

Microchip Introduces No-Cost, License- and Royalty-Free Ensemble Graphics Toolkit to Speed Linux® Graphical User Interface Development

GUI toolkit for Linux enhances 32-bit microprocessor capabilities for low- and mid-range- resolution graphical displays

CHANDLER, Ariz., Sept. 22, 2020 (GLOBE NEWSWIRE) -- Graphical user interfaces (GUIs) and interactive touchscreen displays provide intuitive user experiences in applications from robotic and machine controls to medical user interfaces, automotive instrumentation and home and building automation systems. A well-designed GUI enables users to process information more quickly and interact more effectively with a product. Microchip Technology Inc. (**Nasdaq: MCHP**) today announced a new GUI development toolkit for its portfolio of 32-bit microprocessors (MPUs) running Linux, helping designers of industrial, medical, consumer and automotive graphical displays to reduce development cost and time-to-market.

Microchip's new [Ensemble Graphics Toolkit](#) is a free and open-source C++ GUI suite for the company's SAMA5 and SAM9 series of Arm® Cortex®-A5 and ARM926EJ-S™ processor-based MPUs including the system-in-package and system-on-module products. The Ensemble Graphics Toolkit is optimized for Microchip's 32-bit MPUs running the Linux operating system. By taking advantage of underlying hardware acceleration, including graphics controllers and video decoders when available, the toolkit provides a high-performance user experience on low and mid-range graphical displays up to XGA (1024 × 768 pixels) resolution.

Optimized code allows a smaller memory footprint, saving BOM cost. The efficient performance relative to other graphics solutions that rely on higher-performance cores and 3D graphical acceleration allows rich GUIs to be created for Microchip's power-efficient MPUs. In addition, Ensemble Graphics Toolkit and Linux can be optimized for fast cold boot – with boot times of under three seconds from cold reset that is required for applications such as automotive dashboard clusters.

“Whereas other tools require ever higher-performing, higher-power and costlier microprocessors, this no-cost development suite is an enabler that optimizes processing power,” said Rod Drake, vice president of Microchip's MPU32 business unit. “Developers can achieve modern graphical user interfaces with excellent user experience with a lower bill of material cost, lower power and longevity of solution – while providing a high-end look.”

Microchip's Ensemble Graphics Toolkit suite is available without licensing or royalty fees to all developers of graphical interfaces. The Ensemble Graphics Toolkit is complementary to

Microchip's bare metal/RTOS-focused MPLAB® Harmony Graphics Suite embedded software development framework that also provides a zero-cost, royalty-free graphical user experience.

The toolkit is fully integrated with Linux4SAM, Microchip's mainline, Long Term Support (LTS) Linux offering. In addition to supporting Microchip's MPU families Linux4SAM contains driver support for a broad range of its components including the maXTouch® family of touchscreen controllers, memory devices, power management and analog devices and wired and wireless networking components and modules. Linux4SAM is regularly updated and supports all Microchip MPUs throughout product life.

Development Tools

Microchip's Ensemble Graphics Toolkit is a complete software and tools framework suite. Training and support are available worldwide at www.microchip.com/EGT.

Pricing

Microchip's Ensemble Graphics Toolkit is available at no cost and royalty free for all users and includes full support from Microchip. It is based on the permissive Apache 2.0 open-source license.

Resources

High-res image available through Flickr or editorial contact (feel free to publish):

- Application image:

<https://www.flickr.com/photos/microchiptechnology/50295431376/>

About Microchip Technology

Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 120,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.

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