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New Solution from Microchip Makes it Easier to Build Sophisticated Graphical User Interfaces for MPLAB® Harmony v3 and Linux® Environments

Microchip Graphics Suite is designed to enable seamless portability between Microchip product families and environments to help designers significantly reduce development costs and speed time to market

CHANDLER, Ariz., Sept. 19, 2024 (GLOBE NEWSWIRE) -- Designers are incorporating Graphical User Interfaces, or GUIs, into more electronic devices to enhance the user experience by providing intuitive and visually appealing interactions with today's modern applications. To support embedded developers with their designs, Microchip Technology **(Nasdaq: MCHP)** today announces **Microchip Graphics Suite** (MGS), an easy-to-learn, comprehensive solution that simplifies the process of incorporating GUIs, animations and images into a touchscreen display.

Developing a GUI can be a complex and lengthy process, requiring significant time and resources to debug and integrate code from various tools. MGS is designed to easily integrate with Microchip's 32-bit microcontrollers (MCUs) and microprocessors (MPUs) and supports multiple development platforms, including MPLAB® Harmony v3 and Linux® environments. This comprehensive solution to build a GUI interface aims to help designers improve reusability across projects and simplify design complexities.

MGS offers compositional tools, including a simulator for hardware-free prototyping. By leveraging the MPLAB® Code Configurator (MCC), the simulator builds the MCC-generated C code in either web or native mode. In web mode, the tool creates an HTML file that can run on most web browsers with simulated touch interactivity. In native mode, the simulator enables debugging of the GUI on Windows® desktop computers. These features enable accurate display and functionality demonstrations that are independent of hardware availability.

MGS provides an intuitive WYSIWYG interface with a modern design, enabling users to directly see and manipulate the final output, reducing errors and increasing efficiency. To make GUIs more accessible, MGS is versatile and can support a wide range of devices of varying performance. They can range from resource-constrained devices with significantly lower memory and system performance requirements to high-performance devices supporting tablet-sized touchscreens with high-fidelity video playback.

This solution is optimal for developers who want superior graphical performance without costly hardware upgrades. Additionally, MGS supports a wide range of displays, from

monochrome OLEDs to 1080p 16.7M color TFTs, including MIPI® DSI®, LVDS, RGB, SPI, and HDMI® interfaces, along with touchscreens with 2D/3D gestures.

“At Microchip, we are committed to providing our customers with comprehensive solutions and cutting-edge tools that empower them to make high-quality products and get to market faster,” said Rod Drake, corporate vice president of Microchip’s MCU32 and MPU32 business units. “This innovative tool suite simplifies the process of creating engaging and responsive displays for everything from smart home devices to industrial equipment.”

This comprehensive solution simplifies the integration of a GUI from design phase to implementation across a wide range of applications. MGS is highly compatible with the company’s broad portfolio of PIC32 MCUs, SAM MPUs and maXTouch® touchscreen controllers. Additionally, Microchip can provide other key components including memory, power management and connectivity solutions.

Development Tools

Microchip Graphics Suite is supported by various **development tools** including **MPLAB Harmony v3**, **MPLAB Code Configurator** and Microchip’s mainlined Linux Distribution for 32-bit MCUs and MPUs.

Availability

Microchip Graphics Suite is complimentary and available now to download. For more information and to download the software, visit the **website**.

Resources

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

- Application image: **www.flickr.com/photos/microchiptechnology/53970922906/sizes/l**
- YouTube demonstration video: **https://www.youtube.com/watch?v=2cZQuTGj9Ac**

About Microchip Technology:
Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control and processing 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 approximately 123,000 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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