eFPGA

QuickLogic

Silicon-verified, production-proven Embedded FPGA (eFPGA) IP on a variety of process node / foundry combinations

Build flexibility and differentiation into your next SoC

Key Features:

Bespoke – QuickLogic eFPGA offers high customization. Simply select the desired number of LUT6s, BRAM, and DSP blocks, along with customized routing, to meet your specific requirements

Proven – eFPGA IP is generated with proven standard cell ASIC libraries for the chosen process node / foundry combination

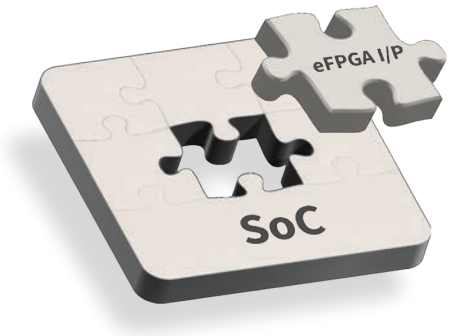
Specialized – eFPGA IP can be implemented utilizing specialized cell libraries, such as RHBD or automotive qualified libraries

Secure – Implement cryptography and data protection with confidence to protect your SoC

Reconfigurable – Adapt to evolving needs with ease, saving on silicon costs

High Performance – Experience accelerated data processing capabilities

Optimized – For performance, area, and power consumption for embedded systems



Benefits:

Faster Time-to-Market – Utilize customized eFPGA IP cores that align with your development window

Cost Efficient – Eliminate the need for costly ASIC re-spins

Scalable Solutions – Expand functionality without hardware modifications

Unparalleled Performance – Address the demands of complex applications

Security-Ready – Safeguard your data and communications with our robust security features

Flexibility to Meet your SoC Design Requirements – Optimized for your power, performance and area requirements

Cost Effective – Our automated approach ensures cores are tailored to your specific needs meeting your development time and cost targets

Most Successful Track Record for ***both*** FPGAs and eFPGA IP

~50M units shipped **>20** production FPGA tape-outs **~2,000** customers

8 foundries **13** process nodes

6/7nm*, 12nm, 16nm, 22nm, 28nm, 40nm, 65nm, 90nm, 130nm, 180nm, 0.25µm, 0.35µm, 0.65µm

tsmc GlobalFoundries TOWERJAZZ CYPRESS skywater UMC VLSI SAMSUNG

* Coming soon

aurora

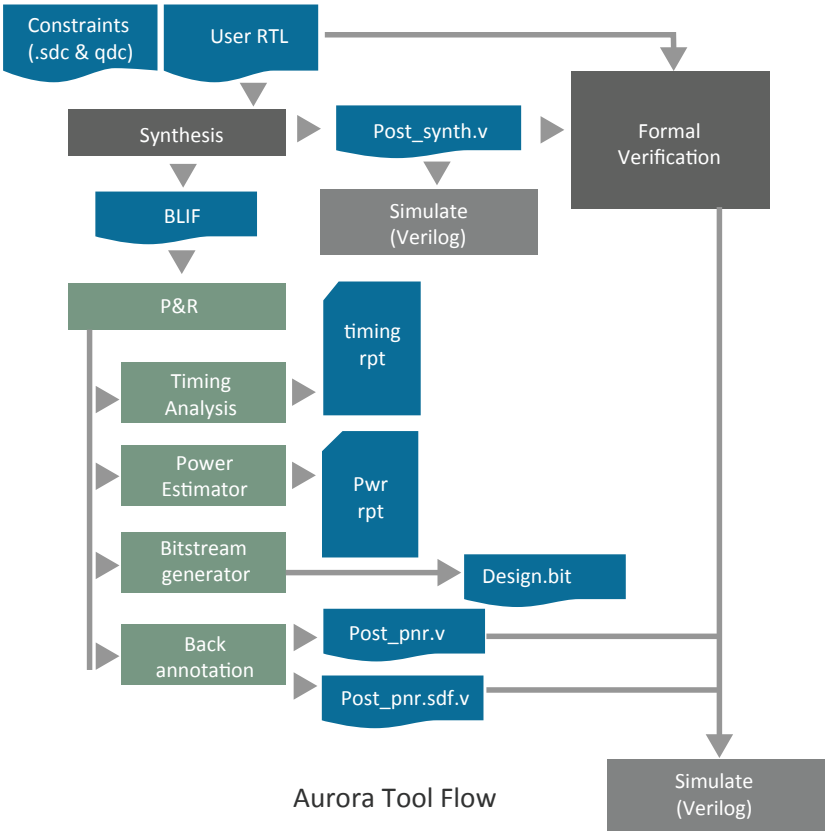
QuickLogic's eFPGA Technology Delivers Post Manufacturing Flexibility

aurora

Aurora™ FPGA User Tools

The Aurora Development Tool Suite integrates fully open-source modules for scalability, longevity, and full code transparency.

It features core tool enhancements that improve the eFPGA utilization and performance of a designer's RTL, particularly in the area of reconfigurable computing.



Aurora Tool Flow

State-of-the-art "Single Stage" Routing Algorithm
Experience a remarkable up to 24% increase in the maximum operating frequency (Fmax) of your designs.

Asymmetric BlockRAM (BRAM) Inferencing
Simplify your RTL design with our inferencing feature, reducing the need for manual modifications and enhancing overall design efficiency.

Dynamic Power Calculation
Our tool automatically calculates dynamic power consumption, streamlining power calculations across your design libraries.

Enhanced Usability
The development environment has been revamped with improved tools, including a Physical Viewer, Critical Path Analysis, and Detailed Timing/Utilization Information.

Learn more about Aurora

QuickLogic

Corporate Headquarters:
2220 Lundy Drive, San Jose, CA 95131 USA
1-408-990-4000 I info@quicklogic.com:

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

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