UPDATE: NXP and Zendar Inc. Accelerate the Development of High-Resolution Radar

November 2, 2023 at 5:53 AM EDT

- *NXP invests in Zendar Inc. to advance high-resolution and high-performance radar systems for autonomous driving and advanced driver assistance systems (ADAS)*
- Zendar's Distributed Aperture Radar (DAR) solution increases the radar aperture, which improves angular resolution to enable lidar-like performance
- OEMs will benefit from simplified system solutions, reduced complexity and a smaller radar footprint

EINDHOVEN, The Netherlands, Nov. 02, 2023 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ: NXPI) today announced the investment in and collaboration with Zendar Inc., a software start-up dedicated to revolutionizing autonomous vehicle systems with high-resolution radar. The investment aims to accelerate and improve high-resolution radar solutions for autonomous driving (AD) and advanced driver assistance systems (ADAS) to complement NXP's leading scalable radar portfolio.

NXP and Zendar will collaborate on enhanced high-resolution radar systems for automotive applications by leveraging Distributed Aperture Radar (DAR), a technology developed by Zendar that allows a simplified system solution approach. The investment reinforces NXP's technology leadership in the automotive radar market while strengthening the ecosystem, which marks the next step towards improved road safety.

Both AD and ADAS applications require high-resolution sensing to ensure the vehicle moves safely on the road. DAR offers a smart path to enhance the resolution of high-performance radar systems while eliminating the need for thousands of antenna channels. It coherently fuses information from multiple radar sensors on a vehicle to create a larger effective antenna that achieves unprecedented sensing resolution. The technology enables high-angular resolution below 0.5 degrees, offering lidar-like performance which is essential for precise mapping of the environment, whereas conventional radar sensors operate between 2 and 4 degrees. In addition, DAR offers further potential to enhance the resolution through flexible mounting techniques.

The radar solutions will be based on NXP's widely adopted S32R radar processor platform and RFCMOS SAF8x one-chip SoCs, which are tailored to cover car OEMs' ever diversifying vehicle architectures and help accelerate the transition toward distributed architectures. Car makers and Tier 1 suppliers will benefit from high-resolution systems developed with substantially simplified standard radars with reduced thermal complexity and a smaller radar footprint for flexible and convenient mounting.

"DAR technology is fundamentally early fusion from distributed radar modules," said Vinayak Nagpal, Co-Founder and CEO, Zendar Inc. "NXP's industry-leading radar portfolio is essential to deploy DAR in automotive. The lidar-like performance of DAR is a breakthrough for next-generation ADAS. I am excited to usher this industry revolution in collaboration with NXP."

"Zendar's innovative technology combined with NXP's state-of-the-art radar portfolio aims to enable high-resolution radar sensing for both, edge and upcoming distributed vehicle architectures. Together with Zendar, we are bringing this exciting new technology to the OEMs and Tier 1 suppliers," said Steffen Spannagel, SVP and GM, ADAS, NXP. "The comprehensive solution allows flexible DAR processing either on the edge or zones to support carmakers' diverse ADAS vehicle architectures."

Availability
Application development can start immediately, and the launch is expected to be scheduled for next-generation OEM platforms.

NXP's Radar Portfolio
NXP offers a complete suite of radar sensor solutions that is designed to 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 New Car Assessment Program (NCAP) applications.

For more information, please visit nxp.com/S32R

For more information about Distributed Aperture Radar (DAR) solution, join us at **NXP Tech Days Detroit**, November 7 - 8. Find more details and a link to registration here.

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.

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A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/aec28348-94ed-49e6-9b77-36ac342ae06d

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Source: NXP USA, Inc.