University of Saskatchewan Selects QuickLogic eFPGA HardIP for StarRISC MCU

- Selection expands QuickLogic's role in radiation-tolerant open-hardware innovation for space and research applications

SAN JOSE, Calif., Dec. 9, 2025 /PRNewswire/ -- QuickLogic Corporation (NASDAQ: QUIK), a developer of embedded FPGA (eFPGA) Hard IP and ruggedized FPGAs, announced today that its eFPGA Hard IP has been selected by the University of Saskatchewan's Semiconductor Technology and Rad-Effects Research Lab (STARR-Lab) to support personalization of its next generation StarRISC Rad-Tolerant RISC-V Microcontroller. The project is also partially supported by Globalfoundries' University Research Program and will be taped out with GF 12nm FinFET technology node. By integrating eFPGA technology into the StarRISC platform, researchers and engineers will be able to prototype and evaluate custom logic blocks, accelerators, and mission-specific algorithms on a radiation-tolerant device designed for space and high-reliability environments.

"STARR-Lab has worked with QuickLogic as members of the Open Hardware Group for several years," said Dr. Li Chen, Professor of Electrical and Computer Engineering and supervisor for the STARR Lab. "We're excited to add eFPGA capability to the next StarRISC Microcontroller, giving users the flexibility to explore new functions, accelerators, and ideas limited only by their imagination."

"The impressive work that Professor Chen and his team have done in creating a rad-tolerant RISC-V MCU with 22nm FDSOI node demonstrating no proton upsets and resilience to very high LET ions, aligns closely with QuickLogic's investment and focus in supporting the space community with eFPGA IP," said Mao Wang, senior director of product marketing at QuickLogic. "We appreciate the STARR-Lab team choosing to incorporate our eFPGA Hard IP into their next design. This will give teams a new platform to experiment with custom logic on radiation-tolerant microcontroller."

QuickLogic can deliver [eFPGA Hard IP](#) on any new process node within four to six months, including radiation tolerant implementations, supporting applications from high-performance data processing to low-power, battery-operated devices. Once a fab-specific Hard IP is established, customer-specific variants can be delivered in just weeks, enabled by QuickLogic's proprietary Australis IP Generator. QuickLogic eFPGA IP is supported by two FPGA tool suites: Aurora, a 100% open-source version, and Aurora Pro, which integrates

Synopsys® Synplify® FPGA Logic Synthesis.

For more information on QuickLogic's eFPGA IP licensing and other solutions, please visit www.quicklogic.com.

About STARR-Labs
The Semiconductor Technology and Rad-Effects Research Lab (STARR-Lab) is located at the University of Saskatchewan in Canada. We are a diverse group of students, researchers, and faculty who study radiation-effects in microelectronics, device reliabilty, and more. Our research group takes ideas from conception, through to design and implemenation, ending with real-world testing. Over the years we have collected a wealth of experience in semiconductor design and testing.

About QuickLogic
QuickLogic Corporation is a fabless semiconductor company specializing in eFPGA Hard IP, discrete FPGAs, and endpoint AI solutions. QuickLogic's unique approach combines cutting-edge technology with open-source tools to deliver highly customizable, low-power solutions for industrial, aerospace, consumer, and computing markets. For more information, visit www.quicklogic.com.

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