Green Hills Software adds support for production-ready RTOS and tools to Imagination Technologies’ RISC-V CPUs

Bringing together Imagination’s RISC-V Catapult CPUs with Green Hills µ-velOSity™ RTOS to accelerate real-time safety and security-focused solutions for the automotive and industrial marketplace

London, England – 7 June, 2023 – Imagination Technologies, in partnership with Green Hills Software, the worldwide leader in embedded safety and security, announces that its RISC-V real-time CPUs now have enhanced ecosystem support through the Green Hills µ-velOSity™ safety- and security-certified real-time operating system (RTOS). This partnership will extend support to Imagination’s Catapult CPU family roadmap in the future.

The µ-velOSity RTOS is the smallest of Green Hills Software’s family of real-time operating systems. It has been updated and optimised to support the RISC-V architecture and has been certified to meet a broad number of industry standards for functional safety and security. Its streamlined design, coupled with seamless integration with the safety-certified Green Hills MULTI® integrated development environment (IDE) and C/C++ compilers, makes it easy to learn and use, allowing developers to create advanced solutions with the highest performance and smallest footprint for automotive, industrial, and IoT applications.

“We have a long-standing relationship with Imagination and are thrilled to extend our support to the company’s RISC-V CPUs,” said Dan Mender, VP of Business Development at Green Hills Software. “The adoption of the RISC-V instruction set architecture is increasing rapidly in countless markets, particularly in IoT, industrial, and embedded applications. By using Imagination’s Catapult family and our µ-velOSity RTOS, advanced debugger and optimizing C/C++ compilers, customers can efficiently create and confidently deploy safety- and security-critical RISC-V applications.”

“Imagination’s RISC-V real-time CPUs are a key initial milestone in our RISC-V product roadmap. We recognise the importance of this architecture in shaping the technologies to come, and we understand the importance of partnering with Green Hills to offer developers the right tools and operating systems to achieve complete application control and visibility,” said Shreyas Derashri, VP of Compute at Imagination Technologies. “The µ-velOSity RTOS adheres to critical safety and security industry standards, making it a purpose-built solution for deploying microcontrollers in vehicles as well as in industrial and IoT applications, and it complements current and future RISC-V CPUs from Imagination.”

Catapult is Imagination’s RISC-V product line designed from the ground up for deployment in key applications and configurable for any use. It brings together Imagination’s near three decades of experience in delivering complex solutions with the flexibility and efficiency of the RISC-V architecture and growing ecosystem.

Imagination’s RISC-V real-time CPUs can be integrated into complex SoCs for a wide range of applications including networking solutions, packet management, storage controllers, and sensor management for AI cameras and smart metering. Together with its market-leading GPU and AI accelerator IP, Imagination’s new CPU cores offer customers access to innovative heterogeneous solutions. Imagination will be expanding its RISC-V CPU product line with more applications-focused solutions in the future.

All Imagination GPUs are compatible with RISC-V SoCs, and are becoming the GPU-of-choice for RISC-V based solutions with product-proven solutions in the market.
Imagination will be demonstrating Green Hills’ µ-velOSity running on Imagination’s RISC-V CPUs at AutoTech Detroit between 7-8 June at Booth 827. Come and talk to us or book a meeting.

- Ends-

About Imagination Technologies
Imagination is a UK-based company that creates silicon and software IP (intellectual property) designed to give its customers an edge in competitive global technology markets. Its GPU, CPU, and AI technologies enable outstanding power, performance, and area (PPA), fast time-to-market, and lower total cost of ownership. Products based on Imagination IP are used by billions of people across the globe in their smartphones, cars, homes, and workplaces. See https://www.imaginationtech.com/.

Follow Imagination on Twitter, YouTube, LinkedIn and Blog.

Imagination Technologies’ Press Contacts:

Catriona Watt  
catriona.watt@imgtec.com  
+44 (0)1923 260 511

Maya Ahluwalia  
maya.ahluwalia@imgtec.com  
+44 (0)1923 260 511

Imagination, PowerVR, and the Imagination Technologies logo are trademarks of Imagination Technologies Limited and/or its affiliated group companies in the United Kingdom and/or other countries. All other logos, products, trademarks, and registered trademarks are the property of their respective owners.

About Green Hills Software
Founded in 1982, Green Hills Software is the worldwide leader in embedded safety and security. In 2008, the Green Hills INTEGRITY-178 RTOS was the first and only operating system to be certified by NIAP (National Information Assurance Partnership comprised of NSA & NIST) to EAL 6+, High Robustness, the highest level of security ever achieved for any software product. Our open architecture integrated development solutions address deeply embedded, absolute security and high-reliability applications for the military/avionics, medical, industrial, automotive, networking, consumer and other markets that demand industry-certified solutions. Green Hills Software is headquartered in Santa Barbara, CA, with European headquarters in the United Kingdom. Visit Green Hills Software at https://www.ghs.com.

Green Hills, the Green Hills logo, INTEGRITY, MULTI and µ-velOSity are trademarks or registered trademarks of Green Hills Software in the U.S. and/or internationally. All other trademarks are the property of their respective owners.