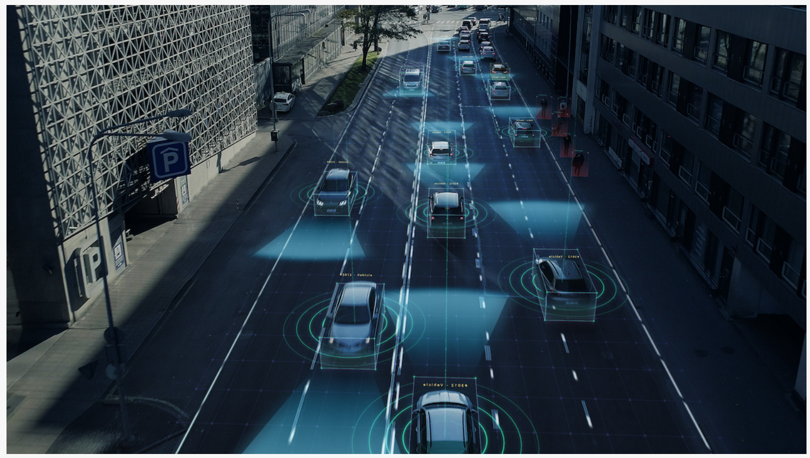
Auto2x publishes its "2023 Ranking of Automotive Supplier Readiness in Level 4-Automated Driving"

Automotive Tech Giants with expertise in AI and Cloud threaten the leadership of major ADAS Tier 1s



Auto2x-2023 Ranking of Automotive Suppliers by Readiness in Level 4 Autonomy

LONDON, UNITED KINGDOM, April 26, 2023 /EINPresswire.com/ -- Auto2x's new report identifies which automotive suppliers that are better prepared for the new era of autonomous Mobility.

To assess the readiness of suppliers we quantify their technological competitiveness, their strategy execution and their market positioning by 2030. Auto2x assessed the Top-20 ADAS Tier-1s, including Aptiv, Bosch, Continental, Denso, Mobileye, Valeo, ZF, in addition to Baidu, Alibaba, Amazon and others.

> “Automotive Tech Giants with expertise in AI and Cloud threaten the leadership of major ADAS Tier 1s”
>
> *Auto2x*

Learn about the readiness level of major suppliers and key new entrants with an analysis of:
- Strategies of key competitors to launch Level 4 Autonomous Driving in cars and commercial vehicles, incl. their vision, organizational structure, partnerships, investments and more,
- The state of the art in their technology building blocks: sensors, architecture, SW, other;
- Their market shares by 2030 in ADAS, which includes the business case for Level 4 autonomy.

In the 2020s the vehicle’s software value will exceed that of hardware as carmakers shift to more common platforms to achieve cost savings and existing players are forced to shift away from vertically integrated, asset-heavy business models to compete with new entrants. Software will be crucial for product differentiation such as new features, content, and new personalized experiences.

To succeed in the Autonomous Driving race, suppliers need to offer a competitive portfolio of L4 features (Highway, City, Parking), sensors (e.g. imaging radar, solid-state lidar), and software. But they also need to develop a strong network of partnerships and investments to scale and capture significant market share.

Auto2x

There are a number of criteria crucial for L4 Autonomy including: Next-gen sensors (e.g. imaging radar, solid-state lidar), Features (Highway, City, Parking), Architecture, SW Stack, Validation-Verification and other.

For Continental, one of the major ADAS Suppliers of cameras, radar and other perception components, Auto2x found the following.

- In terms of Technology Competitiveness, we assess that Continental has the highest level of readiness due to a more mature offering in Lidar, SW stack and Computing Platform to monetize the rising sensor content.

In addition to the ADDC (Autonomous Driving Control Unit) that works for L2 features, Continental offer the AD HPC (High-Performance Computer) which is focused on functions for cruising for L1-L4 autonomy and parking for L2-L4.

Continental offers scalability of HPC to support carmakers at various levels of Autonomy:

- Low-scalability: for L0-1 ADAS
- Mid-level: L2 and L2+ main ECU functions, such as the L2-Cruising “Highway Assist” and back-up functions for L3
- High AD-HPC: up to below L4

Continental says their supercomputer can reduce the development time for ADAS and Autonomous Driving from a few weeks to a few hours. Continental’s supercomputer has already found applications in VW’s ID.3. In 2022, Continental received first-series order for Vehicle High-Performance Computer In China. The company has won 2 customers in AD HPC for SOP 2022 in Japan and 2023 in Germany.

- Features: Continental offers Level 3 Traffic Jam Pilot (low-speed, single-lane) and Highway Pilot (L3+). Continental is developing L4-Highway features but we assess that other Tier-1s, such as APTIV, have stronger capabilities at the moment in this feature.
- Sensors: Continental has strong position in Camera and radar and they are expected to

provide Radar sensors for BMW and Mercedes-Benz flagships offering Level 4. The company, also has a competitive offer in Lidar, ECU-HW and they are building a SW Stack with NVIDIA.
- Robotaxis, Autonomous Mobility: In development.
- Platforms: Part of the L4 Consortium owned by BMW and Mobileye since 2017

- In the Strategy Execution parameter, Continental, Bosch and Intel's Mobileye score in the Top3. Continental is a 100% system supplier from design and manufacturing to validation and expansion to new services in system integration and functions.

- By Market Positioning, Continental led the ADAS market in the period 2015-2018 by revenues, but they were overtaken by Bosch. The contracts with OEMs for ADAS and the ability to support driving andparking features for higher levels of automation are a strength.

How could new suppliers and Tech Giants disrupt major Tier-1s?

Auto2x finds that emerging Chinese Suppliers and tech entrants threaten the leadership of major Tier-1s in ADAS & Electrification. Read our report to understand the outlook for Amazon, Microsoft and Chinese Alibaba, Baidu, Huawei, among other major tech giants in automotive.

Traditional ADAS suppliers still maintain the lion’s share in automotive. But they face competition from US, Chinese and other Tech giants who are capitalizing on their expertise in AI, Cloud and Software transforming the automotive industry.

We have identified a number of opportunities for Tech Companies to enter ordisrupt the existing supply chain.

- Next-gen Perception Hardware for Autonomous Driving, Computing, e.g. for Peta-ops chips for Autonomous Driving, AI for Autonomy and HMI.
- Data-based Mobility Business models such as in-car e-commerce;
- 5G-6G, Connected Infrastructure and Smart Cities;
- Autonomous Shared Mobility: AMoD, autonomous deliveries;

Auto2x assesses that Baidu and INTEL lead the overall competitiveness, followed by Amazon. INTEL's Mobileye spearheads its Autonomous Driving strategy and has captured a large share in ADAS helping INTEL score higher than Baidu in Strategy Execution. Baidu offers competitive technology offering today due to Apollo’s strengths.

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