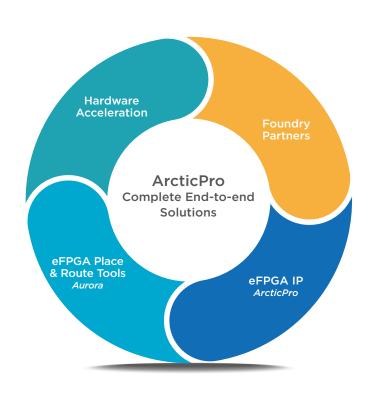


### Democratizing IQ at the Edge and Beyond

Embedded FPGA (eFPGA) technology offers SoC designers and architects the ability to quickly and easily achieve post-production design flexibility in SoCs. Additionally, our eFPGA IP can increase overall system performance and decrease power consumption. QuickLogic delivers a complete solution including hard IP, Aurora™ EDA software, and hardware acceleration blocks.

## Build flexibility and differentiation for edge devices and beyond

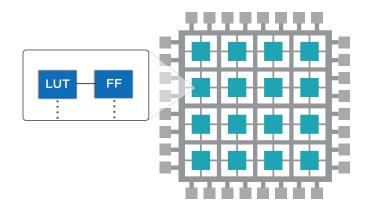
With over 30 years of programmable logic device, software and IP experience, QuickLogic is the world's leading developer of low-cost, ultra-low power, high-performance embedded FPGA solutions. The company's ArcticPro™ eFPGA technology enables SoC designs to be customized post-production without expensive and time-consuming redesign — allowing them to easily address rapidly evolving market requirements, support emerging standards, and address multiple applications with a single mask set.



# **ArcticPr**

#### eFPGA IP

- Proven LUT-based architecture with dense routing resources
- Configurable LUT array sizes in two dimensions for efficient topologies
- Provides efficient use of silicon through high logic utilization



#### **Hardware Acceleration**

- When the eFPGA is integrated in an SoC, a key benefit is the ability to accelerate system performance or reduce system power consumption by offloading critical functions to the eFPGA
- QuickLogic also provides ASIC and FPGA-based function blocks that can be closely coupled to the eFPGA array for easy integration as well as an API for software developers
- Example of these are: FFTs, FIR Filters, etc.

#### eFPGA IP Deliverables

- Customer-defined eFPGA array sizes
- QuickLogic provides all necessary files for SoC integration

(.cdl, .v, .lib, .lef and .gds)

### **Aurora eFPGA Design Tools**

- Robust Development Environment
  - Over 300 engineer years of SW development results in highly efficient logic utilization, P&R and simulation
  - Extensive IP library and development board support
- Aurora Place and Route Tools
  - Standard FPGA design flow
  - Synthesis: Mentor Graphics Precision
  - Simulation: Compatible with industry standard
    EDA simulators (NC-Sim, VCS, Questa, ModelSim)
  - Dynamic FPGA size estimation and size configurator
  - Back annotated timing data for performance analysis
  - Power calculator
  - Standard TCL command line flow supported

The ArcticPro family of eFPGAs are available in 3 different architectures suitable for multiple applications and process nodes.

	Process	Foundry	Availability
ArcticPro	65nm & 40nm	Global Foundries, SMIC, TSMC	Now
ArcticPro 2	22nm FDX	Global Foundries	Now
ArcticPro 3	28nm FD-SOI	Samsung®	Q4 2019



For more information about QuickLogic, please visit www.quicklogic.com

Corporate Headquarters:

2220 Lundy Drive, San Jose, CA 95131 USA | 1-408-990-4000 | info@quicklogic.com

Sales Offices: https://www.quicklogic.com/company/sales-locations/

North America: america-sales@quicklogic.com | China: asia-sales@quicklogic.com | Japan: japan-sales@quicklogic.com Korea: korea-sales@quicklogic.com | Taiwan: asia-sales@quicklogic.com | United Kingdom: europe-sales@quicklogic.com