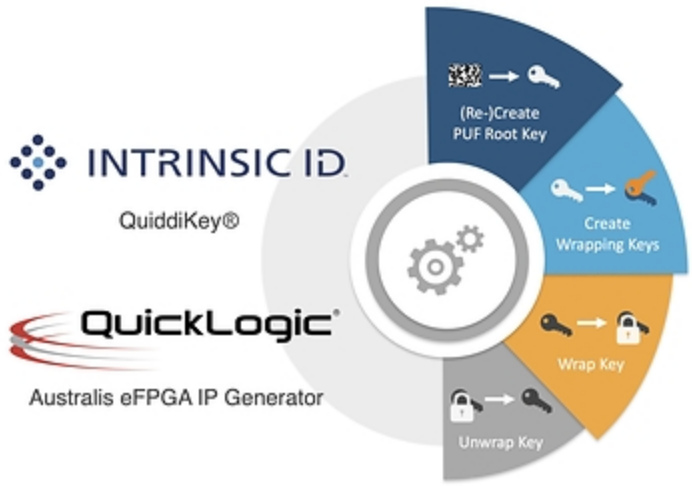
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QuickLogic Partners with Intrinsic ID to Provide eFPGA Security Solutions

- *Delivers high quality security solutions for SoCs with eFPGA technology*
- *Provides multiple security options for wide range of applications ranging from industrial IoT to aerospace and defense*
- *Enables eFPGA and device-level SoC security for any foundry or process node*

SAN JOSE, Calif. and SUNNYVALE, Calif, May 12, 2022 /PRNewswire/ -- QuickLogic Corporation (NASDAQ: QUIK), a developer of ultra-low power multi-core voice-enabled SoCs, embedded FPGA IP, and Endpoint AI solutions, today announced that it has partnered with Intrinsic ID, the world's leading provider of Physical Unclonable Function (PUF) security IP, to provide security options for devices incorporating embedded FPGA (eFPGA) technology. These options range from secure key generation based on SRAM PUF to full security solutions including bitstream encryption, key wrapping, authentication tags, key verification, and data encryption/decryption for storage within the device or for board or system-level communications. This partnership has created a seamless integration of the solutions of both companies, allowing QuickLogic's eFPGA customers to add security functionality without any further integration effort.



Intrinsic ID's solutions are based on Physical Unclonable Functions, or PUFs, which are unique physical characteristic of a specific device that can be used to generate a device-specific encryption key. For SoCs using eFPGA technology, the PUF can be standard SRAM cells or FPGA logic cells specifically configured for PUF purposes. In either case, the PUF gives each individual device a unique digital fingerprint, which can be used to generate an encryption root key whenever it is needed. This approach avoids the need to store the key and thus expose it to hackers. It also ensures that each key is unique to the specific device in which it is generated.

In addition to PUF-based key generation, Intrinsic ID offers a complete SoC security solution called QuiddiKey, which adds functionality including encrypting secret keys and data, deriving wrapping keys to protect other functions, adding authentication tags, and verifying authentication tags and decrypting the associated contents. The benefits of this approach include offering a higher level of security than traditional key storage, enabling the creation and storage of an unlimited number of secure keys, and minimizing hardware overhead. QuiddiKey also enables the wrapping of keys used for bitstream encryption with device unique keys, allowing device owners to protect the device and valuable IP so a trusted supply chain is guaranteed. In short, QuiddiKey is a complete centralized key management solution providing exceptionally reliable secure key storage for devices using even the most advanced technology nodes.

"QuickLogic's Australis™ eFPGA generator and eFPGA technology give SoC developers a quick and easy way to embed programmable technology into their devices," said Pim Tuyls, CEO at Intrinsic ID. "Our partnership with QuickLogic adds a level of security to these programmable logic architectures enabling customers to further enhance their platforms with high security for protecting their critical IP, communications, and supply chains."

"The collaboration between Intrinsic ID and QuickLogic has resulted in multiple solutions for SoC customers who wish to secure critical IP, entire designs, or even system-level communications," said Mao Wang, senior marketing director at QuickLogic. "This security complements the flexibility inherent in eFPGA-based SoCs and is an excellent fit for a wide variety of industrial IoT and other applications including aerospace and defense."

Availability

QuickLogic's eFPGA technology is available now for a wide range of popular foundries and process nodes. For more information, please visit https://www.quicklogic.com/products/efpga/. Intrinsic ID's security solutions for devices using eFPGA technology is also available now. For more information, please visit: https://www.intrinsic-id.com/.

About Intrinsic ID

Intrinsic ID is the world's leading provider of security IP for embedded systems based on PUF technology. The technology provides an additional level of hardware security utilizing the inherent uniqueness in each and every silicon chip. The IP can be delivered in hardware or software and can be applied easily to almost any chip – from tiny microcontrollers to high-performance FPGAs – and at any stage of a product's lifecycle. Intrinsic ID customers around the globe use its products to protect sensitive military and government data and systems, validate payment systems, secure connectivity, and authenticate chips and devices.

About QuickLogic

QuickLogic Corporation (NASDAQ: QUIK) is a fabless semiconductor company that develops low power, multi-core semiconductor platforms and Intellectual Property (IP) for Artificial Intelligence (AI), voice and sensor processing. The solutions include embedded FPGA IP (eFPGA) for hardware acceleration and pre-processing, and heterogeneous multi-

core SoCs that integrate eFPGA with other processors and peripherals. The Analytics Toolkit from our recently acquired wholly owned subsidiary, SensiML Corporation, completes the end-to-end solution with accurate sensor algorithms using AI technology. The full range of platforms, software tools and eFPGA IP enables the practical and efficient adoption of AI, voice, and sensor processing across mobile, wearable, hearable, consumer, industrial, edge and endpoint IoT. For more information, visit www.quicklogic.com and https://www.quicklogic.com/blog.

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