NIO and NXP Collaborate on 4D Imaging Radar Deployment

May 2, 2023

- *NXP's imaging radar technology enables NIO to achieve high-level autonomous driving through vastly improved sensor resolution and extended detection range*
- *Extended radar capabilities allow cars to more accurately detect, separate, and classify objects, bringing more safety to the roads and driving comfort*
- *NXP's imaging radar chipsets are the ideal choice for advanced, high-performance front radar applications that enable Level 2+ and higher autonomous driving services*

EINDHOVEN, The Netherlands, May 02, 2023 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ: NXPI) today announced NIO Inc., a leading brand in the global premium smart electric vehicle market, will leverage NXP's leading automotive radar technology, including its ground-breaking imaging radar solution. NXP's latest 4D imaging radar solution is a powerful technology that allows benefits far beyond traditional radar. It will enable a significant improvement in front radar performance in today's vehicles. The cars will be able to detect and classify objects such as other vehicles and vulnerable road users in high-way and complex urban scenarios and at distances of up to 300m, bringing more safety to the roads and driving comfort for end users.

OEMs increasingly focus on the introduction of safety and convenience features to take autonomous driving services to the next level. NXP's imaging radar technology expands radar's capabilities from measuring range and speed, to include direction, angle of arrival, and elevation measurement. Fine-resolution point clouds enhance environmental mapping and scene understanding, enabling the detection and classification of objects beyond the range of human eyesight while measuring the objects' velocity under almost all weather and light conditions. The technology is a key step in improving road safety and saving lives, it allows the car to 'see' a motorcycle driving close to a large delivery truck or a child entering a roadway between parked cars.

NXP's imaging radar solutions are the ideal choice for advanced, high-performance front radar applications. Being part of NXP's full range of radar products, they offer seamless performance scalability as well as software and hardware design reuse across radar platforms. The combined radar processor and transceiver chipsets deliver efficient advanced radar processing with high-performance RF technology, enabling Level 2+ and higher autonomous driving services.

"NIO is committed to providing users with a vehicle experience that exceeds expectations. Carmakers developing high-level, assisted intelligent driving experiences is a key element of that," said Kevin Pan, Assistant Vice President of NIO Supply Chain Development. "Together with NXP, we'll be able to take the next step toward improving driver experiences."

"NXP's imaging radar technology offers high-resolution object and feature detection for precisely mapping the car's surroundings, enabling carmakers to deliver improved ADAS and autonomous driving features," stated Torsten Lehmann, EVP and GM, Radio Frequency Processing, NXP. "NIO's decision to adopt NXP 4D imaging radar technology is a testament to its differentiating performance and efficiency."

NXP's Radar Portfolio
NXP offers a complete suite of radar sensor solutions that can surround vehicles in a 360-degree safety cocoon. The scalable suite of sensing solutions covers car OEMs' ever-diversifying use cases and architectures, from corner radar to high-resolution 4D imaging radar. The S32R platform offers a common architecture for software reuse and speedy development, a highly performant hardware security engine (HSE), over-the-air (OTA) update support, and compliance with the newest cybersecurity standards. The latest addition to NXP's scalable radar portfolio is the industry-first 28nm RFCMOS radar one-chip IC family SAF85xx for next-generation NCAP applications.

For more information, please visit nxp.com/S32R

About NXP Semiconductors
NXP Semiconductors N.V. (NASDAQ: NXPI) brings together bright minds to create breakthrough technologies that make the connected world better, safer and more secure. As a world leader in secure connectivity solutions for embedded applications, NXP is pushing boundaries in the automotive, industrial & IoT, mobile, and communication infrastructure markets while delivering solutions that advance a more sustainable future. Built on more than 60 years of combined experience and expertise, the company has approximately 34,500 team members in more than 30 countries and posted revenue of $13.21 billion in 2022. Find out more at www.nxp.com.

For more information, please contact:

Americas & Europe
Andrea Lempart
Tel: +49 175 610 695 1
Email: andrea.lempart@nxp.com

Greater China / Asia
Ming Yue
Tel: +86 21 2205 2690
Email: ming.yue@nxp.com

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A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/4b2eed56-97b5-4819-a7b7-d49f9958bd81

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Source: NXP USA, Inc.