

The Low Power Programmable Leader

June 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







### **Lattice Semiconductor Overview**

### **APPLICATIONS & MARKETS**

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



43%



**AUTOMOTIVE** 

41%



LICENSING SERVICES

16%

### **WORLD CLASS SUPPLIER**

World's largest volume supplier of FPGA

# Tier 1

Supplier with 38 years of innovation













### **GROWING CUSTOMER BASE**





Microsoft NOKIA Panasonic

Raytheon

**SIEMENS** 

SONY

ZTE

# **GLOBAL SUPPORT** Development Ctr. Operations Ctr. Sales 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**









### **Committed to Sustainable Business Practices**



# Agenda







### **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 (6 x 6 mm) with 5G PCIe & GigE support
- Up to 150K LUTs with significant compute under 1 W and lowest power 5G SERDES

#### 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**

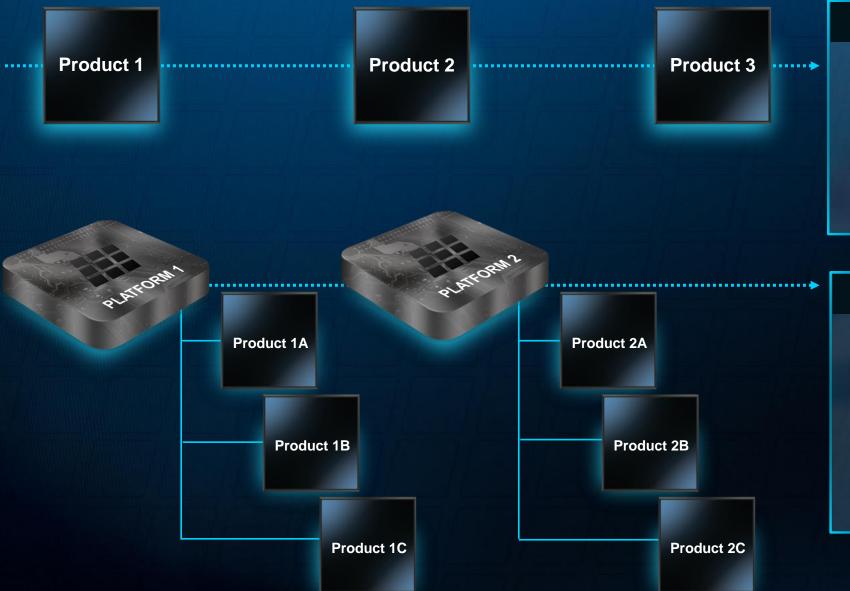


Optimized for platform management & security applications

- 50% market share
- Highest I/O density



# **Our Platform Based Design Approach**



### **PRIOR METHOD**

- Pre-Nexus products
- Lack of reuse and scale
- Longer development time

### **NEW METHOD**

- Nexus and future products
- Lower development cost
- Faster time to market



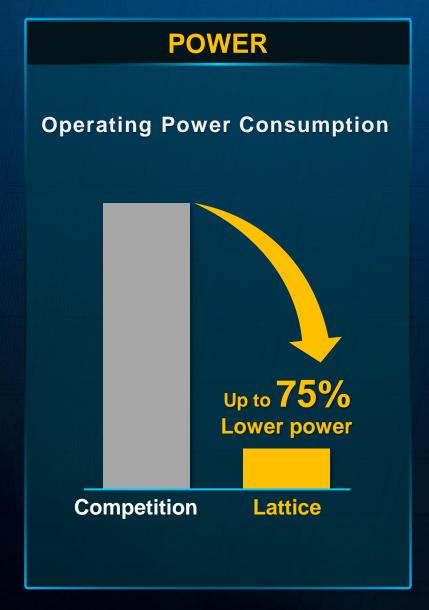
# LATTICE NEXUS

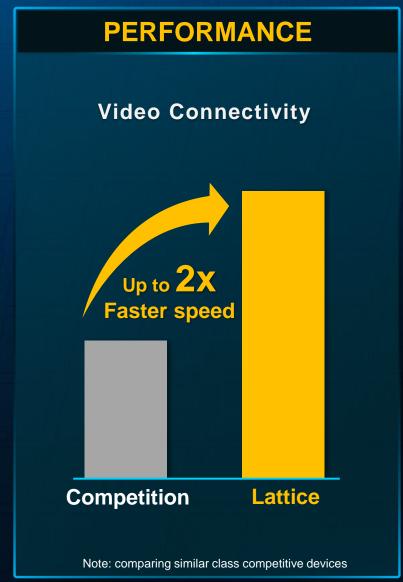
### FD-SOI Small FPGA Platform

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



# **Lattice Nexus is Changing the FPGA Landscape**









### **New Nexus-based Low Power Silicon**

### **CrossLink-NX**



**Embedded Vision Processing** 

Built on the Lattice Nexus Platform

Optimized Low Power Architecture

**AVAILABLE NOW** 

### **Certus-NX**



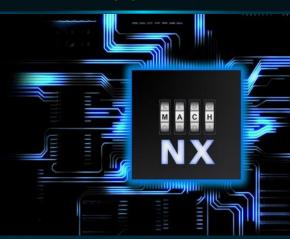
General Purpose Processing

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

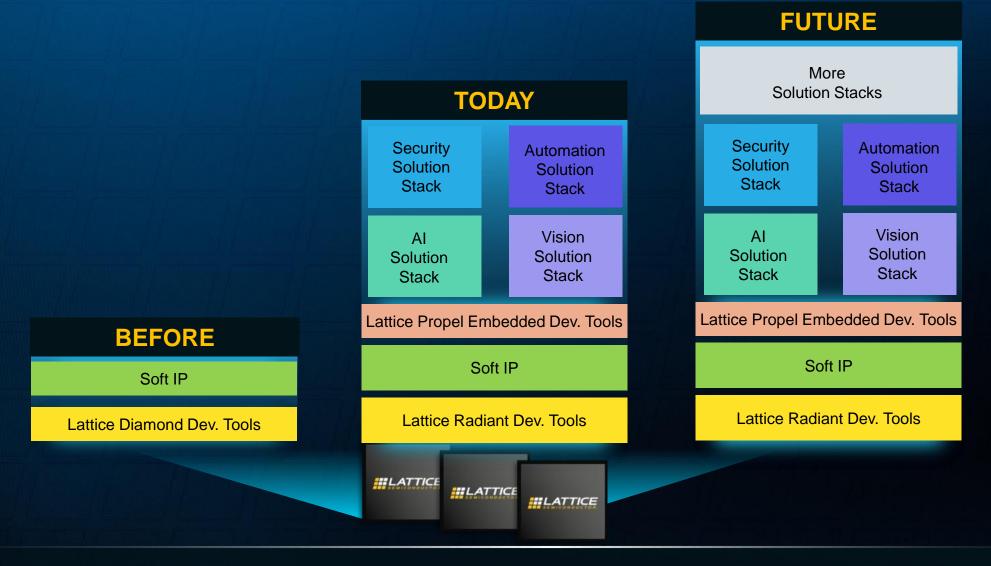
Industry leadership in power efficiency

Best in class system bandwidth

**LAUNCHING JUNE 2021** 



# Lattice's Expanded System Solutions

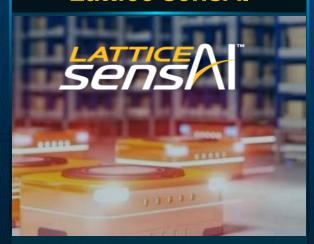


Bringing Additional Value to Our Customers



### **Value-Added Solution Stacks**

### **Lattice sensAl**



# Low Power Edge Al

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

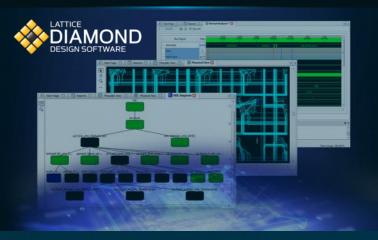
Supports common use cases including motor control, real-time networking, & predictive maintenance

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 5G ORAN Stack

LAUNCHING H1 2022

Next Solution Stack

TO BE ANNOUNCED

**HARDWARE DEVICES** 

### LATTICE AVANT



LAUNCHING H2 OF 2022

### LATTICE NEXUS



CrossLink-NX

**##LATTICE**Certus-NX

##LATTICE
Mach-NX

##LATTICE
CertusPro-NX

**LAUNCHING JUNE 2021** 

**##LATTICE** 

Nexus #5

LAUNCHING H1 2022

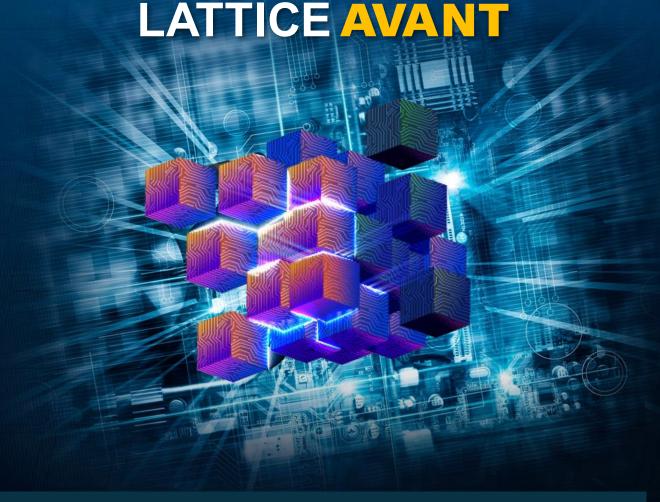
## LATTICE

Nexus #6

TO BE ANNOUNCED



# **Innovating for the Future with Avant**



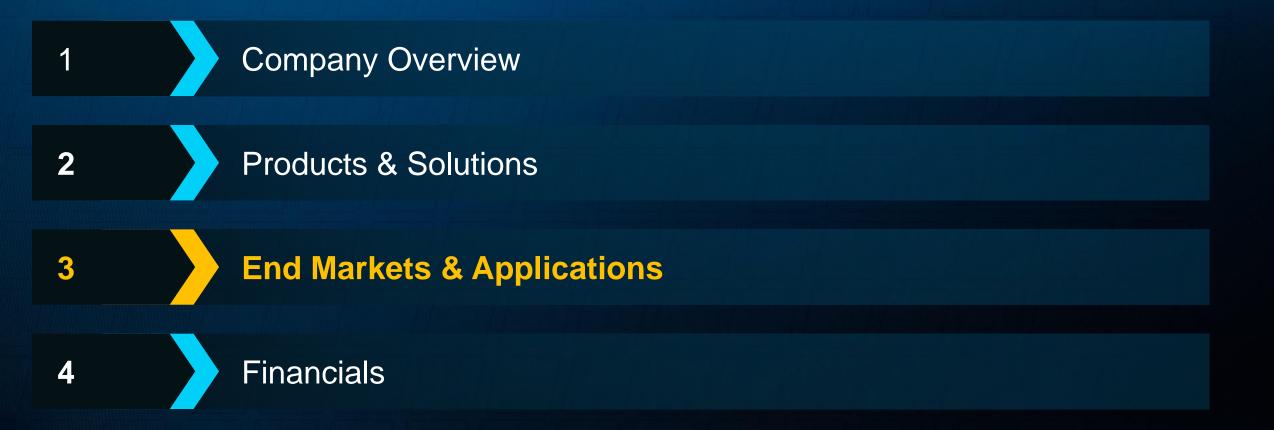
### Target Launch H2 of Next Year

### **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



# Agenda





# **Positioned in Growing Markets**



5G Wireless
Switches/Routers



Servers

Client



Industrial IoT
Factory Automation



ADAS
Infotainment



Smart Home Wearables

# Leading the Industry in Low Power Programmability



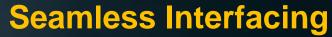
# Lattice Solves Communications Challenges



# **Lattice Solves Client Computing Challenges**

### Al Capable

Aware of surrounding User detection & wellness



MIPI bridging Sensor fusion

### **Enhanced Security**

Platform Firmware Resilience

### **Small Form Factor**

Single wire aggregation

Client Computing is a Greenfield Opportunity for Lattice



# Lattice Solves Datacenter Challenges



**Platform Firmware Resilience** 



**System Control** 



**Card Interface** 



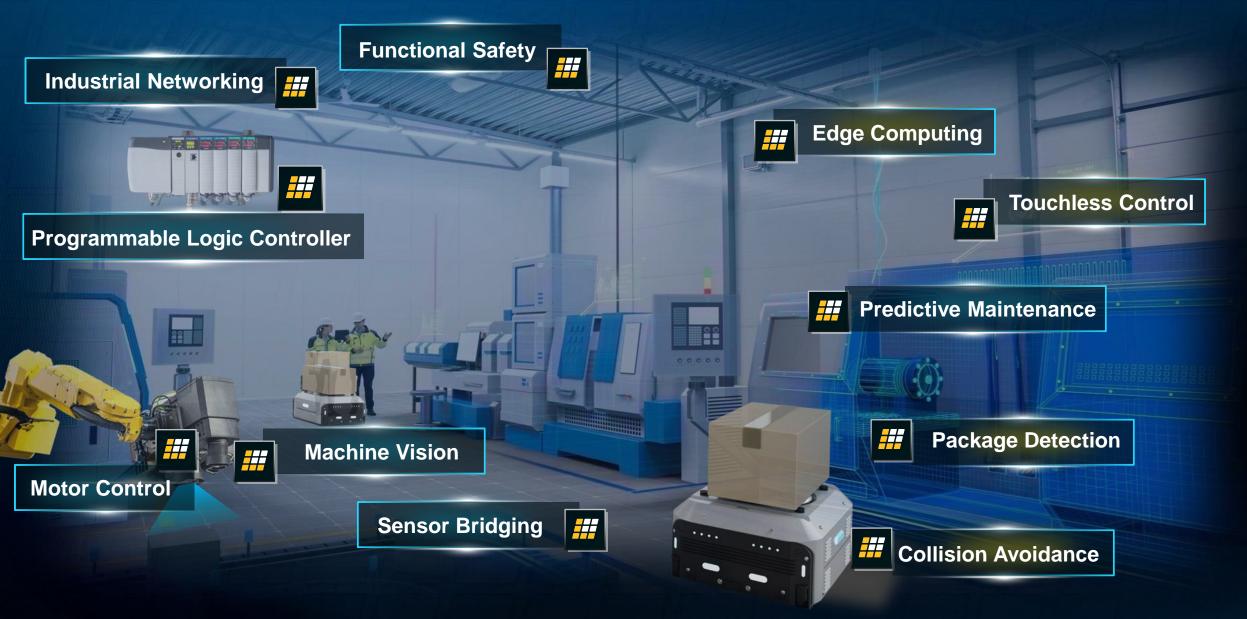
**Compute Acceleration** 



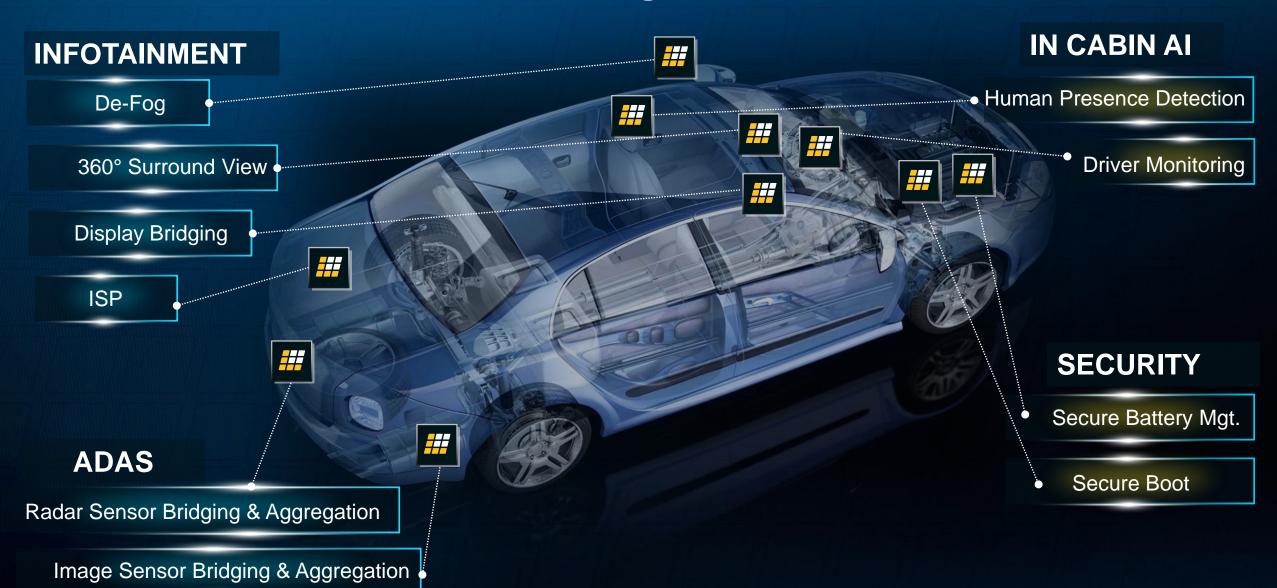
**Power Sequencing** 



# **Lattice Solves Industrial Challenges**



# **Lattice Solves Automotive Challenges**



# **Lattice Solves Consumer Challenges**

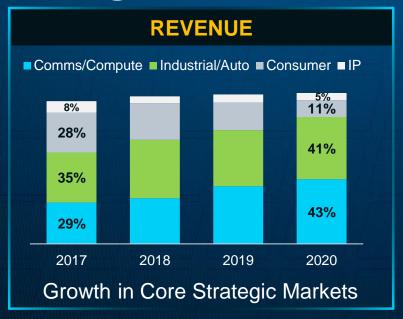


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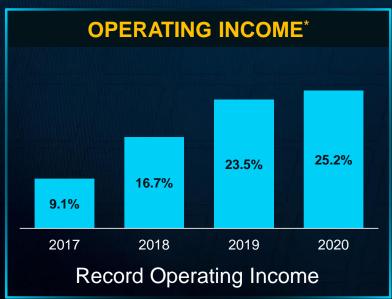


# **Strong Financial Execution**















# **Q1'21 Financial Highlights**









