October 21, 2020

Microchip Acquires High-Level Synthesis Tool Provider LegUp to Simplify Development of PolarFire® FPGA-based Edge Compute Solutions

Software engineers can now map applications coded in C/C++ directly into PolarFire FPGAs and SoCs that are the industry's lowest-power mid-range fabric solutions for acceleration

CHANDLER, Ariz., Oct. 21, 2020 (GLOBE NEWSWIRE) -- Microchip Technology Inc. **(Nasdaq: MCHP)** today announced it acquired Toronto-based LegUp Computing Inc., expanding its Field-Programmable Gate Array (FPGA)-based edge compute solution stack with a high-level synthesis (HLS) tool. Commercialized from University of Toronto research, the LegUp HLS tool will make it easier for a larger community of software engineers to harness the algorithm-accelerating power of Microchip's PolarFire FPGA and PolarFire System on Chip (SoC) platforms.

"The LegUp team brings us deep experience in high-level synthesis and related technologies as we continue to optimize the integrated design environment tool flows for our PolarFire FPGA and PolarFire SoC customers," said Bruce Weyer, vice president of the FPGA business unit at Microchip. "The acquisition also gives our traditional Microchip MCU and MPU clients the ability to use FPGAs as accelerators through an easy-to-use compiler that will substantially improve their design productivity and system performance while shortening their time to market."

The LegUp HLS tool will be used alongside Microchip's **VectorBlox** Accelerator Software Design kit and VectorBlox Neural Networking IP generator to provide a complete front-end solution stack for C/C++ algorithm developers who want to work with PolarFire FPGA and PolarFire SoC devices without having to understand the underlying Register Transfer Level (RTL) development flows. Microchip acquired Vancouver, Canada-based VectorBlox Computing in August 2019 to enhance its portfolio of solutions for **edge compute applications**.

"Software engineers needing hardware acceleration demand performance and power efficiency, while looking for tools that enable higher levels of abstraction for the hardware that will implement their compute-intensive algorithms," said Andrew Canis, CEO of LegUp Computing, now part of Microchip. "We are very pleased to be part of a team that will help fuel rapid innovation for edge compute applications as we enable developers to leverage innovative software algorithms developed in C/C++ to be ported to low-power, thermally elegant, and compute-efficient PolarFire FPGAs and SoCs."

Microchip will be making the LegUp HLS tool available to early access customers immediately and roll out a fully integrated design flow in the first half of 2021. For more

information on early access, contact **legup@microchip.com**.

About the Microchip PolarFire Family
Microchip's award-winning **PolarFire FPGAs** deliver 50 percent lower power than alternative solutions at mid-range densities while providing high levels of security and reliability. Built on the same FPGA architecture, the PolarFire FPGA SoC is a multi-core RISC-V device that uses a deterministic, coherent RISC-V CPU cluster and deterministic L2 memory subsystem to provide the highest performance for acceleration applications with the greatest power efficiency. For more information on products and history or for contact information visit **www.legupcomputing.com**.

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

- Press image: **https://www.flickr.com/photos/microchiptechnology/50481217536/sizes/l/**

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**.

About LegUp Computing, Inc.
LegUp Computing, Inc. provides an integrated development environment that allows engineers to program any FPGA device in C/C++ for greater productivity and easier verification. Originally developed at the University of Toronto, the LegUp platform offers a novel programming model that allows threaded C/C++ software to target FPGA devices for efficient processing of low-latency, embedded, real-time processing workloads. The company was founded by Dr. Andrew Canis, Dr. Jongsok Choi, Ruolong Lian, and Professor Jason Anderson in 2015 to commercialize the award-winning open-source LegUp high-level synthesis tool. LegUp's core technology offers a programming model for software developers to achieve 10X better throughput and latency using FPGAs. For more information, visit **www.legupcomputing.com** or follow @legupcomputing.

Note: The Microchip name and logo, the Microchip logo and PolarFire are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. All other trademarks mentioned herein are the property of their respective companies.

Editorial Contact:
Brian Thorsen
480-792-7182
brian.thorsen@microchip.com

Reader Inquiries:
1-888-624-7435



Source: Microchip Technology Incorporated