



Global Autonomous Vehicle Forecast

Launch webinar
Q3 2026

Automotive | Global Autonomous Vehicle Forecast |
September 2026 | Presented by Sammy Chan





What We Will Cover

~40 minutes, Q&A at the end

1

The global outlook to 2038

101 million light vehicle sales, nine in 10 with Level 2 or higher assistance

2

China, the US and Europe compared

Three regions climbing the autonomy ladder at different speeds

3

ADAS supplier outlook

Compute and perception hardware fitment outlook

4

Robotaxis

A fleet expected to triple in 2027 and what it means for ownership

5

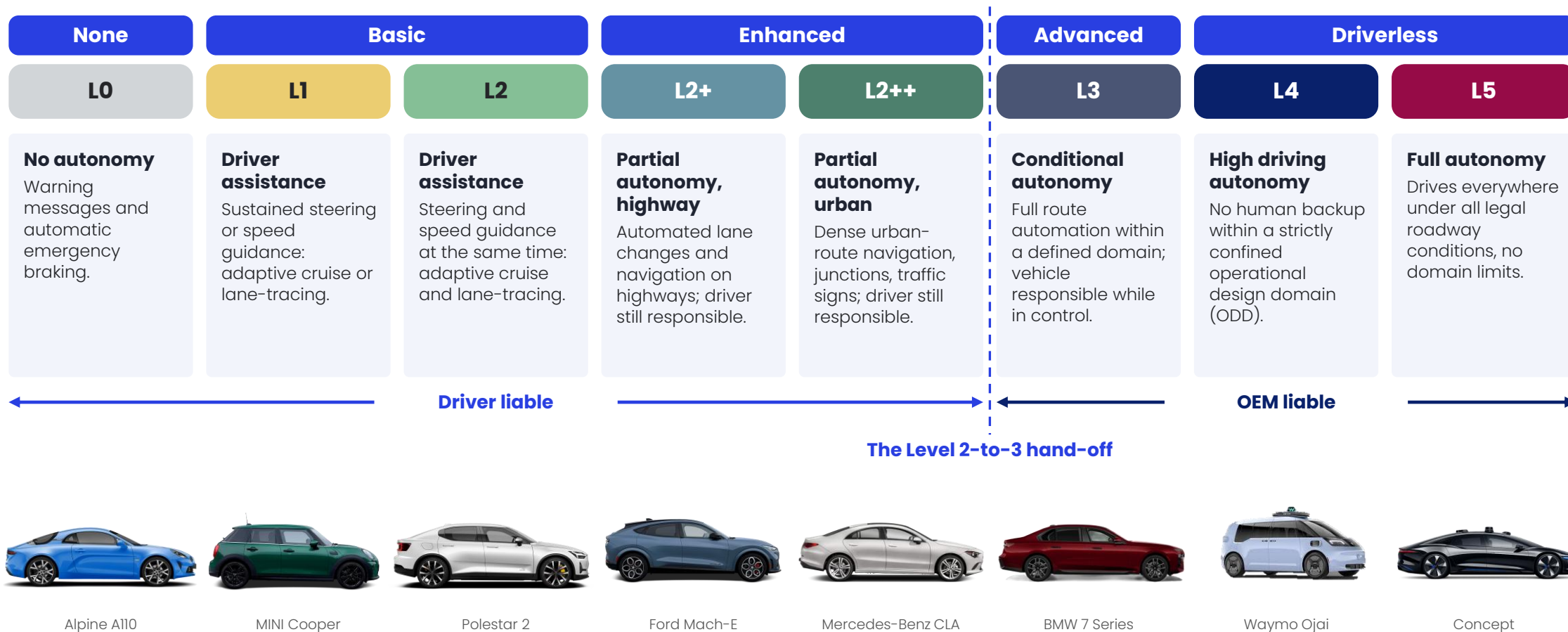
Patents, hiring and deals

Where autonomy is being built: IP, talent and capital

GlobalData Autonomous Levels



Eight levels from L0 to L5, and the hand-off where liability moves to the OEM



Source: GlobalData, *Global Autonomous Vehicle Forecast, Q3 2026*. Vehicles illustrate the level a nameplate is offered at in at least one market.



Global Outlook

101 million vehicle sales, nine in 10 with Level 2 or higher assistance

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The global outlook

101 million vehicle sales in 2038, nine in 10 with Level 2 or higher capability

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Global Vehicle Sales by Autonomy Level

Nine in 10 sold in 2038 carry Level 2 or higher assistance



The mix shifts up

Against that tepid backdrop, the autonomy mix moves towards higher levels of driver assistance: L2-and-above capability rises to 92% of sales by 2038.

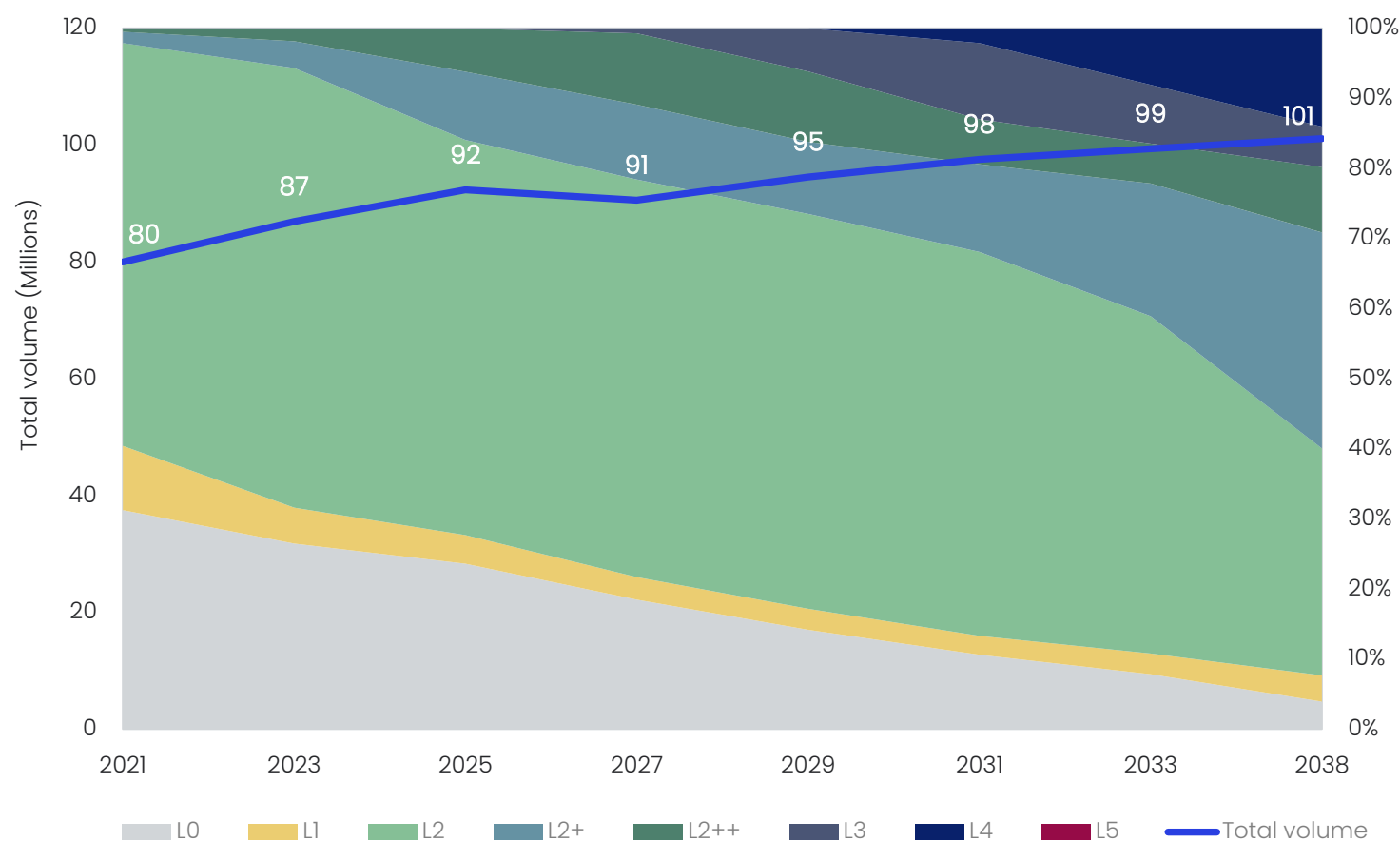
Levels 0 and 1 dissipate

Safety requirements, driver convenience and brands showcasing advanced technology could see L0 and L1 fall from over 40% of sales to 8%.

L2 – 2++ gains momentum

L2+ and L2++ capable vehicles are expected to grow to over 40M units by 2038.

Light vehicle sales by GlobalData autonomy level

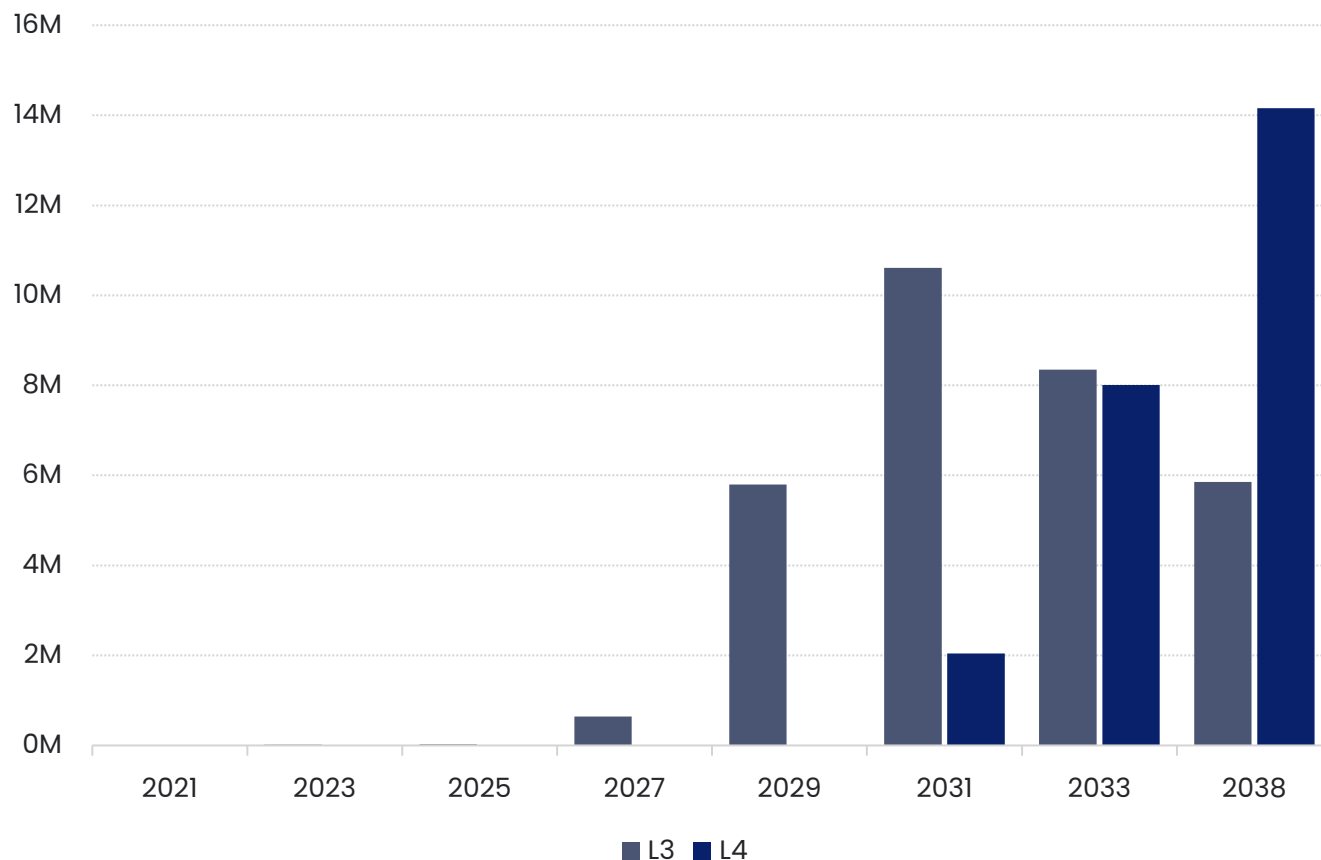




Level 3 and Level 4 Outlook

Level 3 scales in China from 2027; Level 4 from 2031

Global PV sales at Level 3 and Level 4



2026: L3 paused

Mercedes-Benz paused L3 offerings with the S-Class (January 2026) and EQS (October 2026); BMW dropped Personal Pilot L3 in February 2026.

Added costs, low demand

BMW priced Personal Pilot at EUR5,110 vs EUR1,450 for the Level 2 system that replaced it.

China carries the first major L3 wave

China holds 9.4M of the world's L3 sales in 2032.

L3 superseded by Level 4

Level 4 capable vehicle sales overtakes L3 and reaches over 14M units by 2038, driven by China.



The Level 3 Retreat

Three flagships offered or promised eyes-off driving with lidar, then stepped back



BMW 7 Series

Offered

Personal Pilot L3 from MY2024: eyes-off on German motorways to 60 km/h, one Innoviz lidar, EUR5,110 (about EUR6,000 at list).

Shelved, February 2026

Dropped with the 7 Series facelift (April 2026) after two years and too few takers. Lidar deleted.

Replaced by

Motorway Assistant, a hands-off, eyes-on Level 2 system to 130 km/h, EUR1,450 on the iX3 and DCAS-certified for 60 countries.



Mercedes-Benz S-Class

Offered

DRIVE PILOT, the first certified L3 on sale: Germany from MY2022, California and Nevada from MY2024, one Valeo SCALA lidar, a EUR6,000 to EUR9,000 option.

Shelved, January 2026

Left out of the S-Class facelift (January 29, 2026) and the EQS (October 2026). Lidar deleted.

Replaced by

MB.DRIVE ASSIST PRO, a door-to-door hands-off, eyes-on Level 2++ system without lidar, about EUR3,400 for three years; Level 4 effort moves to robotaxis with NVIDIA and Momena.



Volvo EX90

Promised

Ride Pilot, an unsupervised (Level 3) subscription for California announced in January 2022, built on a standard roof-mounted Luminar Iris lidar (MY2023 to MY2025).

Shelved, November 2025

Luminar contract terminated and lidar deleted from MY2026 EX90 and ES90; Luminar filed for Chapter 11 in December 2025. Ride Pilot has not launched.

Replaced by

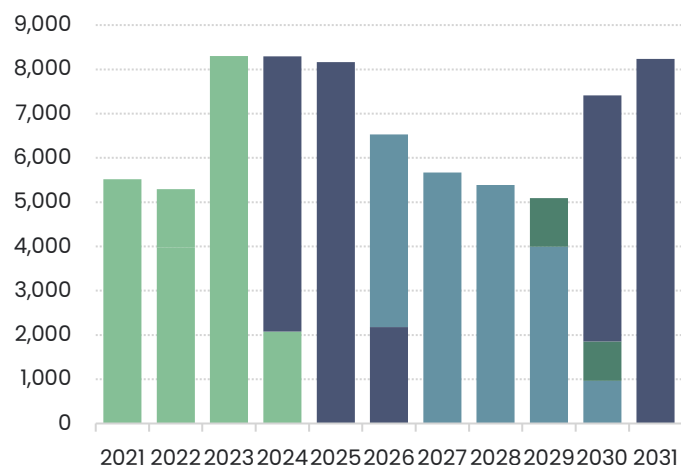
The existing camera, radar and ultrasonic set on NVIDIA DRIVE Orin, "with or without a lidar"; owners compensated in July 2026 (EUR1,500 in the Netherlands, about \$1,500 in the US).



The Retreat in Our Data

European sales by model-year generation and autonomy level

BMW 7 Series • Europe



MY2024 Level 3 • Personal Pilot L3

1 × Innviz InnovizOne lidar, 250 m range; Mobileye EyeQ5

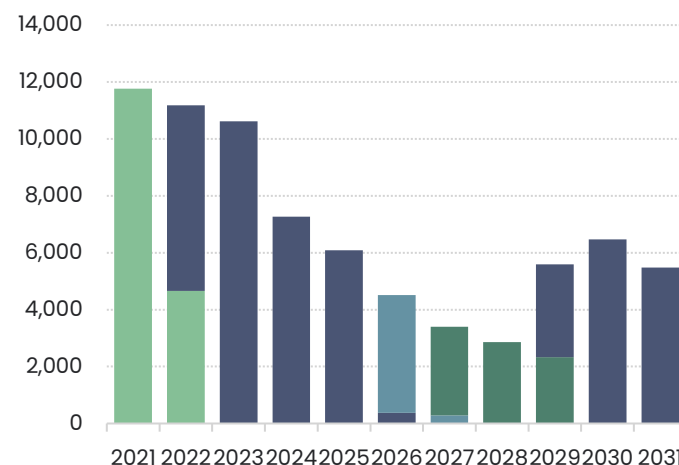
MY2026 Level 2+ • Motorway Assistant

Lidar: None

MY2029 to MY2030 Level 3 • NK platform

Urban hands-off on Neue Klasse, Personal Pilot returns

Mercedes-Benz S-Class • Europe



MY2022 Level 3 • DRIVE PILOT

1 × Valeo SCALA lidar • Driving Assistance Package Plus

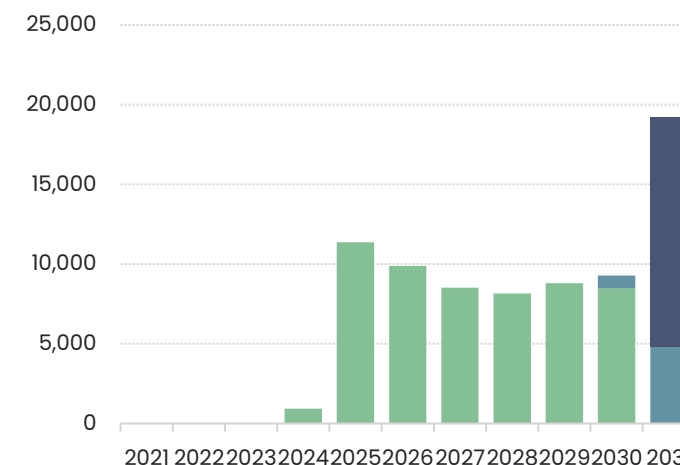
MY2026 Level 2+ • MB.DRIVE ASSIST PRO

Lidar: None • NVIDIA DRIVE Orin, 508 TOPS from MY2027 (L2++)

MY2029 Level 3 • DRIVE PILOT returning

Hesai lidar • NVIDIA • GlobalData forecast

Volvo EX90 • Europe



MY2023 Level 2 • Pilot Assist

1 × Luminar Iris lidar, 250 m • NVIDIA Orin + Xavier, 280 TOPS

MY2026 Level 2 • Pilot Assist

Lidar deleted (Luminar contract ended Nov 2025) • NVIDIA Orin, 508 TOPS

MY2031 Level 3 • Ride Pilot (forecast)

Lidar (supplier unconfirmed)

L2

L2+

L2++

L3

Source: GlobalData, Global Autonomous Vehicle Forecast, Q3 2026



Regional Outlook

Three regions climbing the autonomy stack at three different speeds

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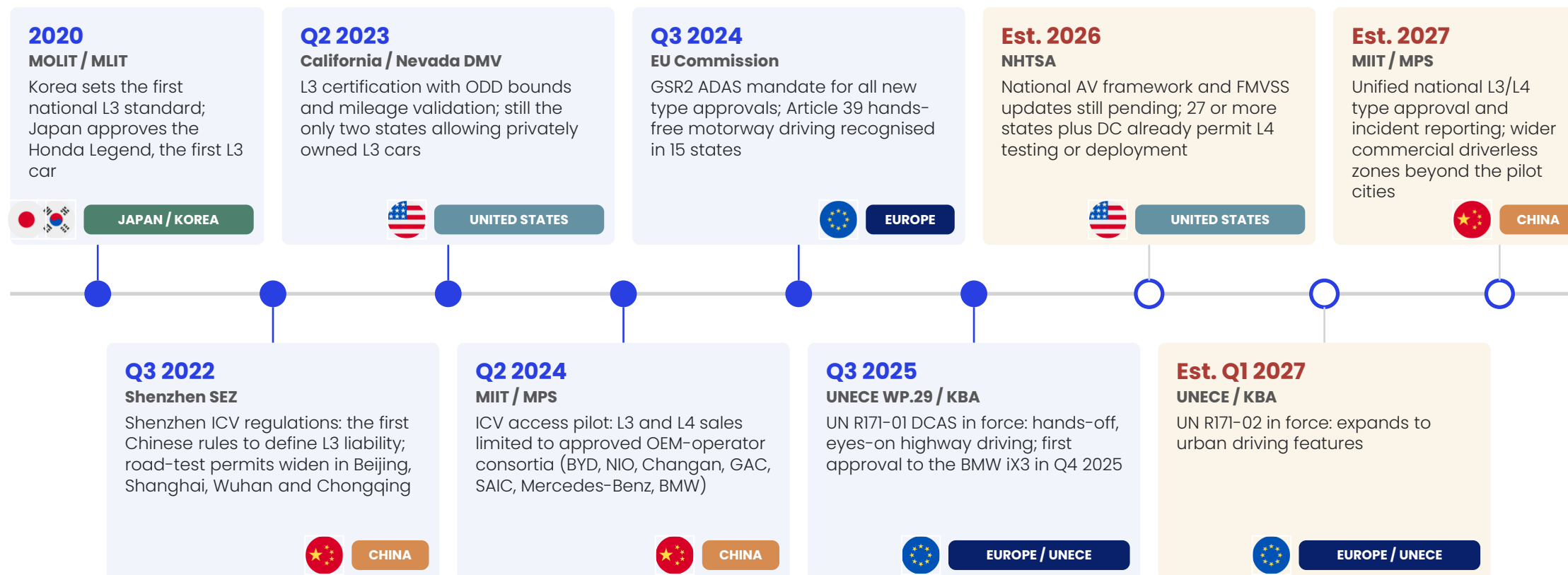


Global Regulatory Timeline

The rules set for Level 2++, Level 3 and Level 4 across regions

Adopted regulatory instruments

Expected regulatory instruments

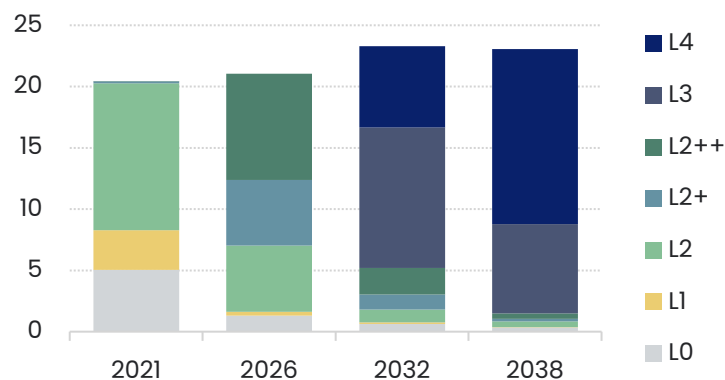




Regional Vehicle Sales by Autonomy Level

Four regions, four speeds

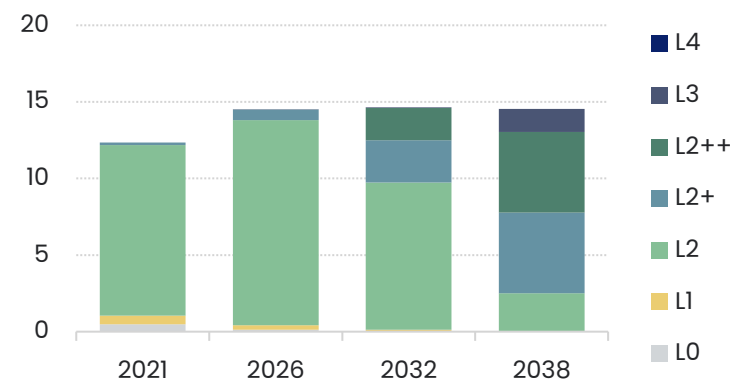
China



L3+L4

Push to L3 and L4 in the 2030s far more aggressively than other regions

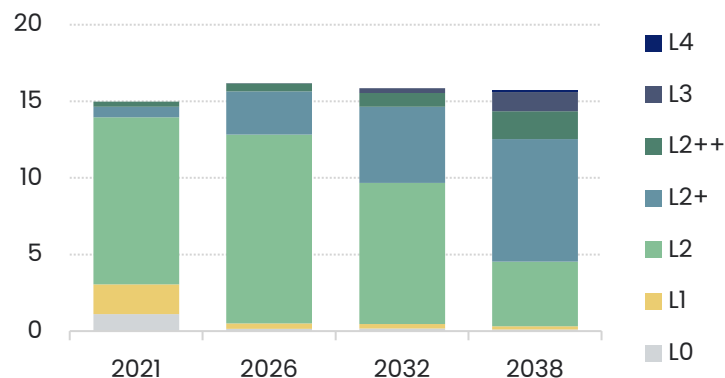
Europe



L2+/++

Access to European premium brands and Chinese tech-focused brands pushes autonomy to L2++

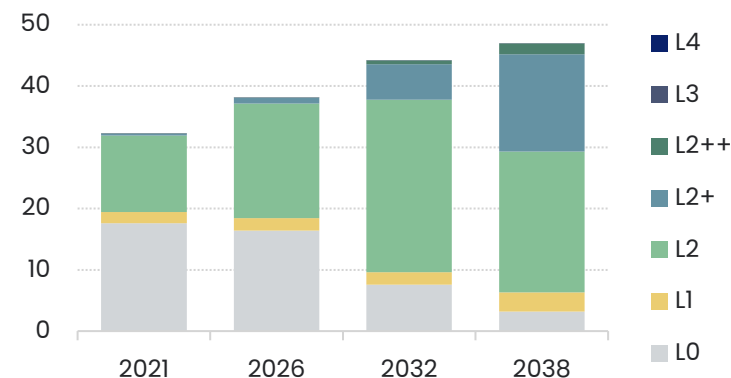
USA



L2+

Highway assistance becomes the focus of many OEMs in North America

Rest of the World



Trailing

Much lower levels of autonomy with demand for lower-cost vehicles propped up by developing car markets



China: Three Paths for Level 3

Level 3 scenarios for China passenger vehicle sales

Optimistic

L3 goes mass market from RMB 200K

L3 proves mature and reliable, OEMs launch multiple models and prices fall to RMB 200K. Within three years rules mature and OEMs move on to L4 for its cost advantage.

77%

L3 share in 2030

Base

Premium first, then down to RMB 200K-300K

L3 proves reliable. OEMs start in the RMB 300K-350K segment, absorb compliance costs without major price rises, then scale L3 down to RMB 200K-300K.

44%

L3 share in 2030

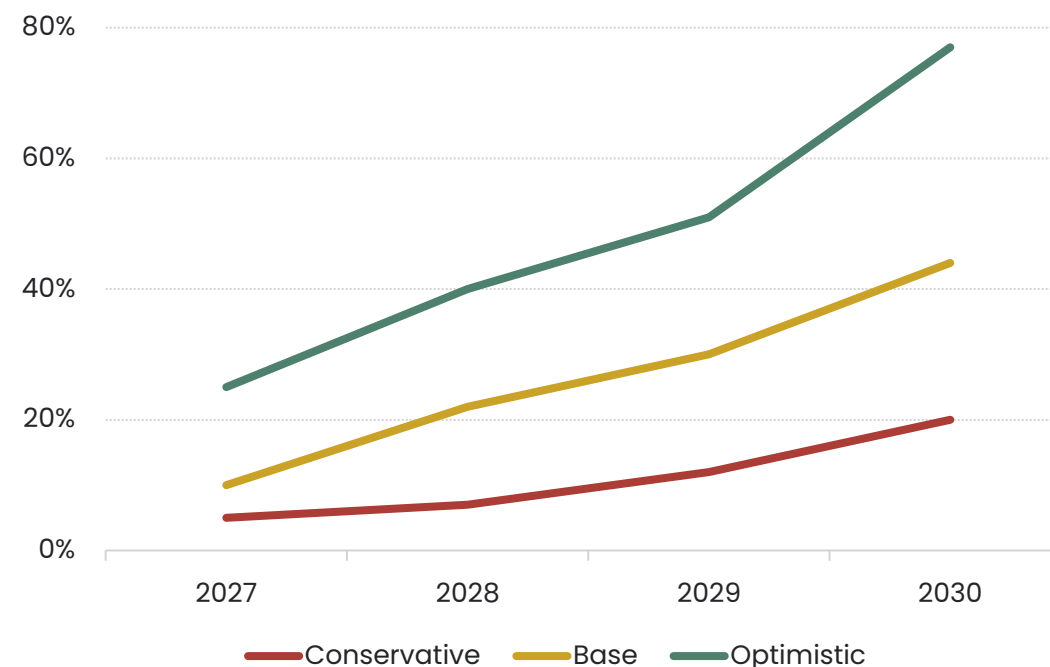
Conservative

L3 stays a niche above RMB 400K

L3 falls short of maturity and reliability expectations. Start-ups pilot a few models, incumbents stay cautious and a wide price gap keeps buyers on L2++.

20%

L3 share in 2030



2027 is set to be a year of two halves

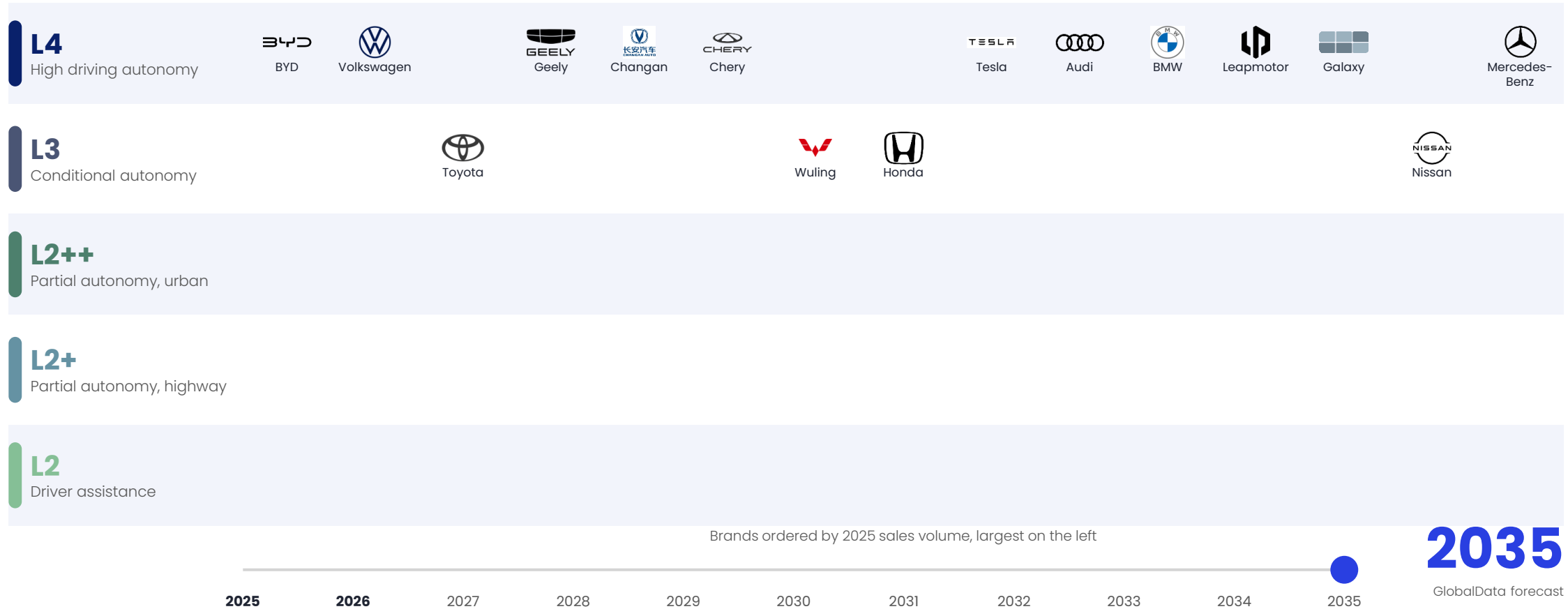
	H1 2027	H2 2027	Full year
Optimistic and base	Slowdown: buyers wait for L3	Surge: L3 launches plus the tax deadline	Strong H2, weak H1
Conservative	Stable	Moderate year-end rush	Relatively flat

Source: GlobalData, *Global Autonomous Vehicle Forecast, Q3 2026*.



China: Climbing the Autonomy Ladder

Highest autonomy level offered by top 15 brands



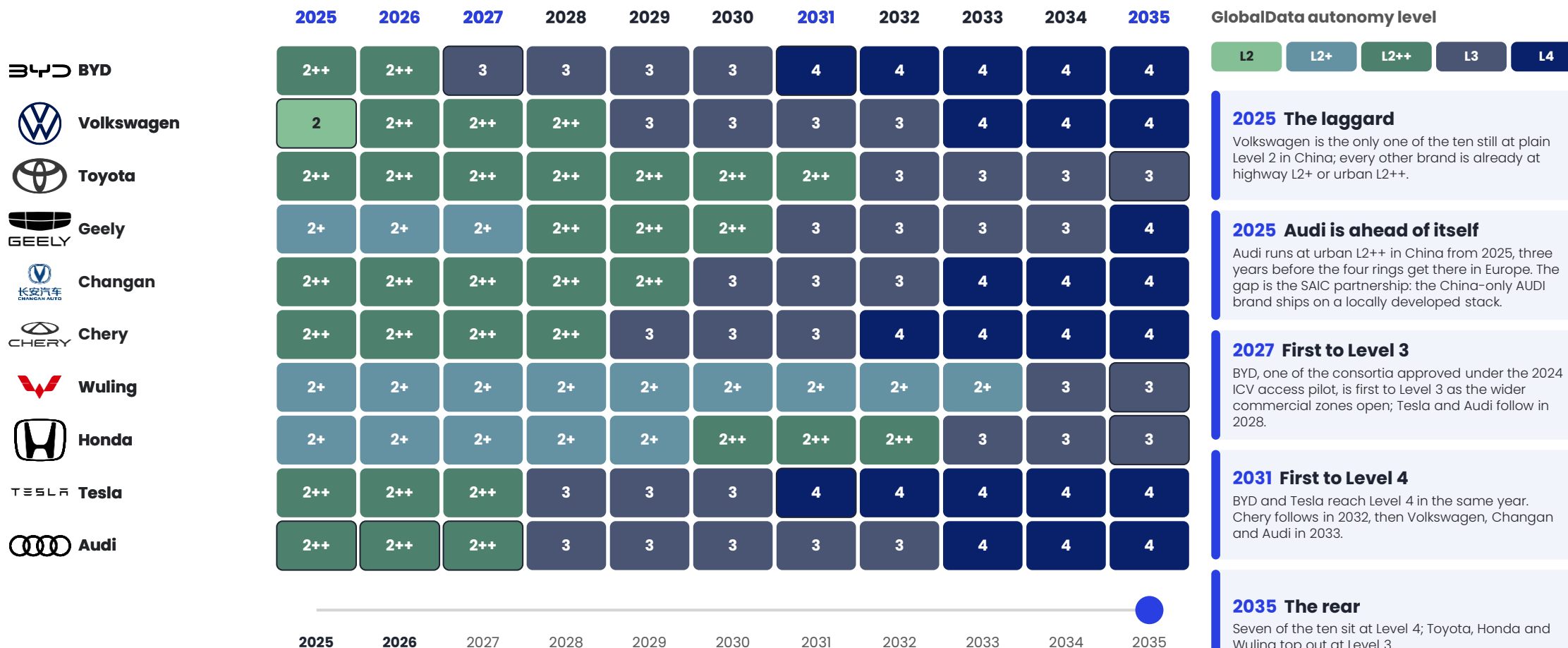
Everyone moves. Every one of the fifteen brands climbs at least one level, and eleven reach Level 4 by 2035. **BYD leads from the front.** Level 3 in 2027, Level 4 in 2031, with Chery, Leapmotor and Galaxy a year behind and Volkswagen's China-only models following in 2033. **Toyota, Honda, Nissan and Wuling.** Level 3 only in the 2030s.



China: The Moves That Matter

The OEM autonomy timeline, 2025 to 2035

2025 to 2026 as verified; 2027 onward GlobalData forecast



Source: GlobalData, Global Autonomous Vehicle Forecast, Q3 2026. Ten largest brands in China by 2025 volume.



USA: Climbing the Autonomy Ladder

Highest autonomy level offered by top 15 brands

L4

High driving autonomy

L3

Conditional autonomy



Ford



BMW

L2++

Partial autonomy, urban



Hyundai



Kia

TESLA

Tesla



Lexus

L2+

Partial autonomy, highway



Toyota



Chevrolet



Honda



Nissan



GMC



Subaru



Jeep



Mazda



Ram

L2

Driver assistance

Brands ordered by 2025 sales volume, largest on the left

2025

2026

2027

2028

2029

2030

2031

2032

2033

2034

2035

2035

GlobalData forecast

Level 4 later than 2035. None of the top 15 US brands reaches Level 4 in the period, and only Ford (2029) and BMW (2034) reach Level 3 at all. Level 4 in the US is a robotaxi story. **Tesla starts ahead.** Alone at L2++ in 2025 and still there in 2035. **A slow board.** Nine of the fifteen brands remain on highway L2+ between 2025 and 2035.



US: The Moves That Matter

The OEM autonomy timeline, 2025 to 2035

2025 to 2026 as verified; 2027 onward GlobalData forecast



Source: GlobalData, Global Autonomous Vehicle Forecast, Q3 2026. Ten largest brands in USA by 2025 volume.



Europe: Climbing the Autonomy Ladder

Highest GlobalData level reached by brand, 2025 to 2035, fifteen largest brands

L4

High driving autonomy

L3

Conditional autonomy



BMW



Mercedes-Benz



Audi



Volvo

L2++

Partial autonomy, urban



Peugeot



Hyundai



Kia



Opel



Citroen

L2+

Partial autonomy, highway



Volkswagen



Toyota



Skoda



Renault



Ford

L2

Driver assistance



Dacia

Brands ordered by 2025 sales volume, largest on the left

2025

2026

2027

2028

2029

2030

2031

2032

2033

2034

2035

2035

GlobalData forecast

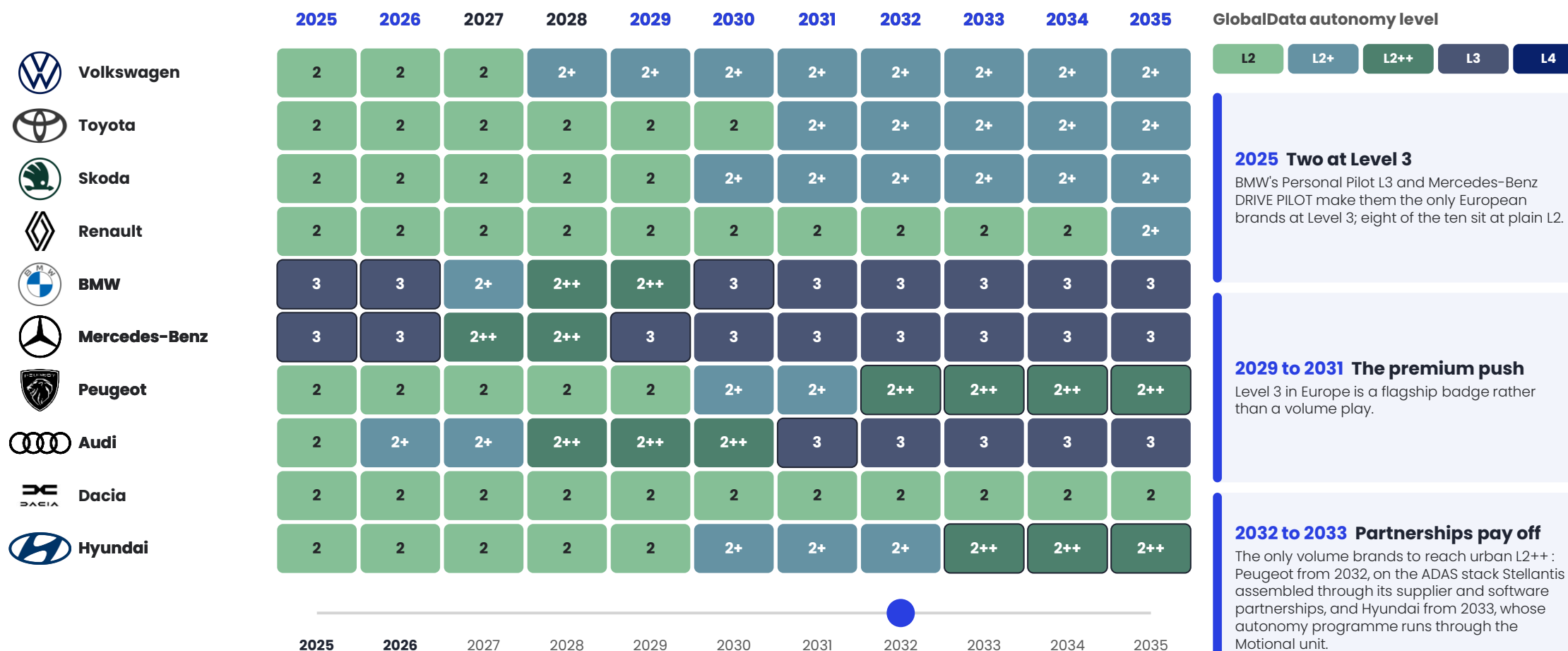
Volume stays low, premium climbs. Volkswagen, Toyota, Skoda, Renault, Dacia and Ford never pass L2+ in the period; BMW, Mercedes-Benz, Audi and Volvo carry Europe's Level 3. **The L3 retreat.** BMW and Mercedes-Benz step down, as L3 leave the price lists; both climb back through L2++ to Level 3 by 2030. **No European brand reaches Level 4 by 2035 for privately owned passenger cars.**



Europe: The Moves That Matter

The OEM autonomy timeline, 2025 to 2035

2025 to 2026 as verified; 2027 onward GlobalData forecast



Source: GlobalData, Global Autonomous Vehicle Forecast, Q3 2026. Ten largest brands in Europe by 2025 volume.



ADAS Supplier Outlook

Compute and perception hardware fitment outlook

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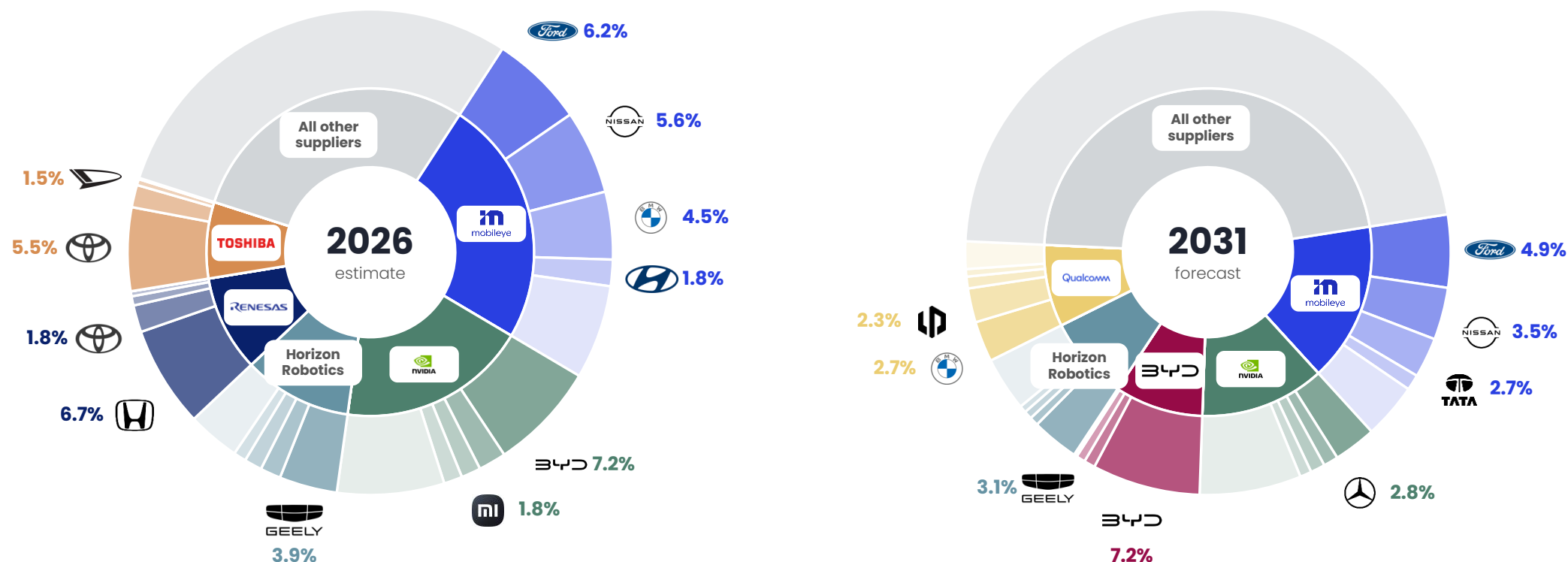
Patents, hiring and deals

Where autonomy is being built: IP, talent and capital



Driver-Assistance Chip Suppliers

Share of units with a known chip supplier, and the brands behind each one

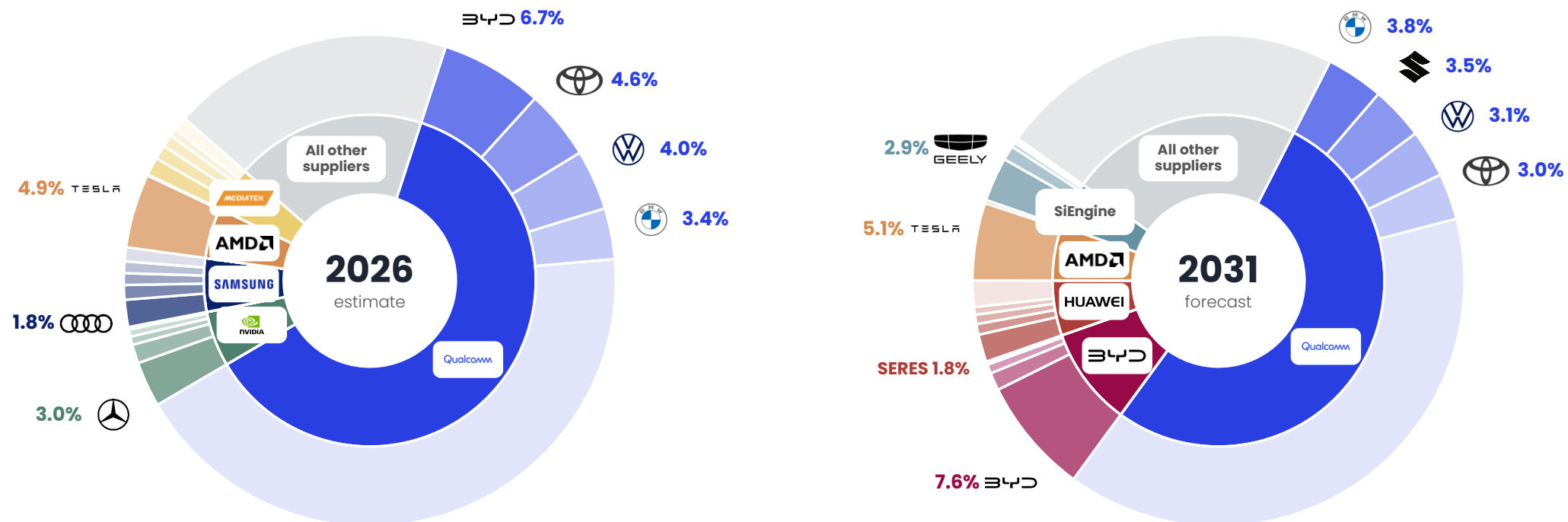


Different suppliers, different customers. Mobileye's 2026 share is Ford, Nissan and BMW; Renesas and Toshiba are almost entirely Honda and Toyota; NVIDIA and Horizon Robotics are almost entirely Chinese brands. **The captive supplier arrives.** BYD is a top-three driver-assistance supplier by 2031 on its own vehicles alone, and Qualcomm enters the top five on BMW and Leapmotor. **Concentration falls.** The top five drop from 71% to 53% of units with a known supplier as in-house silicon and second sources spread.



Infotainment Chip Suppliers

Qualcomm keeps over half the cockpit market; Chinese in-house silicon follows



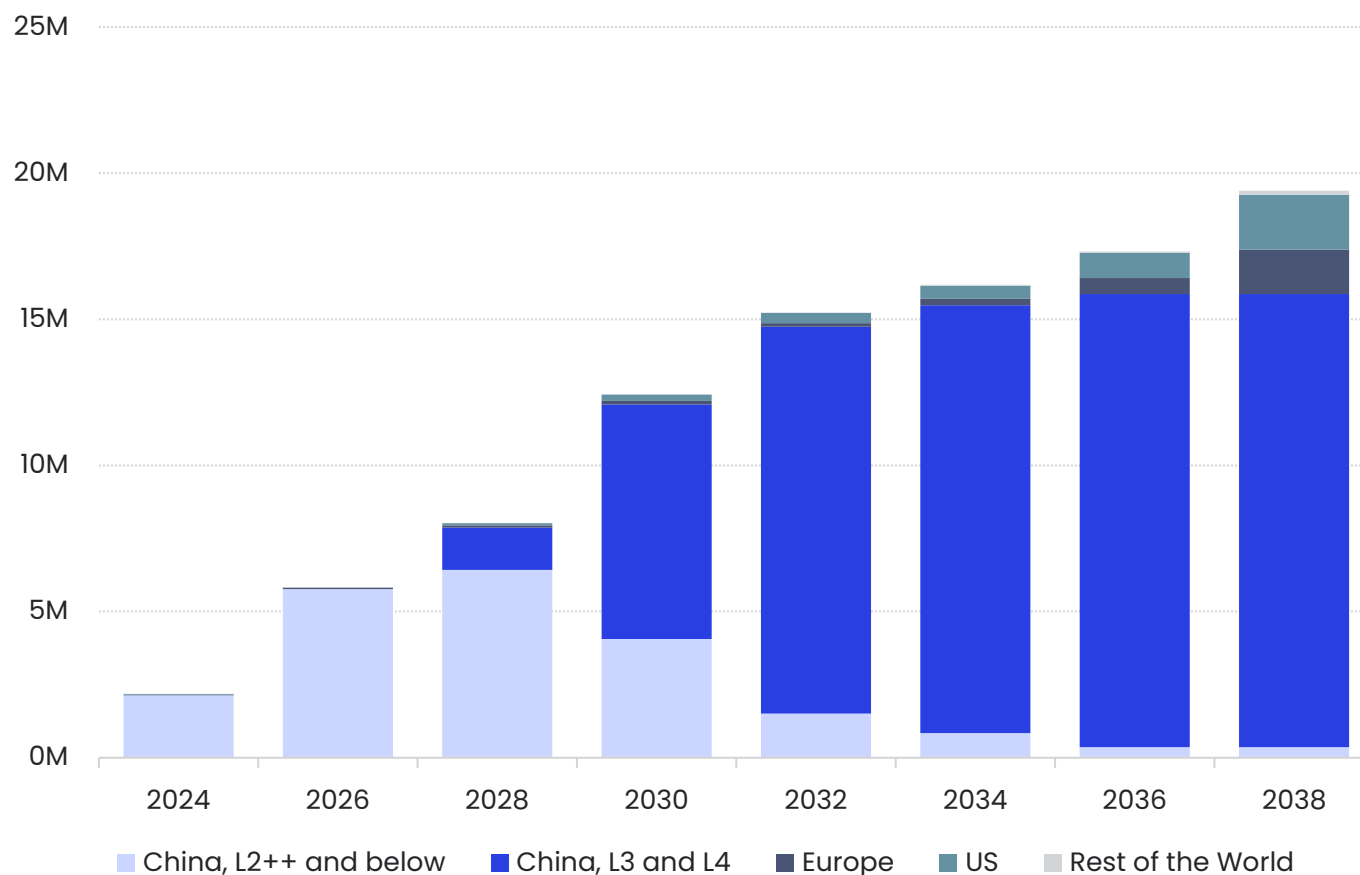
Qualcomm 62% to 53%. Snapdragon cockpit platforms run BYD, Toyota, Volkswagen and BMW cockpits today and keep more than half the market in 2031. **NVIDIA, Samsung and MediaTek drop out of the top five.** Their 4% to 5% shares in 2026 are overtaken by in-house and Chinese suppliers. **BYD (10%), Huawei (5%) and SiEngine (5%) enter by 2031.** AMD stays at about 5% on Tesla; the cockpit follows the ADAS chip toward vertically integrated silicon.



LiDAR Fitment Outlook

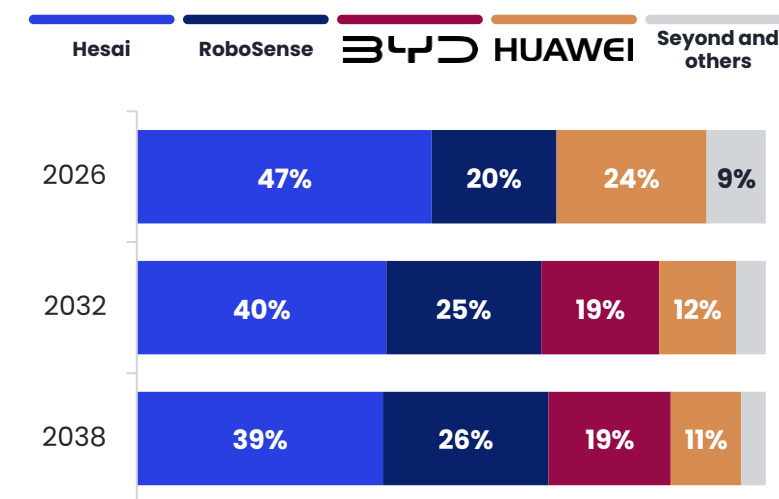
China takes lidar mainstream with L3 and L4; Europe and the US follow late

Light vehicles sold with lidar, millions of units



Who supplies it

Share of lidar-equipped units with a known lidar brand



BYD brings lidar in-house. 19% of supply by 2032, while Huawei's share halves (24% to 11%) and Hesai holds the lead.

Source: GlobalData, Global Autonomous Vehicle Forecast, Q3 2026 (light vehicles able to be fitted with one or more lidar sensors). Supplier shares exclude units whose lidar brand is unconfirmed.



Robotaxi Market

A fleet that triples in 2027 and what it means for ownership

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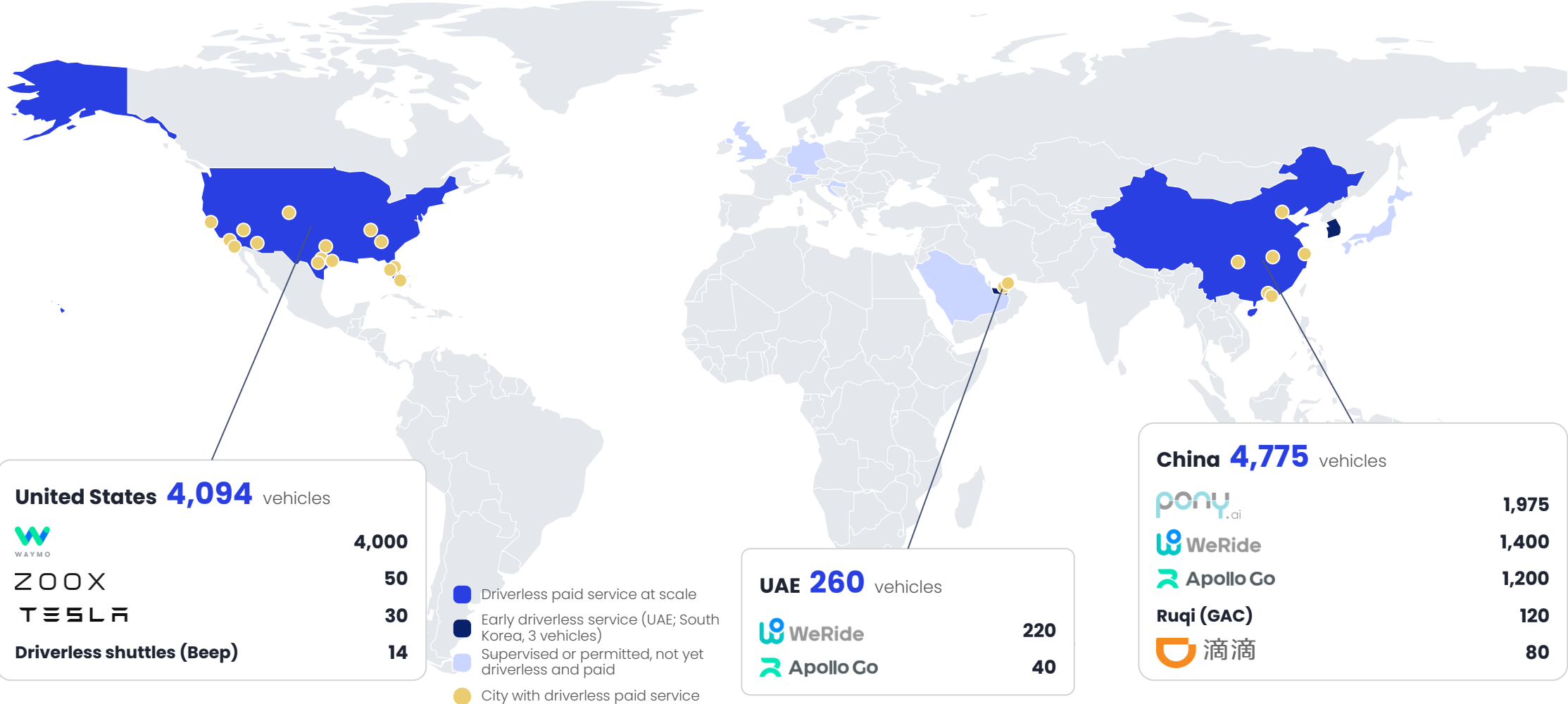
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Robotaxi Markets Today

About 9,100 driverless robotaxis and shuttles in September 2026; 97% in the US and China



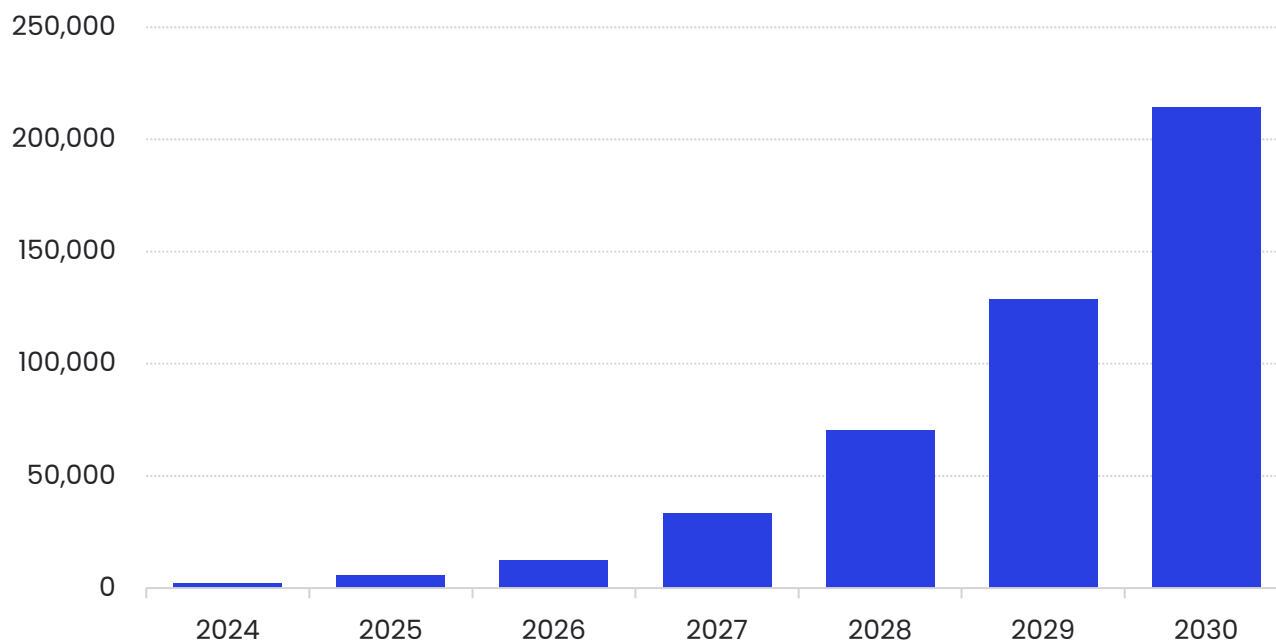
Source: GlobalData. Counts vehicles with no onboard safety operator in paid, public service.



Robotaxi Regional Outlook

Growth ramps up in 2027 as the global driverless fleet nearly triples

Global driverless robotaxi and shuttle fleet, vehicles, 2024 to 2030



Operator share of driverless robotaxi and shuttle fleets



Our view. Through 2035 robotaxis take urban miles, not the driveway. Private ownership survives on cost, and the OEMs that win private L3 will be the ones that learned the fleet rulebook first: an OEM that has certified a fleet safety case finds most of the private-car submission already written.



Patents, Hiring and Deals

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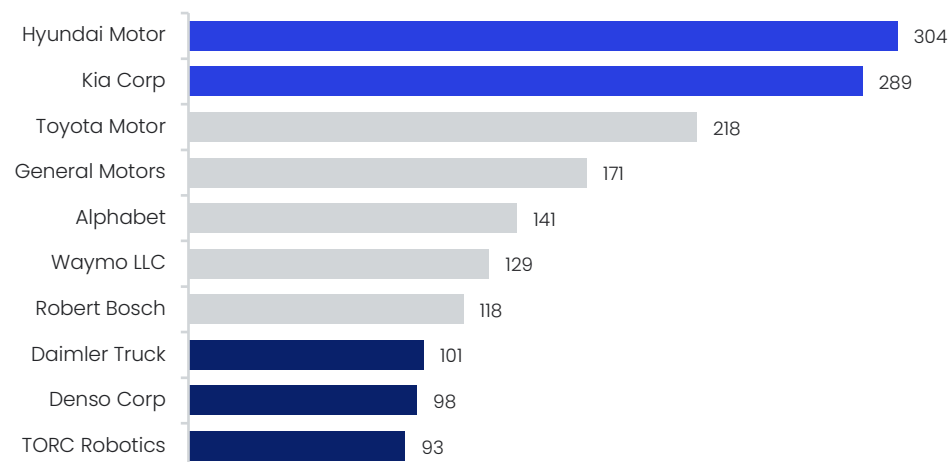
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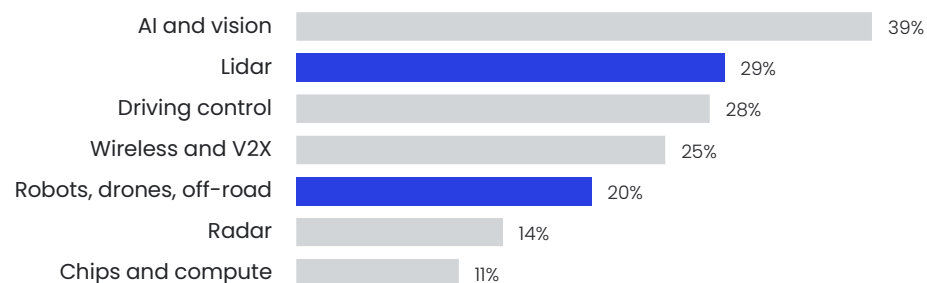
Patent Trends

Autonomous vehicle patent activity, YTD June 2026

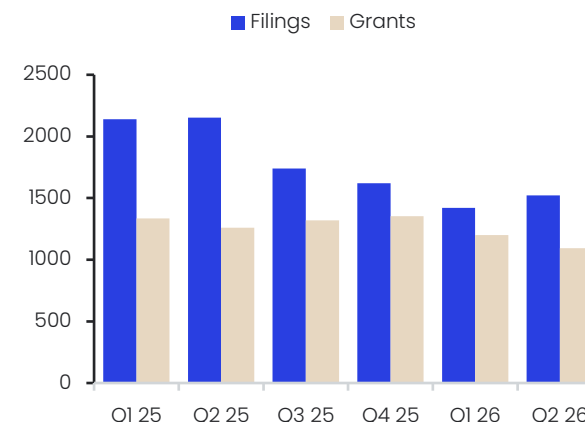
Top Applicants: Publications, YTD June 2026



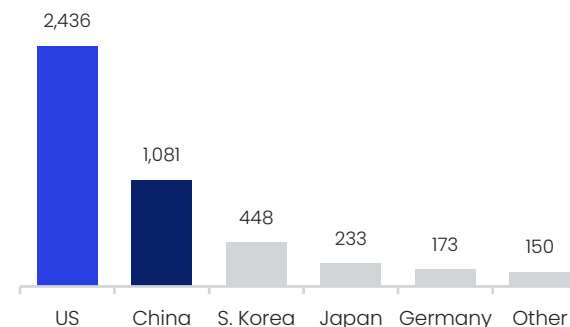
Share of H1 2026 AV patents involving each technology



Filings and Grants by Quarter



Publications by Authority: YTD June 2026



01 Korea tops the table

Hyundai and Kia file as one group: 593 publications between them YTD, nearly three times Toyota's 218.

02 Trucking pulls its weight

TORC Robotics, Daimler Truck and Denso take three of the top ten.

03 Lidar, AI and vision lead

39% of AV patents cover AI and vision and 29% lidar, against 14% radar. About 20% are robots, drones and off-road machines.

04 Waymo patents a taxi; Tesla patents chips

Waymo files on pickup points, pulling over, remote assistance and rider wayfinding. Tesla's filings are mostly low-precision compute for its own AI hardware.

05 The filing cycle

1,523 new filings in Q2, the first rise in a year and 7% above Q1 — but grants fell 9% to 1,093, so the pipeline is refilling faster than it is clearing.

06 AV intellectual property is American

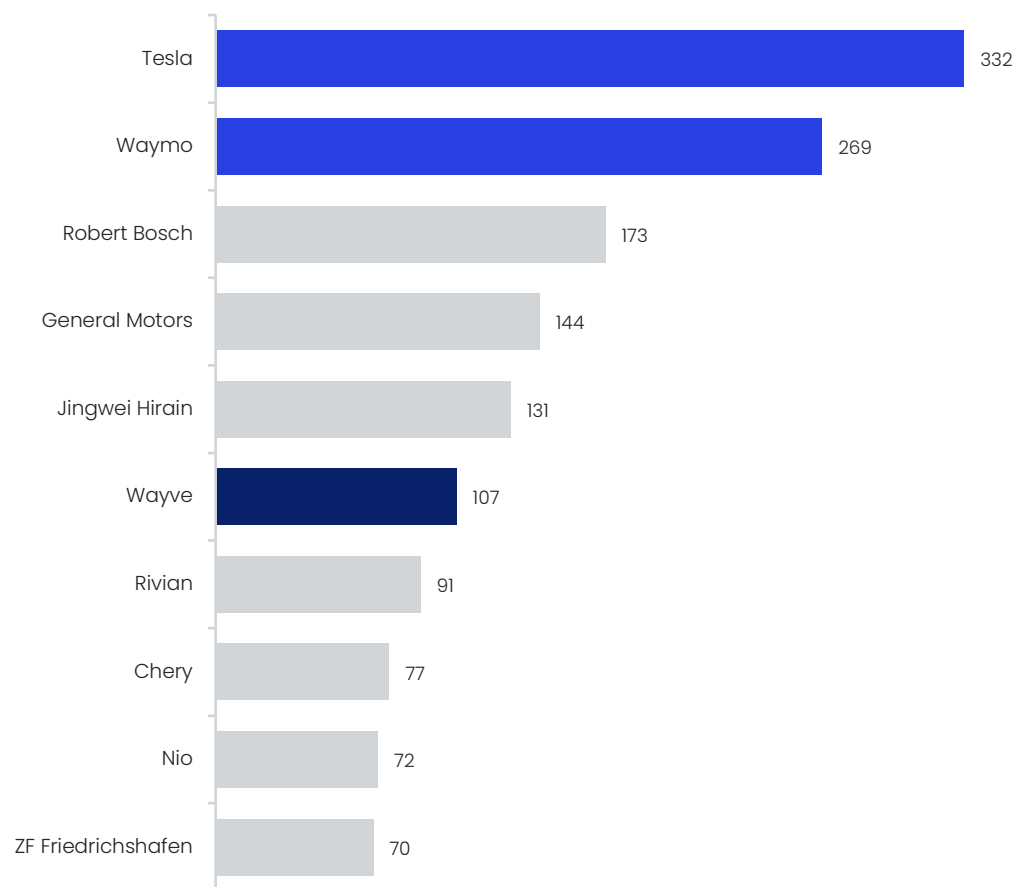
The US takes 52% of YTD publications, 2.3x China.



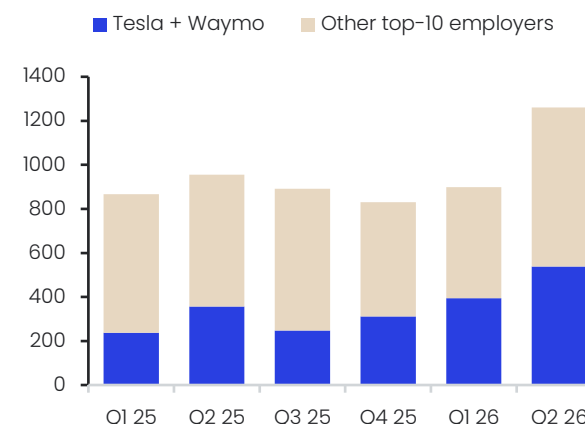
Hiring Trends

AV hiring is accelerating as active postings hit a two-year high in June 2026

Top Hirers: Active Postings, June 2026



Active Postings by Quarter: Monthly Average



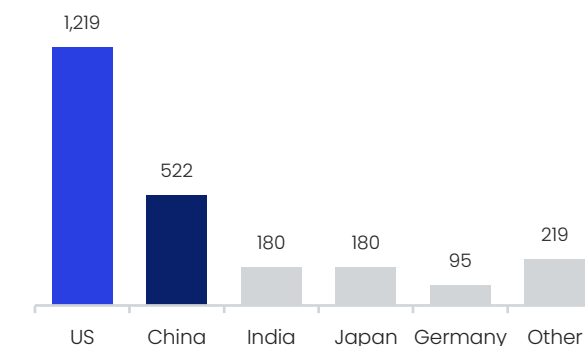
01 Tesla takes the top slot

332 active postings in June against Waymo's 269. Between them they hold more open autonomy roles than the next four employers on the list combined.

02 Startups now hire at scale

Wayve carries 107 open roles — more than Rivian, Chery, Nio or ZF. Headcount in autonomy is following the software.

Active Postings by Country: June 2026



03 Two companies set the pace for hiring

Tesla and Waymo went from 238 postings a month in Q1 2025 to 538 in Q2 2026.

04 Hiring and patents point opposite ways

Publications are down 23% year on year while Q2 postings are up 32%. Filings lag what teams are actually building, so watching the hiring gives an indication of what's coming.



Autonomous Vehicle Deals

H1 2026: 65 deals worth USD23.2bn

Announced	Deal companies	Deal description	Value (\$m)
28-Jan-2026	Waabi / Khosla Ventures, G2	USD750m Series C for autonomous trucking, expanding into robotaxis run exclusively on Uber.	750
02-Feb-2026	Waymo / Dragoneer, DST Global, Sequoia	USD16bn at a USD126bn valuation to take robotaxis to 20+ new cities, including Tokyo and London.	16,000
25-Feb-2026	Wayve / Eclipse, Balderton, SoftBank	USD1.2bn Series D at USD8.6bn, taking its end-to-end AI driver into commercial deployment with Uber and OEMs.	1,200
25-Feb-2026	Zelos Technology	Chinese last-mile delivery specialist raised over USD300m at a valuation above USD1.4bn.	300
27-Feb-2026	Einride / EQT Ventures, Legato Merger Corp III	USD113m PIPE alongside a SPAC merger valuing the autonomous electric freight group at USD1.35bn.	113
31-Mar-2026	Saronic Technologies / Kleiner Perkins	USD1.75bn Series D at USD9.25bn to scale autonomous surface vessels for defence and commercial use.	1,750
26-May-2026	ZERON / Temasek, Zijin Mining	USD200m Series B2 to scale autonomous heavy-duty trucks for mining and bulk cargo.	200

01 One round is two thirds of the market

Waymo's USD16bn at a USD126bn valuation is 69% of the USD23.2bn tracked across 65 AV deals in H1. Strip it out and the rest raised USD7.2bn.

02 The AI driver, sold separately

Waabi (USD750m) and Wayve (USD1.2bn) both sell a driver rather than a vehicle, and both reach the road through Uber rather than an OEM.

03 Autonomy is about more than the road

Saronic's USD1.75bn for autonomous vessels is the half's second-largest deal; Zelos delivery vans and ZERON mining trucks also drew nine-figure rounds.

The Global Autonomous Vehicle Forecast



20+ ADAS specifications across 1,000+ models, with a 5-year history and 12-year forecast

What we offer

01 Quarterly updates

Data deliverables, dashboards and reports every quarter

02 History and forecast

5-year history for context and a 12-year forecast of where the market is heading

03 Model-level specifications

Autonomous driving levels and specifications by market, brand and model

04 Regulatory coverage

Regional coverage of the autonomous vehicle regulatory landscape

05 Strategy insight

Autonomous vehicle strategies from OEMs and technology suppliers

Core data fields

Region	Country	Sales Group	Global Make
Local Make	Vehicle Type	Local Sales Model	Global Sales Model
Body Type	Status	Size	Make Origin

ADAS data fields

ADAS features	ADAS Level	Cruise Control System	Lane Keeping System
	Driving Assistance System	Highway / Urban NOA	HUD System
Perception hardware	LiDAR (supplier, model, specs)	Cameras (types, quantity)	Radars (types, quantity)
	DMS Cameras		
Computing platform	Chip Supplier	Chip Model and Quantity	Platform Computing Power
	E/E Architecture Type	OTA Upgrade Type	

GlobalData | Autonomous Vehicles

TRENDS: TRACKED

Explore ADAS features, perception hardware and computing platforms.

PLAYERS: MAPPED

Explore OEM strategies, suppliers and partnerships across the industry.

REGULATION: NAVIGATED

Track the evolving autonomous vehicle regulatory landscape across regions.

Technology

Supplier
Ecosystem

Market
Regulation

SEE WHAT OEMS ARE USING

Understand technology adoption by market, brand and model.

FOLLOW THE ECOSYSTEM

See which companies and technologies are supporting the shift towards autonomous vehicles.

FORECAST ADOPTION

Understand how regulation and market developments could shape ADAS growth for each region and brand.

Click here:

[Request a Demo](#)

Or scan:



Thank you.

For any questions or further enquiries, please contact us at:

customersuccess.automotive@globaldata.com

globaldata.com

