NXP Demonstrates Complete Autonomous Vehicle Platform Using NXP Silicon at Each ADAS Node

May 16, 2016

New BlueBox Solution Engineered to Enable the World's Leading Carmakers to Design, Manufacture and Sell Level-4 Self-Driving Cars By 2020

AUSTIN, Texas, May 16, 2016 (GLOBE NEWSWIRE) -- **(NXP FTF Technology Conference) –** Marking a significant milestone in the fast-approaching self-driving vehicles era, NXP Semiconductors N.V. (NASDAQ:NXPI) today demonstrated a comprehensive and highly manufacturable autonomous vehicles platform leveraging NXP's new BlueBox engine, and deploying NXP silicon and software solutions at each ADAS node. The system demonstration incorporates the BlueBox central computing engine, together with radar, lidar, and vision sensing, as well as an onboard secure V2X system – all of which are powered by NXP silicon currently in volume production or sampling to customers now.

Already in customers' hands at four of the top five largest carmakers in the world, the BlueBox engine works in NXP's comprehensive autonomous vehicles platform to provide OEMs and their suppliers with the technology they need to meet the stringent safety, power and processing performance requirements of the global automotive industry, using readily available NXP technology. The free programmability, outstanding performance-per-power ratios, and deep system awareness of NXP's autonomous vehicles platform makes it an exceptional resource for the near-term creation of radically innovative self-driving cars.

NXP introduces its new autonomous vehicles platform just months after becoming the world's #1 provider of silicon to the worldwide automotive market. NXP is also a world leader in ADAS processors, having shipped more than 30 million ADAS processors worldwide to date. Eight of the world's top 10 largest carmakers use ADAS processors from NXP.

"With this industry-first platform, NXP is leveraging its worldwide automotive silicon leadership to dramatically advance the state of autonomous vehicles," said Kurt Sievers, Executive Vice President and General Manager of NXP's Automotive Business. "Our systems-level expertise, deep understanding of complex ADAS engineering challenges, and broad portfolio of NXP products meeting automotive-grade (ISO 26262-level) functional safety requirements, all position NXP as the definitive silicon provider capable of single-handedly speeding the readiness and availability of the self-driving cars of tomorrow."

In autonomous vehicles systems, multiple streams of sensor data are routed to the BlueBox engine, where they are fused to create a complete 360° world model around the vehicle. This functionality greatly improves car safety by both managing and preventing emergency situations. BlueBox and its connected secure smart solutions also incorporate the embedded intelligence and machine learning required for complete situational assessments, supporting advanced classification tasks, object detection, localization, mapping and vehicle driving decisions.

Unlike closed systems focused only on vision or other single-sensor data streams, the NXP BlueBox engine for autonomous vehicles is an open-platform, Linux-based solution programmable in linear C language that automotive manufacturers can easily customize to their needs for optimal product differentiation.

About NXP's new BlueBox Engine

The BlueBox engine incorporates NXP's S32V automotive vision processor, as well as the company's LS2088A embedded compute processor, which is among the highest performing embedded products ever developed for the performance-hungry networking market. The LS2088A processor integrates eight 64-bit ARM Cortex-A72 cores running at 2 GHz, along with specialized accelerators, high performance communications interfaces, DDR4 memory controllers for extremely low latency, and more. The result is an exceptionally high-performance solution, providing BlueBox with 90,000 DMIPS (million instructions per second) of performance at under 40 Watts of power, thereby eliminating the need for fans, liquid cooling or other exotic thermal management componentry. The S32V processor includes graphics engines, dedicated high performing image processing accelerators, as well as state-of-the-art sensor fusion functionality, high-performance ARM cores and advanced APEX image processing. Together, these NXP processors can power the autonomous car of the future, today.

BlueBox at NXP FTF 2016

NXP's BlueBox engine and autonomous vehicles platform system demonstration are on display this week at the NXP FTF Technology Forum, in the Smart Transport section of the NXP FTF Tech Lab.

Availability

NXP's BlueBox solution has been shipping to select customers since September 2015, and is broadly available now. Visit http://www.nxp.com/BlueBox for more information.

NOTE: Level 4 Autonomous Vehicles based on SAE International Standard J3016

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ:NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has 45,000 employees in more than 35 countries and posted revenue of $6.1 billion in 2015. Find out more at www.nxp.com.

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