



Media Information
10 March 2022

BMW Group, Qualcomm and Arriver to form long-lasting strategic cooperation for joint development of Automated Driving software solutions

BMW Group, Qualcomm Technologies, and Arriver join forces to co-develop next generation of Automated Driving Systems.

The cooperation combines BMW's current AD stack with Arriver's Vision Perception and NCAP Drive Policy products on Qualcomm Technologies' system-on-chip, with the goal of designing best-in-class Automated Driving functions spanning NCAP, Level 2 and Level 3.

Munich. BMW Group, Qualcomm Technologies, Inc. and Arriver Software AB announced a long-term development cooperation for the development of Automated Driving technologies. The companies signed an agreement for a strategic cooperation, which will focus on joint development of next-generation AD technologies ranging from New Car Assessment Program (NCAP), Level 2 Advanced Driving Assistance Systems to Level 3 High Automated Driving functionalities. The co-development of software functions is based on the current BMW Automated Driving software stack first launched with the BMW iX in 2021, which will be further extended in the next generation through this cooperation. In November 2021 the companies announced that BMW's next generation Automated Driving System will be ported on the Snapdragon Ride™ Vision system-on-chip (SoC) including Arriver Computer Vision and the Snapdragon Ride Platform's compute SoC controllers managed by Snapdragon® Car-to-Cloud Services platform.

The efforts will focus on creating a scalable platform for Automated Driving based on a common reference architecture, sensor-set specifications, and safety requirements with joint development, toolchain, and a data center for storage, reprocessing, and simulation. The cooperation will see more than 1,400 specialists working together in locations worldwide, including Germany, USA, Sweden, China, Romania, and the BMW AD Test Center in Czech Republic.

"This joint software development is an important milestone for the BMW Group with regards to our next generation Automated Driving platform. To enable sophisticated and safe functionalities in a vehicle you need state-of-the-art software in all components of the digital value chain. This forms the backbone for intelligent driver assistance systems. The BMW Group is excited to further extend our partnership with global technology leaders Qualcomm Technologies and Arriver to include a long-lasting strategic co-development cooperation in order to continue delivering world-class driving experiences to our customers." says Nicolai Martin, Senior Vice President Driving Experience, BMW Group.



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"We are proud of this long-term cooperation with the BMW Group and Arriver which focuses on co-development and deployment of Automated Driving systems from NCAP to Level 3 customer functionality in BMW upcoming series production vehicles," said Nakul Duggal, Senior Vice President and General Manager Automotive, Qualcomm Technologies, Inc. "Building on already commercialized stack components from BMW Group and Arriver, this cooperation will position us to extend BMW Automated Drive software to the Snapdragon Ride platform, and expand the accessibility of safer self-driving technologies to other automakers and Tier-1s in an open, flexible and scalable deployment framework. We believe Snapdragon Ride will create significant economies of scale and time-to-market benefits across the automotive industry with the launch of the automated driving software globally in BMW's series production vehicles, which have always been an exemplar of the highest quality, performance and safety standards in modern day automobiles."

"We are pleased that Arriver's Vision Perception and market proven NCAP features will be combined with the BMW Automated Driving software stack. Joining forces with Qualcomm Technologies and BMW Group Arriver's team will co-develop the next generation of open and scalable Drive Policy with world-class feature solutions and performance. This co-developed product will be offered to our customers globally. This cooperation is a key milestone for Arriver and a proof point of the rich competence of our teams through years of experience in ADAS & safety," said Giuseppe Rosso, President and Managing Director, Arriver.

The BMW Group, Qualcomm Technologies and Arriver are working closely together to establish and continuously develop an ecosystem for automated driving solutions but remain open to further partnerships.



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The BMW Group

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises 31 production and assembly facilities in 15 countries; the company has a global sales network in more than 140 countries.

In 2021, the BMW Group sold over 2.5 million passenger vehicles and more than 194,000 motorcycles worldwide. The profit before tax in the financial year 2021 was € 16.1 billion on revenues amounting to € 111.2 billion. As of 31 December 2021, the BMW Group had a workforce of 118,909 employees.



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The success of the BMW Group has always been based on long-term thinking and responsible action. The company set the course for the future at an early stage and consistently makes sustainability and efficient resource management central to its strategic direction, from the supply chain through production to the end of the use phase of all products.

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About Qualcomm

Qualcomm is the world's leading wireless technology innovator and the driving force behind the development, launch, and expansion of 5G. When we connected the phone to the internet, the mobile revolution was born. Today, our foundational technologies enable the mobile ecosystem and are found in every 3G, 4G and 5G smartphone. We bring the benefits of mobile to new industries, including automotive, the internet of things, and computing, and are leading the way to a world where everything and everyone can communicate and interact seamlessly.

Qualcomm Incorporated includes our licensing business, QTL, and the vast majority of our patent portfolio. Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, operates, along with its subsidiaries, substantially all of our engineering, research, and development functions, and substantially all of our products and services businesses, including our QCT semiconductor business.

About Arriver

Arriver, a unit within Veoneer, is a software unit and brand focused on developing perception, fusion and drive policy software for the next generation cars. It builds on more than a decade of experience in Active Safety software development and delivers an open, scalable and flexible architecture solution running on Qualcomm® Snapdragon Ride™ System on a Chip (SoC) platform.

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