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<u>**For Immediate Release**</u>

Vivante® Joins GENIVI® Alliance Bringing OpenGL® ES 3.0 and OpenCL™ to Automotive Platforms

Vivante automotive solutions drive next generation HMI graphics and GPU Compute technologies inside in-vehicle infotainment (IVI) and Advanced Driver Assistance Systems (ADAS)

CES 2013 – Las Vegas, NV – January 8, 2013 – Vivante Corporation, a global leader in graphics and GPU Compute technologies for consumer and embedded devices, today announced it has joined the GENIVI Alliance, an automotive and consumer electronics industry association driving the development and adoption of an open in-vehicle infotainment (IVI) reference platform. Vivante has rapidly expanded its footprint in the automotive market through partnerships with leading silicon vendors, automotive manufacturers, tier one suppliers, ISVs, and middleware providers that use the latest graphics and OpenCL features. Membership in the GENIVI Alliance allows Vivante to bring GPU expertise to the consortium and push forward innovations in IVI HMI displays.

IVI design and features are a major selling point and key differentiator for automobiles, and the first thing people notice when sitting in a car. An intuitive and beautifully designed IVI becomes an extension of driver and passenger outside the home, creating a comfort zone that combines consumer entertainment with real-time automobile information. IVI encompasses a wide range of applications like entertainment (games, music, news, movies, internet, and social media), radio, navigation, location services, telephony, gesture, and more.

GENIVI's mission is to simplify the development, testing, deployment, and field support of IVI platforms and enable fast time to market of GENIVI products. The platform is built on an open source, Linux-based, reusable solution that is unified across an automotive OEMs entire product line, from luxury to compact segments and across different makes and models. In a connected world where the car becomes a node in the IOT (internet-of-things), a standards body like GENIVI that facilitates development from concept to production will help accelerate mass adoption.

As a member of the GENIVI Alliance, Rightware® provides an HMI solution used by some of the top tier automotive OEMs to create visually stunning user interfaces. They stated the following: "The automotive industry has very high requirements for render quality in HMIs, they are looking for a solution that rids them of artifacts, fixes anti-aliasing issues, and improves the overall image quality. These features are important not only for safety reasons, but also as

it strongly reflects to the overall quality image of the car," stated Ville Ilves, COO at Rightware[®]. "Rightware's Kanzi[®] Solution, which supports OpenGL ES 3.0, enables designers to take advantage of Vivante's OpenGL ES 3.0 hardware and continue pushing the envelope in graphical HMI quality. By combining these two technologies, automotive OEMs are able to deliver desktop-quality graphics and performance to the screens in your car."

About Vivante GC (Graphics and Compute) Cores

Vivante offers a comprehensive set of GPU IP solutions for leading mobile, consumer, automotive, and embedded applications. With a growing ecosystem and product portfolio that covers the entire range of licensable GPU/GPGPU cores, Vivante has rapidly grown its IP licensing business to become a global leader in GPU shipments. You can find products powered by Vivante in your hand, home, office, or car, using the latest versions of Android, Linux, Green Hills, QNX, and Microsoft Windows.

Vivante's product portfolio includes mass market, performance leading technologies in 3D, 2D/Composition Processors, GPGPU, and vector graphics. Vivante cores offer robust support in a unified driver architecture for industry-standard application programming interfaces like OpenGL® ES 3.0/2.0, desktop OpenGL®, OpenCL®, OpenVG®, Microsoft® DirectX® 11, DirectFB, BLTsville™, XWindows, Google Renderscript™ Compute, and other standard APIs.

New features built into their latest GPU solutions include:

- **World's Smallest Licensable GPU Core designed* for OpenGL ES 3.0:** 3.5 mm^2 total silicon footprint (including memories) in TSMC 40nm LP process for area sensitive designs that does not sacrifice on features or performance. Cores can be optionally configured with an integrated Composition Processing Core (CPC) which seamlessly accelerates OS level composition tasks at a fraction of the power with only a 10% GPU silicon area increase.

- **Single/Dual/Quad/Eight GPU Configurations:** ScalarMorphic cores scale from highly silicon optimized single GPU cores to performance optimized multi-GPU nodes, all with best-in-class performance and available hardware support for security and OS virtualization.

- **Single Software Stack:** Single unified software stack supports all Vivante cores across the full range of graphics and compute APIs, features, and performance levels.

- **Battery Saving Innovations:** Extreme low power microarchitecture and smart grid technologies for leading mW per MHz/GHz and dynamic power control

- **Memory Efficient:** Memory bandwidth modulation optimized for contemporary vertex intensive applications and pixel rich displays including support for the latest compression standards in OpenGL ES 3.0 and optionally the recently announced Khronos ASTC™ – Adaptive Scalable Texture Compression extension

- **Heterogeneous Platform Architecture:** GC cores designed for hybrid computing systems like HSA using AMBA® ACE-Lite™ (CPU – GPU cache coherency) and the latest Stream Interface

To learn more about Vivante's technologies and involvement in GENIVI during CES 2013 (January 8 – 11), please contact us at sales@vivantecorp.com to schedule a meeting.

About GENIVI Alliance

The GENIVI Alliance is a non-profit industry association whose mission is to drive the broad adoption of an In-Vehicle Infotainment (IVI) open source development platform. GENIVI will accomplish this by aligning requirements, delivering reference implementations, offering certification programs and fostering a vibrant open source IVI community. GENIVI's work will result in shortened development cycles, quicker time-to-market, and reduced costs for companies developing IVI equipment and software. Comprised of more than 165 member companies, GENIVI is headquartered in San Ramon, California. www.genivi.org

About Vivante Corporation

Vivante Corporation, a leader in multi-core GPU, OpenGL® ES, OpenCL™, and 2D Composition IP solutions, provides the highest performance and lowest power characteristics across a range of Khronos™ Group API conformant standards based on the ScalarMorphic™ architecture. Vivante GPUs are integrated into customer silicon solutions in mass market products including smartphones, tablets, HDTVs, consumer electronics and embedded devices, running thousands of graphics applications across multiple operating systems and software platforms. Vivante is a privately held company incorporated and headquartered in Sunnyvale, California, with multiple R&D centers in China and the United States. For more information, visit http://www.vivantecorp.com

Product is based on a published Khronos OpenGL ES 3.0 Specification, and is expected to pass the Khronos Conformance Testing Process. Current conformance status can be found at www.khronos.org/conformance.

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