Synopsys Announces VDK for Freescale S32V200 MCU Family for Advanced Driver Assistance Systems Development

Virtualizer Development Kit Speeds Software Development, Integration and Test

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Highlights:

- Virtualizer Development Kit enables early software development, integration and test for increased productivity, higher reliability and reduced development cost
- New VDK combines the virtual prototype for the S32V234 MCU, VDK software development tools and integration with automotive design tools enabling system integration and testing using a virtual Hardware-in-the-Loop environment
- S32V234 virtual prototype developed as part of the Freescale® and Synopsys Center of Excellence collaboration ensures the earliest availability of VDKs to Freescale customers

Synopsys, Inc. (Nasdaq:SNPS) today announced the availability of its Virtualizer™ Development Kit (VDK) for Freescale's S32V200 family of microcontrollers (MCUs). The VDK uses the S32V234 virtual prototype as an embedded target for early and more efficient software development, integration and test of advanced driver assistance systems (ADAS). The VDK was developed through the Center of Excellence collaboration between Freescale and Synopsys, which leverages joint engineering teams to develop and test virtual prototypes and VDKs optimized for Freescale automotive products.

"Our S32V series customers developing ADAS need software development solutions that will help accelerate system software integration and test," said Ray Cornyn, vice president of automotive engineering for Freescale's automotive microcontroller business. "The VDK for Freescale S32V200, delivered through our Center of Excellence collaboration with Synopsys, help to ensure that our customers can accelerate automotive system development and rapidly deliver high quality software to market."

Advanced driver assistance systems enable functions such as adaptive cruise control, lane- keeping systems, autonomous braking, park assist and autonomous driving in the future. These functions require development, integration and testing of algorithms and software that interpret all sensor data and implement the behavior of a skilled driver. The VDK for S32V200 includes software development tools and integrates third-party tools to support automotive flows for software development, virtual Hardware-in-the-Loop-based integration and fault testing for ISO 26262. The VDK for S32V200 can also be used with other Synopsys VDKs to simulate a network of electronic control units (ECUs). This complete virtual development environment can easily be deployed in a regression environment, resulting in higher software quality, better product reliability and reduced development costs.

"Synopsys' VDK for Freescale's S32V200 integrates ARM® Fast Models for the dual-core, dual-cluster ARM Cortex™-A53 processor and plugs into our DS-5 Development Studio tools," said Hobson Bullman, general manager, development solutions group at ARM. "The new VDK gives ARM-based automotive customers access to virtual prototypes that enable them to start software development well before hardware availability, cutting months off of their development schedules."

"The CogniVue APEX Image Cognition Processing (ICP) technology is a key element of developing algorithms and software for ADAS based on the Freescale S32V2 series," said Simon Morris, chief executive officer at CogniVue. "Our partnership with Synopsys ensures that users of the VDK for Freescale S32V200 can seamlessly access the APEX subsystem model and accelerate software development of automotive embedded vision applications."

"To manage the growth in software content and testing complexity of advanced driver assistance systems, development teams must start automotive system development earlier," said John Koeter, vice president of marketing for IP and prototyping at Synopsys. "Synopsys' collaboration with Freescale and IP partners provides automotive software developers with a 'one-stop shop' for VDKs to accelerate development, integration and test for their advanced automotive designs."

Availability & Resources

The VDK for Freescale S32V200 is available now from Synopsys. To learn more visit:

www.synopsys.com/freescalevdks32v200

About Synopsys

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