

07 February 2025



DRIVING THE DIGITAL FUTURE OF AUTOMOTIVE

Qualcomm CDMA technologies
Automotive Business development
Toshiya Matsui

Foundation for intelligent software-defined vehicles



Snapdragon
Digital Chassis



Snapdragon
Cockpit



Snapdragon
Auto Connectivity



Snapdragon
Car-to-Cloud



Snapdragon
Ride

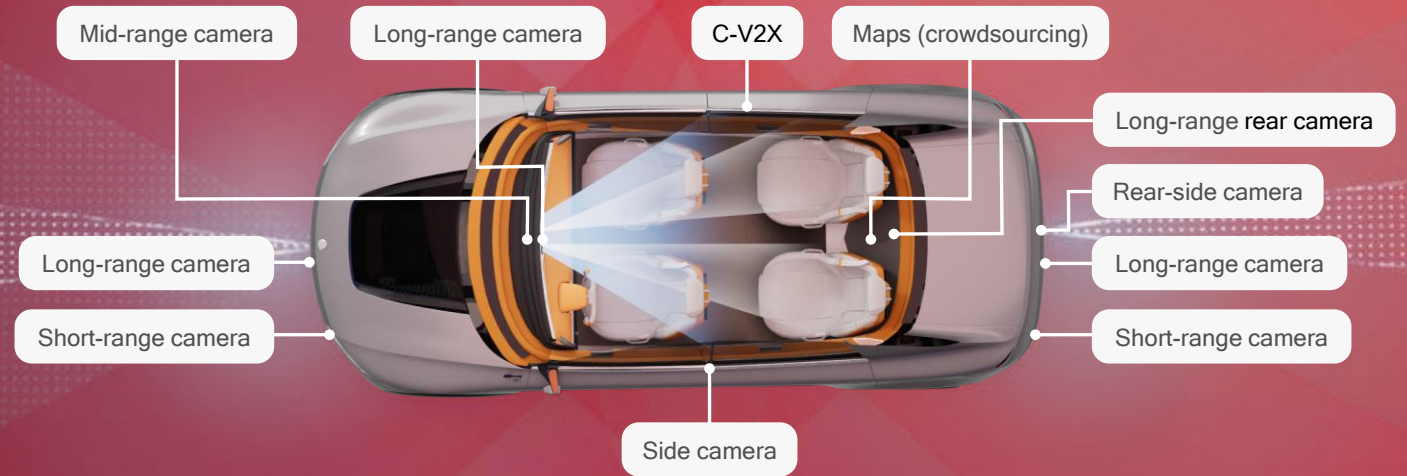




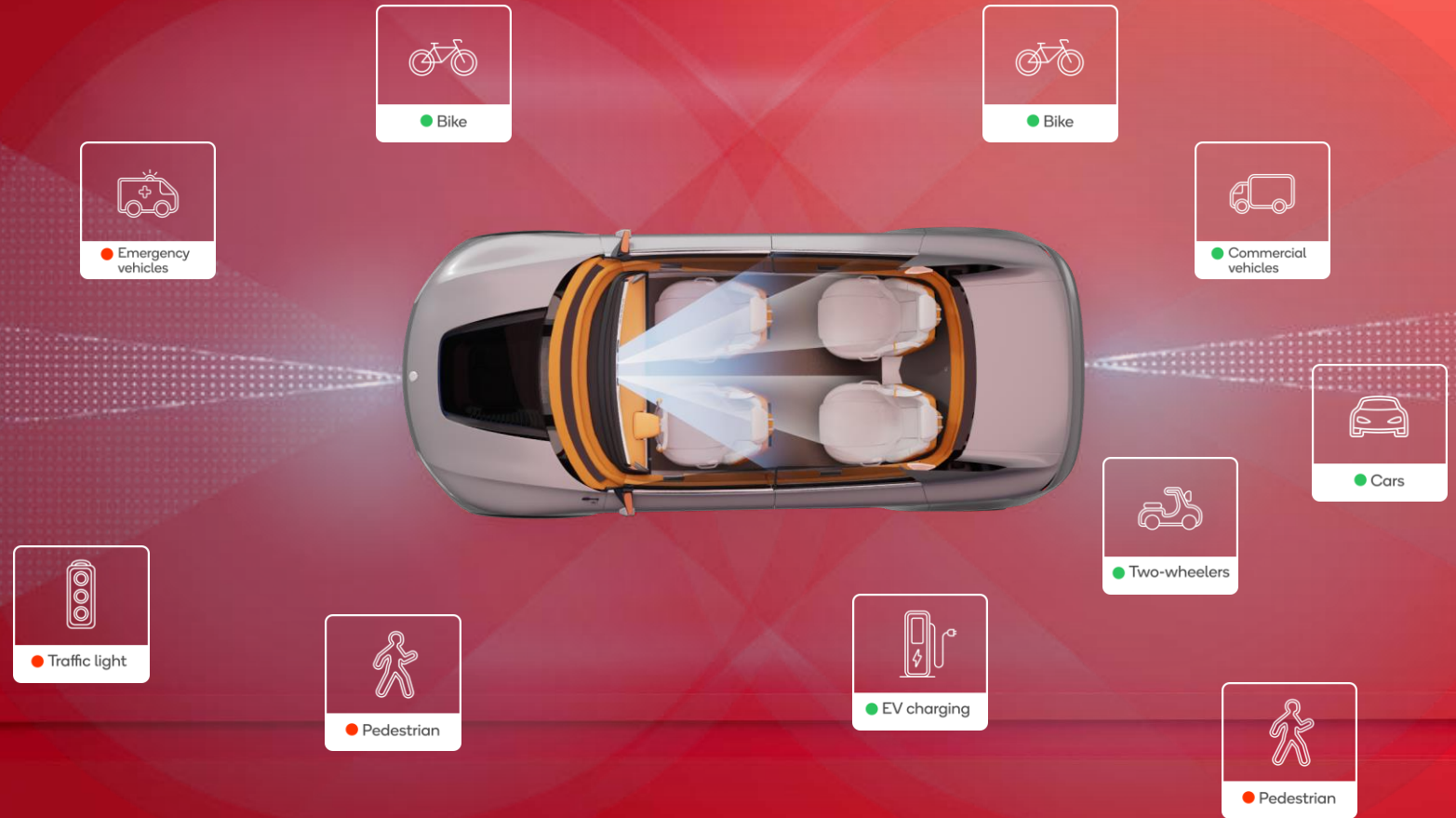
Building the in-cabin experience



Building the automated experience



Building the automated experience



Building the digital auto experience



Shift to intelligent vehicles



Central
compute



Software-defined
vehicle



AI



Snapdragon Digital Chassis – The foundation for the software-defined vehicle



Services platform
Maps



4G/5G cellular connectivity
In-car connectivity
Positioning
EV charging connectivity
V2X



In-car experiences
Instrument clusters
Navigation
Cameras
Displays
Audio and multimedia
Consumer and auto ecosystems



Scalable ADAS and AD SoC portfolio
Snapdragon Ride Vision SoC and Stack portfolio
Snapdragon Ride Vision and Automated Driving Stack
Sensor partnerships – camera, radar, lidar





Your journey,
transformed



P

260

mi

ODO 32583 mi



→ 900 m

Linda Vista Rd

From

6506 Tanglewood Rd

6506 Tanglewood Rd,

San Diego, CA 92118

To

Mission Heights Park


5000 Acacia St, San Diego,

CA 92118

4.9 km · 7 min


8:45am





Home Vibes

Via Vallheim





Sahara Ardia Fadia

Okay! see you at 6:30.

12:32 AM ✓

+ 96%

225mi.



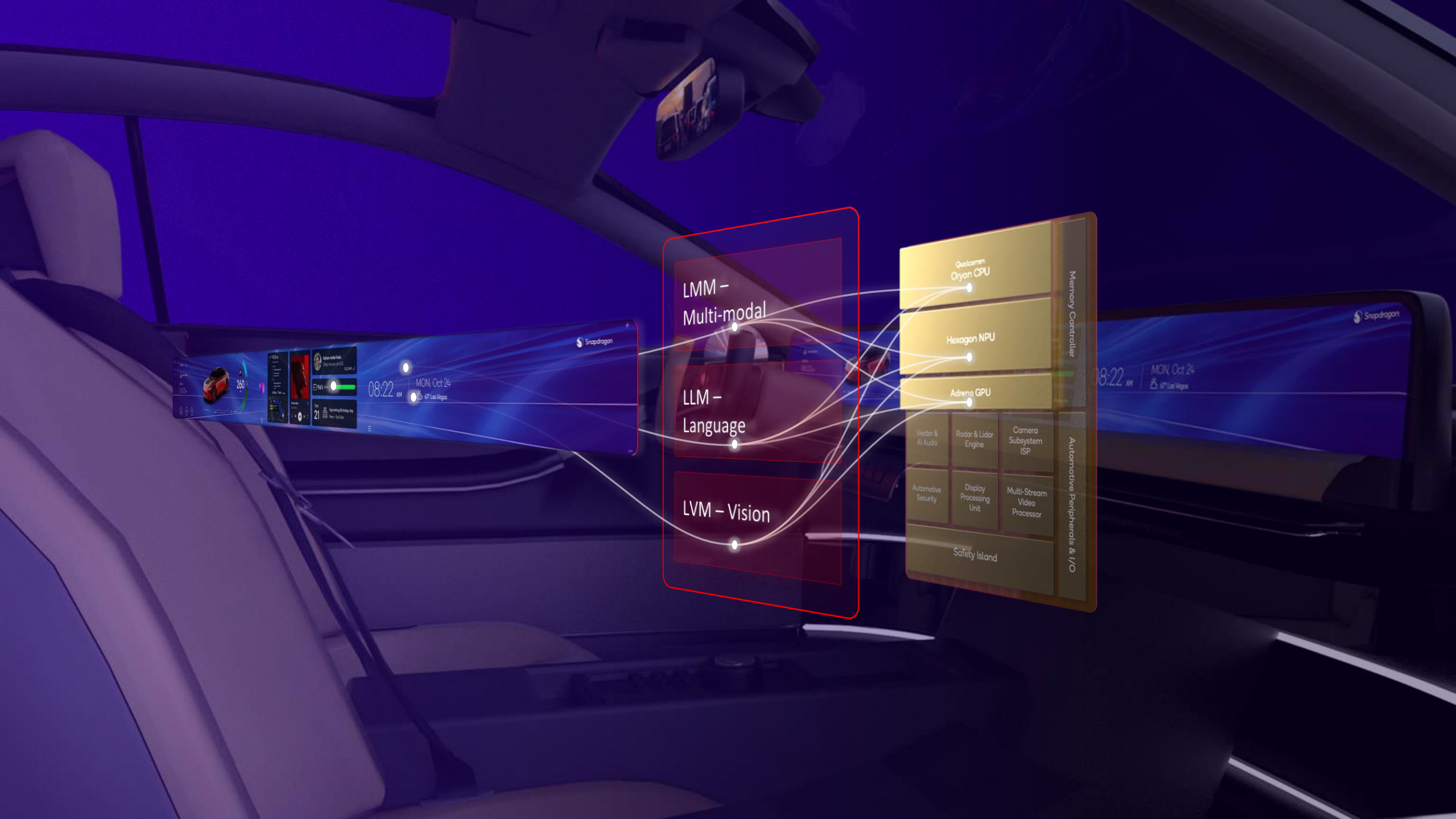
Oct 21

 Upcoming Birthday day

Mom - Oct 24st

08:22 AM

MON, Oct 24
☁ 67° San Diego



LMM –
Multi-modal

LLM –
Language

LVM – Vision

Qualcomm
Oryon CPU

Hexagon NPU

Adreno GPU

Vector &
AI Audio

Radar & Lidar
Engine

Camera
Subsystem
ISP

Automotive
Security

Display
Processing
Unit

Multi-Stream
Video
Processor

Safety Island

Memory Controller

Automotive Peripherals & I/O



📶 📶 📶 📶 📶

James Smith

OCT 24

08:22 AM



P

260

mi

...

170 m
Oakland Pike St.

From
Easy Mart
1015 Folsom St.

To
Chicken Madras
Oakland Pike, 2

1.2 km · 7 min
8:45am



08:22 AM

MON, Oct 24
67° Las Vegas



Snapdragon



Game changing in-vehicle experiences

Designed for

3X GPU

performance
increase*

Designed for

12X NPU performance
increase*

16 high-resolution
displays

Designed for

4X audio DSP
increase*

Multi-sensor

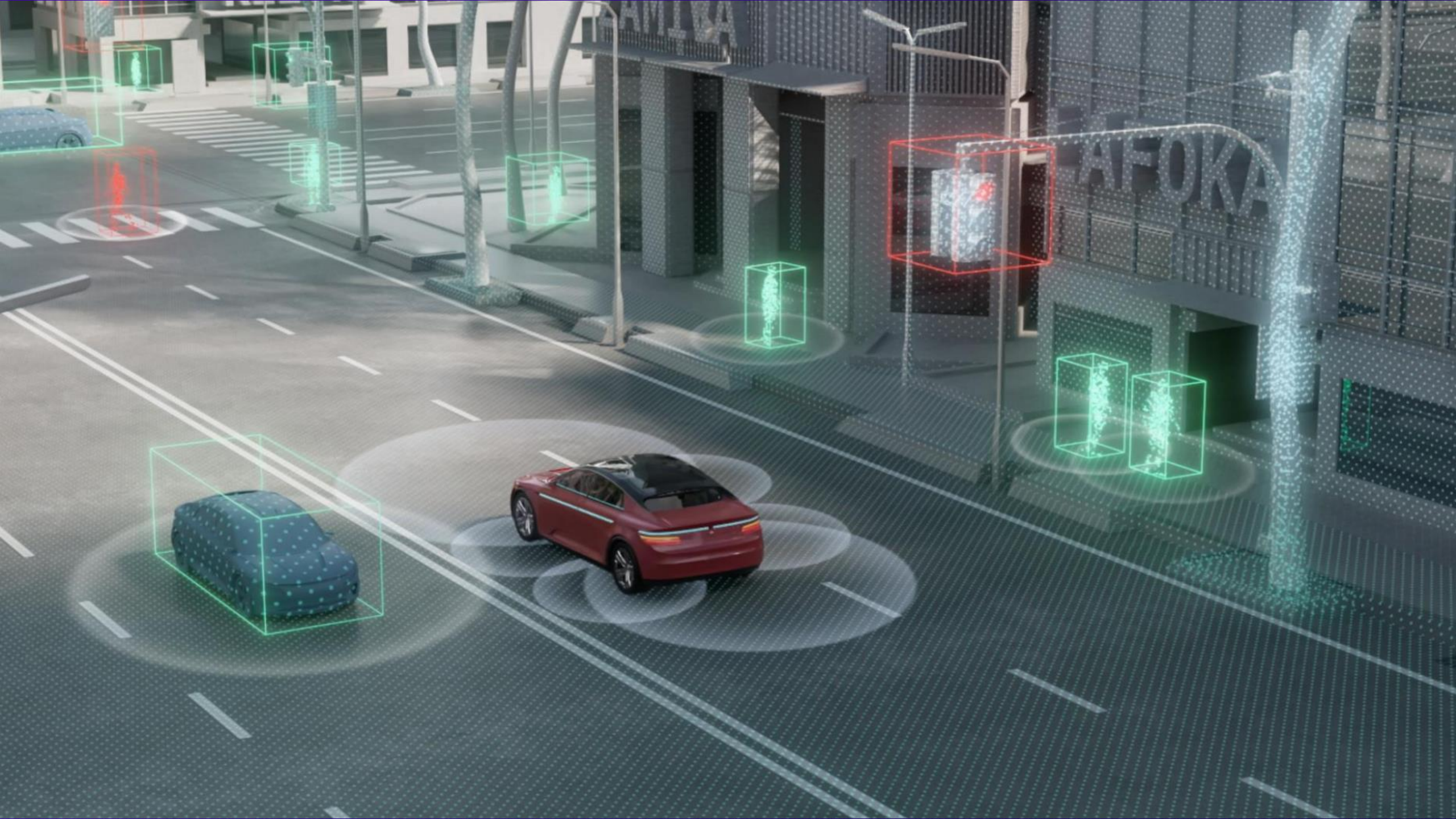
pipeline for surround
and in-car safety

* All performance targets are compared to previous generation, based on preliminary internal testing, and subject to change upon final validation. Sampling for this platform will start in 2025.





Your journey,
transformed







Snapdragon
Cockpit Elite

Next-level system intelligence and safety

40+

multimodal
sensors



ASIL-D

Compliant for functional safety

Designed for end-to-end
safety from sensing to
vehicle control







AI toolbox



AI Hub



AI Stack

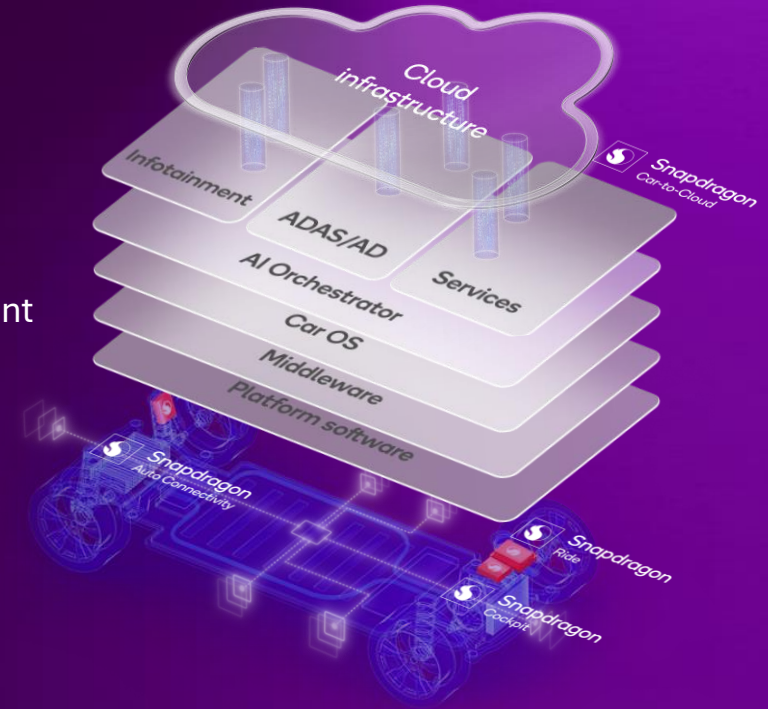


AI Orchestrator



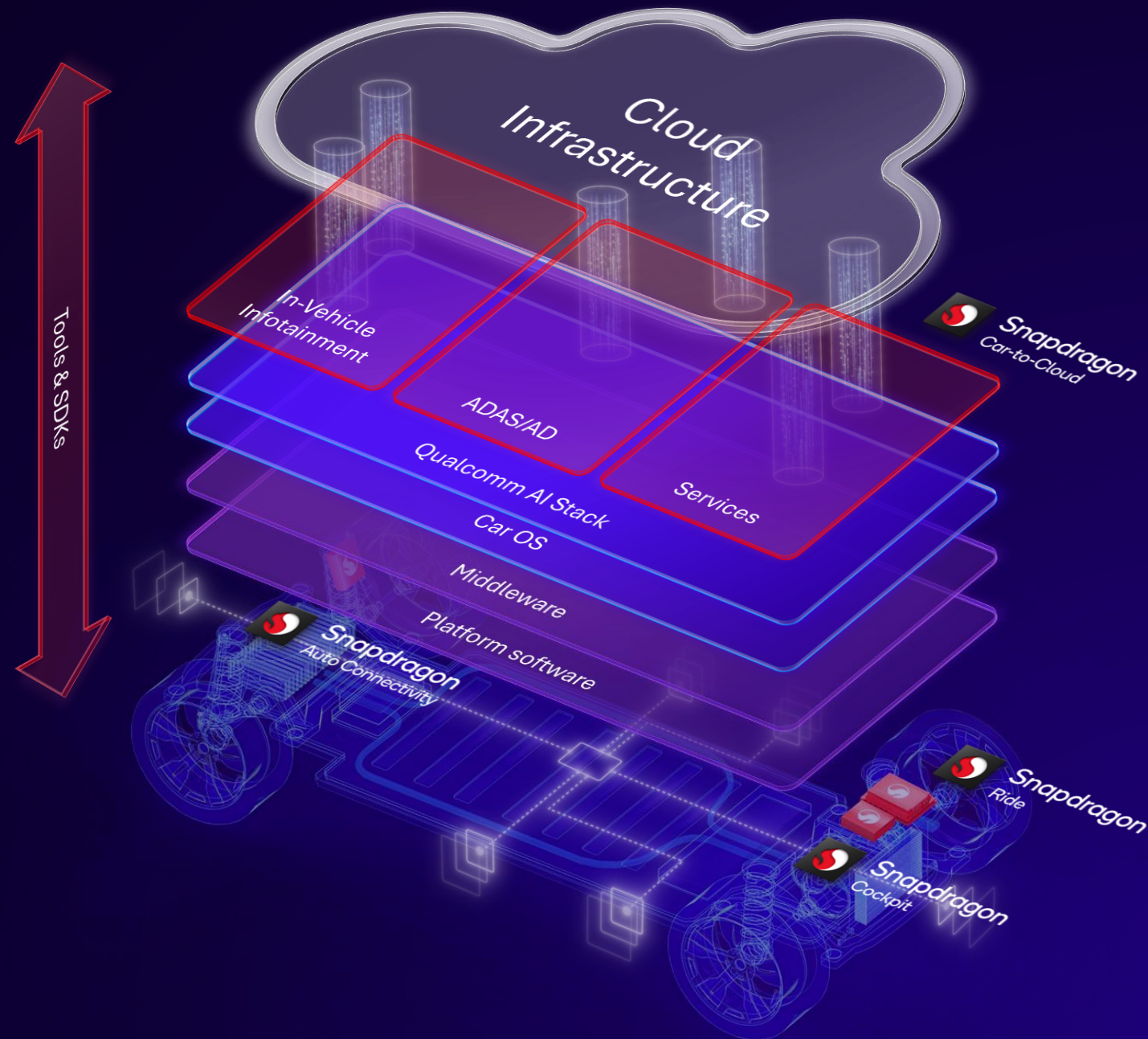
Full stack for seamless integration

Tools &
development
platform





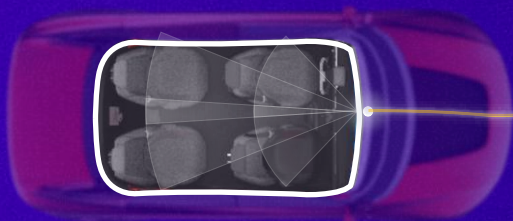
Foundation for the Intelligent Software Defined Vehicle



AI Digital life



In-Cabin



Around the vehicle



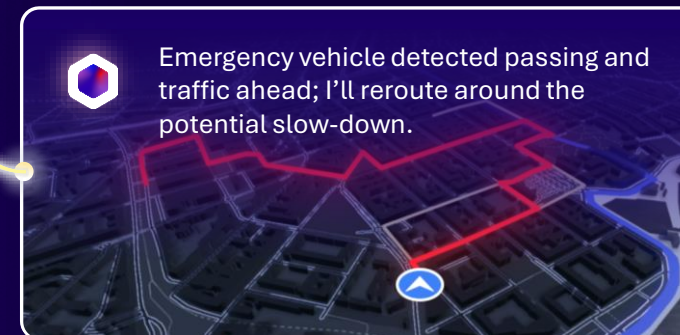
It's a beautiful day, you always like your sunroof open, I'll go ahead and open it.



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

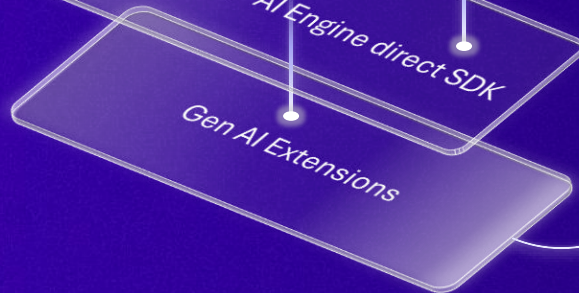
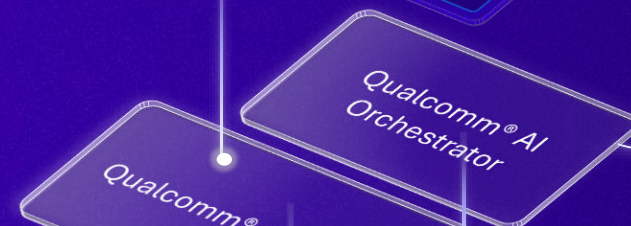
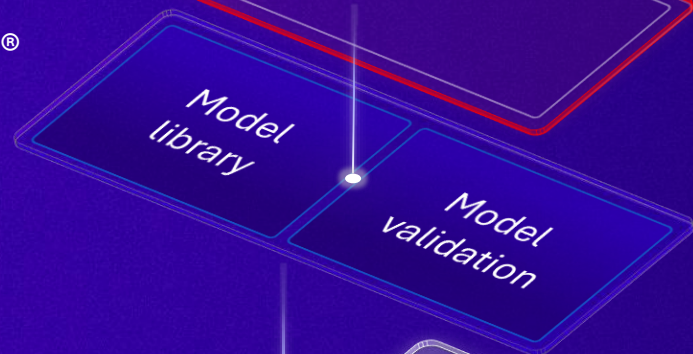


Emergency vehicle detected passing and traffic ahead; I'll reroute around the potential slow-down.



Qualcomm®
AI Hub

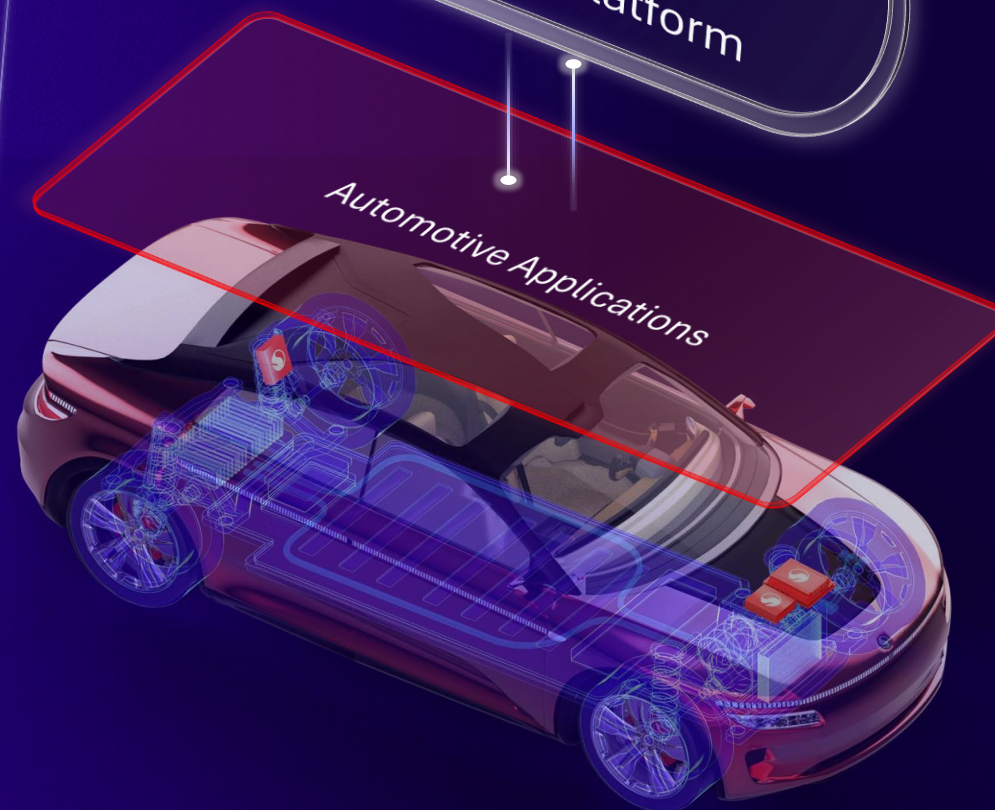
 Qualcomm
AI Stack



Snapdragon® Digital Chassis™
Workbench
and cloud platform



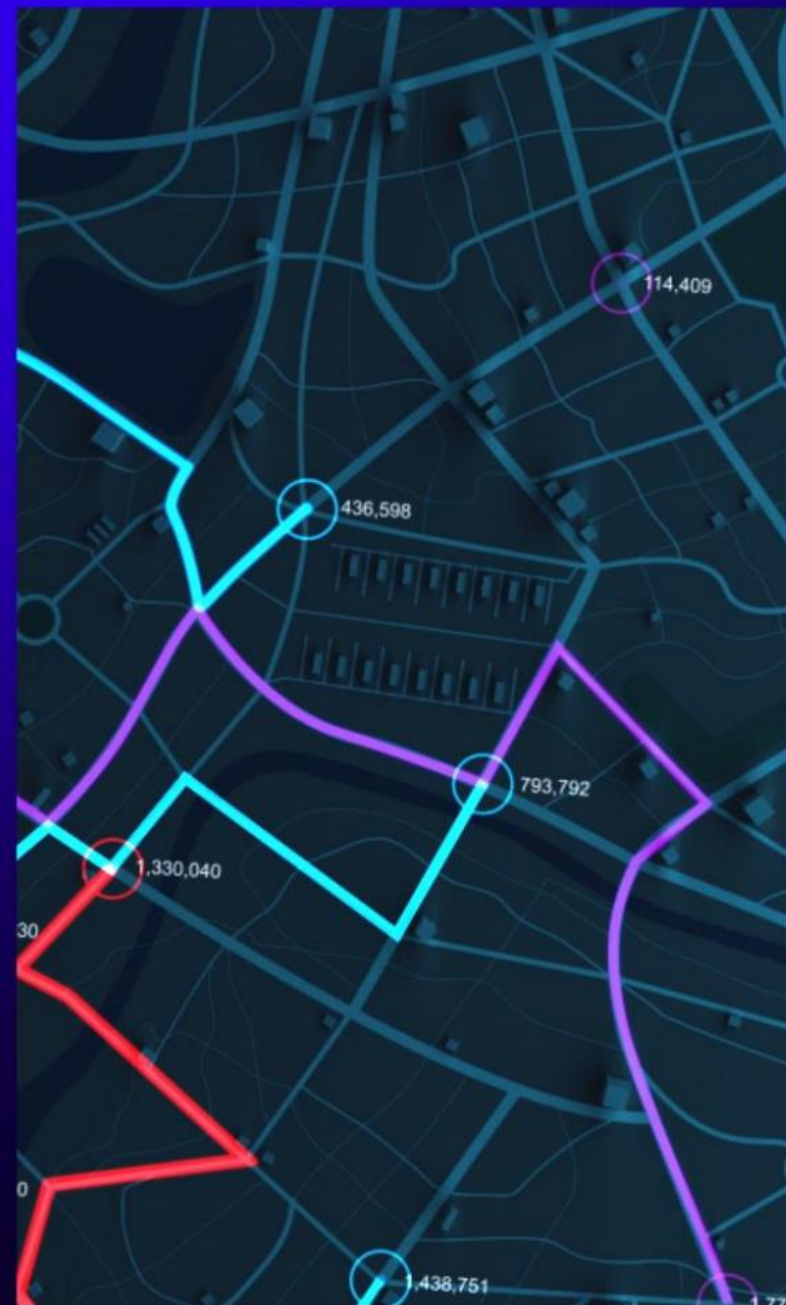
The Snapdragon Digital Chassis Workbench and cloud platform is represented by a cloud icon with a red border. It is connected to the Automotive Applications layer below it.

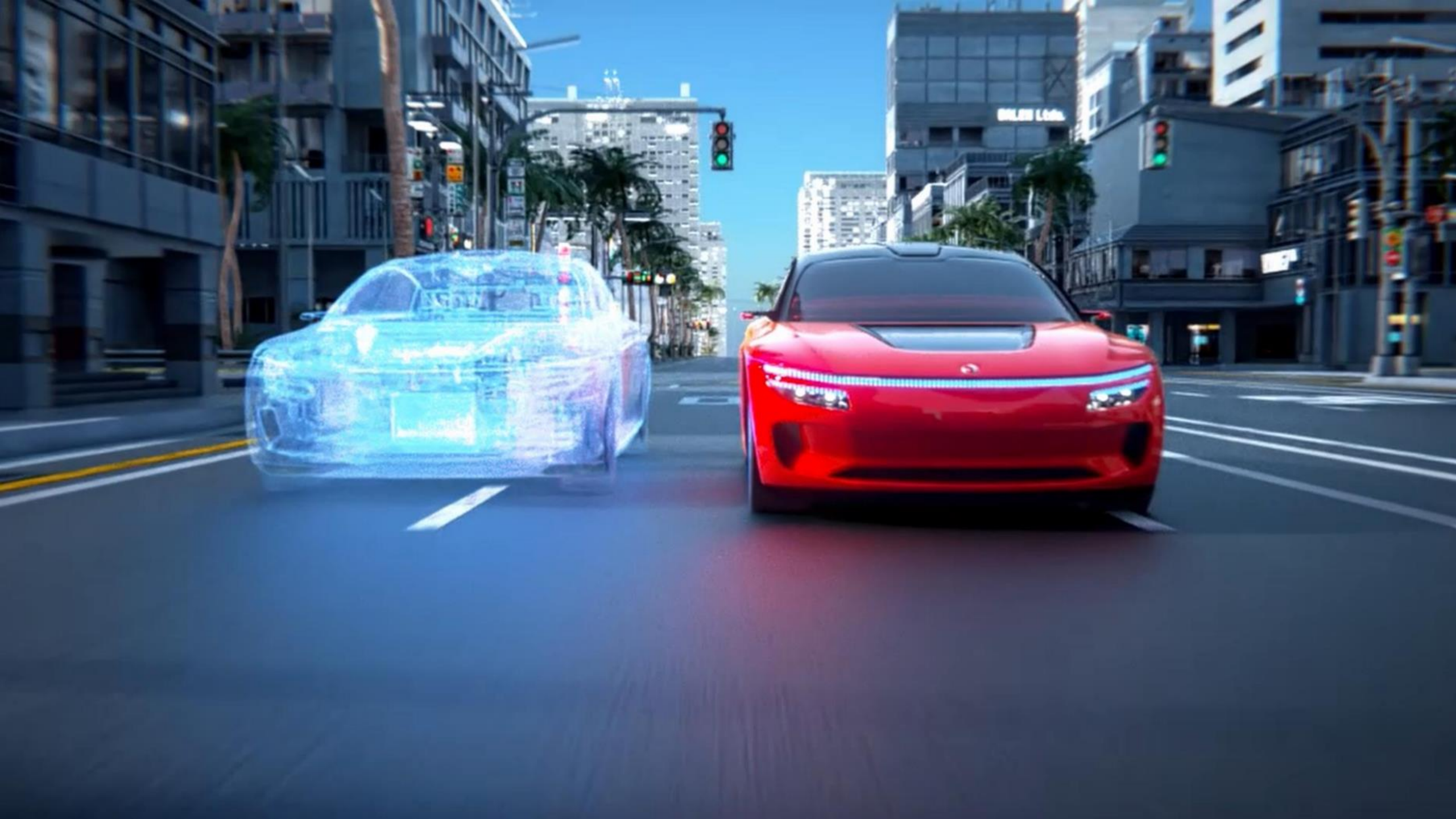




Traffic Jam Assist unavailable









Qualcomm® Hexagon™ NPU

Optimized

for large end-to-end networks
and multimodal use cases

AI Powerhouse
design for up to

12x
performance*



Your journey, transformed

Qualcomm® Adreno™ GPU

Designed for

3x Performance
increase*

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. Sampling for this platform will start in 2025.

Qualcomm Oryon™ CPU

customized for
automotive

Flex fabric supports infotainment
and ADAS on a single SoC

Designed for

3x Performance
increase*

Automotive Quality, Safety & Reliability

AECQ-100 | ISO 26262 ASIL D | SAE 21434

Advanced Automated Driving

hardware-software co-
designed, E2E architectures,
multi-sensor low level
perception and AI planner

40+ Multimodal
Sensors

Audio & Display Processing

Multidimensional
premium
entertainment and
productivity

AI enabled
zonal audio

16
high-resolution
displays

THANK YOU



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