



The Low Power Programmable Leader

August 2021

# Safe Harbor

This presentation contains forward-looking statements that involve estimates, assumptions, risks and uncertainties, including statements relating to our expectations about our systems solutions' offerings under the heading "Future".

Factors that may cause actual results to differ materially from the forward-looking statements in this presentation include those risks more fully described in Lattice's filings with the SEC including its annual report on Form 10-K for the fiscal year ended January 2, 2021 and quarterly filings.

You should not unduly rely on forward-looking statements because actual results could differ materially from those expressed in any forward-looking statements. In addition, any forward-looking statement applies only as of the date on which it is made. The Company does not intend to update or revise any forward-looking statements, whether as a result of events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

# Agenda

1



**Company Overview**

2



Products & Solutions

3



End Markets & Applications

4



Financials



# Our Mission

**The Low Power Programmable Leader**



# Lattice Semiconductor Overview

## APPLICATIONS & MARKETS

We enable secure control, flexible connectivity, and low power compute acceleration



COMMUNICATIONS  
& COMPUTING

43%



INDUSTRIAL &  
AUTOMOTIVE

41%



CONSUMER &  
LICENSING SERVICES

16%

## WORLD CLASS SUPPLIER

#1

World's largest volume  
supplier of FPGA

Tier 1

Supplier with 38 years  
of innovation



## GROWING CUSTOMER BASE



## GLOBAL SUPPORT



# Lattice Executive Leadership Team



**Jim Anderson**  
CEO



**Sherri Luther**  
CFO



**Mark Nelson**  
Sales



**Esam Elashmawi**  
Marketing & Strategy



**Steve Douglass**  
Research & Development



**Glenn O'Rourke**  
Operations & Quality



**Byron Milstead**  
General Counsel



**Terese Kemble**  
Human Resources



# Holding Ourselves to the Highest ESG Standards

## CULTURE OF INNOVATION



## ENVIRONMENTALLY CONSCIOUS



## INCLUSION & SOCIAL WELLBEING



## TRANSPARENCY & INTEGRITY



## Committed to Sustainable Business Practices

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# Lattice Value Proposition

Smallest  
**SIZE**



Lowest  
**POWER**



Highest  
**SECURITY**



**RELIABLE**  
by Design



**EASE**  
of Use



# Lattice FPGA Portfolio

## BROAD FAMILY OF LOW POWER FPGAs

### GENERAL PURPOSE



Addresses a broad range of applications across multiple markets

- Lowest power and smallest package with up to 10G SERDES and 150K LUTs
- Industry-leading reliability and efficient processing with class-leading on-chip memory

## FPGA FAMILIES TAILORED FOR SPECIFIC NEEDS

### VIDEO CONNECTIVITY



Optimized for high-speed video and sensor applications

- First FPGA with hardened MIPI D-PHY
- Highest performance at lowest power

### ULTRA LOW POWER



World's lowest power FPGAs; Optimized for small form factor

- Static current as low as 25 uA
- World's most popular ultra-low power FPGA

### CONTROL & SECURITY



Optimized for platform management & security applications

- 50% market share
- Highest I/O density



AVAILABLE NOW

# LATTICE NEXUS<sup>TM</sup>

## FD-SOI Small FPGA Platform

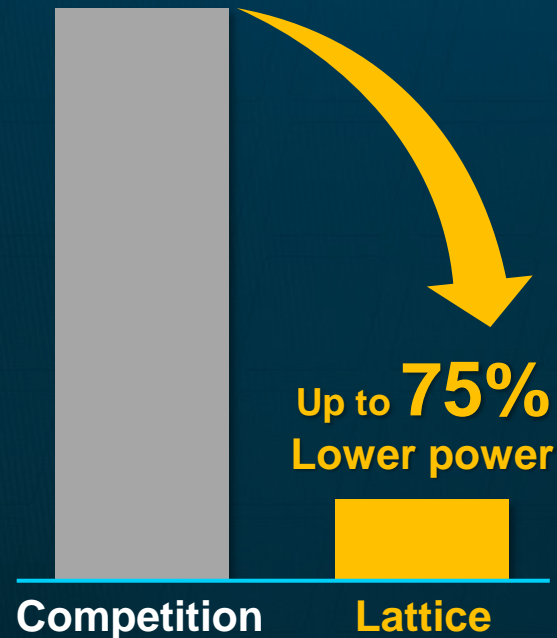
- Low power leadership
- Edge computing ready
- Robust and reliable
- Smallest form factor
- Faster innovation cadence



# Lattice Nexus is Changing the FPGA Landscape

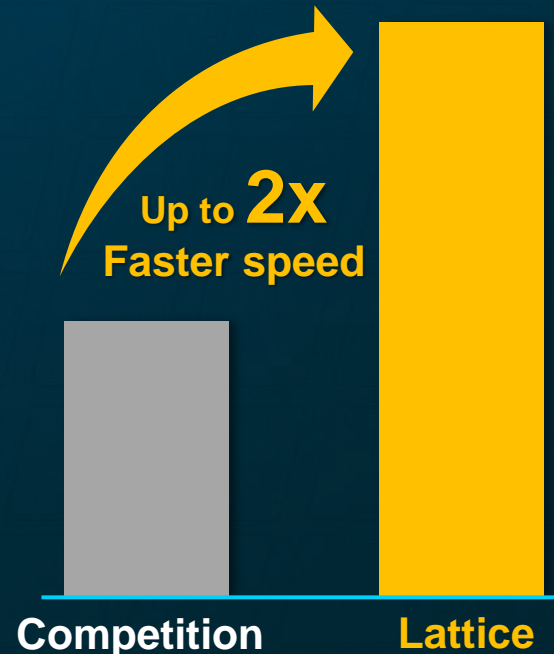
## POWER

Operating Power Consumption



## PERFORMANCE

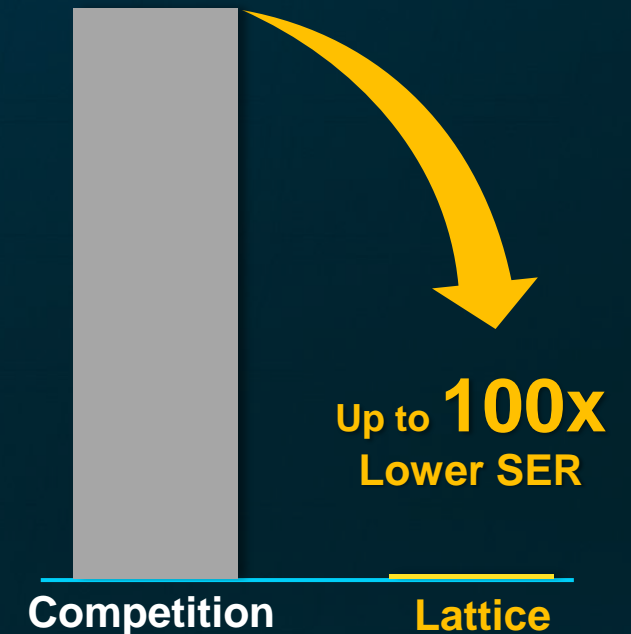
Video Connectivity



Note: comparing similar class competitive devices

## RELIABILITY

Soft Error Rate





# Nexus-based Low Power Silicon

## CrossLink-NX



### Embedded Vision Processing

Built on the Lattice Nexus Platform

Optimized Low Power Architecture

**AVAILABLE NOW**

## Certus-NX



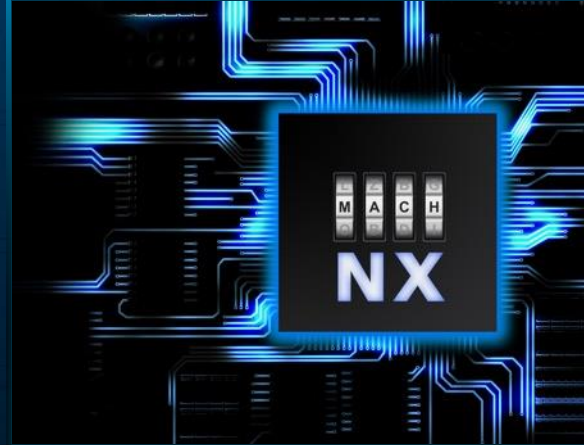
### General Purpose Processing

Built on the Lattice Nexus Platform

Lowest Power & Smallest Package  
with 5G PCIe

**AVAILABLE NOW**

## Mach-NX



### Next Gen Hardware Security

Cyber Resilient System Control

Dynamic End-to-End  
Firmware Protection

**ENGINEERING SAMPLES AVAILABLE**

## CertusPro-NX



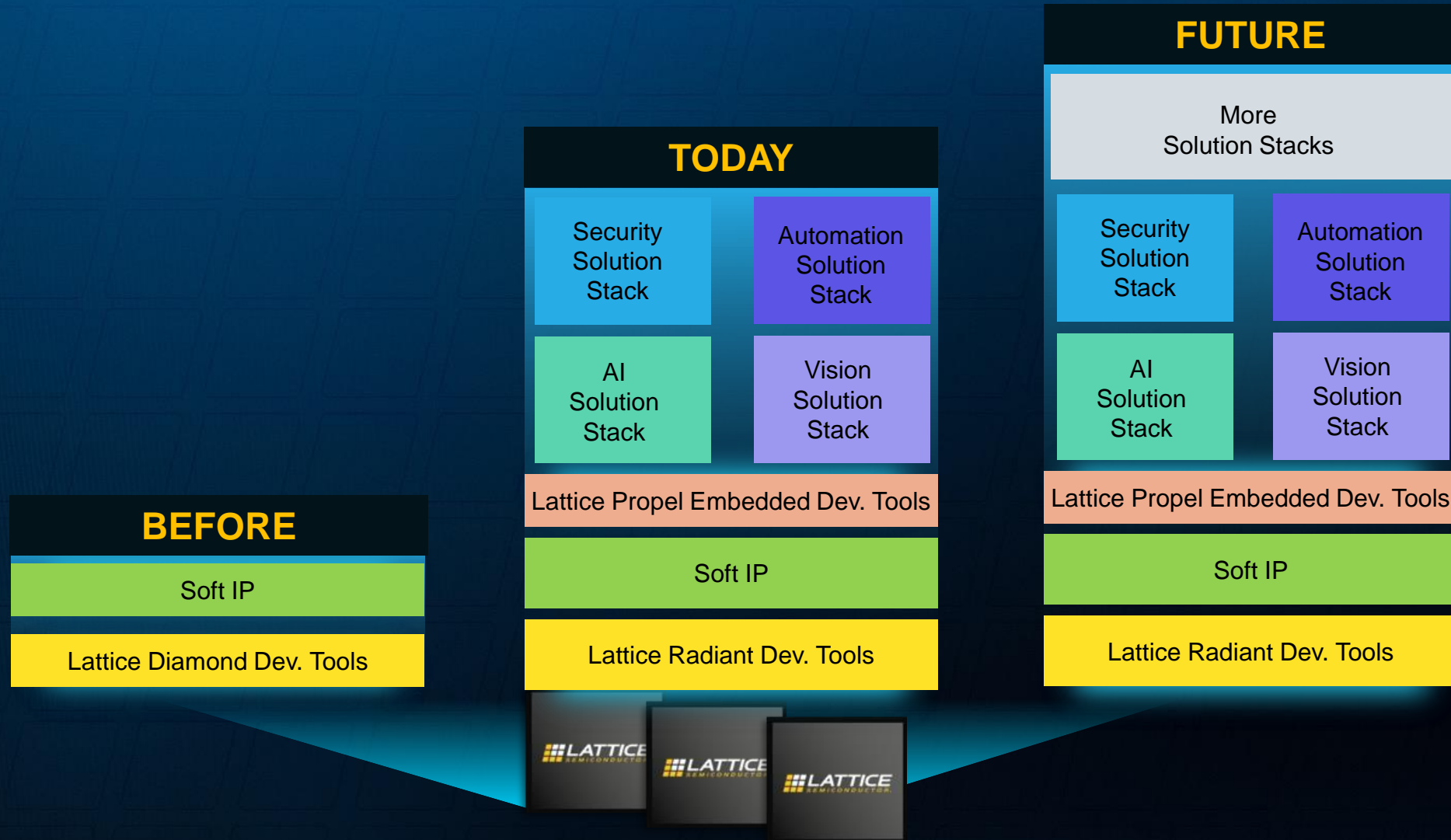
### Advanced General Purpose FPGA

Highest Logic Density Nexus FPGAs

Best in class power efficiency, system  
bandwidth, and memory capabilities

**ENGINEERING SAMPLES AVAILABLE**

# Lattice's Expanded System Solutions



Bringing Additional Value to Our Customers



# Value-Added Solution Stacks

## Lattice sensAI



### Low Power Edge AI

- High Performance Inferencing Under 1W
- Supports Industry Standard ML Frameworks
- Complete Solution Enablement

## Lattice mVision



### Low Power Embedded Vision

- Flexible Image Sensor Bridging & Aggregation
- Image Processing Integration
- Complete Solution Enablement

## Lattice Sentry



### Protect with Dynamic Trust

- Secure Hardware Creates Root-of-Trust for Systems
- Cryptographically Secured Supply Chain
- Protection Against Cloning, Counterfeiting, Trojan Insertion, & Simulation

## Lattice Automate



### Accelerating Factory Automation

- Complete solutions stack accelerates industrial automation development
- Supports common use cases including motor control, real-time networking, & predictive maintenance
- Complete solution enablement

# Easy-to-use Software Tools

## Lattice Diamond



**Powerful FPGA Design & Verification Environment**

Easy Design Exploration

Easy to Use Powerful Tools

Optimized for Lattice Devices

## Lattice Radiant



**Best-in-class, Easy-to-use Design Software**

Simplified Flow for Faster Design

Increase Re-use with IP Tools

Leading Synthesis & Simulation

## Lattice Propel



**Complete Toolset for FPGA-based Embedded System Design**

IP System Integration Environment

Software Development Kit & Libraries

Build, Compile, Analyze, Debug



# Expanding Our Leadership Portfolio

## SOFTWARE SOLUTIONS

**LATTICE**  
*sensAI*

**LATTICE**  
mVision

**LATTICE**  
Sentro

**LATTICE**  
Automate

Lattice 5G  
ORAN Stack

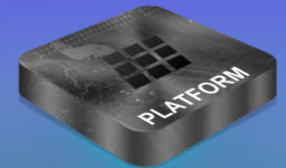
LAUNCHING H1 2022

Next Solution  
Stack

TO BE ANNOUNCED

## HARDWARE DEVICES

**LATTICE AVANT™**



LAUNCHING H2 OF 2022

## LATTICE NEXUS

**LATTICE**  
SEMICONDUCTOR

CrossLink-NX

**LATTICE**  
SEMICONDUCTOR

Certus-NX

**LATTICE**  
SEMICONDUCTOR

Mach-NX

**LATTICE**  
SEMICONDUCTOR

CertusPro-NX

**LATTICE**  
SEMICONDUCTOR

Nexus #5

**LATTICE**  
SEMICONDUCTOR

Nexus #6

LAUNCHING H1 2022

TO BE ANNOUNCED

# Innovating for the Future with Avant

## LATTICE **AVANT**

*Target Launch H2 of Next Year*

### CUSTOMER BENEFITS

- Market leading power efficiency
- Advanced FPGA architecture
- Scalable to 5X the capacity of Nexus
- Higher system bandwidth
- Breakthrough system features
- Leverages existing software portfolio
- More to be announced at launch



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# Positioned in Growing Markets

## COMMUNICATIONS



5G Wireless

Switches/Routers

## COMPUTE



Servers

Client

## INDUSTRIAL



Industrial IoT

Factory Automation

## AUTOMOTIVE



ADAS

Infotainment

## CONSUMER



Smart Home

Wearables

## Leading the Industry in Low Power Programmability



# Lattice Solves Communications Challenges

Scalable Hardware Management



5G ORAN



Secure Control



ASIC Bridging



PCIe Bridging





# Lattice Solves Client Computing Challenges

## AI Capable

Aware of surrounding  
User detection & wellness

## Enhanced Security

Platform Firmware Resilience

## Seamless Interfacing

MIPI bridging  
Sensor fusion

## Small Form Factor

Single wire aggregation

Client Computing is a Greenfield Opportunity for Lattice



# Lattice Solves Datacenter Challenges





# Lattice Solves Industrial Challenges

Industrial Networking



Functional Safety



Programmable Logic Controller



Edge Computing



Touchless Control



Predictive Maintenance



Machine Vision



Package Detection



Motor Control



Sensor Bridging



Collision Avoidance





# Lattice Solves Automotive Challenges

## INFOTAINMENT

De-Fog

360° Surround View

Display Bridging

ISP

## ADAS

Radar Sensor Bridging & Aggregation

Image Sensor Bridging & Aggregation

## IN CABIN AI

Human Presence Detection

Driver Monitoring

## SECURITY

Secure Battery Mgt.

Secure Boot



# Lattice Solves Consumer Challenges

Drones



AR / VR



Smart Appliance



Smart Speaker



Consumer Robots



Video Surveillance



Wearable



Smart Doorbell



Smart Toys





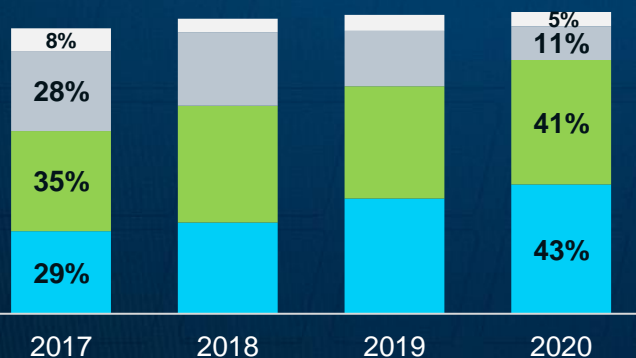
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# Strong Financial Execution

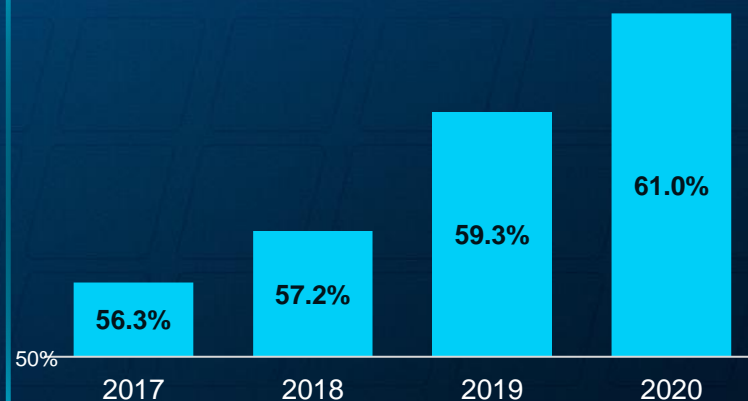
## REVENUE

Comms/Compute Industrial/Auto Consumer IP



Growth in Core Strategic Markets

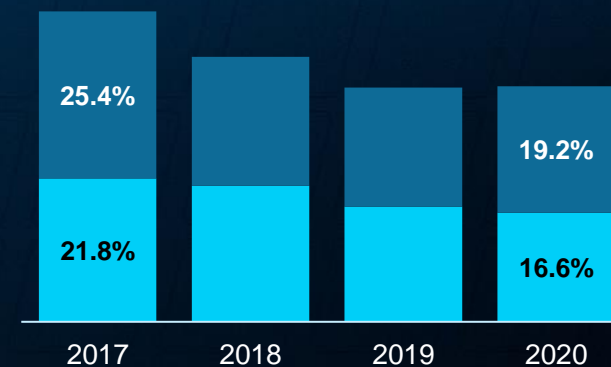
## GROSS MARGIN\*



Gross Margin Expansion

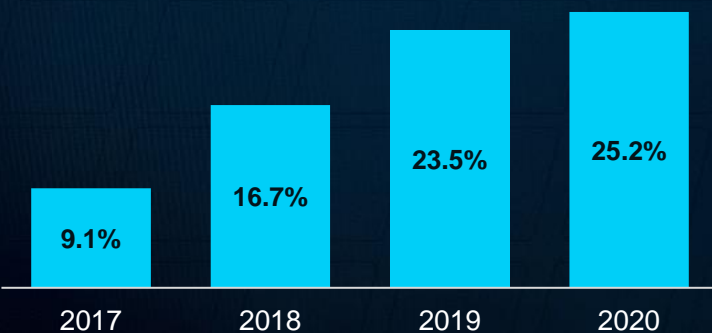
## OPEX\*

SG&A R&D



OpEx Discipline

## OPERATING INCOME\*



Record Operating Income

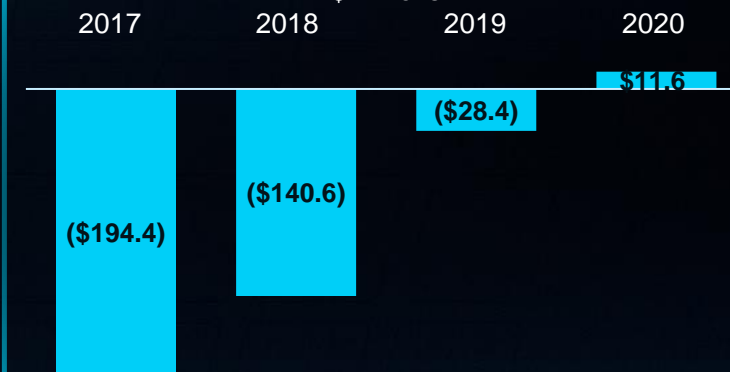
## EARNINGS PER SHARE\*



EPS Expansion

## NET CASH

\$ Millions



Positive Net Cash Position



# Q2'21 Financial Highlights

