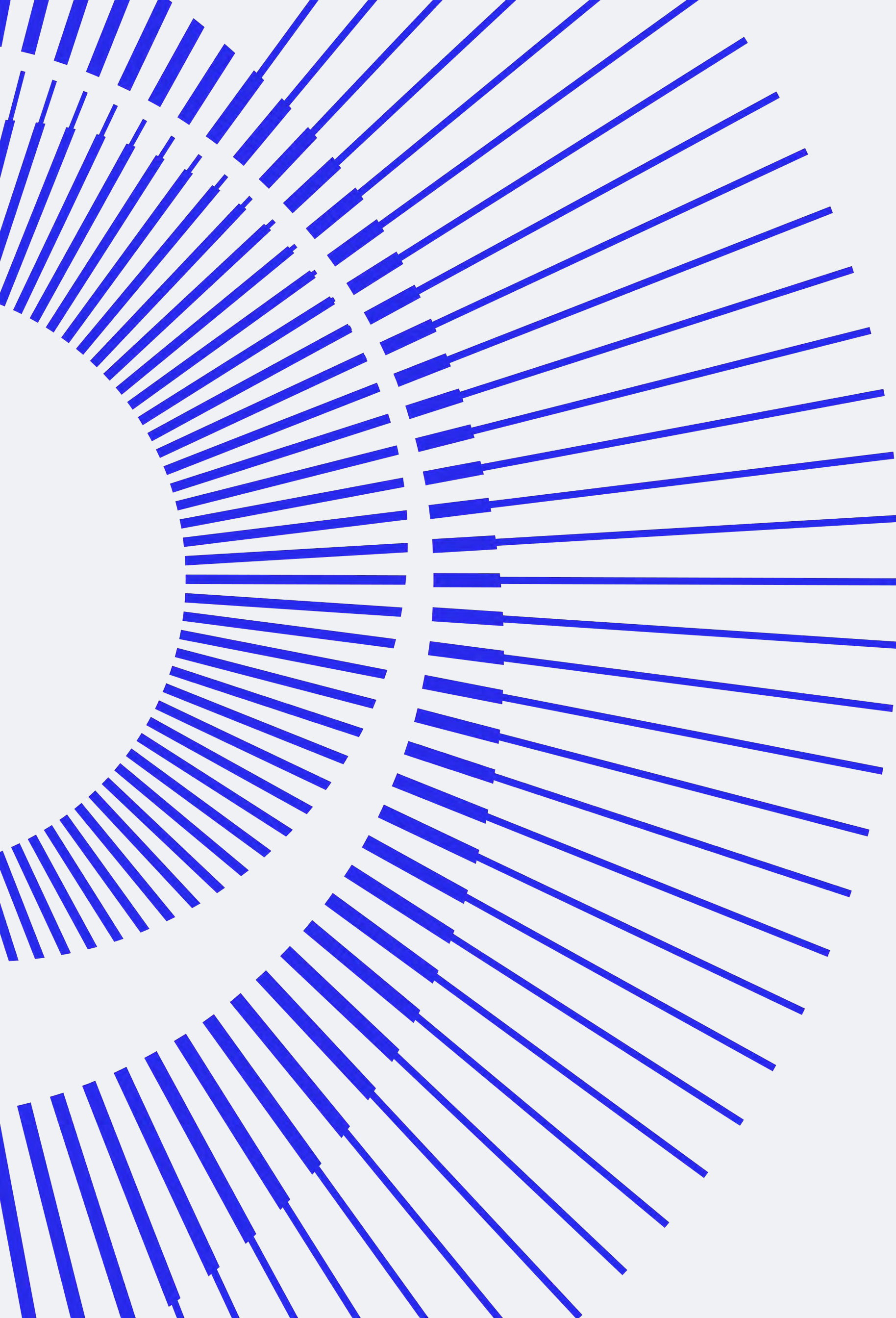
On-device AI

- Performance and efficiency
- Privacy and security
- Immediacy
- Reliability
- Personalization
- User interface
- Cost

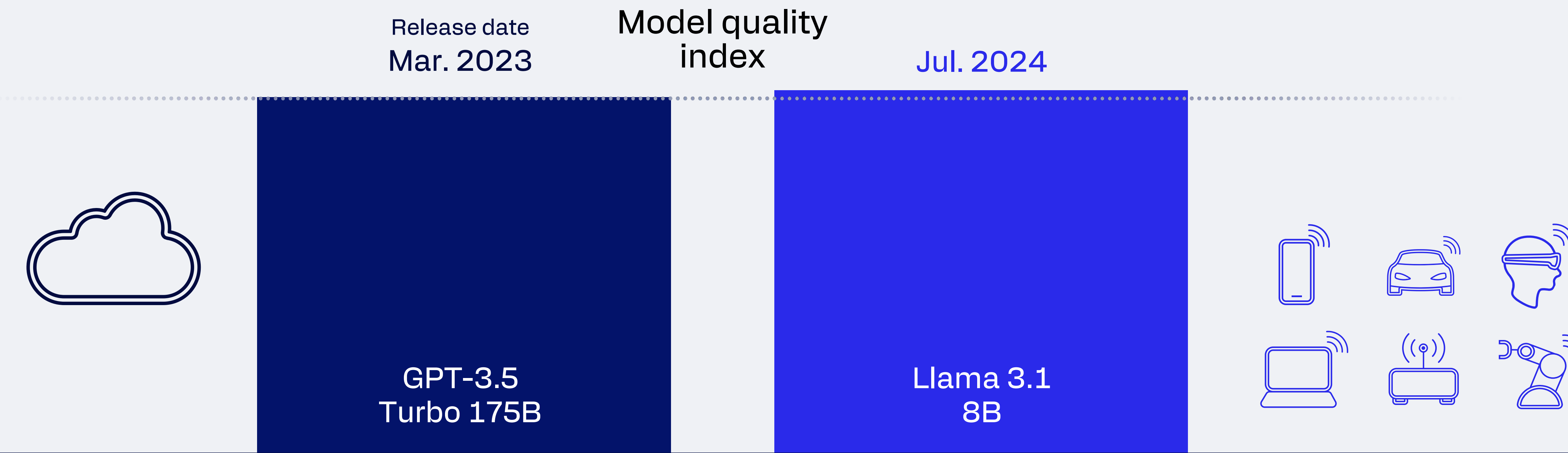


AI inference on edge devices is here

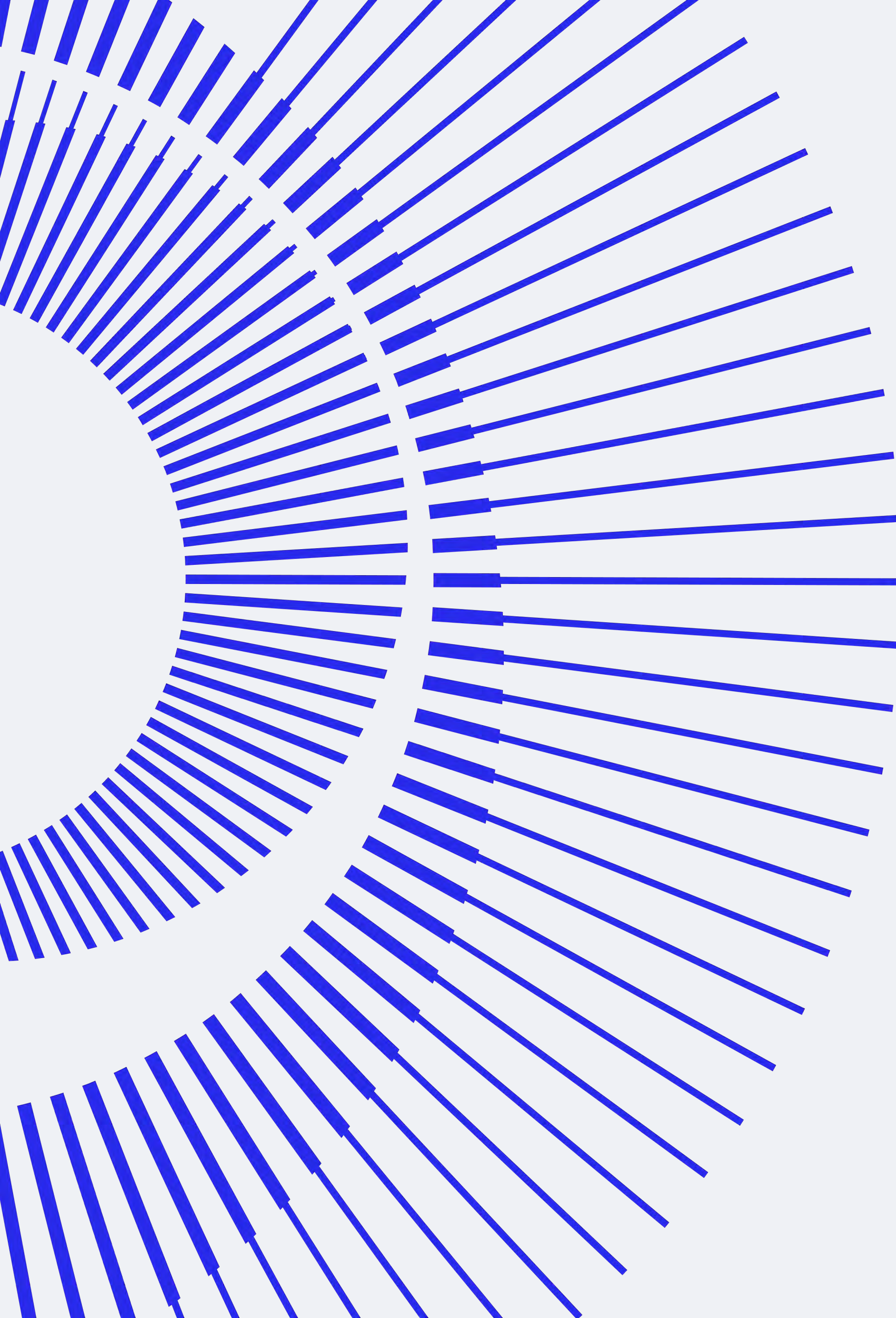




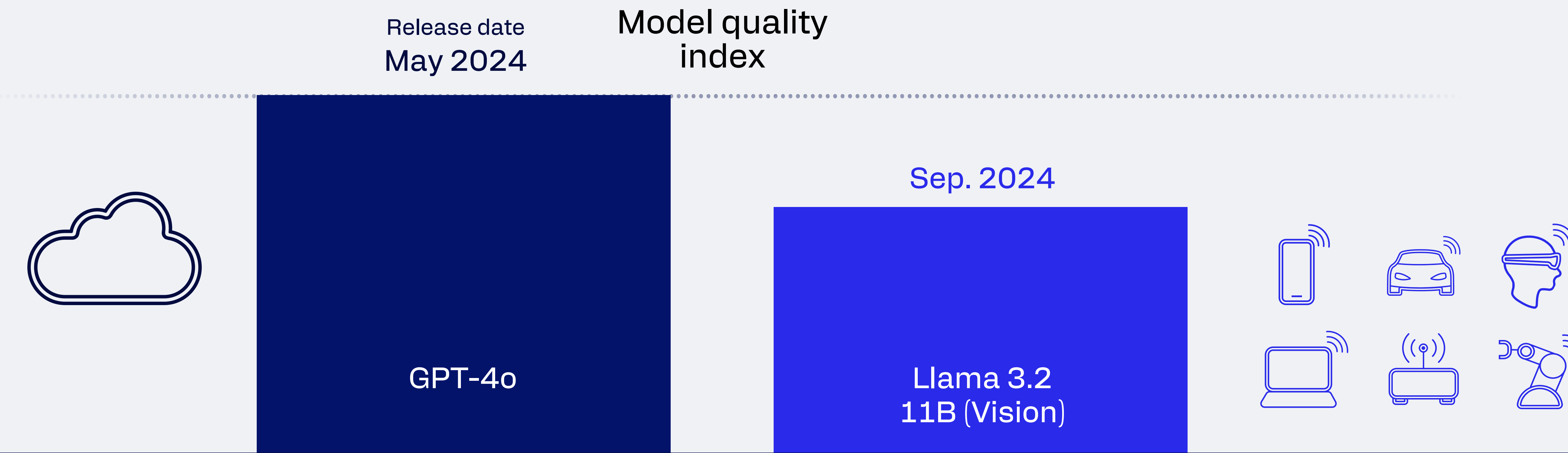
AI capabilities on device today equals last year's on cloud



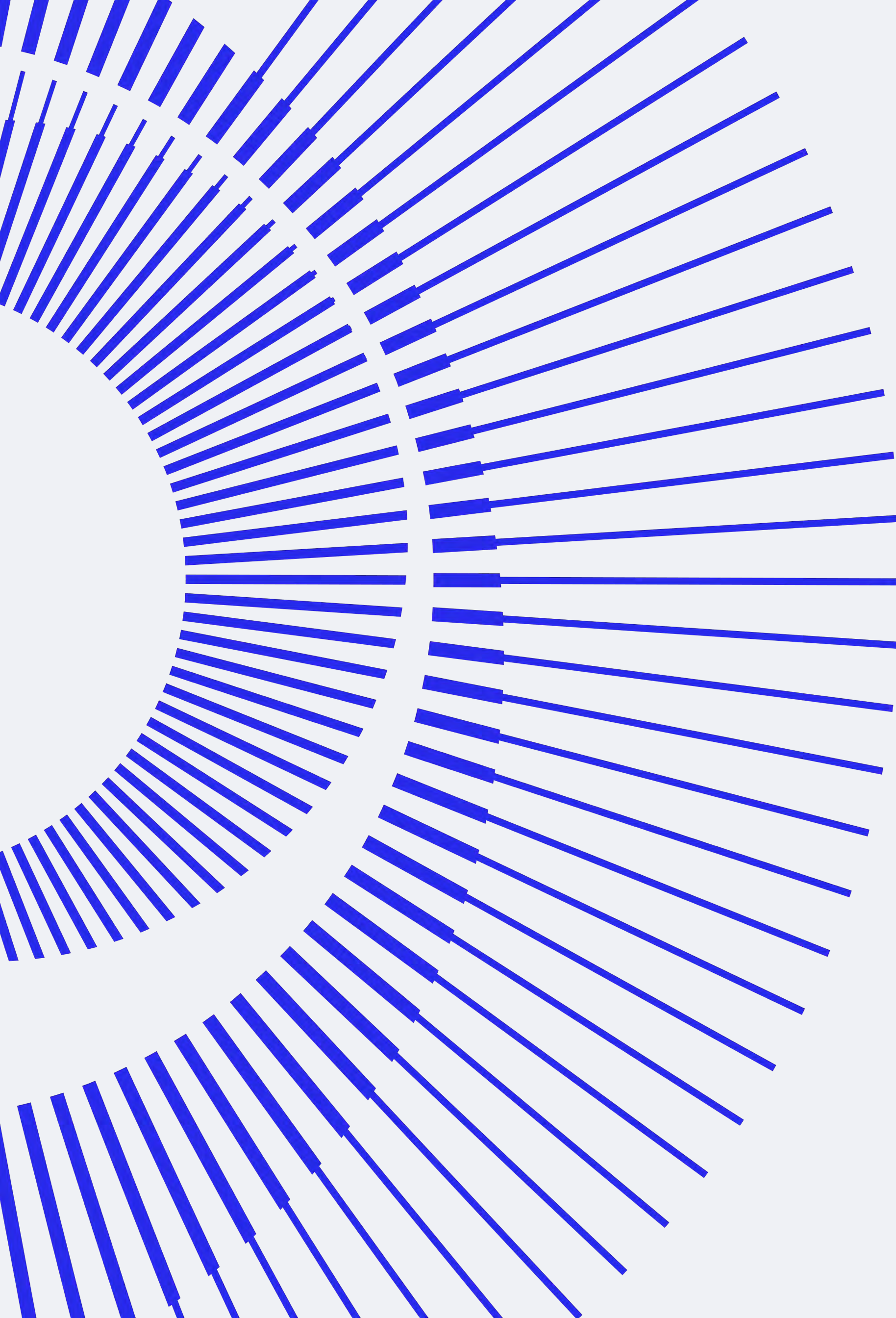
Artificial Analysis, Nov. 2024; Index represents normalized average relative performance across Chatbot arena, MMLU and MT-Bench.



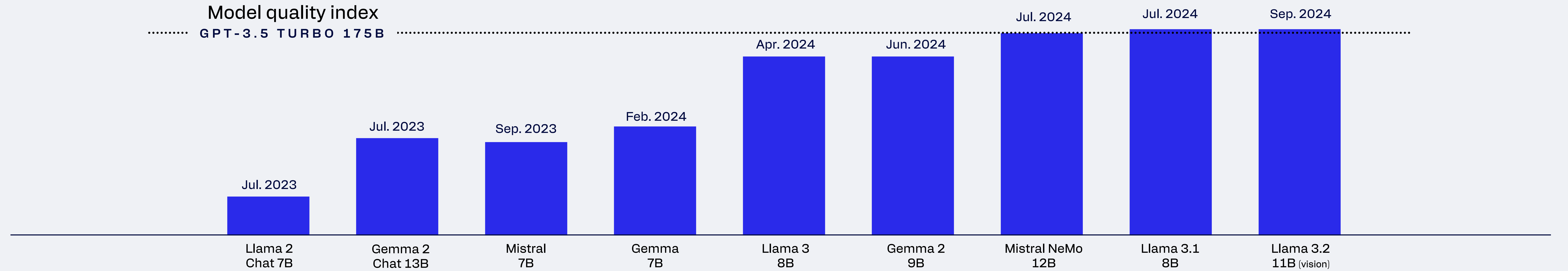
The rise of on-device AI model capabilities continues this year



Artificial Analysis, Nov. 2024; Index represents normalized average relative performance across Chatbot arena, MMLU and MT-Bench.



Quality of small models suitable for on-device AI is rapidly increasing



Artificial Analysis, Sep.-Nov. 2024; Index represents normalized average relative performance across Chatbot arena, MMLU and MT-Bench.

Cloud inferencing costs deter GenAI scalability

	OpenAI	Meta	ANTHROPIC	MISTRAL AI	Alphabet
CLOUD MODEL	GPT-4o	Llama 3.1 405B	Claude 3.5 Sonnet	Mistral Large 2	Gemini 1.5 Pro
CLOUD INFERENCING PRICE PER 1M TOKENS	\$4.38	\$5.13	\$6.00	\$3.00	\$2.19

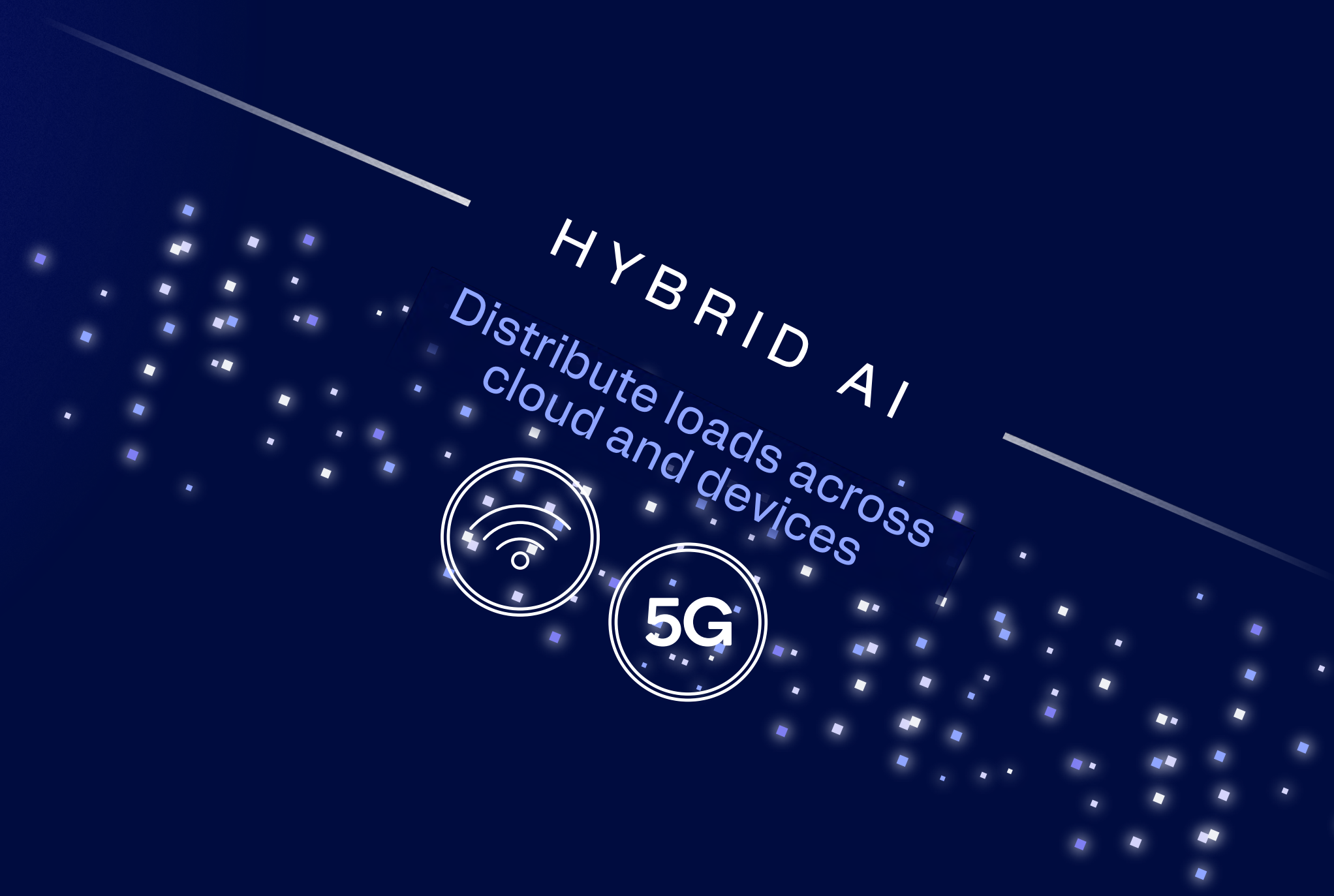


CENTRAL CLOUD

Edge AI brings
cost-efficiency
opportunities



CENTRAL
CLOUD



ON DEVICE

“ [AI inferencing on devices]
reduces operational costs for
developers and app providers”

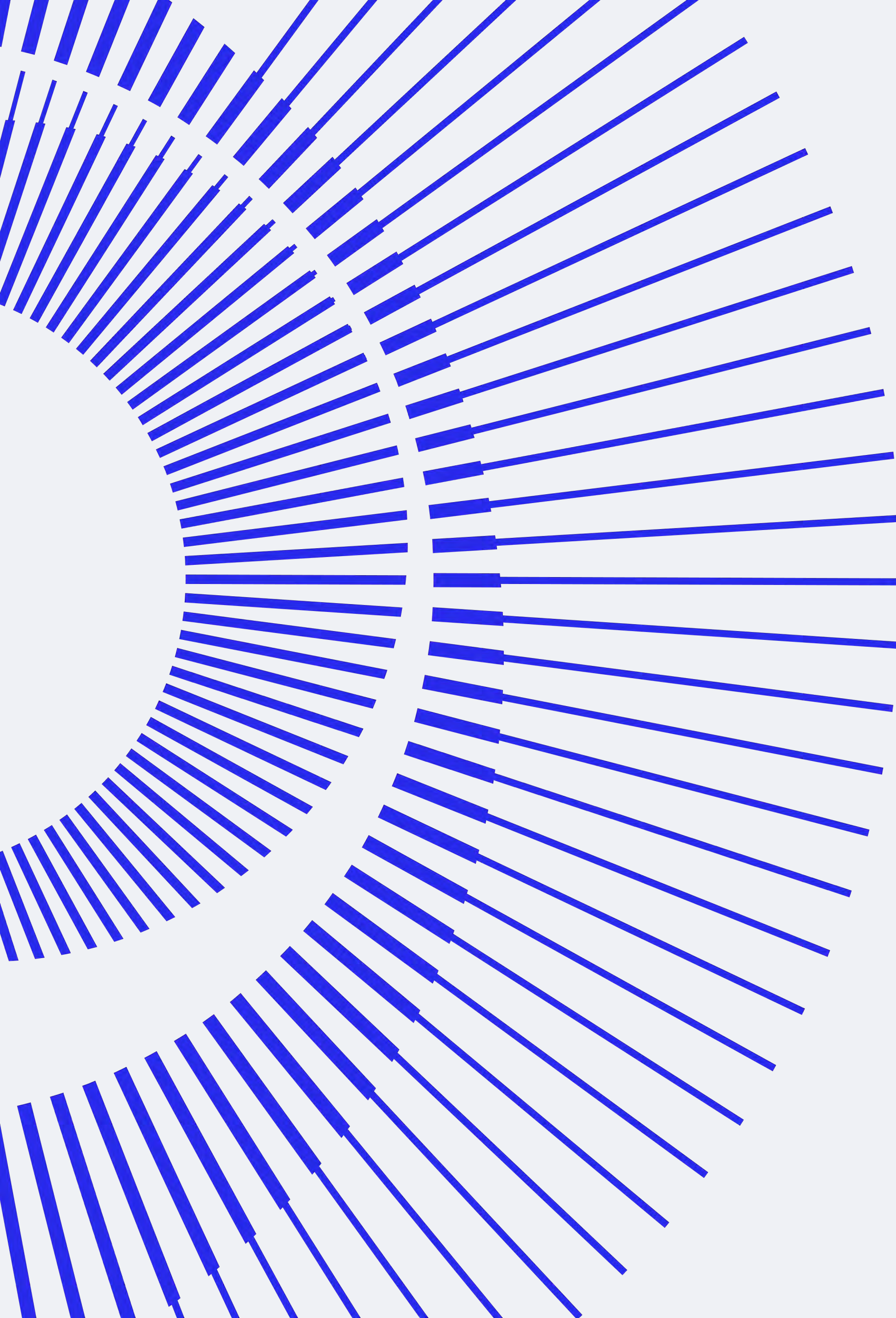
- IDC, Oct. 2024

Train on cloud
Run on Qualcomm



A diverse choice of models available for edge AI

Open	Proprietary	Regional	Traditional
— Aya DBRX Gemma Granite Jamba Llama Mistral Phi Solar Stable diffusion	— Baichuan Gemini Nano Ministral PLaMo Phi Silica Qwen Reka	— ALLaM (KSA) Bielik (Poland) Jais (UAE) Pharia (Germany) Indus (India) SEA-LION (Singapore)	— Computer vision Depth estimation Image classification Image editing Image to text Object detection Pose estimation Semantic segmentation Speech recognition Super resolution



What's next



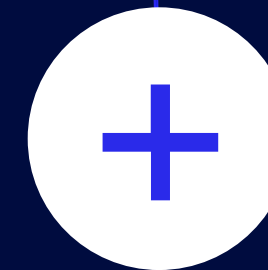
EDGE AI

Supporting key use cases

Text creation and summarization | Content creation

Photo / video editing | Productivity | AI assistants

Code generation | Live translation



Creating a new UI across devices

Creating a new UI across devices



Voice/audio



Text/touch



Photo



Vision



Sensors

AI is the
new UI

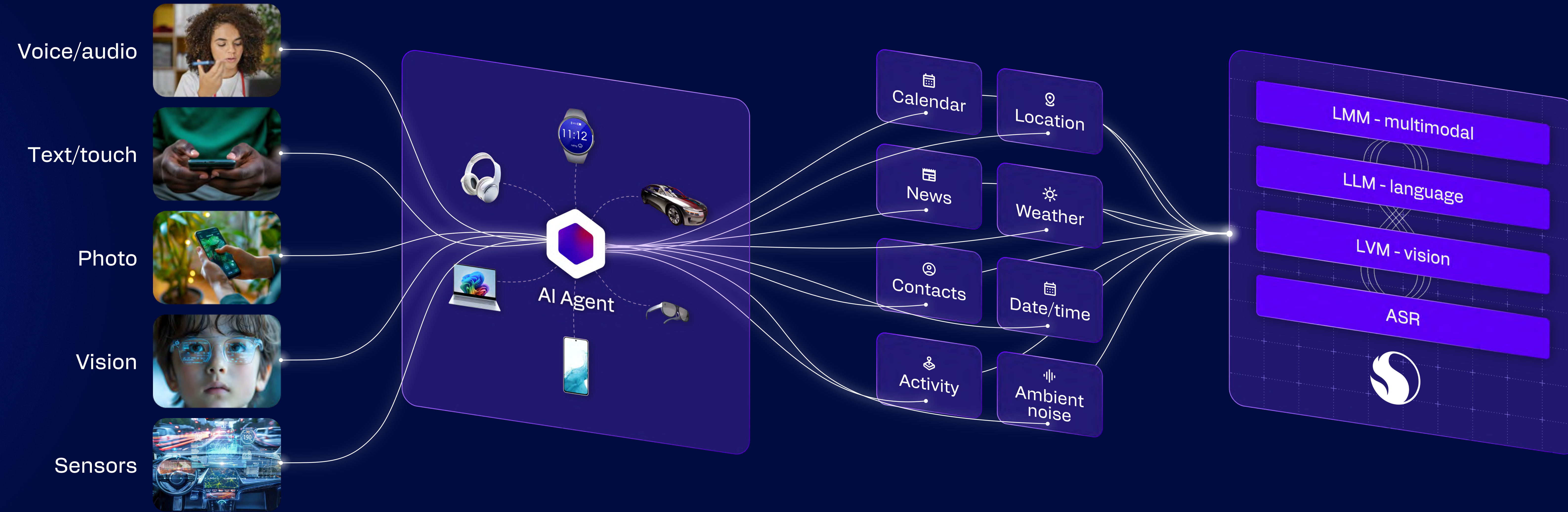
AI is the new UI



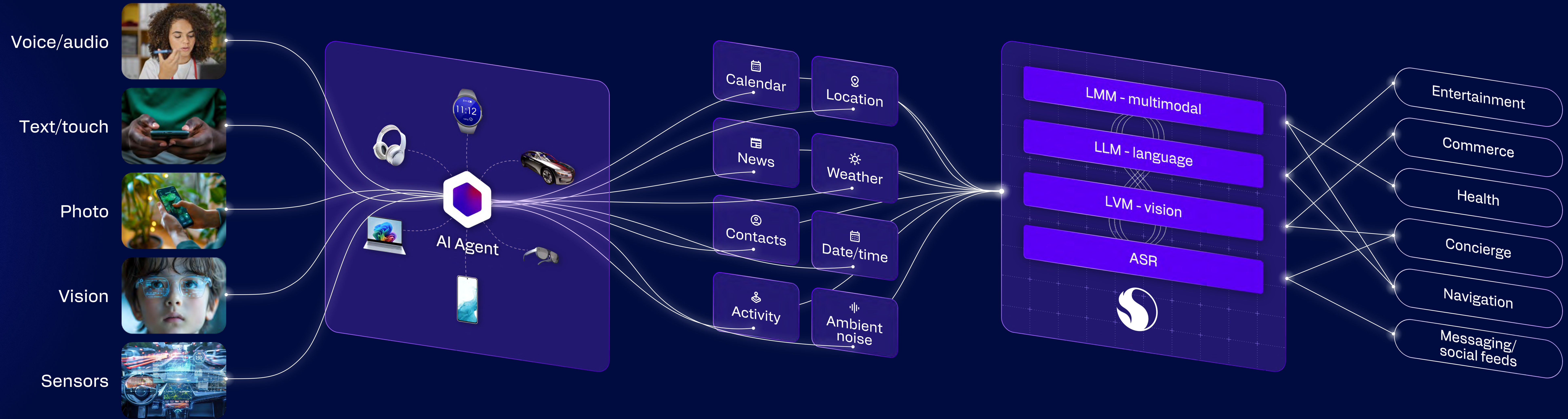
AI is the new UI

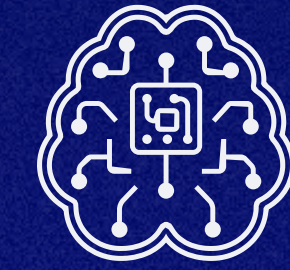


AI is the new UI



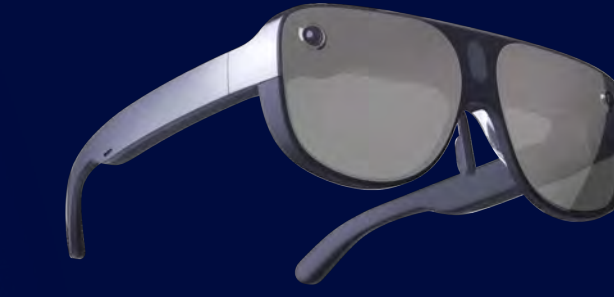
AI is the new UI





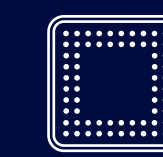
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Scale at the edge



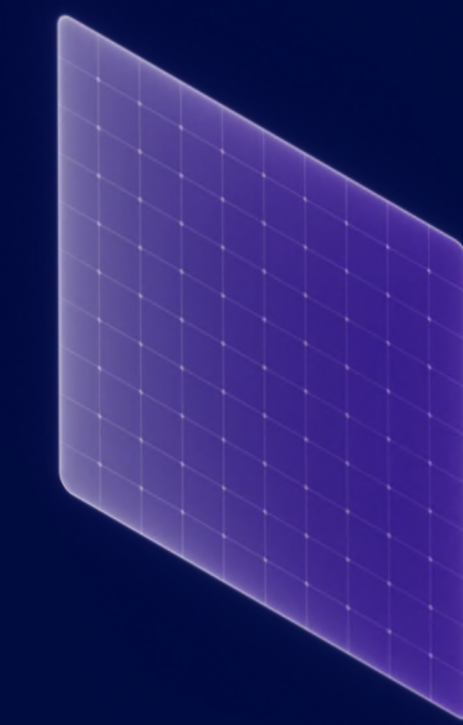
Qualcomm has built the foundational technologies to drive AI at the edge

Train on cloud | Run on Qualcomm



Hardware

CPU, GPU, NPU



Software

All frameworks, runtimes, delegates

PyTorch

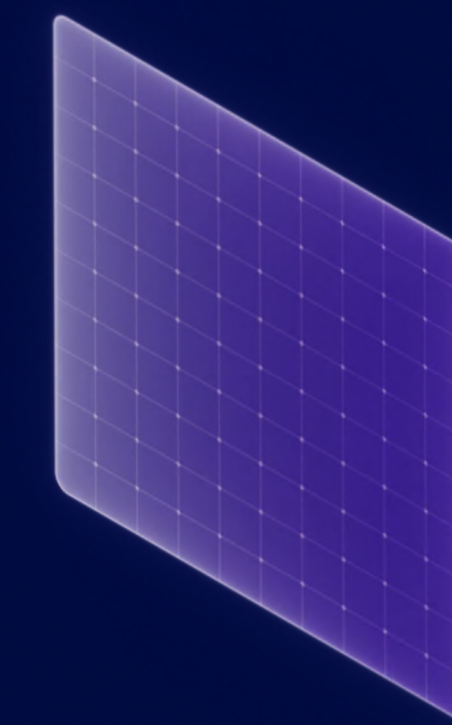
Keras

ONNX

Microsoft DirectML

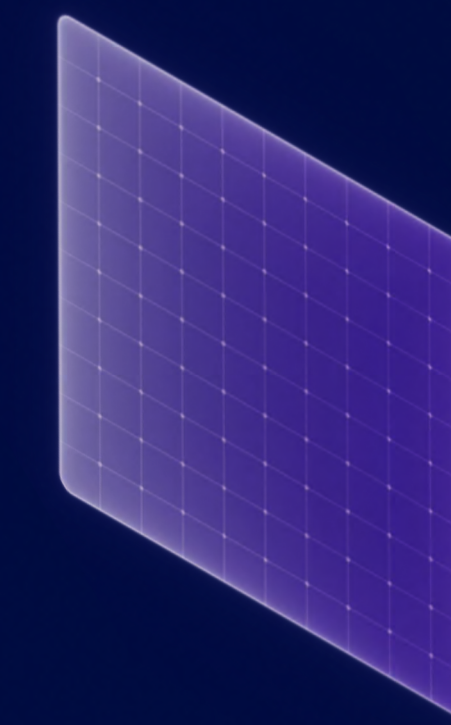
TensorFlow

Qualcomm® AI Engine Direct



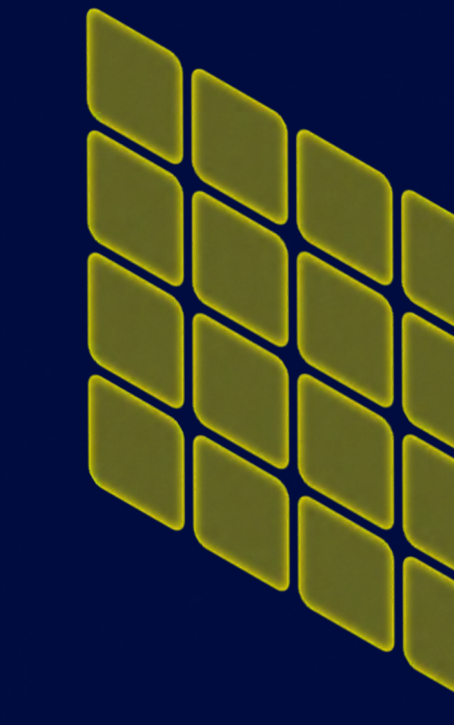
Orchestrator

AI agents, planner, RAG, model selection



Tools

Qualcomm® AI Hub



OS

android, windows, linux, Zephyr

ubuntu®, CentOS, QNX





CUSTOM CPU + GPU + NPU

Cornerstone of edge AI leadership

Custom-designed IP, system-level design

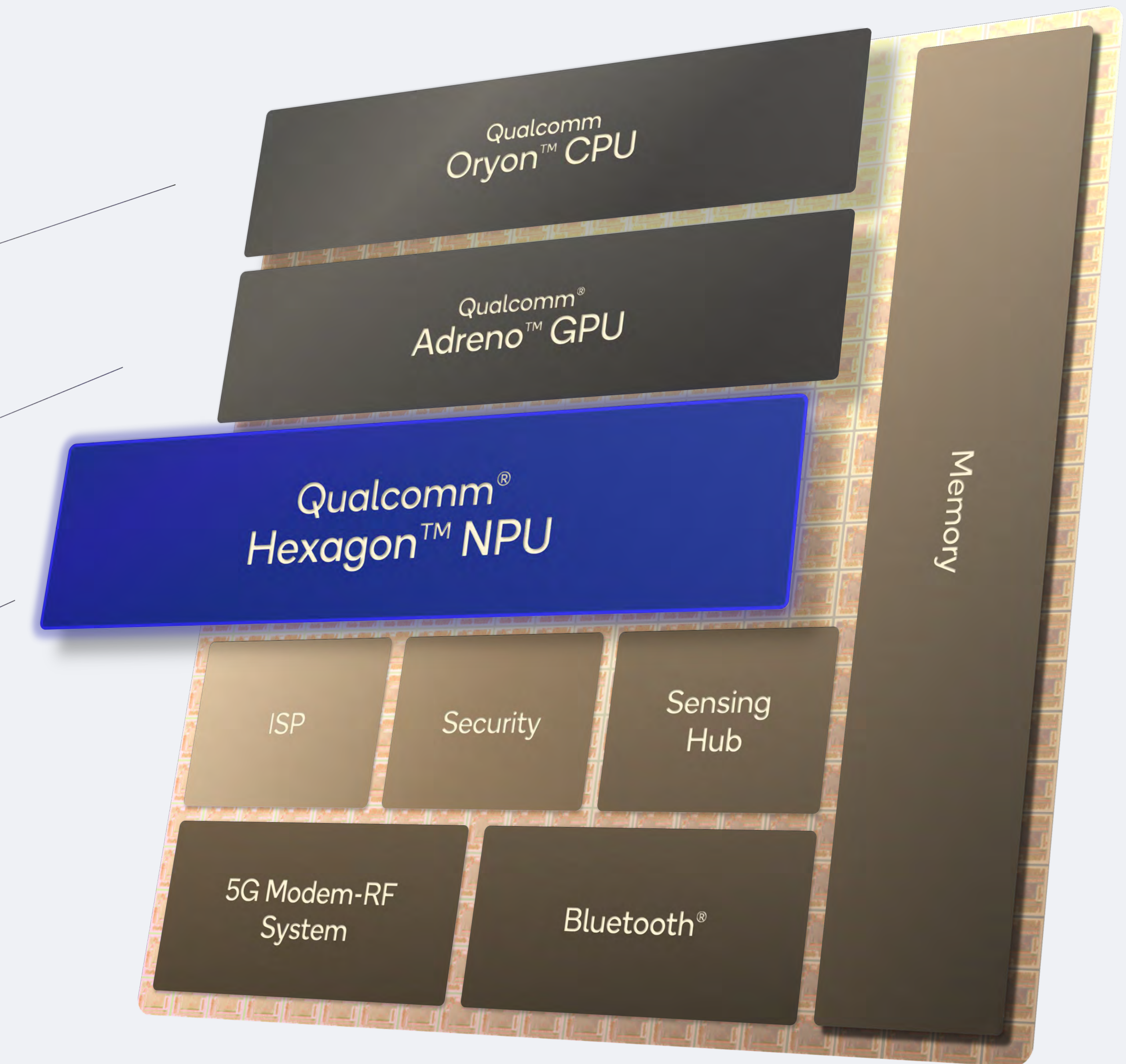
Best-in-class GenAI performance and power efficiency

Enabling on-demand, sustained and pervasive AI applications

Immediacy

Image and video processing

Sustained and pervasive usage



Chiplet
integration

Scalable
high-memory bandwidth

Thermal
design

Qualcomm has the IP for sustained leadership in edge AI

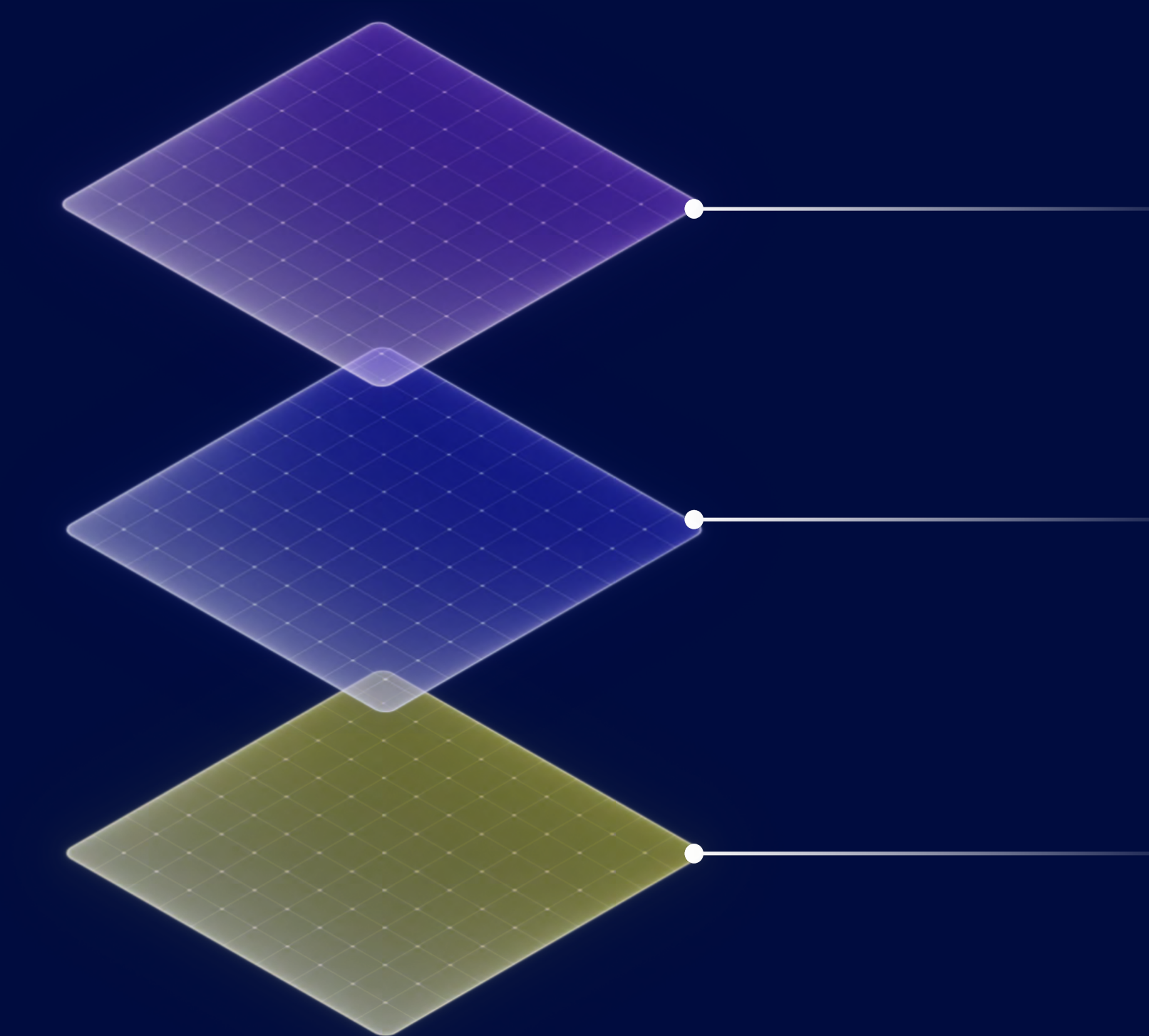
Heterogeneous
computing

Package
technologies



Unified AI software across our products

Train on cloud
Run on Qualcomm



AI frameworks

TensorFlow | PyTorch | ONNX | Keras

AI runtimes

Qualcomm[®] Neural Processing SDK | Qualcomm[®] AI Engine direct |
DirectML | ExecuTorch | TFLite (LiteRT) | ONNX Runtime

Developer libraries and services

Programming languages | Profilers and debuggers | Compilers |
Math libraries | Containers | SoC accelerators | Emulation support

System software

System interface | SoC accelerator drivers | Emulation support

Qualcomm® Agentic AI Orchestrator





Qualcomm® AI Hub

ENABLING DEVELOPERS FOR SUPERIOR ON-DEVICE AI PERFORMANCE

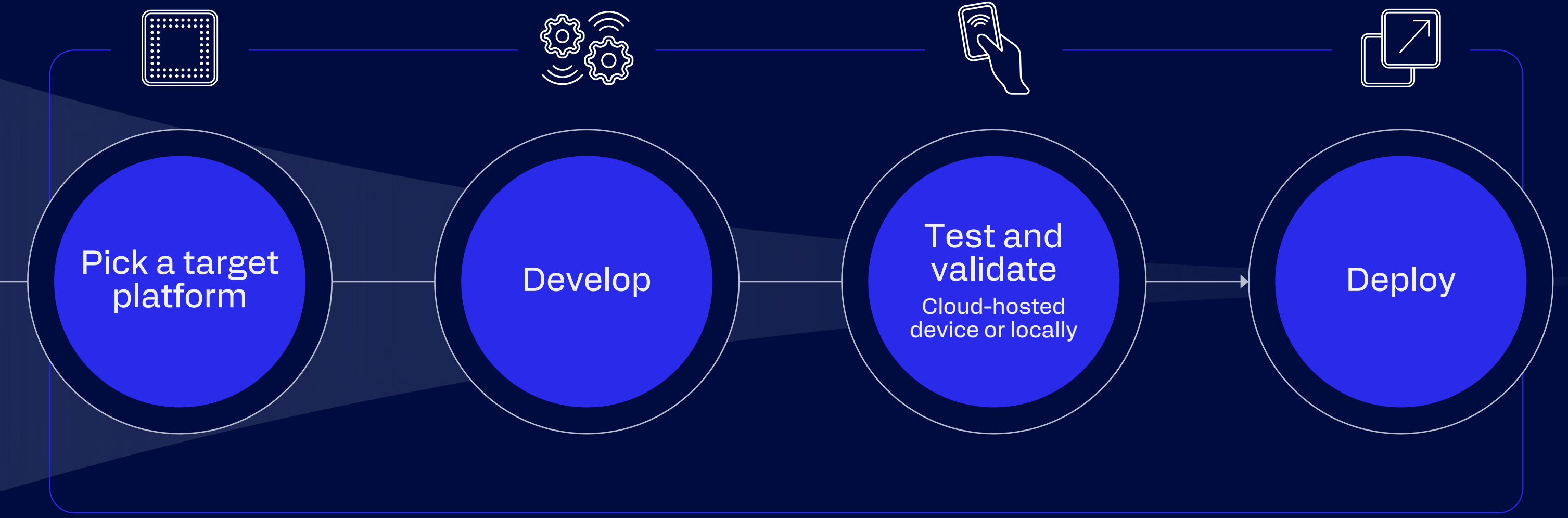
Device farm Models Services
Tools Marketplace



Pick a curated model
Free or paid

Bring your own model
Model is curated for you

Bring your own data
Model is made and curated for you



1,000+ COMPANIES USING QUALCOMM AI HUB



Qualcomm® AI Hub

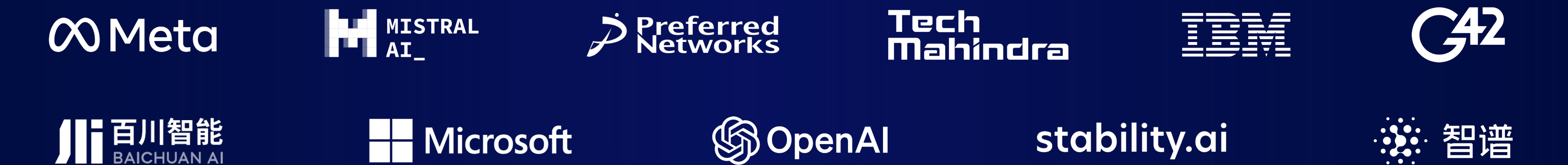
One-stop solution for the edge AI developer ecosystem



SERVICE AND SOFTWARE COLLABORATORS



MODEL MAKERS





Key takeaways

EDGE AI IS INEVITABLE

Driven by performance, privacy,
user interface and cost

QUALCOMM LEADS EDGE AI

Train on cloud
Run on Qualcomm

Thank you

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