

Koito and Quanergy Collaborate to Design Automotive Headlight Concept With Built-In LiDAR Sensors

Compact Quanergy Solid State LiDAR Sensors Concealed Within Koito Headlight

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SUNNYVALE, Calif.--(BUSINESS WIRE)--Koito Manufacturing Co., Ltd. (TYO:7276), the largest global maker of automotive headlights, and Quanergy Systems, Inc., the leading provider of LiDAR sensors and smart sensing solutions, today announced a collaboration to design an automotive headlight concept with built-in Quanergy S3 solid state LiDAR sensors. The Koito headlight with built-in sensors will be on display at the 2017 International Consumer Electronics show (CES), January 5-8 in the Quanergy booth, 4138, located in the North Hall of the Las Vegas Convention Center.

The Koito headlights, which will be located on the corners of a vehicle, each incorporates two compact Quanergy S3 solid state LiDARs that perform sensing forward and to the side, and provide real-time long-range 3D views of the environment around the vehicle and the ability to recognize and track objects. The sensors are seamlessly embedded inside the headlights and do not protrude or alter the exterior look of the headlights or the vehicle. Additionally, the headlight protects the sensors from dust, dirt and water, and headlight lens washers can be used to help ensure an unobstructed view for the sensors.

The LiDARs embedded in the headlights have the function of primary sensors in advanced driver assistance systems (ADAS) and autonomous vehicle (AV) systems. As primary sensors, the LiDARs are used for (a) perception, (b) mapping and localization, and (c) occupancy grid detection, path planning and navigation.

“We are excited to be working with Koito on this groundbreaking headlight,” said Dr. Louay Eldada, Quanergy CEO. “We believe that headlights with integrated LiDAR sensors will help accelerate the commercialization of cars with autonomous driving capability and will help reinvent the driving experience.”

The Quanergy S3 is the world's first and only compact, low-cost, automotive-grade solid state LiDAR sensor with high reliability and superior capability. The S3 LiDAR sensor was recently recognized as the 2017 CES Best of Innovation Award grand winner in the vehicle intelligence category. The company's sensors enable autonomous driving and perform real-time 3D mapping and object detection, classification and tracking.

About Quanergy Systems, Inc.

Quanergy Systems, Inc. was founded in 2012 and builds on decades of experience of its team in the areas of optics, photonics, optoelectronics, robotics, artificial Intelligence, machine learning and controls. Headquartered in Sunnyvale, California, in the heart of Silicon Valley, Quanergy offers the world's leading LiDAR sensors and software for the capture and processing of 3D spatial data, and object detection, tracking and classification. Its sensing systems improve safety, efficiency and costs in sectors ranging from transportation and security to industrial automation and 3D terrestrial and aerial mapping. In transportation, the data is utilized in real time to greatly improve the accuracy and reliability of on-board driver safety systems and enhance them with perception, scenario analysis, and decision making capability for cost-effective and robust advanced driver assistance systems (ADAS) and autonomous driving solutions. Quanergy's LiDARs lead in all key commercialization areas – price, performance, reliability, size, weight, power efficiency – while meeting the mass deployment requirements of durability and dependability using solid state technology. For more information, visit www.quanergy.com.

About Koito

The Koito Group is comprised of the parent company (KOITO MANUFACTURING CO., LTD.), 28 subsidiaries and 2 affiliates. Koito Manufacturing Co., Ltd (Koito) has been marking a history of leadership in automotive lighting since its establishment in 1915. Today the lighting equipment and components are widely used in a variety of industries including transportation such as automobiles, aviation, railways, shipping and traffic systems. The company also develops a wide variety of electrical systems. The Koito Group makes full use of electronics and other cutting edge technologies, and conducts R&D activities to develop unique systems and multi-functional products to improve safety. For more information, visit www.koito.co.jp.

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