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AutoTechInsight Webinar: CES Recap

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Presenting Analysts

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Questions and answers

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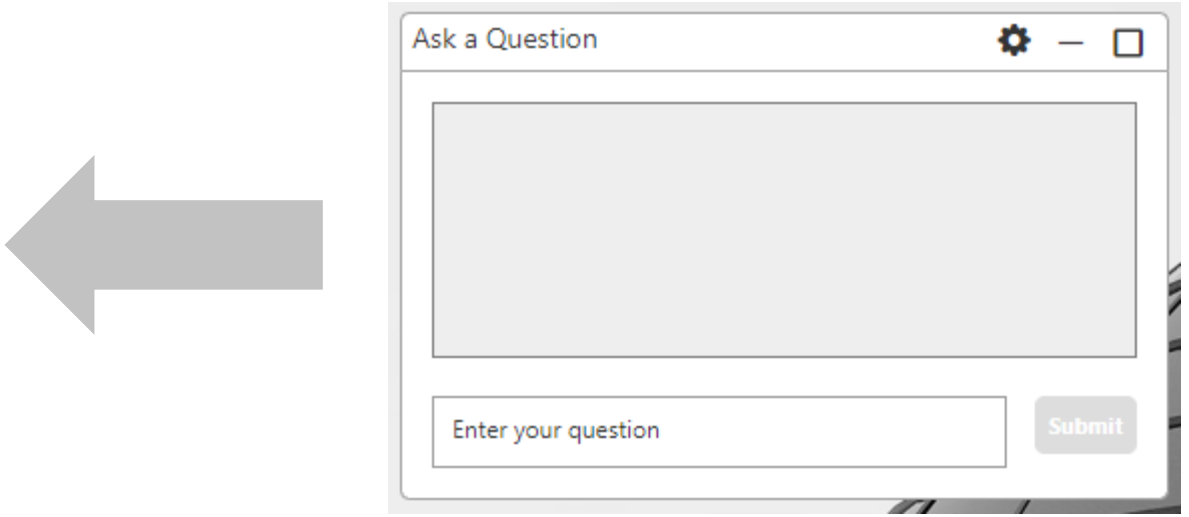

Agenda

- Overview
- Autonomy
- Connected Car and Vehicle Experience
- E/E & Semiconductor
- Q&A

CES 2026

- CES 2026 was held in Las Vegas, Nevada, USA from January 6th to January 9th
- CES 2026 was the 59th year of the show and is widely considered to be one of the largest tech conferences in the world
- The automotive industry continues to have a large presence at the show as advances in vehicle technology propel the industry forward
- Attendance at CES 2026 reportedly reached 148k, continuing the rebound in attendees since CES 2020.
  - CES 2025: 141k
  - CES 2024: 135k
  - CES 2023: 115k
  - CES 2020: 171k

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Autonomy

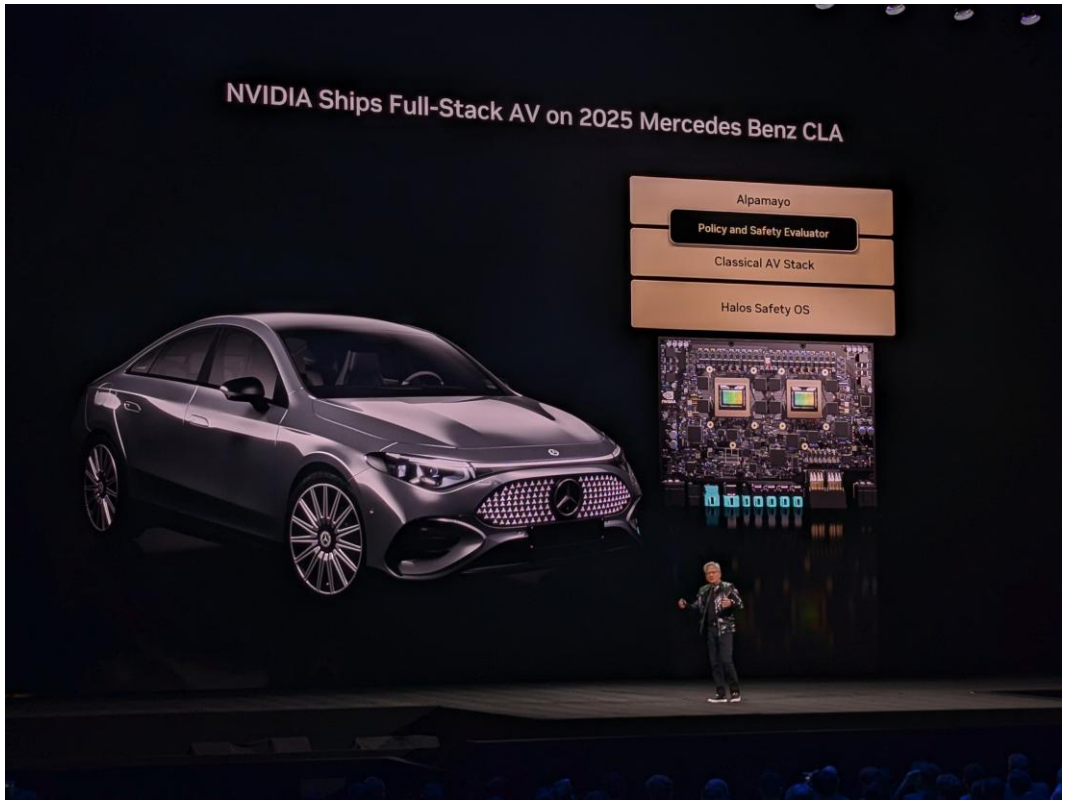
Brock Walquist
Automotive Supply Chain & Technology
Senior Analyst

Autonomy Trends of CES 2026

- Innovations accelerating not just next-generation automated driving, but also next-next and beyond
  - Physical AI, VLAM, E2E architecture buzz with new products and/or announcements
- L2+ and L2++ headline, but robotaxi companies continue to move against long-term plans
  - Those who remain continue making actionable progress, from geographical expansions to first commercial launches with firm timelines
- CES continues to be a great exhibition for the supply chain
  - T1 suppliers are seizing the opportunity to educate and advertise in the absence of many OEM exhibitions and announcements
- Impressive vehicles on display, albeit in small numbers
  - C-OEMs return with latest product front and center
  - Afeela, BMW, Mercedes-Benz, Tensor showcase new product

Next-gen automated driving systems

- Mercedes Benz introduces all-new CLA at CES 2026 equipped with MB.DRIVE ASSIST PRO
  - Next-gen MB.DRIVE technology co-developed with NVIDIA and powered by NVIDIA AI, full-stack DRIVE AV software, and NVIDIA DRIVE AGX accelerated compute
  - Mercedes will be first automaker to utilize Alpamayo
  - Alpamayo (E2E AI) is deployed alongside a traditional AV stack, with a policy and safety evaluator to arbitrate between the two, to provide the most functional option while defaulting to a very safety-focused option depending on conditions
  - MB.DRIVE ASSIST PRO informally accelerates the L2+ race in western markets, pushing the boundaries into “L2++” by navigating urban and city environments for point-to-point automated functionality in addition to L2+ hands-free driving



Next-gen automated driving systems

- AFEELA Intelligent Drive, underpinned by an end-to-end AI model and VLAM, to begin as Level 2+/Level 2++ system with under pinning of 40 sensors
- Ford to debut next-gen L2+ BlueCruise system in 2027, followed by L3 eyes-off driving in 2028. Point-to-point autonomy targeted in these updates.
- Tensor makes pitch for personally-owned Level 4 autonomous vehicle, designed for both manual and autonomous drive modes.
- Mobileye announces US-based automaker to leverage EQ6H and Mobileye Surround ADAS for next generation of hands-free functionality across millions of vehicles globally.

Robotaxi market building momentum behind Waymo

- Waymo holds strong position in the market with clear roadmap of expansion and fleet transition to Waymo 6th Gen Driver with Ioniq 5 and Zeekr RT rebrand to Ojai (Oh-hi)
  - 20M rides served, 5 cities with commercial operations currently but target on at least 20 internationally
- Zoox continues to make progress, offering free ride-hailing in Las Vegas currently (and during CES) with expansion targets of Austin and Miami
- Motional returning to action after a brief pause and change in ownership
  - Service re-launch targeted in Las Vegas by end of 2026
- Lucid-Nuro new kid on the block underpinned by NVIDIA DRIVE Hyperion platform, Nuro tech

Supply chain makes a strong showing across various technologies

- Aptiv showcases next-generation E2E AI-powered ADAS platform, demonstrating L2++ hands-free driving across highway and urban environments
- Valeo continues evolving ADAS portfolio with next-gen camera, lidar, and in-cabin sensing
- Lidar suppliers seeing cautious optimism beyond China as global markets push forward with upgradeable L2+ and L2++ systems and architectures, robotaxi growth
- HERE AI-powered maps converge navigation and autonomy for improved automated driving, navigate on autopilot capabilities
- AI driven partnerships with automakers continue rapid improvement of cutting edge automated driving and in-vehicle technologies

Impressive vehicles on display, albeit in small numbers

- BMW iX3
  - Debut model for the Neue Klasse platform
  - By 2027, the technologies of this platform and architecture will be integrated across 40 new models and model updates in BMW
- Mercedes Benz CLA
  - Debut model for the next-generation of MB.DRIVE driver assistance and automated driving technologies
- Geely
  - Introduced Geely Afari Smart (G-ASD) as the brands AI-powered, global next-generation intelligent driving system
  - Full-Domain AI 2.0 announced as the architecture to enable cross-functional advancements
- Afeela
  - Premieres AFEELA Prototype 2026 as second model to come in 2028
  - AFEELA 1 pre-production model to begin deliveries in 2026

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Connected Car and Vehicle Experience

Fanni Li
Automotive Supply Chain & Technology
Principal Analyst

Key trends

- OEMs and suppliers are pushing beyond size into digital cockpit design, integrated multi display modules, pillar-to-pillar dashboard, panoramic displays and windshield OLED display concepts. Cockpit design and intuitive interaction are becoming new levers of OEM differentiation and brand expression.
- Mobility is being redefined as the vehicle becomes an always-connected “third living space,” extending daily life and productivity into the cabin. Solution providers are repositioning to own the next-generation cockpit and the broader SDV software stack. Across CES 2026 demos, agents and multimodal experiences stood out, enabling cross-domain feature coordination that lifts safety, convenience, and personalization.
- With stronger tool chains and platform-ready architectures, OEMs can shift validation and integration earlier, enabling faster post-SOP feature enhancements and updates across the vehicle lifecycle.

Afeela front and rear Infotainment system

BMW iX3 Ushers in Next-Generation Innovations at CES

BMW iX3 Panoramic iDrive

BMW is putting its next-generation cockpit on display in the new iX3, including Panoramic iDrive and an AI-powered Intelligent Personal Assistant. BMW integrates Alexa+ technology into its vehicles.

BMW in-car entertainment

Ever-evolving entertainment and app ecosystem in BMW Operating System X : gaming, music & video streaming, productivity and more.

Source: BMW CES 2026

Brand Personalized Cockpit and Immersive Experience

AUMOVIO Branded Personalized Cockpit

Branded Personalized Cockpit showcases AUMOVIO's customized display solutions, featuring a colorful multi-display solution. It includes advancements such as vibrant color **ePaper** technology displays, switchable **privacy** functionality, and the **invisible** integration of a camera behind **OLED** display.

Visteon Large Format Curved Displays

Visteon Curved large display with differentiated design for luxury and premium segments. This trend is expanding to mid segment.

AUMOVIO Window Projection

Visually impressive projection of content onto rear side windows

Source: AUMOVIO, Visteon

Displays with unique design

TCL Multi-Curved IJP OLED Automotive Display

TCL high brightness & low power consumption P-HUD

Highlights：

- IJP (Inkjet Printing) OLED brings the large size flexible display to automotive industry, building the immersive experience of high-end luxury cockpit
- Display can endure more than 100,000 times of sliding.
- Gradient curvature and seamless design realize merging of aesthetics and human machine interaction

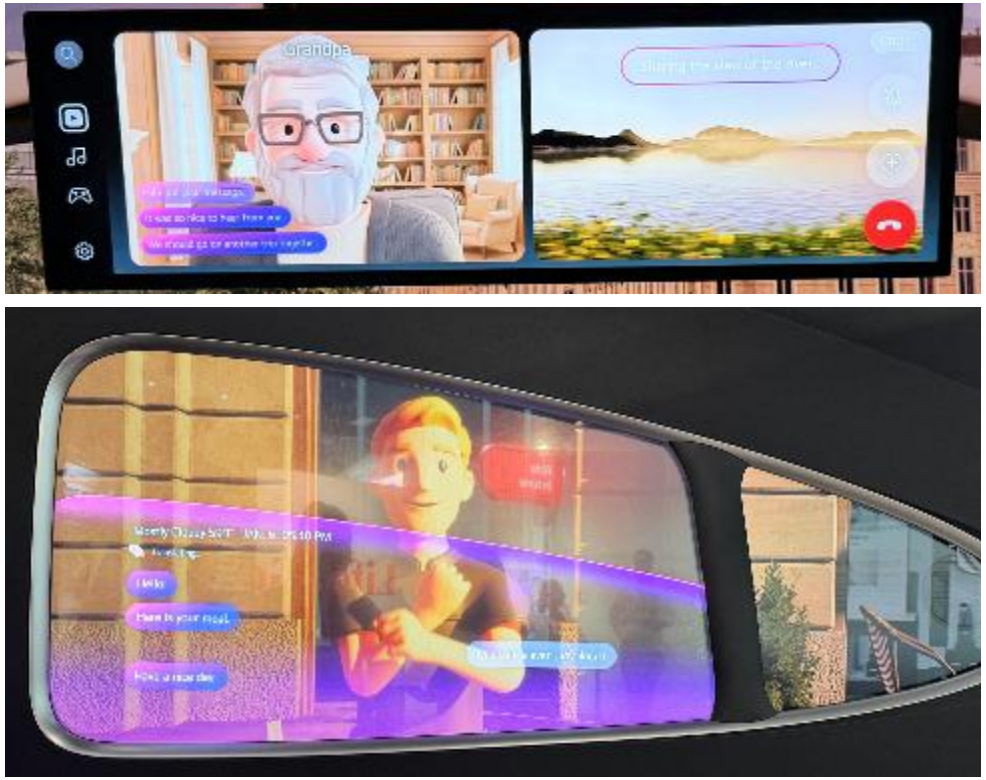
Source: TCL CSOT

LG showcase AI-powered In-Vehicle displays

LG windshield display surface for real time information and mixed reality

LG Mobility Display Solution

Convert the windshield into a display surface for real time driving and mixed reality content during autonomous operation



LG in vehicle entertainment

In-Vehicle Entertainment Solution

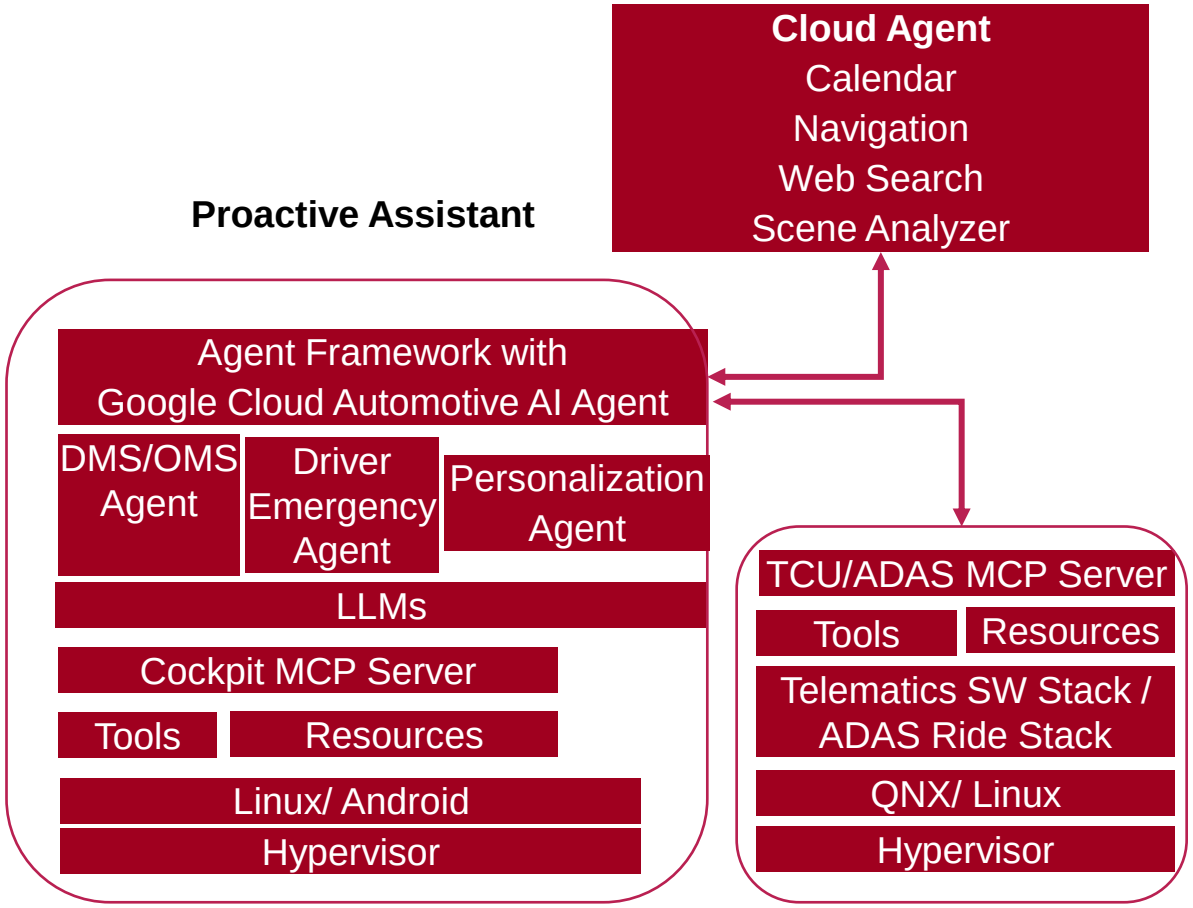
Supports seamless content streaming between home and vehicle and enables communication through vehicle side windows. On-device multimodal generative AI platform creates individualized experiences throughout journeys.

Source: LG

Multi modality with high performance edge and cloud compute

Qualcomm Elite platform with Google Gemini

Qualcomm and Google expand the partnership to accelerate the development of SDVs by integrating the Snapdragon Digital Chassis with Google's Cloud Automotive for AI agent.



Source: Qualcomm CES 2026

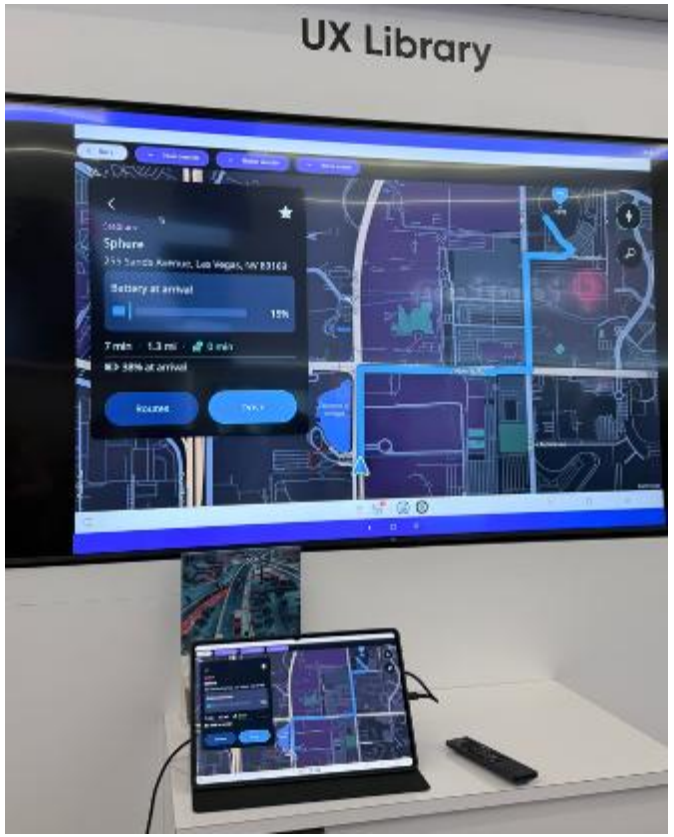
Navigation and map innovation

BMW X7, HERE 3D map

The BMW X7, powered by Here HD live map, is equipped with highway assistant, allowing level 2 hands off eyes on driving to 137 km/hour on highways in the US and Canada. It also has navigation, traffic and predictive routing from HERE.

Lucid Gravity, charging planner

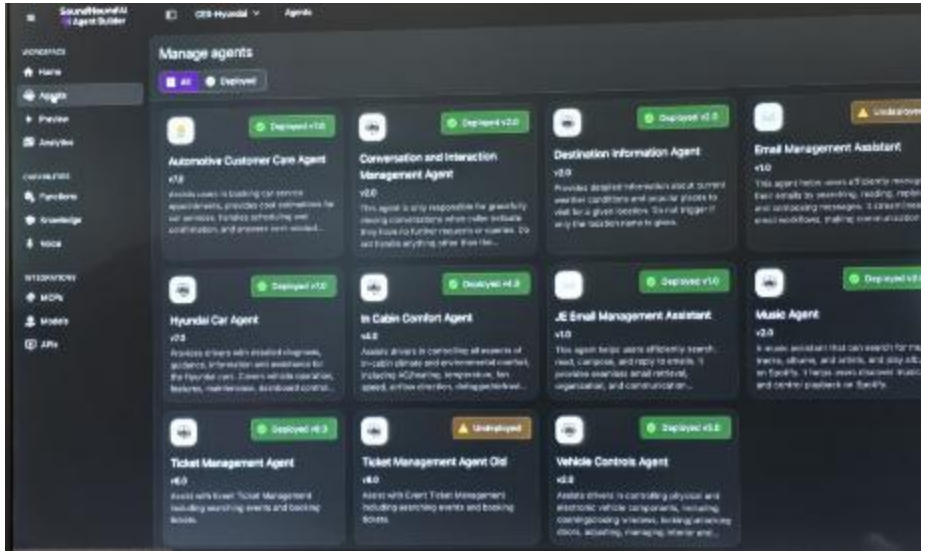
The vehicles incorporate enhanced EV routing and real-time charge point data to optimize long-distance journeys.



TomTom UX Library

Source: HERE, TomTom

Voice AI agents builder and increased onboard capability



SoundHound Agent builder platform

SoundHound's AI agent orchestration platform enables multiple agents to carry out tasks and transactions on behalf of the driver – from the company's own voice commerce agents that allow food ordering and reservations with restaurant brands, to external agents that will allow users to check email or adjust their schedules.

Cerence AI and SiMa.ai partnership

Cerence AI and SiMa.ai partner to run CaLLM Edge on SiMa's Modalix MLSoC, bringing advanced, low-power conversational AI to vehicles.

Cerence's mobile work agent can access to Microsoft 365 Copilot including Teams, Outlook and OneNote.

Source: SoundHound, Cerence

Sonatus Showcases AI-Powered SDV Innovations

Sonatus Collector AI for features on demand

A joint demonstration with Bosch showcases the modern E/E architecture, coupled with real-world data collection and efficient OTA updates using Sonatus Collector AI and Sonatus Updater for feature-on-demand deployment.

Sonatus Collector AI and AI Technician for Nissan development

Sonatus demonstrates how AI tools can accelerate vehicle development, helping Nissan Technical Centre Europe (NTCE) deliver faster, smarter, and more efficient engineering workflows for Nissan's future lineup.

Source: Sonatus

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E/E & Semiconductor

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CES 2026 from the Automotive SoC suppliers' perspective

Topics included

- SoC supplier based announcements and perspectives.
- SDV gets refined to mean software architecture drives hardware development.
- AI still evolving and refining and becoming domain specific
- Some concerns about memory supply chain in the short-term, but longer term automotive is looking to migrate to higher performing memory and L4 applications will need higher memory bandwidth.

Main announcements and messages from Nvidia, Mobileye and Qualcomm

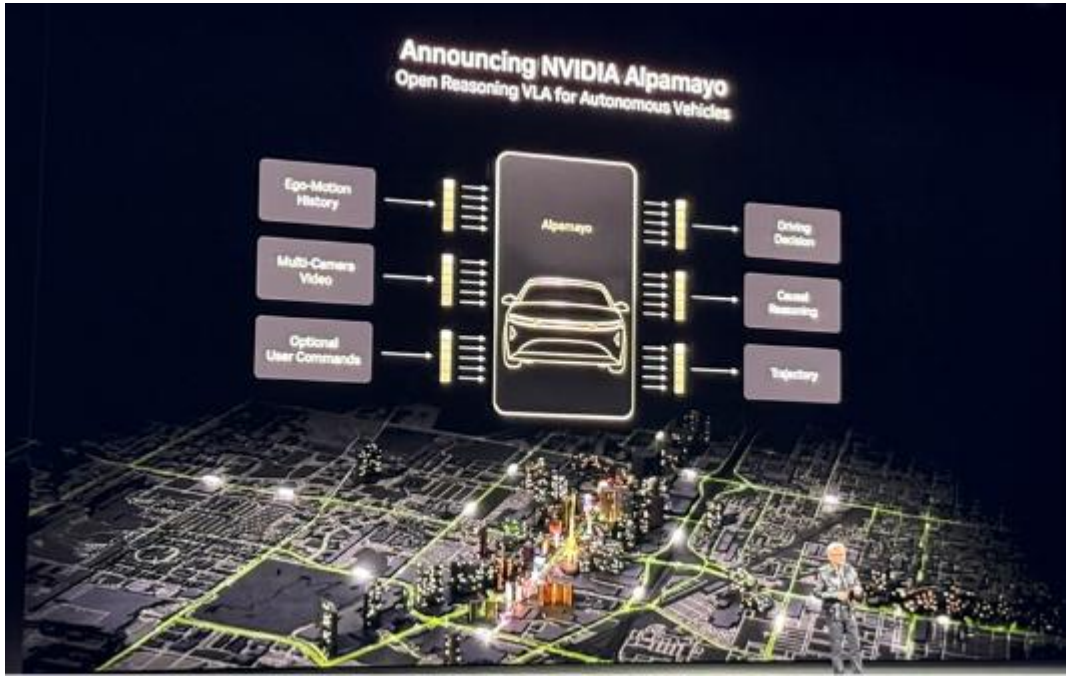
Physical AI supports both ADAS and Robotics

Mobileye

- Mobileye 3.0
- Mobileye acquires Mentee Robotics.
- EyeQ7H sample and targeting PPAP for Q3 2027 for mind off and above applications.
- Autonomous Vehicles are becoming more aligned with Robotics.
  - Number of vehicles produced annually will be relative fixed, but the number of robots produced annually from industrial to personal use, while unknown, could be tremendous.

Nvidia

- Physical AI is needed for applications that interact in the real world, not just exist in the digital world.
- Alpamayo announced as their open sources AI model and ecosystem.
  - Can be used on Nvidia SoCs and other SoCs that meet minimum performance capabilities.
- Alpamayo will launch on Mercedes CLA in 2026.



Significant SoC automotive announcements

Main announcements and messages from Nvidia, Mobileye and Qualcomm cont.

- Cockpit functions will be large AI model based and the driver assistance functions will be VLAM (Vision Language Action Model) based.
- Qualcomm and Leapmotor introduced cross-domain, two chip central controller solution powered by SA8797P, Snapdragon Cockpit and Ride Elite platforms
- Toyota RAV4 use Snapdragon Cockpit Platform.
- Collaborating with ZF's on their ProAI using Snapdragon Ride.
- Expand on the 10-year long joint efforts with Google to further adapt and evolve AAA (automotive AI Agent) E2E GenAI in automotive.
- VW and Qualcomm agree to develop Snapdragon Cockpit Platforms for Infotainment applications developed via the VW/Rivian joint venture.

Significant SoC automotive announcements

Other main announcements or messages

- Ambarella
  - CV3-AD and R families (5nm) and CV7x (4/5nm) for automotive vision and radar applications.
- AMD
  - Ryzen AI Embedded P100 and X100 Series for infotainment.
  - Versal Edge Series collaborating with StradVision.
- MIPS/GF
  - GlobalFoundries acquired MIPS in 2025
  - Announced MIPS S8200 SoC for physical AI edge applications.
    - First platform samples targeted for 2027.
- Renesas
  - R-Car X5H leveraging 3nm and Chiplets.
    - 400 TOPS monolithic performance that can be increased using chiplet capabilities.
    - Targeting IVI and ADAS applications
    - Leveraging long term automotive commitment and legacy
- Texas Instruments
  - TDA5 family
    - Scalable from 10-1200 TOPS.
    - Power efficiency 24 TOPS/W
    - Chiplet compatible to support scalability.
    - Leveraging long term automotive commitment and legacy

SDV gets refined to mean software architecture drives hardware development.

- It’s not about lines of codes or converting everything to E2E.
  - Infotainment will leverage GenAI while ADAS/AV will leverage VLAM.
    - Can use transformers, same or different, or can have traditional S/W running in parallel to provide guard rails.
    - Different domains don’t need to have a common AI but they need to be able to share common data between AIs.
- It’s about architecting the software first
  - SoCs are defined to support the S/W requirements instead of just following the silicon process evolution.
  - This is causing a bifurcation of answers to cost is king.
    - One answer is well suited to high and premium end of the market where common hardware and software platforms co-exist and are common throughout an OEM.
    - The other answer is lower features applications and cars can’t afford the cost of L4 hardware on L2+ vehicles.
      - Common S/W platform that can be reused but hardware must be priced to support lower cost vehicles.
      - The result is different low, mid and high-end hardware platforms to meet cost targets but common software platform that can be scaled as needed.
    - To paraphrase Deepak Patak of Skild AI generalize first, then specialize.
      - Common platforms within an OEM but specifical implementations within each model within the OEM.
  - Nvidia will sell its Alpamayo AV S/W stack separately for OEMs to use on any hardware that meets the minimum performance requirements.

AI still evolving and refining and becoming domain specific:

- IVI will become more of an HMI domain relying on LLMs.
- ADAS/AV relying on Physical AI using VLAMs.
- They need to communicate and share information, but don’t need to use common or single transformers.

Memory concerns

- Some concerns about memory supply chain in the short-term, but longer term automotive is looking to migrate to higher performing memory and L4 applications will need higher memory bandwidth.
- Longer term SoCs need memory with higher performance.
  - LPDDR4 will be displaced with LPDDR5
  - LPDDR5 and beyond bandwidth will need to increase to avoid being the bottleneck for system performance.
    - Compute is less of an issue but accessing data can be the limiting factor in using that compute.

Questions and answers

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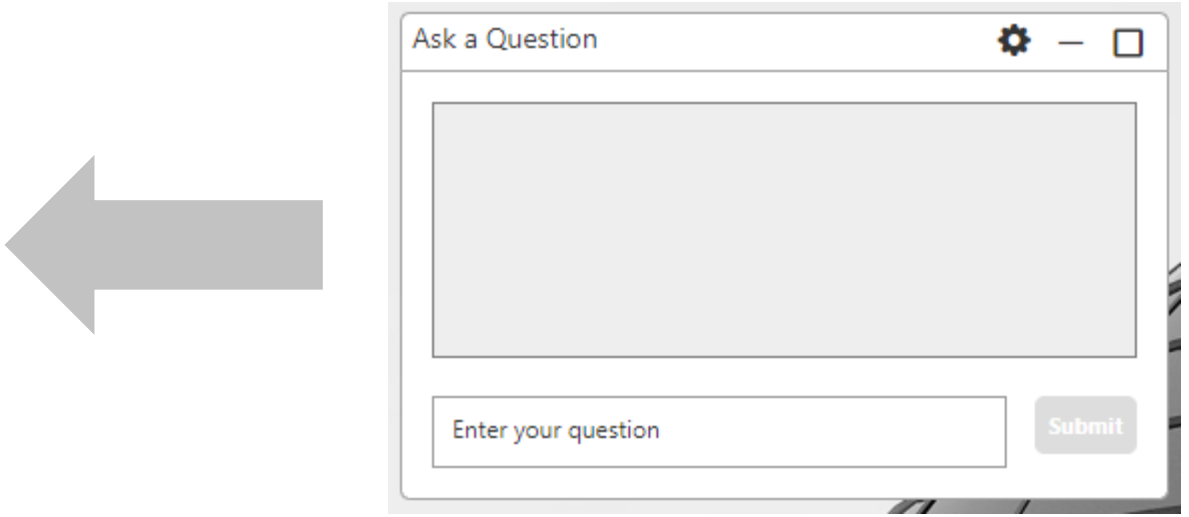

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thank you!

Next AutoTechInsight Webinar on February 25th, 2026

SDV: UIUX domain

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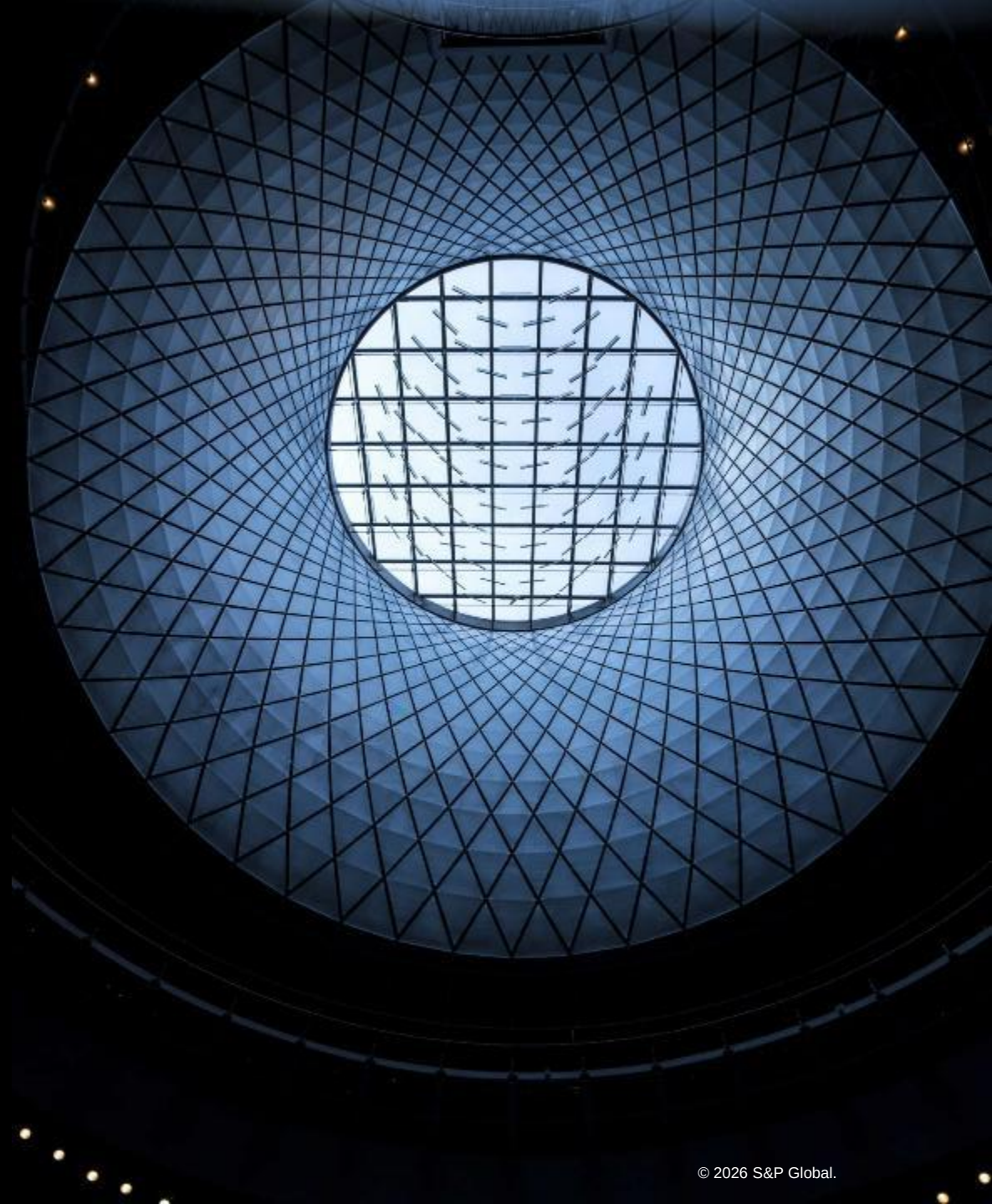

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