



The Low Power Programmable Leader

## Lattice Software Tools Overview

# Tools for FPGA Device Implementation

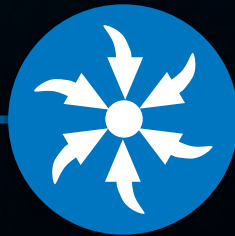


## Easy to Use



- Download & Install
- Include Design Examples
- Easy Integration in Customer Design Environment

## Efficient Design Entry & Implementation



- IP Ready for Integration
- Team Based Design
- Fast Compile Time

## Easy Timing Closure Methodology



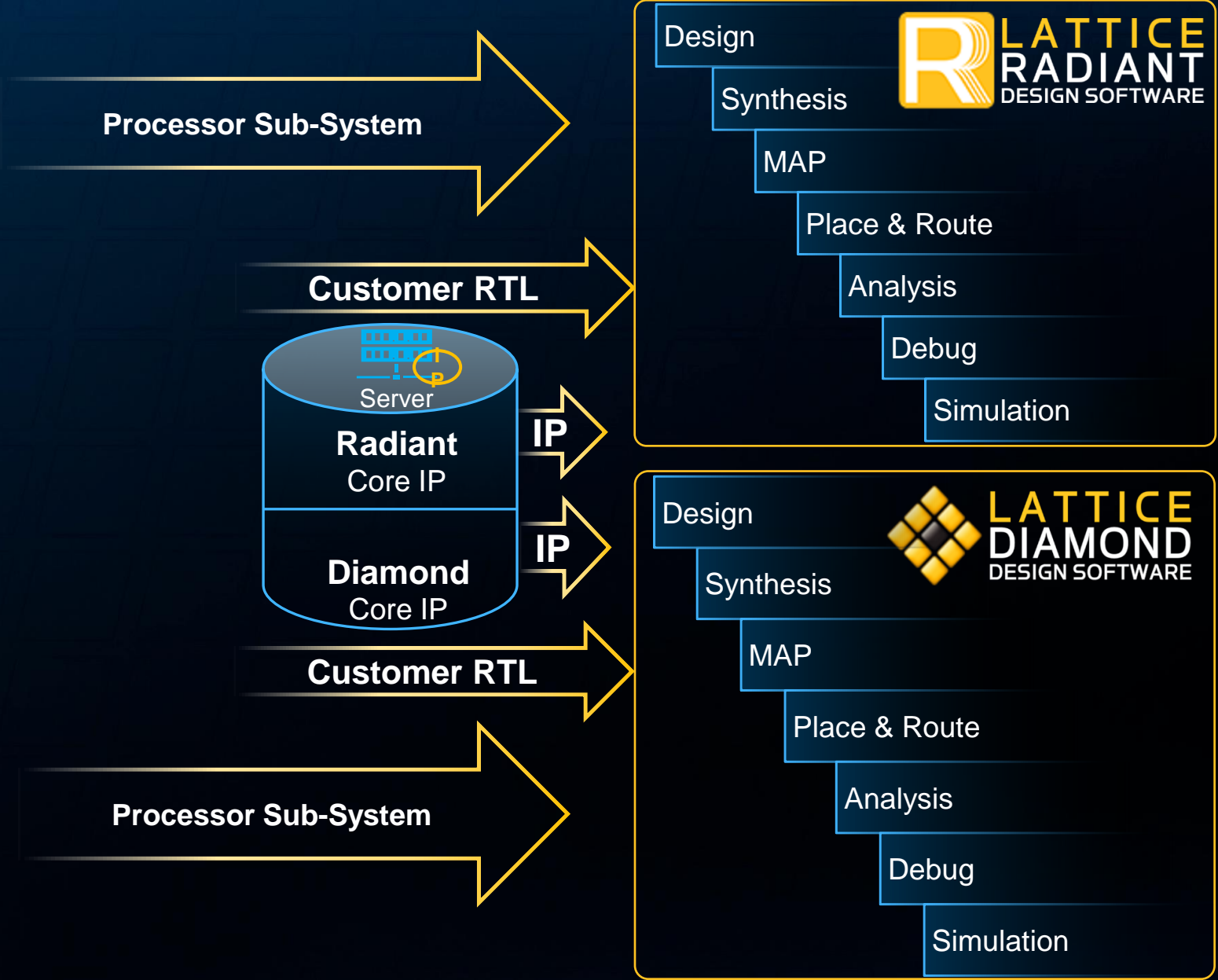
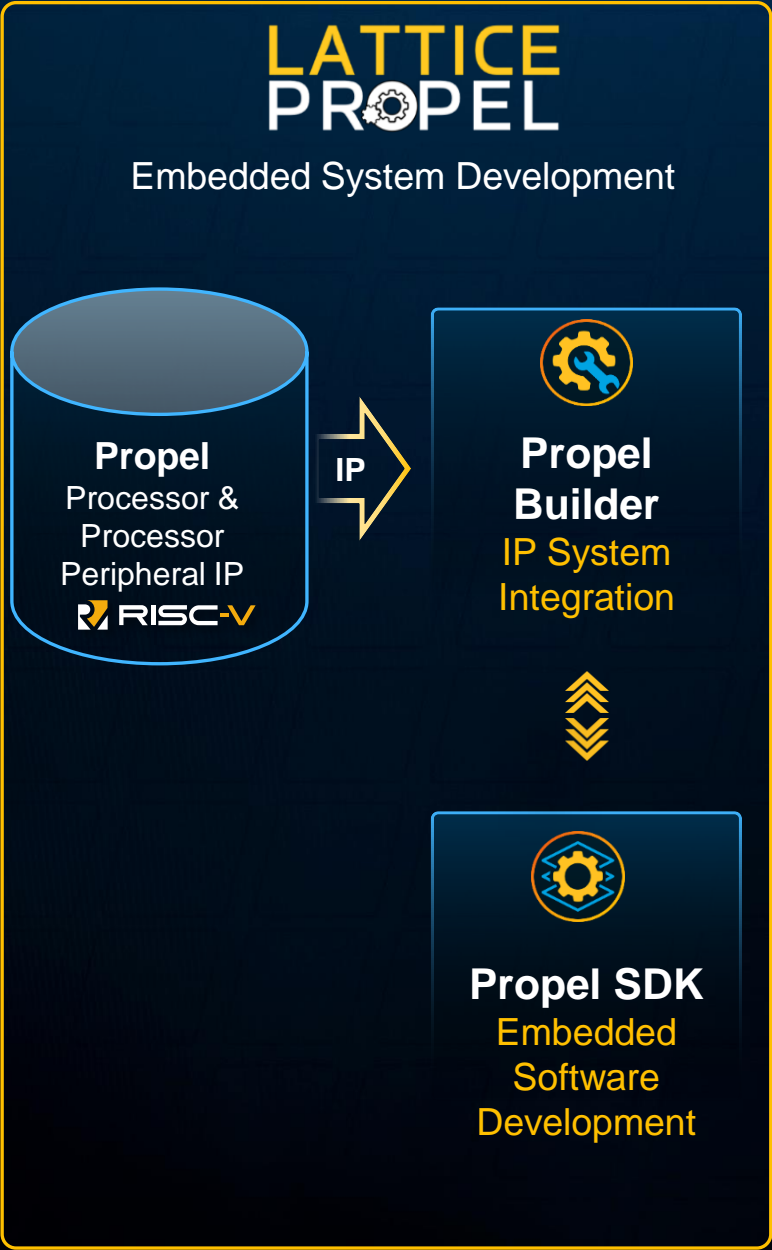
- Interactive Timing Analysis
- Incremental Compilation
- Physical Optimizations

## Extensive Verification & Validation



- Questasim Lattice Edition
- 3<sup>rd</sup> Party Verification Tools Support
- High Speed Interface & Remote Debug

# Lattice Design Tools Flow





# IP Catalog - Extensive IPs Selection to Simplified Design Process

Ethernet

DDR/LPDDR

Video

PCIe

DSP

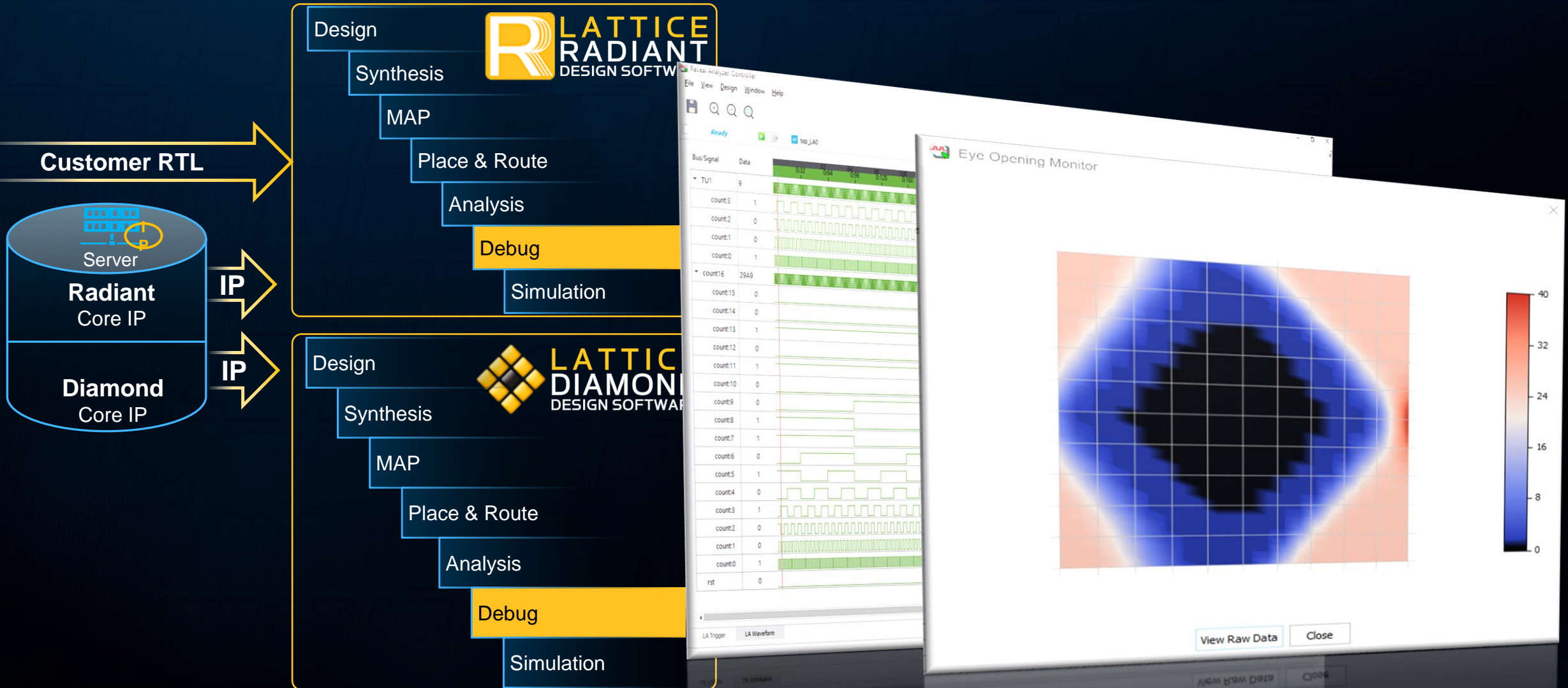
CNN

Security

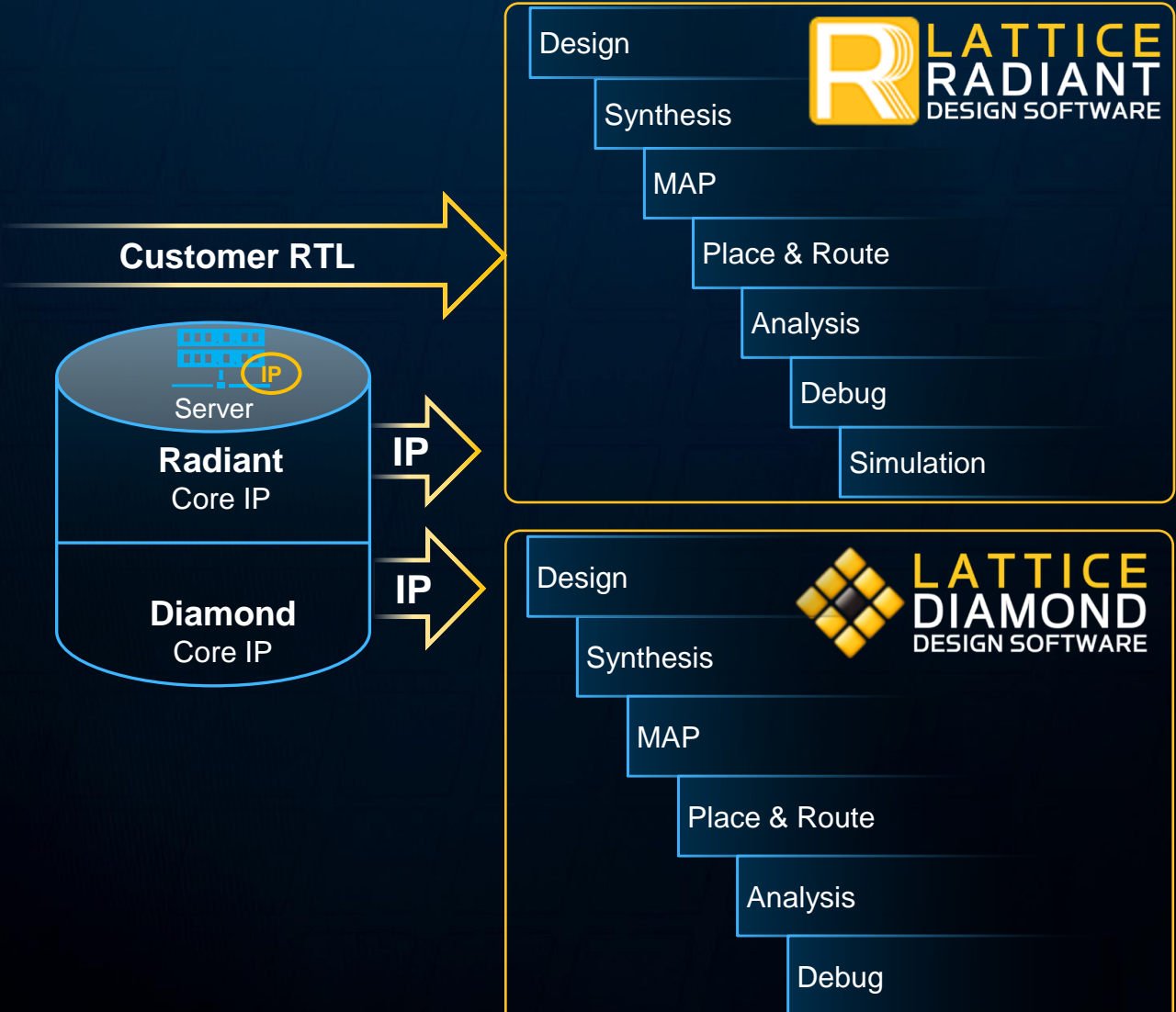
and many more...



# Real-Time On-Chip Debugging

Reveal Inserter – Reveal Controller – SERDES Eye Opening Monitor



# Simulation



  
  
  
Advanced Simulator

the information is strictly limited to the facts in the Siemens's website and is not intended to be used for any other purpose. Siemens is not responsible for any errors or omissions in this information. Siemens is not responsible for any damages or losses resulting from the use of this information. Siemens is not responsible for any legal consequences resulting from the use of this information.

QuestaSim Lattice FPGA Edition – Powerful Debug Features



# Lattice Propel Builder – Build Your System in Minutes



## Easy to Use System Integration Environment

# Design Tools Device Support & License Subscriptions



LATTICE  
RADIANT  
DESIGN SOFTWARE



LATTICE  
DIAMOND  
DESIGN SOFTWARE

LATTICE  
PROPEL

Radiant  
Subscription

Radiant-RT  
Subscription

Diamond  
Subscription

Ordering Part  
Number

Free

LSC-SW-  
RADIANT

LSC-SW-  
RADIANT-RT

Free

LSC-SW

Free

Video  
Connectivity

CrossLink-NX

CrossLink-NX

CrossLink-NX

CrossLink  
CrossLinkPlus

CrossLink  
CrossLinkPlus

CrossLink-NX

General  
Purpose

Certus-NX

Avant-E  
Avant-G/X  
CertusPro-NX  
Certus-NX

CertusPro-NX  
Certus-NX  
CertusPro-NX-RT  
Certus-NX-RT

ECP5

ECP5  
ECP5U/M  
ECP3

CertusPro-NX  
Certus-NX  
CertusPro-NX-RT  
Certus-NX-RT

Control &  
Security

MachXO5-NX

MachXO5-NX

Mach-NX  
MachXO3D  
MachXO3/XO2

Mach-NX  
MachXO3D  
MachXO3/XO2

MachXO5-NX  
Mach-NX  
MachXO3D  
MachXO3/XO2

Ultra Low  
Power

iCE40 UltraPlus

iCE40 UltraPlus

iCE40 UltraPlus



# FPGA Device Implementation



- Easy to Use
- Efficient Design
- Powerful

**LATTICE**  
**PROPEL**

**Embedded System Development**

# More Resources Available

## [Sales Resources](#)

- Sales Toolbox – Presentations by marketing team for customers
- Channel Partners – Resources for Distribution Channel

## [Lattice Licensing Portal](#)

- Free trial license
- 1-year free license application
- Licensing Collaterals

## [Lattice Insights On-demand Trainings](#)

- Lattice Radiant Overview (8 Mins)
- Lattice Propel Overview (14 Mins)
- Developing with Radiant: Fundamentals (2Hrs 41 Mins)
- Developing with Propel: Fundamentals (1Hr 12 Mins)
- Developing with Diamond: Fundamentals (45Mins)
- Reveal Analyzer (1Hr 13Mins)



## [Lattice Radiant](#)

- Software Tool Download
- Documentation
- Tutorials

## [Lattice Propel](#)

- Software Tool Download
- Documentation
- Tutorials

## [Lattice Diamond](#)

- Software Tool Download
- Documentation
- Tutorials



The Low Power Programmable Leader