

Qualcomm

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# Qualcomm

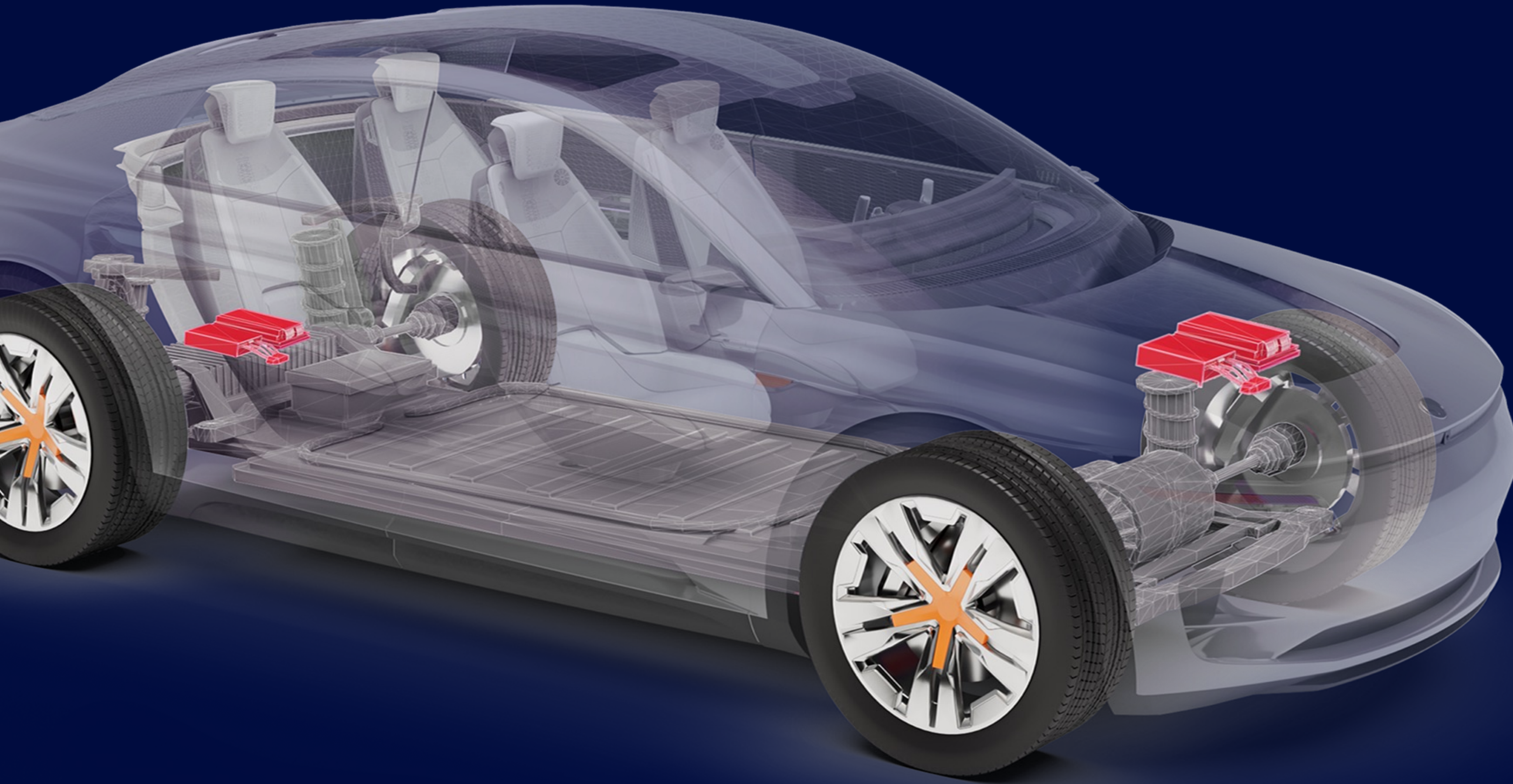
## INVESTOR DAY 2024

# 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](http://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.

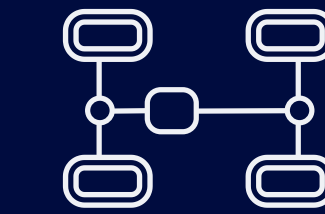
This presentation includes “Non-GAAP financial measures” as that term is defined in Regulation G. Further discussion regarding our use of Non-GAAP financial measures, as well as the most directly comparable GAAP (accounting principles generally accepted in the United States) financial measures and information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

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# Delivering on commitments

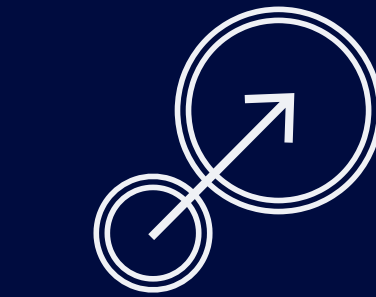
2022 Qualcomm Automotive Investor Day



~\$45B

Design-win pipeline

Advanced driver assistance systems and autonomous driving (ADAS/AD) solutions represent ~1/3 of design-win pipeline



55%

year-over-year QCT Automotive revenue growth in FY24

## Leadership

in connectivity, computing and AI

The design-win pipeline reflects the current estimated future size of awarded automaker programs, based on forecasts provided directly by automakers and Tier-1 suppliers, as of Nov. 19, 2024.



# Leading the path to AI-ready vehicle compute architecture

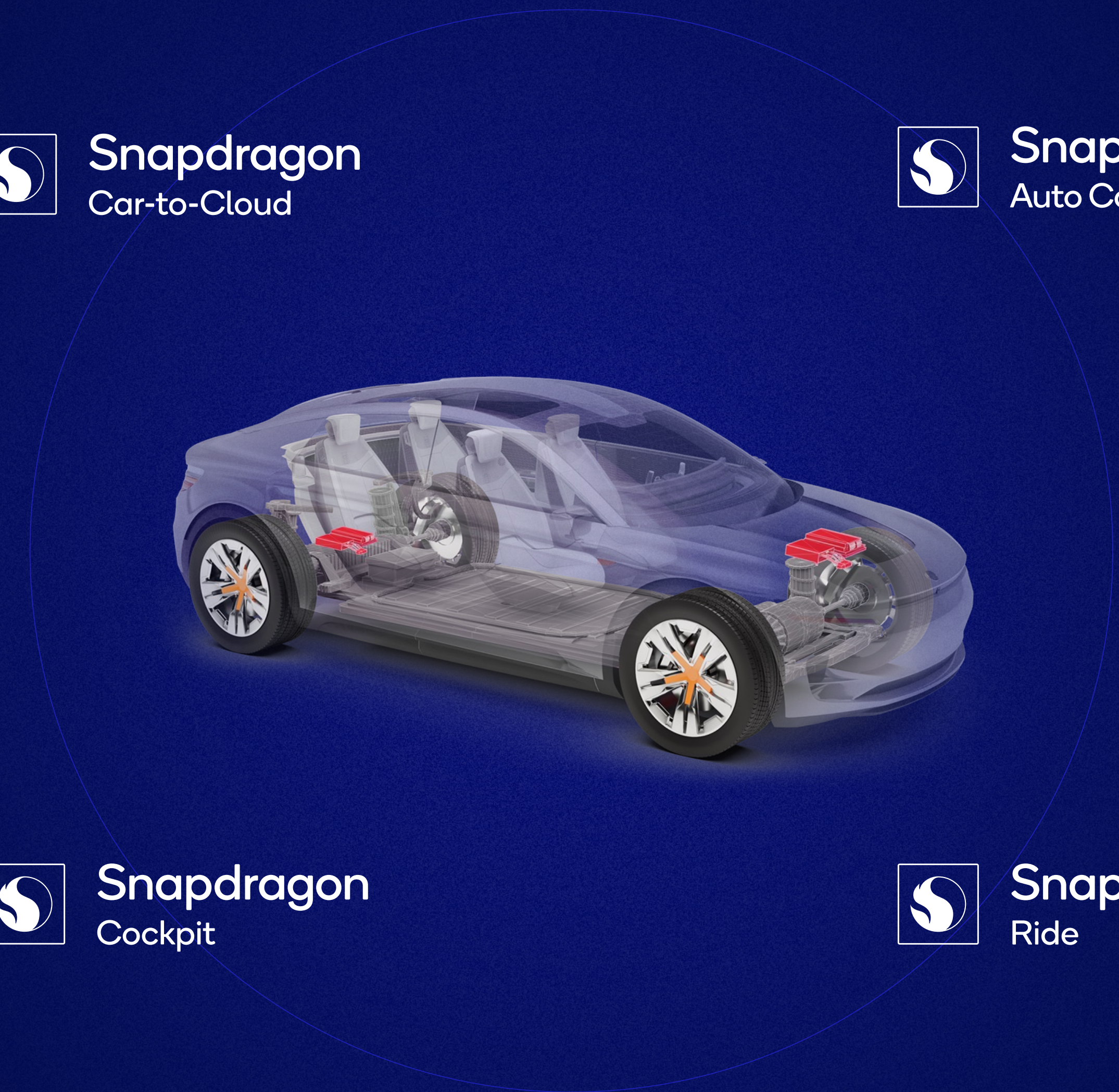
Luxury- to entry-tier roadmap

Common compute fabric across ADAS/AD and cockpit

Fully validated HW/SW platform incorporating safety by design

Developed to comply with automotive industry standards

Globally deployed

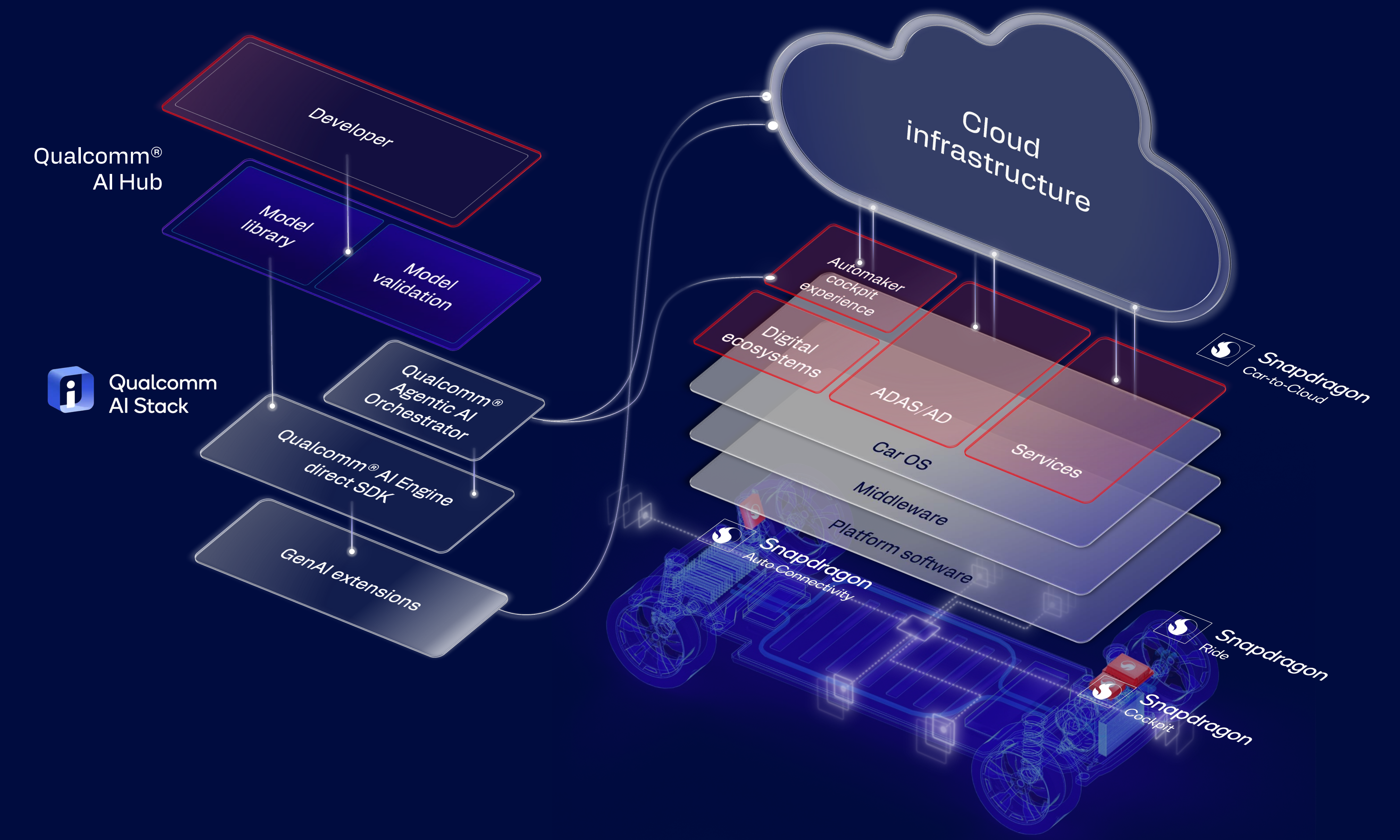




# Foundation for the software-defined vehicle

- Open, programmable platform for automotive and AI development
- AI infrastructure for the multi-modal GenAI cockpit
- Software architecture for mixed-criticality and safety virtualization

- Digital consumer ecosystem pre-integration
- Complex real-time automotive ecosystem pre-integration with central compute



Tools and development platform



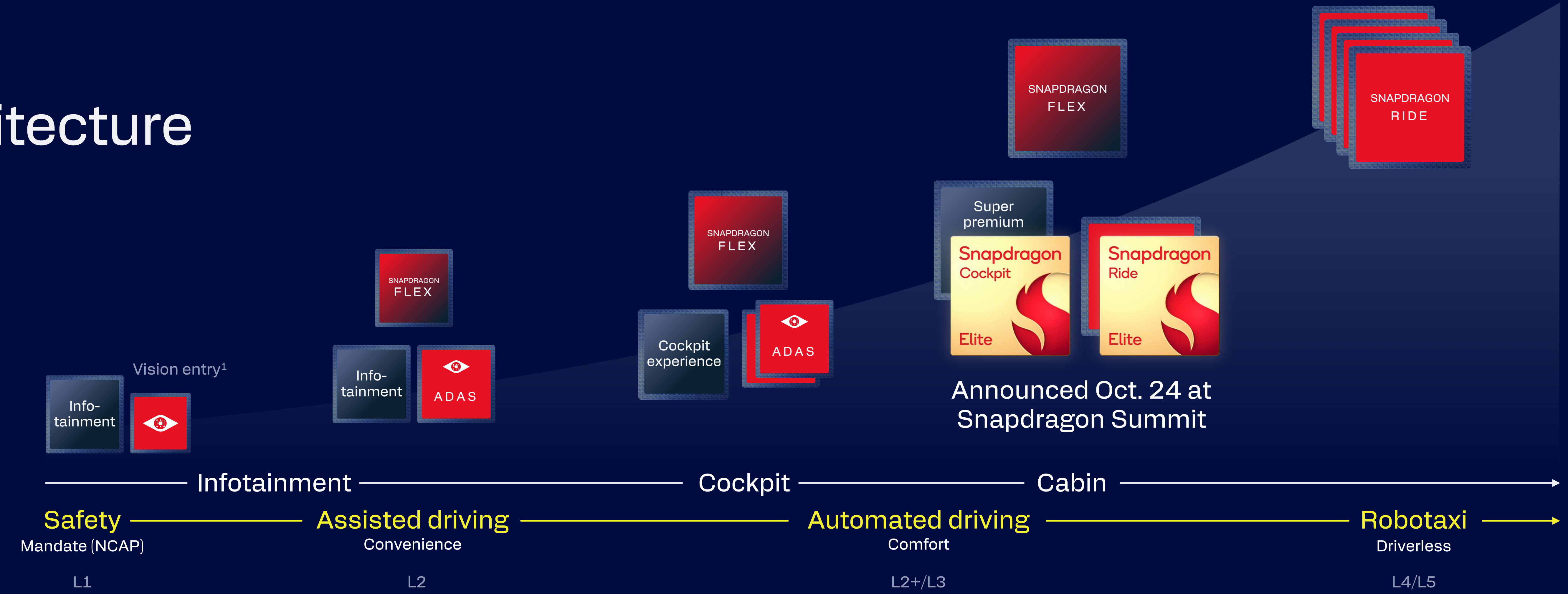
# Defining industry-leading automotive compute architecture

Vision systems  
Driver assistance  
Automated driving

Infotainment  
Cockpit  
Cabin experiences

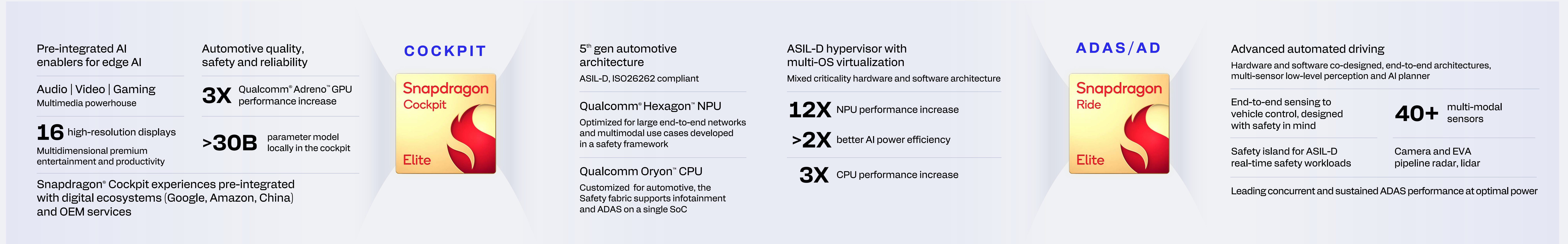
Mercedes-Benz

理想



1. Snapdragon Ride Vision products offered as SoC and Perception Stack combination.

# Unlocking a new era of automotive intelligence



All performance targets are compared to previous generation, based on preliminary internal testing and subject to change upon final validation.



**Art Museum**  
★★★★ 4 stars  
Art museum featuring European masterpieces  
1.5–2 hours

Art museum open until 17:00

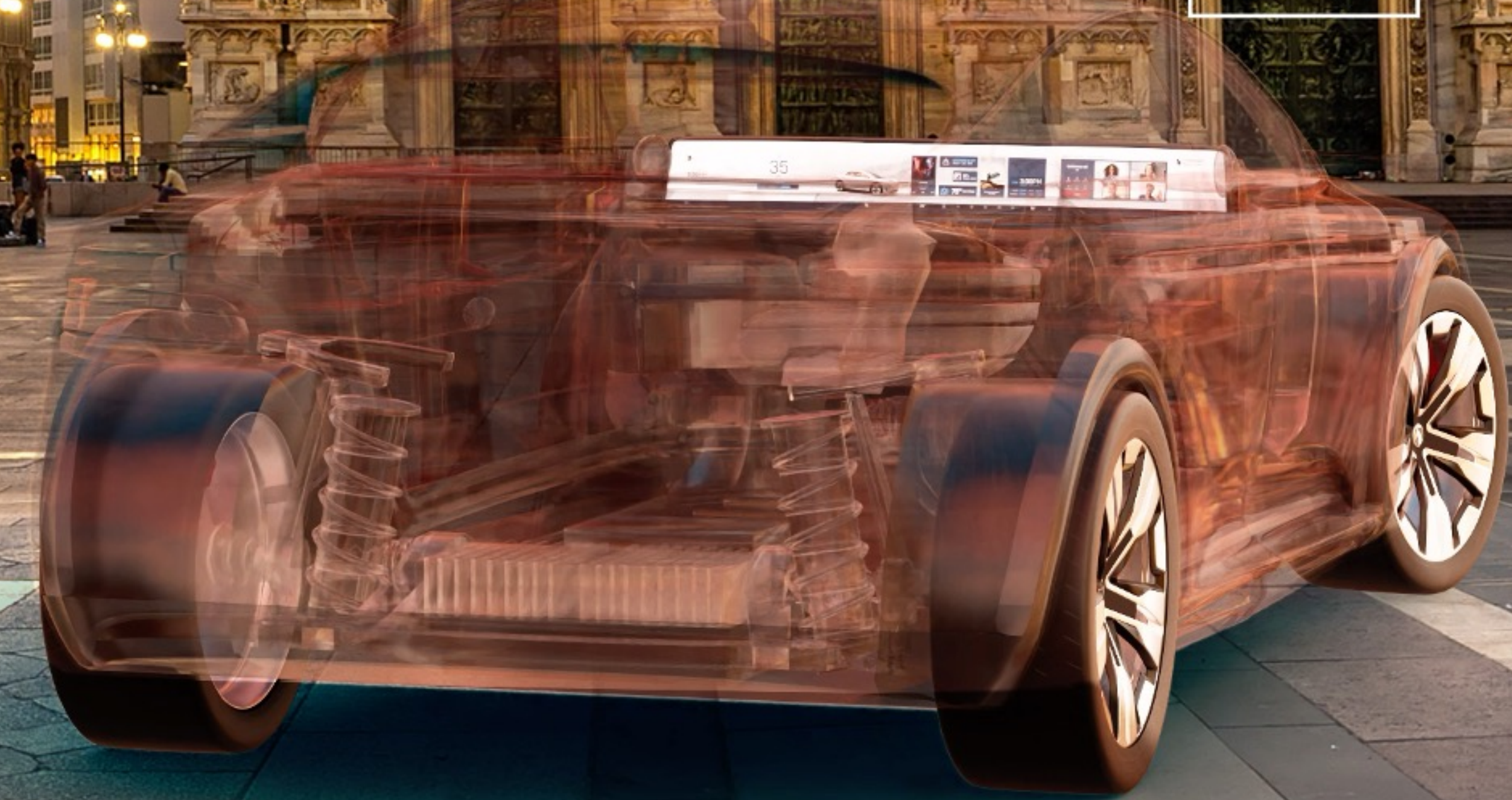
Safe drop off location

**I don't see parking near your destination. I'll drop you off close. Your car will be outside when the event is done.**

Safe drop off location

**History Museum**  
★★★★ 4 stars  
Fascinating exhibits on science and technology  
1.5–2 hours

History museum open until 18:00



**I have checked opening times and have booked tickets for:**

History Museum €22.50	Art Museum €27.50
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**Plan for the day**

History Museum	From 10:00 – 11:55
Nonna's	From 12:00 – 13:30
Art Museum	From 13:45 – 15:45
Pick up at Art Museum	At 16:00

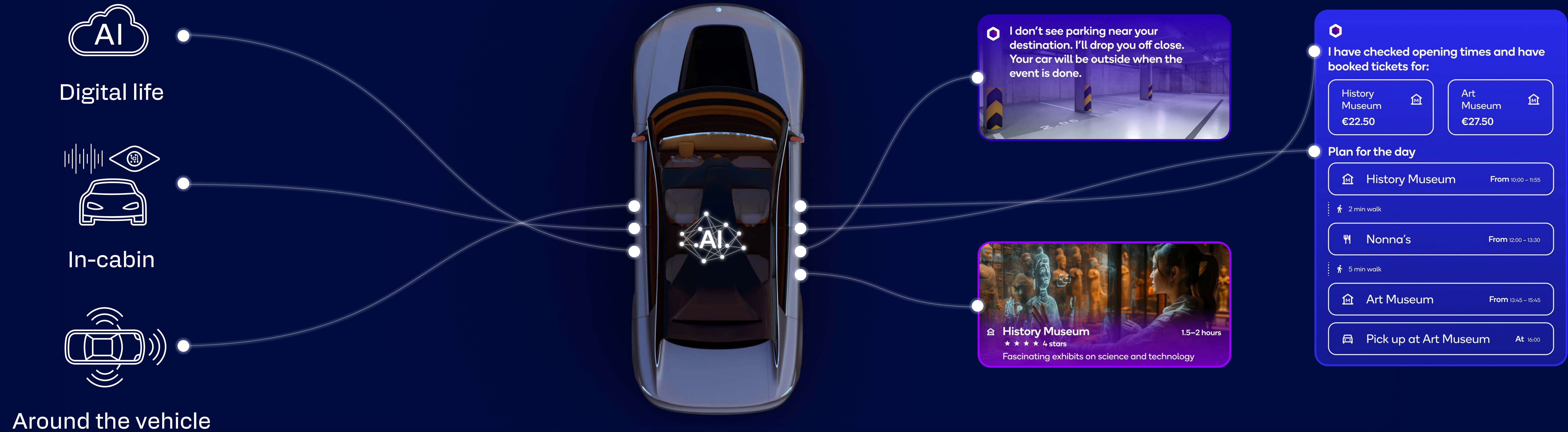
Bavarian restaurant nearby

Italian restaurant nearby

**Nonna's**  
★★★★★ 4.5 stars  
A neighborhood Italian spot for casual dining  
Open until 21:00  
€€ - Comfort Italian

Art museum open until 17:00

# Orchestrator for multi-modal inputs

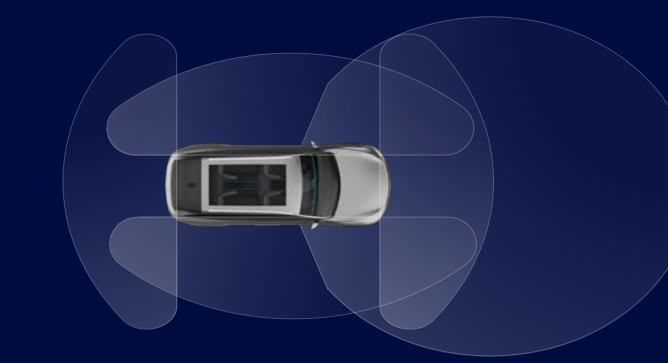




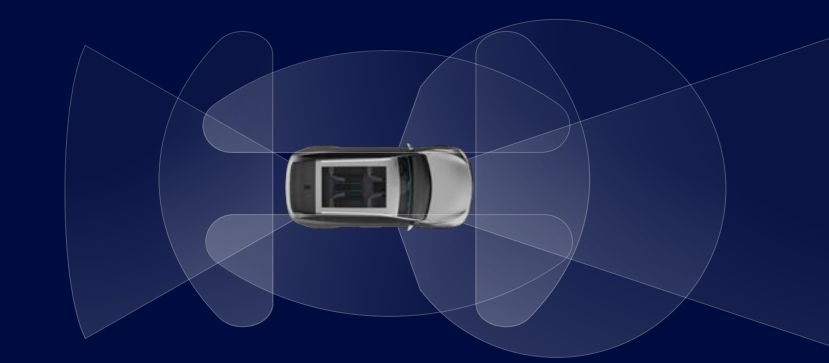
# Driver Assistance/ Automated Driving Stack

Customer AD functions

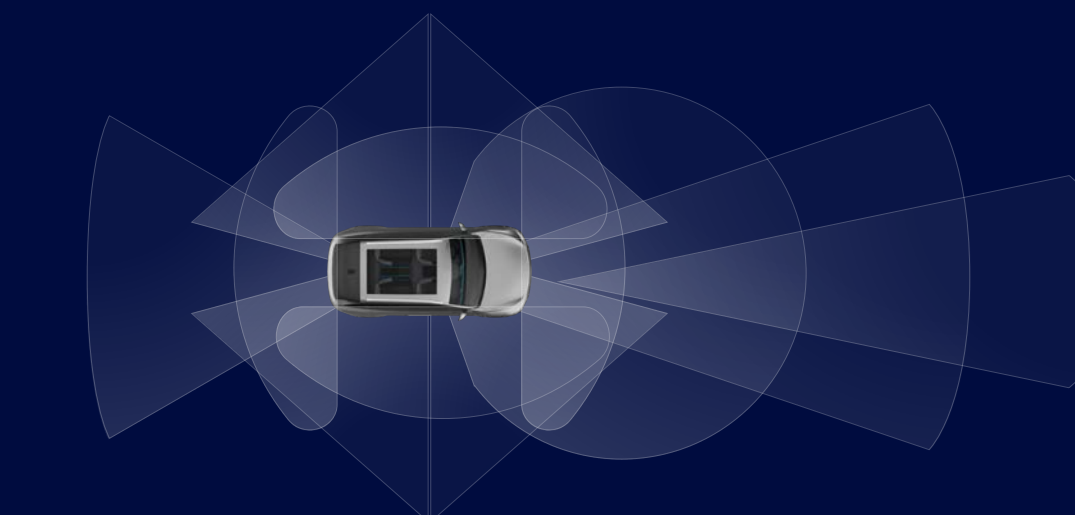
		L4 Address to address	
		L3 Highway pilot	
		L3 Commute pilot	
	L3 Advanced highway	_____	✓
	L2+ Country drive assist	_____	✓
	L2+ Urban and downtown drive assist	_____	✓
	L2+ Highway drive assist	_____	✓
L2 Active safety shell	_____	_____	✓
L2 Traffic sign/light assist	_____	_____	✓
L2 Dynamic cruise control	_____	_____	✓
L1 Rear collision warning	_____	_____	✓
L1 Emergency steering/stop	_____	_____	✓
L1 Blind spot monitoring	_____	_____	✓
L1 Lane keep assist	_____	_____	✓



**Assisted driving**  
Safety and convenience  
L1/L2



**Automated driving**  
Advanced highway  
L2+/L3

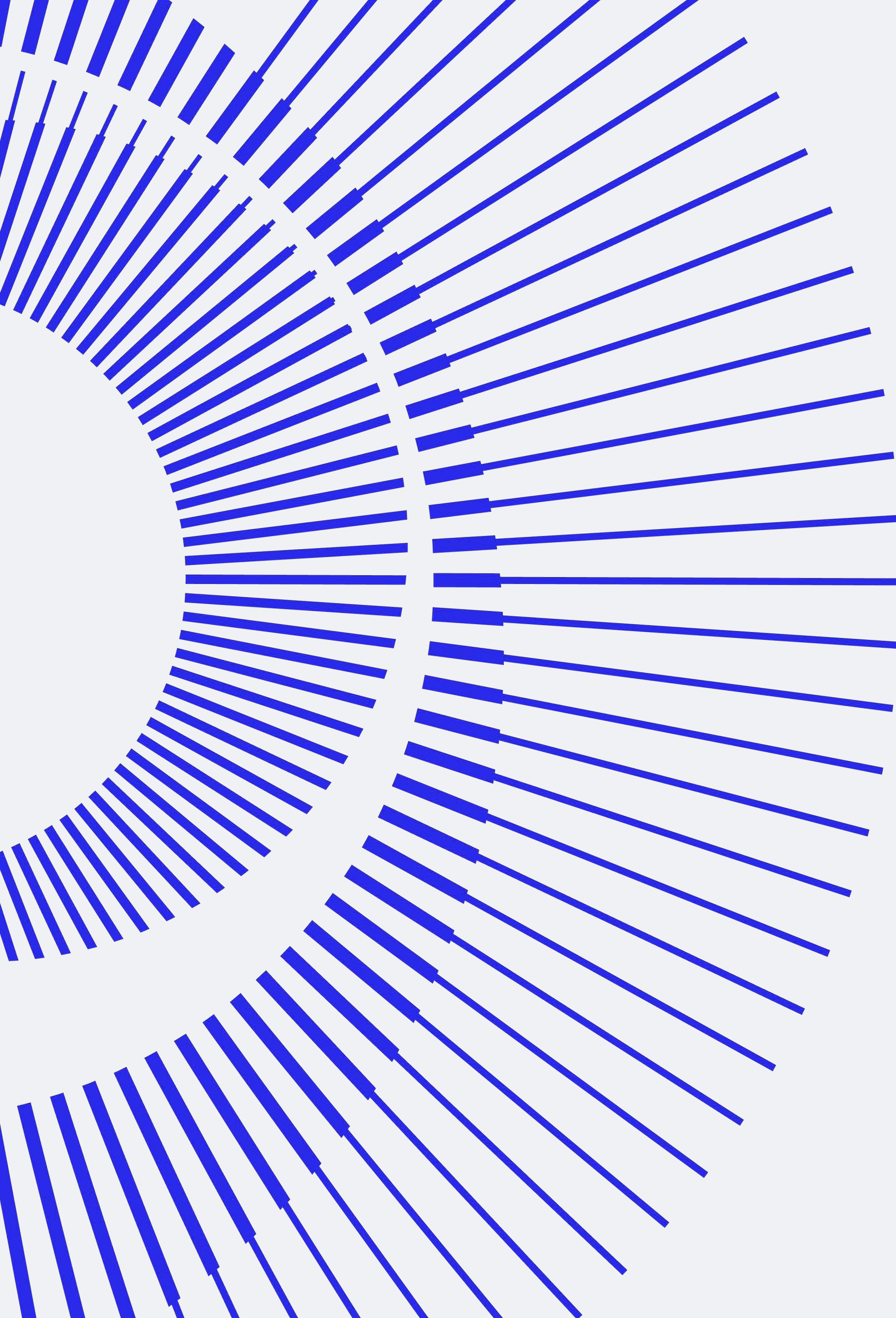


**Advanced automated driving**  
Highway/urban  
L3/L4<sup>1</sup>

1. L3/L4 stack under development.

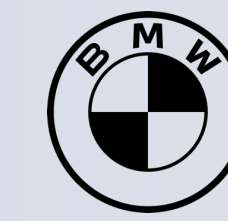
FULL STACK PRODUCT

<b>AD cloud and workbench</b> <ul style="list-style-type: none"> <li>• Data simulation factory</li> <li>• Reprocessing, ground truth, data</li> <li>• ML operations</li> </ul>	
<b>Complete AD stack</b> <ul style="list-style-type: none"> <li>• Features validated for up to L3</li> <li>• Architecture scales to L4</li> </ul>	
<b>Modular architecture</b> <ul style="list-style-type: none"> <li>• Perception, maps, localization,</li> <li>• Advanced AI predictor and planner</li> </ul>	
<b>5<sup>th</sup> gen CV/perception product</b> <ul style="list-style-type: none"> <li>• Advanced 360° camera CV (3D)</li> <li>• Low level multi-modal perception</li> </ul>	
<b>SoCs, software and middleware</b>	



# Snapdragon Ride™ Platform ADAS/AD Stack

## Commercial launch 2H 2025



Qualcomm

Co-developed ADAS System  
and Drive Policy Stack with BMW

Supports  
L1 to L3

5<sup>th</sup> gen  
computer  
vision stack

Hardware-software co-design  
to achieve industry standards  
of safety and reliability

L2+ to be commercialized in 2025.

### Automated Driving on Urban and Highway

Front Wide Camera

In-Cabin View

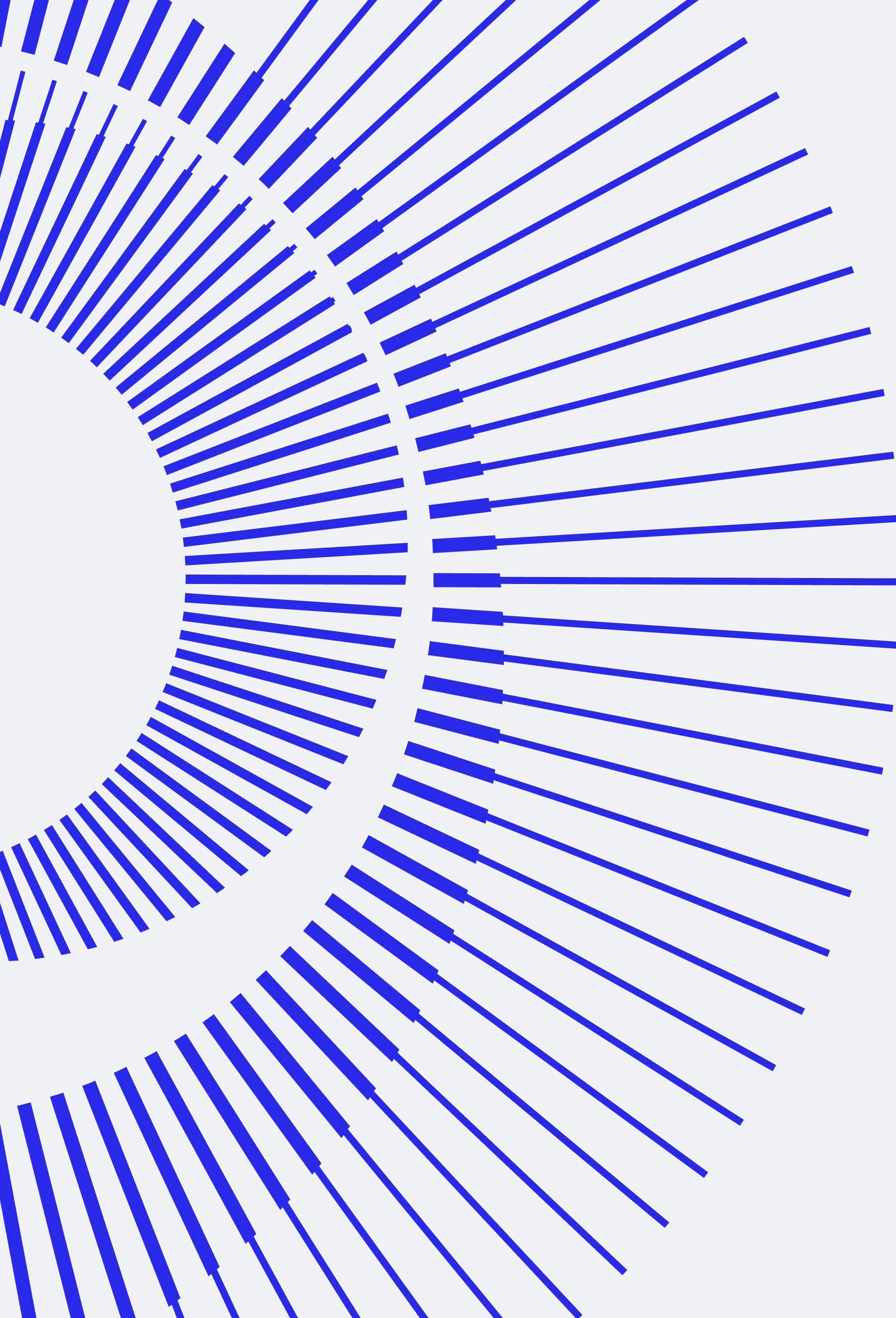
Wing Left Front

Wing Right Front

360 Surround Perception

Fast detection of stopped lead vehicle

3x Speed



# Snapdragon Flex

Snapdragon Ride Computer Vision/Drive Policy stack and Snapdragon Cockpit on the **same SoC**

Reducing compute and software system cost

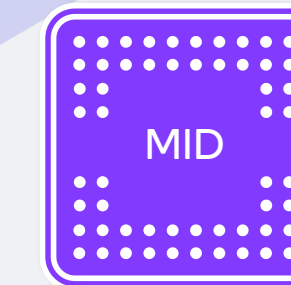
OEM Start of Production in 2026

Extending our lead further

Snapdragon  
Ride



Autonomy level



**SOP '26**

FLEX  
L2 Ride + Cockpit

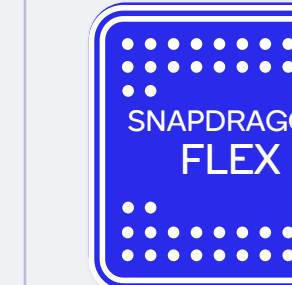
In-vehicle experience



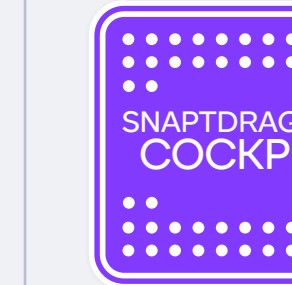
**Snapdragon**  
Cockpit



Driver Assist



Cockpit and Driver Assist



Cockpit

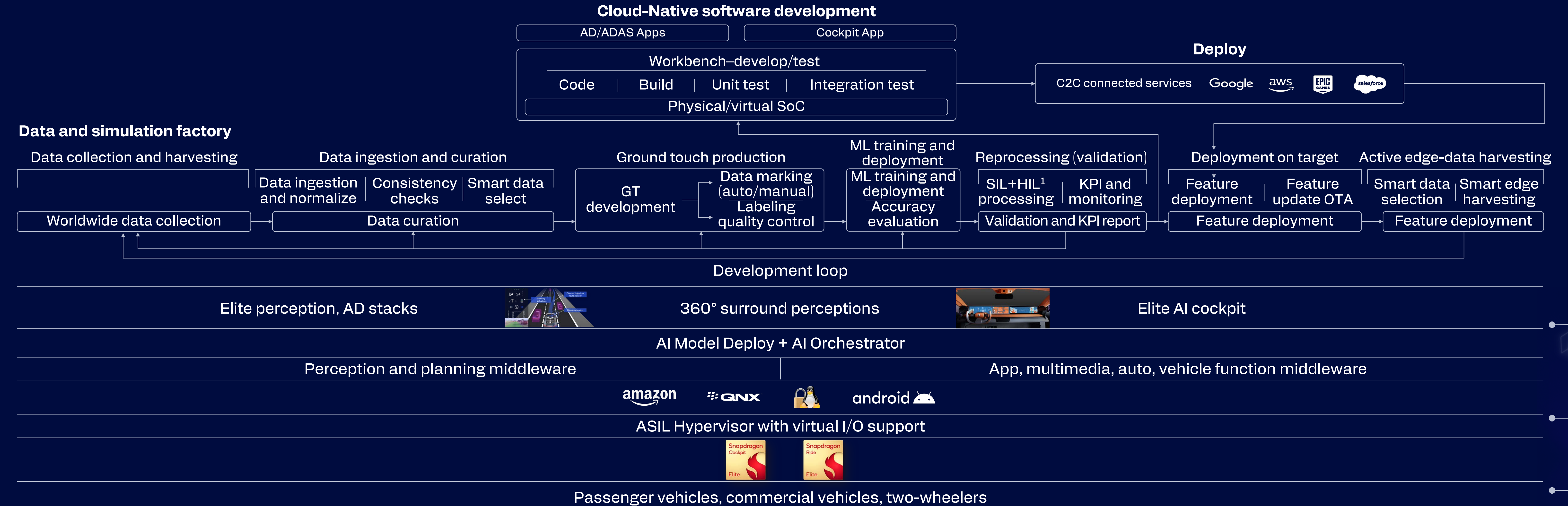
**Snapdragon Cockpit**

**Snapdragon Ride**

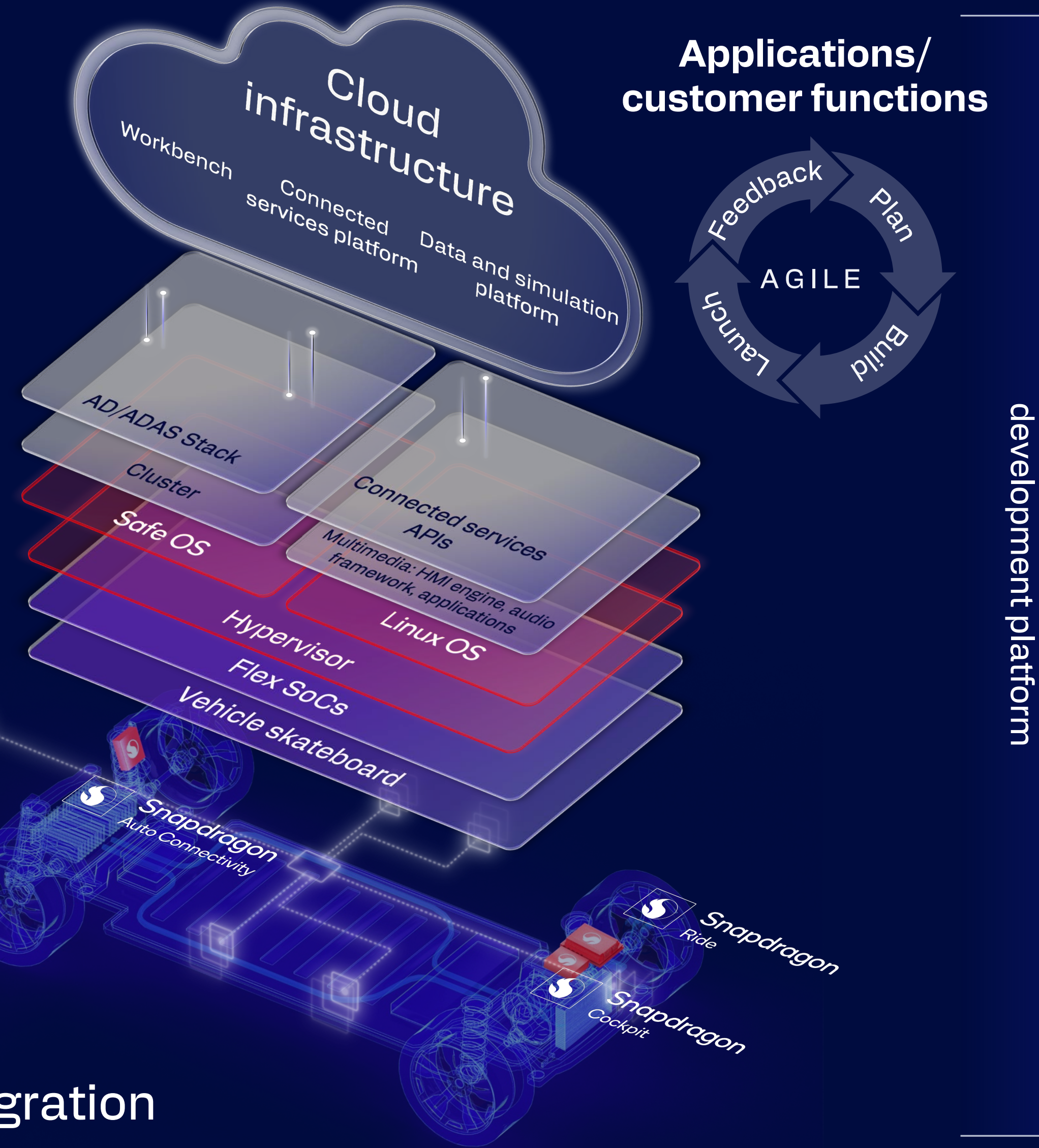
**Snapdragon Car-to-Cloud**

**Snapdragon Auto Connectivity**

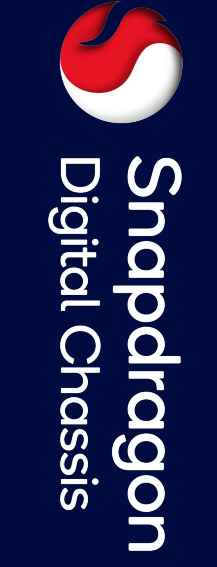
Flexible engagement model:  
SoCs, OS, middleware, tools



Cockpit, sensing, vehicle control, connectivity and services – SoC, OS, middleware, AI, development infrastructure, OEM and ecosystem pre-integration



Car-to-cloud  
development platform



1. Software-in-the-loop, hardware-in-the-loop



 **Snapdragon Digital Chassis** **Global ecosystem**



# Key takeaways

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Executing to strategy as outlined at 2022 Automotive Investor Day

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Snapdragon Digital Chassis is the industry's preferred platform

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GenAI reinforces digital cockpit leadership

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Additional growth opportunities for ADAS stack post 2H 2025

# Thank you

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