
CoreAVI Announces Functionally Safe Graphics and Compute Support for NXP's i.MX 8 Applications Processor Family

Vulkan-based Graphics and Compute Solutions Target Automotive Industry

Tampa, Florida, Nov 16, 2021: CoreAVI announced today that it will provide graphics and compute driver support for NXP® Semiconductors' Arm® Cortex-A53-based i.MX 8 applications processors with dual GPUs to enable next generation low powered, scalable performance capabilities for functionally safe automotive platforms. CoreAVI's Vulkan® SC-based graphics and compute driver VkCore® SC, as well as its OpenGL® SC application libraries, ComputeCore™ compute algorithm libraries and OpenVX™-based library for AI and computer vision enable implementation of a full, functionally safe software stack on the i.MX 8 family of applications processors. Drivers for automotive applications are certified as Safety Elements out of Context (SEoC). This will facilitate state-of-the-art graphics and compute capabilities in the next generation of applications such as Safe Clusters and Advanced Driver-Assistance Systems (ADAS), while also providing a simplified, low risk path to ISO 26262 compliance.

NXP's i.MX 8 Family of applications processors' highly scalable design allows multiple platforms and operating systems to be combined into one, enables high performance vision processing and object recognition, and facilitates up to four 1080p displays with independent content. Targeted at automotive infotainment as well as advanced HMI interface and control applications, the i.MX 8 applications processor family revolutionizes multiple display automotive applications, industrial systems, vision, and HMI.

"CoreAVI is proud to support NXP's i.MX 8 applications processor family with our functionally safe software stack," said Neil Stroud, Vice President of Marketing and Business Development at CoreAVI. "Functional safety is emerging quickly in the automotive and industrial sectors as a requirement going forward, and CoreAVI's legacy of certification experience, as well as our support for the i.MX 8, will enable automotive customers to seamlessly enhance safety in their platforms."

"Our i.MX 8 applications processor family is well suited for Safety Element out of Context computer vision and HMI applications in automobiles," commented Dan Loop, Vice President and General Manager, Automotive Edge Processing at NXP. "Our longstanding partnership with CoreAVI ensures that functionally safe ISO 26262 systems have the state-of-the-art graphics and compute capabilities they need enabled on the powerful dual GPUs in the i.MX 8 Family."

For more information, please contact Sales@coreavi.com.

About CoreAVI

CoreAVI is the global leader in architecting and delivering safety critical graphics and compute software drivers and libraries, embedded 'system on chip' and discrete graphics processor components, and certifiable platform hardware IP. CoreAVI's comprehensive software suite enables development and deployment of complete safety critical solutions for automotive, industrial and aerospace applications requiring certification to the highest integrity levels coupled with full lifecycle support. CoreAVI's solutions support both graphics and compute applications including safe autonomy, machine vision and AI in the automotive, unmanned vehicle and industrial IoT markets, as well as commercial and military avionics systems. www.coreavi.com

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