

GITI Forum 2022, Waseda

# Intel IDM 2.0 Strategy

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Intel Corporation

June 4, 2022



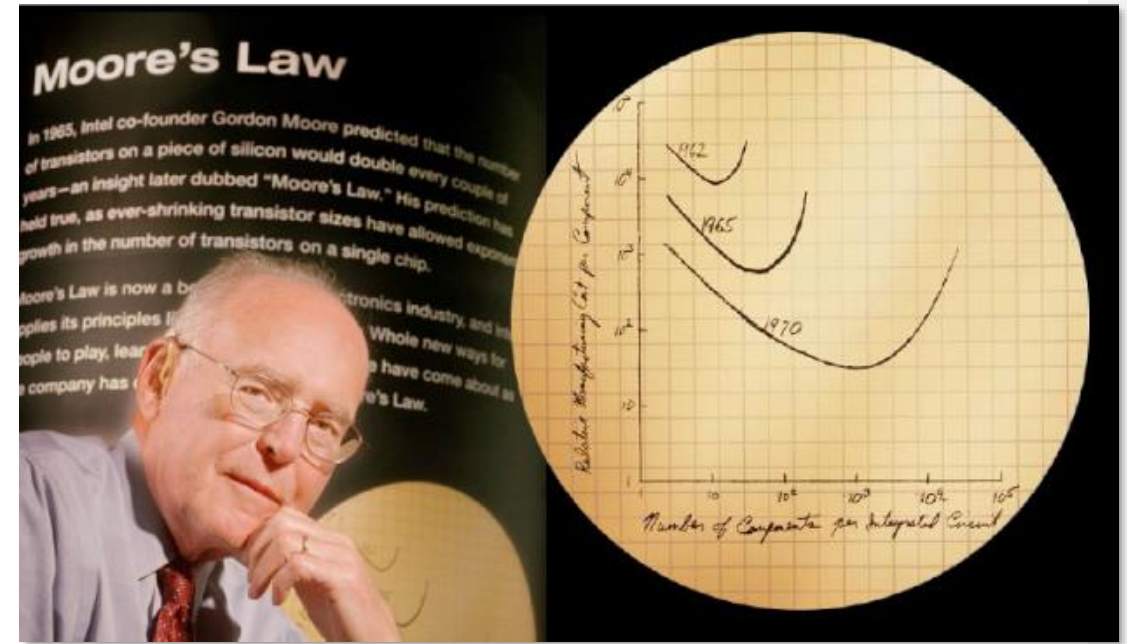
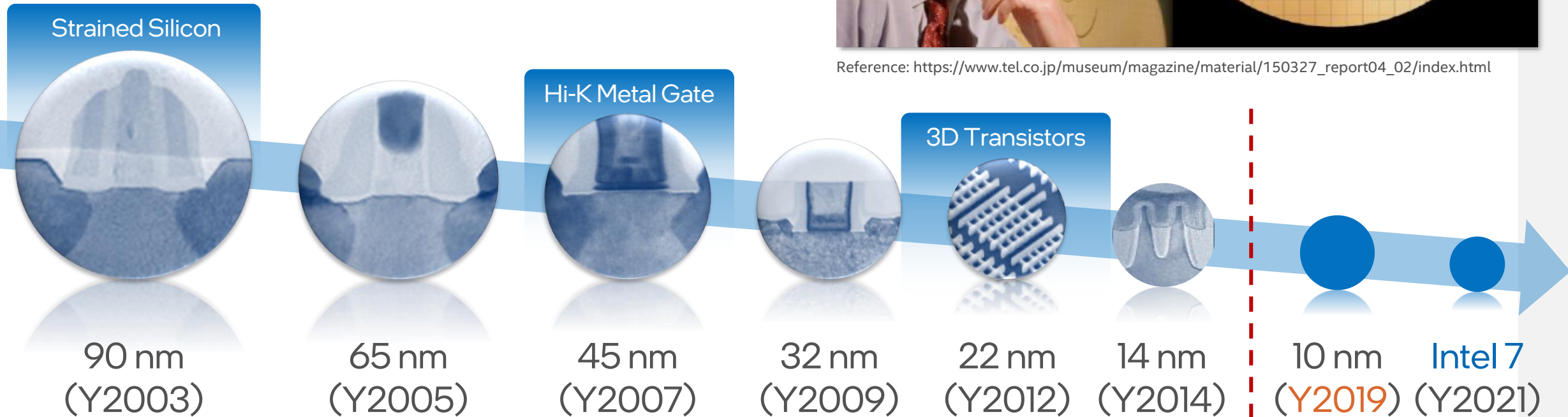
# Forward-Looking Statements

Statements in this press release that refer to future plans and expectations, including with respect to Intel's manufacturing expansion and investment plans in the European Union (EU), are forward-looking statements that involve a number of risks and uncertainties. Words such as "anticipates," "expects," "intends," "goals," "plans," "believes," "seeks," "estimates," "continues," "may," "will," "would," "on track," "should," "could," and variations of such words and similar expressions are intended to identify such forward-looking statements. Statements that refer to or are based on estimates, forecasts, projections, uncertain events or assumptions, including statements relating to the anticipated benefits of Intel's planned EU investments, including with respect to meeting future demand and future capacity expansion; anticipated supplier, ecosystem, community, and government support and approval for Intel's planned EU investments and anticipated benefits related to such support; the proposed transaction between Intel and Tower Semiconductor (Tower), including statements regarding the benefits and the timing of the transaction, as well as statements regarding the companies' products, customers, and markets; additional future site investments and the timing of such investments; anticipated construction and production timing for Intel's planned factories; future products and technology and the availability and benefits of such products and technology, including future transistor technology; environmental plans for and benefits from Intel's factories and technologies, including regarding energy use, water use, and waste; future external foundry business; plans and goals related to Intel's foundry business; foundry service offerings; market opportunity; and anticipated trends in our businesses or the markets relevant to them, also identify forward-looking statements. Such statements are based on management's expectations as of the date they were first made and involve risks and uncertainties that could cause our actual results to differ materially from those expressed or implied in our forward-looking statements. Important factors that could cause actual results to differ materially include, among others, Intel's failure to realize the anticipated benefits of its strategy, plans, and proposed transactions; construction delays or changes in plans due to business, economic, or other factors; increases in capital requirements and changes in capital investment plans; adverse changes in anticipated government incentives and associated approval related to Intel's planned EU investments; adverse legislative or other government actions; insufficient ecosystem support; the risk that the proposed transaction with Tower may not be completed in a timely manner or at all; uncertainties as to the timing of the consummation of the Tower transaction and the potential failure to satisfy the conditions to the consummation of the transaction, including the receipt of certain governmental and regulatory approvals; demands in Tower customer end markets and for Tower foundry services and/or products that exceed Tower's capacity; the impact of macroeconomic and geopolitical trends and events; and the factors set forth in Intel's Securities and Exchange Commission (SEC) filings, including the company's most recent reports on Forms 10-K and 10-Q, which may be obtained by visiting our Investor Relations website at [www.intc.com](http://www.intc.com) or the SEC's website at [www.sec.gov](http://www.sec.gov). Intel does not undertake, and expressly disclaims any duty, to update any statement made in this press release, whether as a result of new information, new developments or otherwise, except to the extent that disclosure may be required by law.

# Challenges in Moore's Law\*

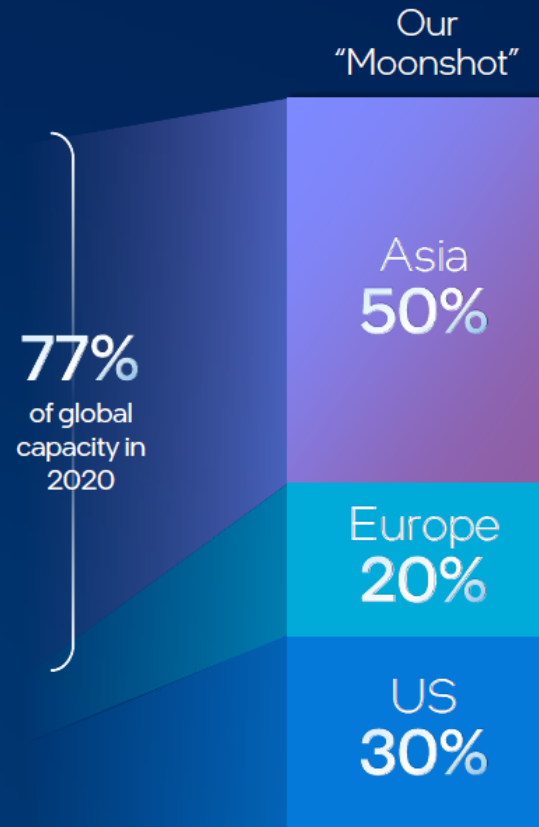
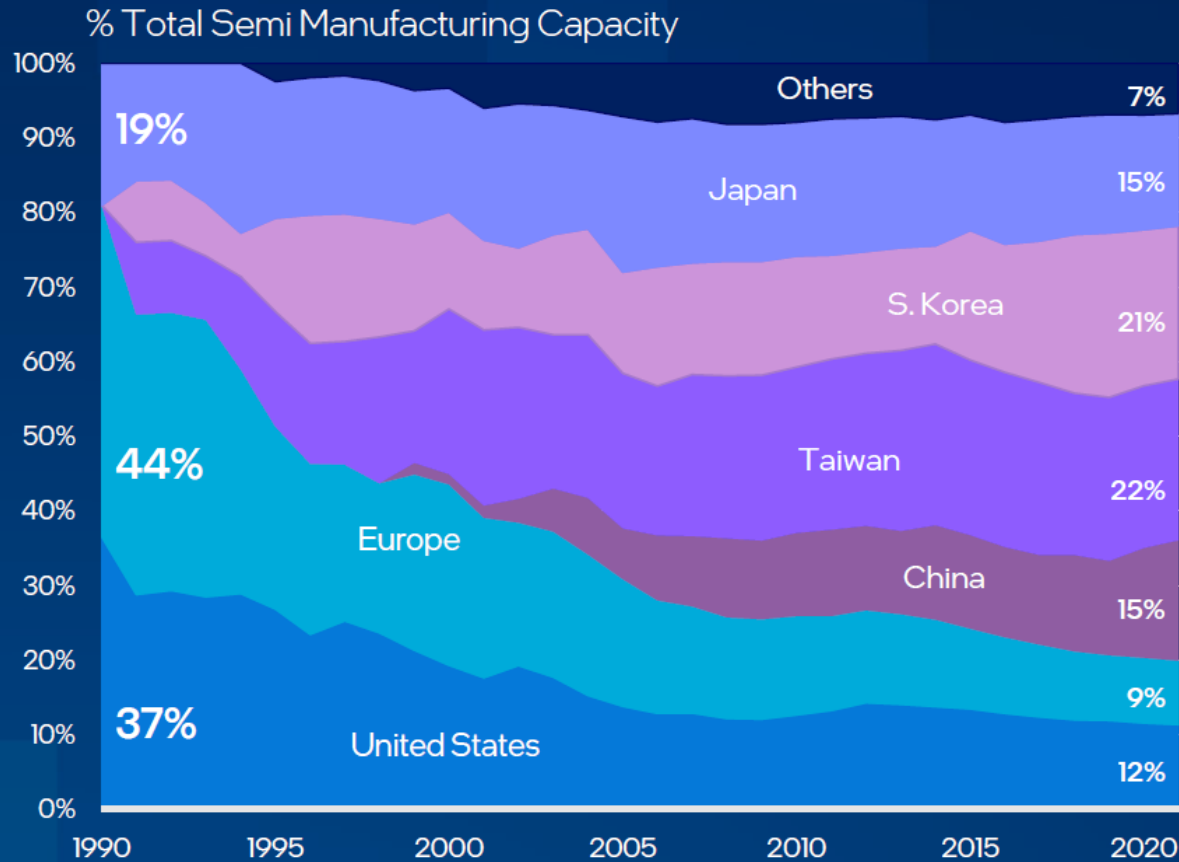
\* The number of transistors in an integrated circuit doubles approximately every two years

Enabling new devices  
with higher functionality and complexity  
while controlling power, cost, and size



Reference: [https://www.tel.co.jp/museum/magazine/material/150327\\_report04\\_02/index.html](https://www.tel.co.jp/museum/magazine/material/150327_report04_02/index.html)

# The world needs more balanced and resilient supply chains



"These chips are a wonder of innovation and design that power so much of our country and enable so much of our modern lives to go on ..... We need to make sure these supply chains are secure and reliable"

—Joe Biden,  
President of the United States

"It is not an exaggeration to say at the moment that we have a crisis in our supply chain... [it's] a national security risk and an economic security risk."

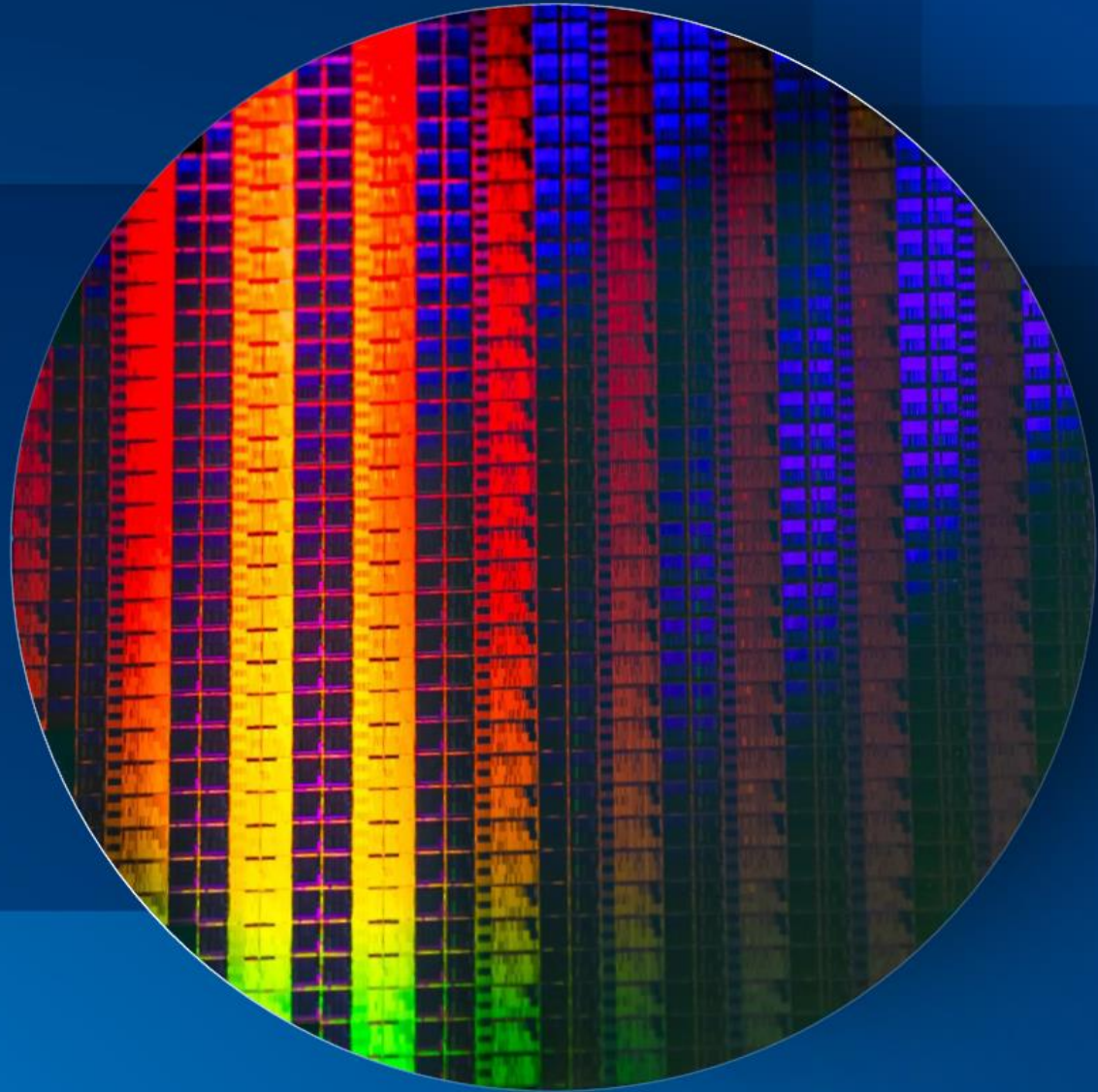
—Gina Raimondo,  
US Commerce Secretary,  
on CHIPS Act for America

"The aim is to jointly create a state-of-the-art European chip ecosystem, including production. That ensures our security of supply and will develop new markets for ground-breaking European tech."

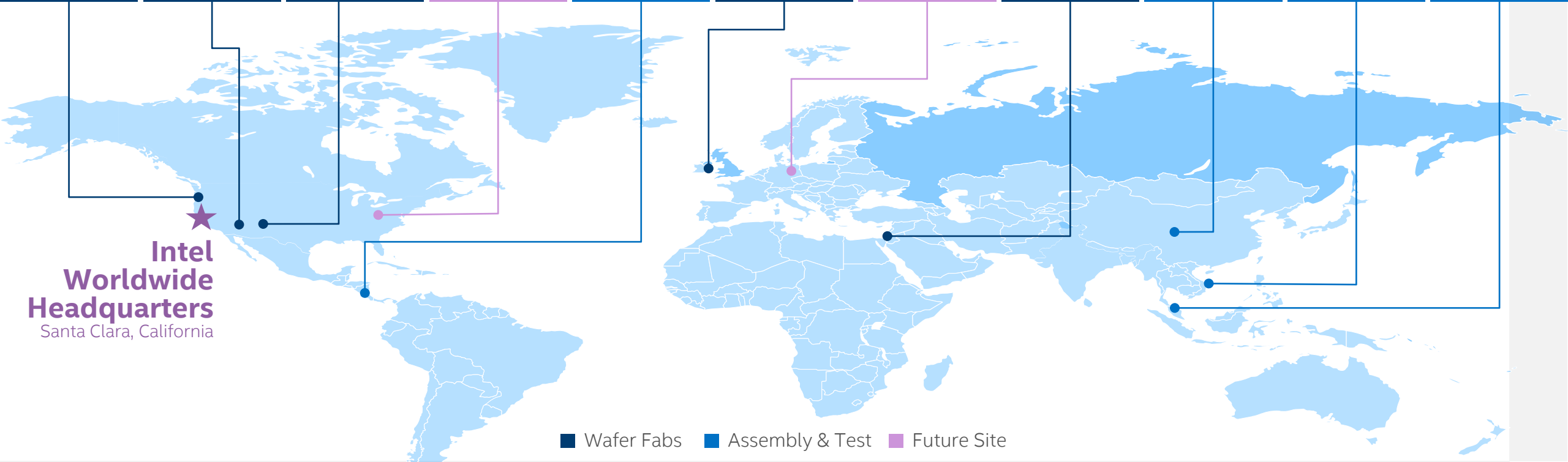
—Ursula von der Leyen,  
EU President, on the EU Chips Act



# Regaining process leadership



# Geographically Diverse Manufacturing Capacity



**Intel**  
**Worldwide**  
**Headquarters**  
Santa Clara, California



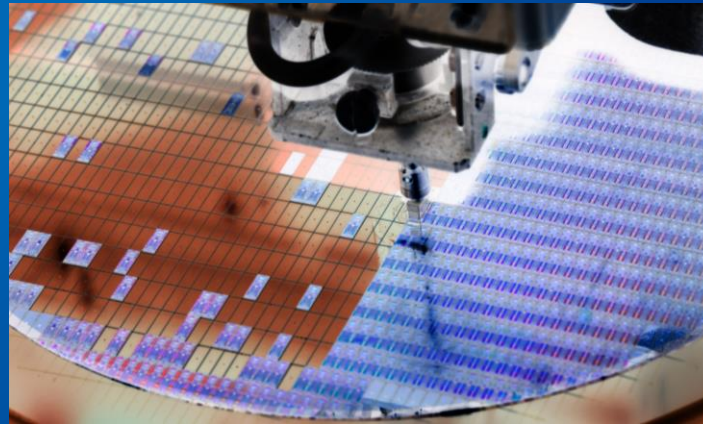
# Intel Delivering Leadership Manufacturing: IDM 2.0

## Internal Factory Network



Intel's global, internal factory network for at-scale manufacturing

## External Foundries



Expanded use of third-party foundry capacity

## Intel Foundry



Building a world-class foundry business, Intel Foundry Services

Leveraging Intel's leading-edge packaging & process technology & world-class IP portfolio

# Road to Tech Leadership

Creating a consistent framework and more accurate view of process nodes

**10nm**  
SuperFin

**Intel 7**

**Intel 4**

**Intel 3**

**Intel 20A**

A = Å (Angstrom), 0.1nm

**RibbonFET**  
new gate all around transistor architecture

**PowerVia**  
new backside power delivery network

**Intel 20A**

intel foundry services

**Qualcomm**

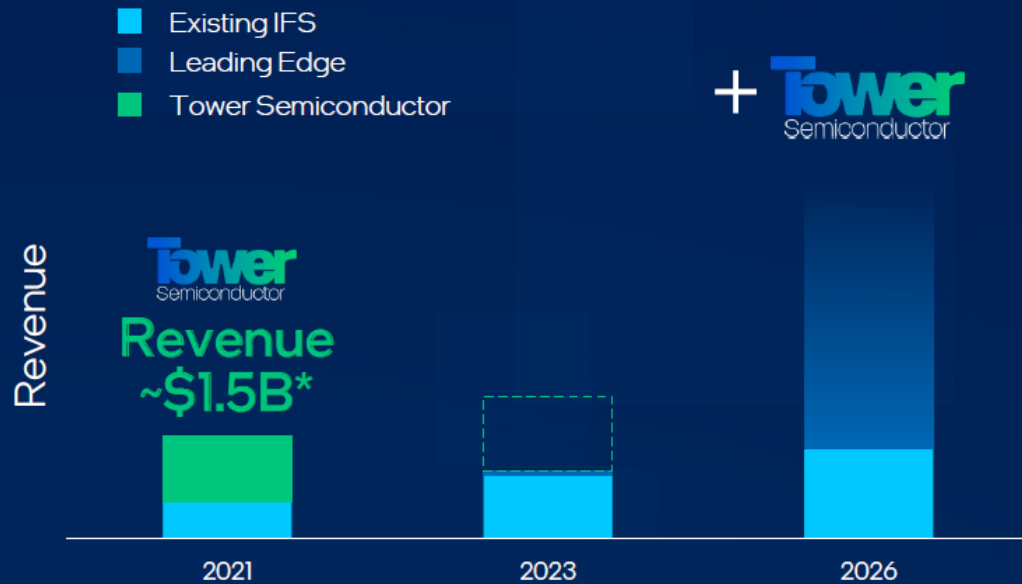
"Qualcomm is excited about the breakthrough RibbonFET and PowerVia technologies coming in Intel 20A. We're also pleased to have another leading-edge foundry partner enabled by IFS that will help the U.S. fabless industry to bring its products to an onshore manufacturing site."

— Cristiano Amon  
President and Chief Executive Officer, Qualcomm

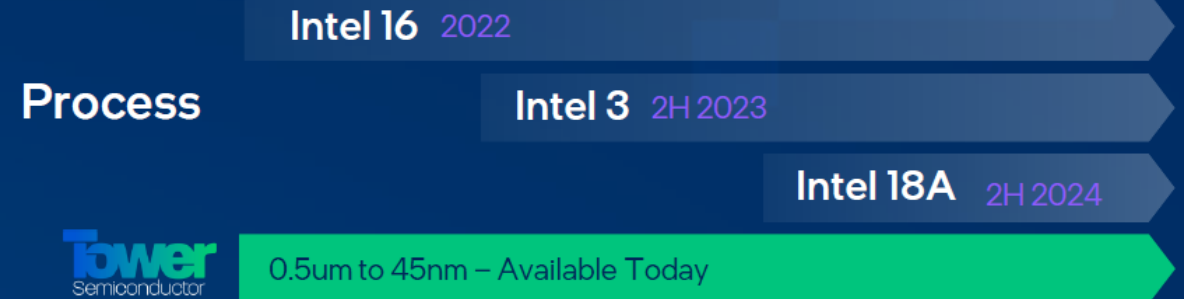
intel accelerated



# With a wide range of process, IP, and packaging, IFS will become the trusted provider of foundry services



Tower Semiconductor accelerates our entry into the foundry market



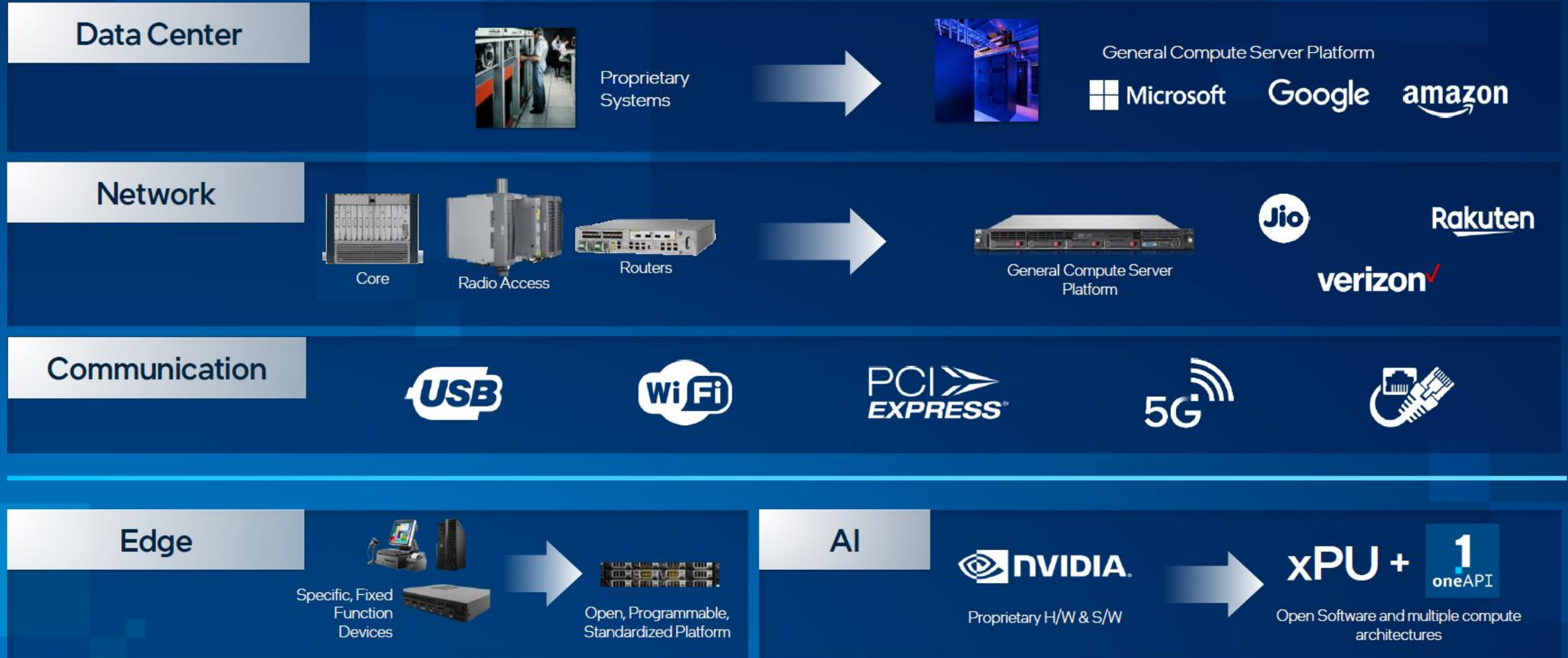
- Specialty node leader. 20 years of foundry experience
- Deep customer and ecosystem relationships
- Global manufacturing footprint

# We are unlocking the \$1T market opportunity by **expanding the power of open**



# Open ecosystems

continue to unleash innovation and democratize compute





Every aspect of human existence is becoming more digital creating an era of **sustained, long-term demand**



Ubiquitous Compute



Cloud-to-Edge Infrastructure

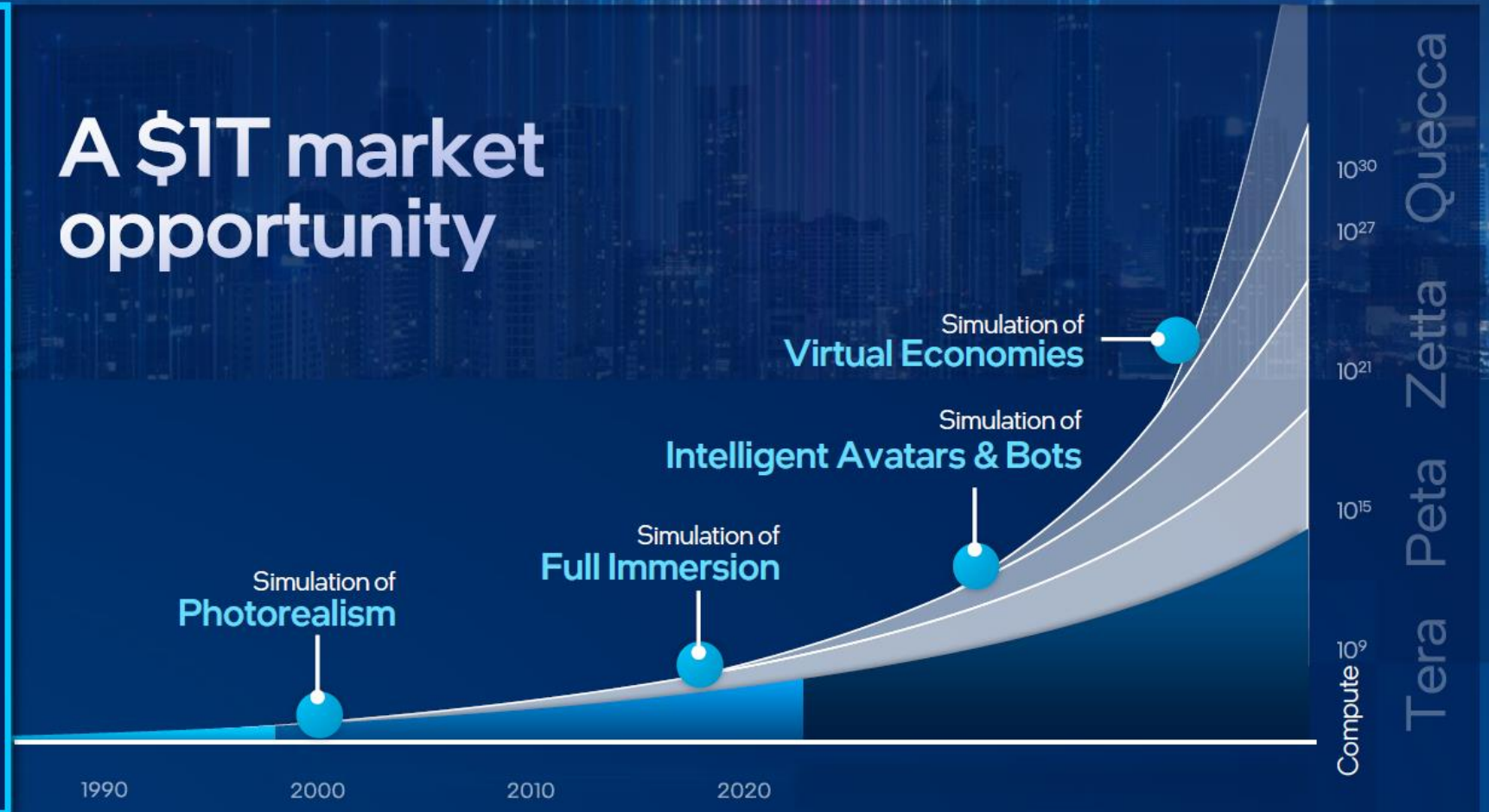


Pervasive Connectivity



Artificial Intelligence

## A \$1T market opportunity

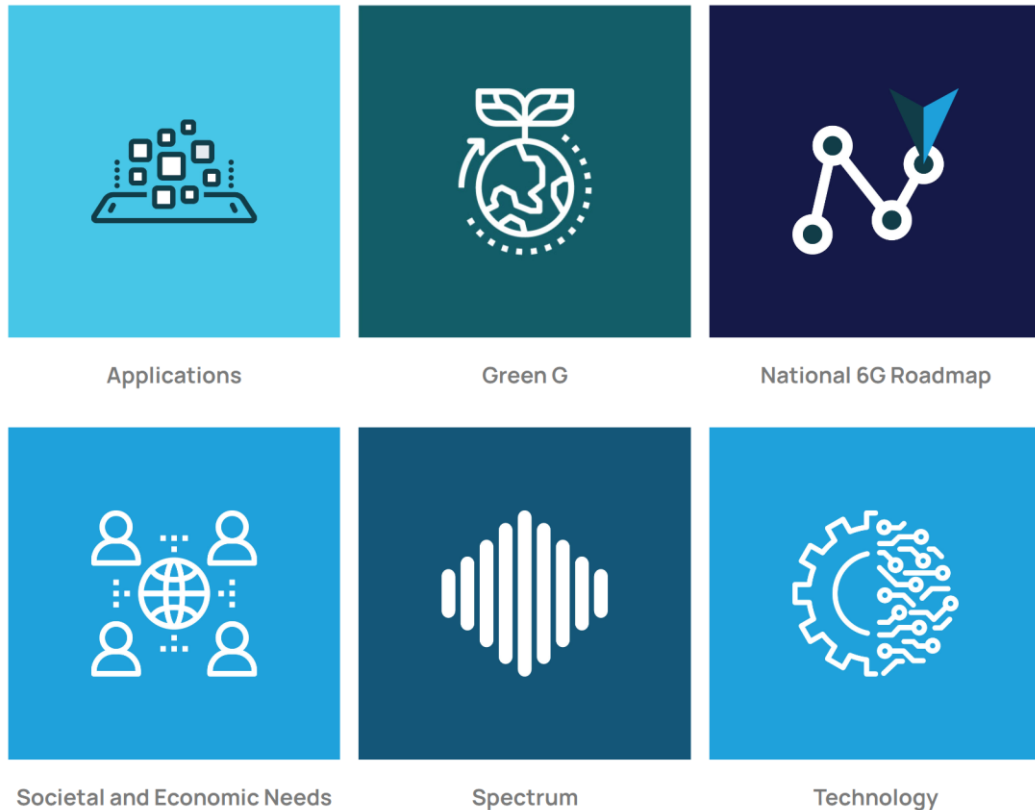


# Standards Bodies

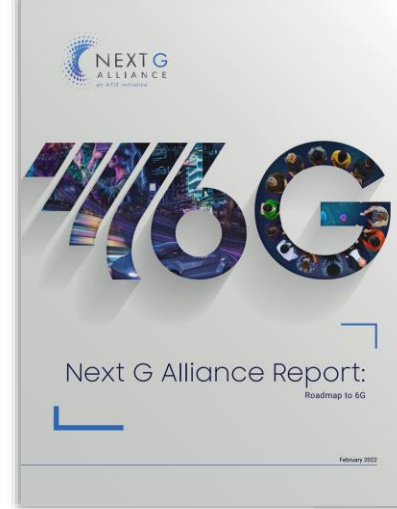
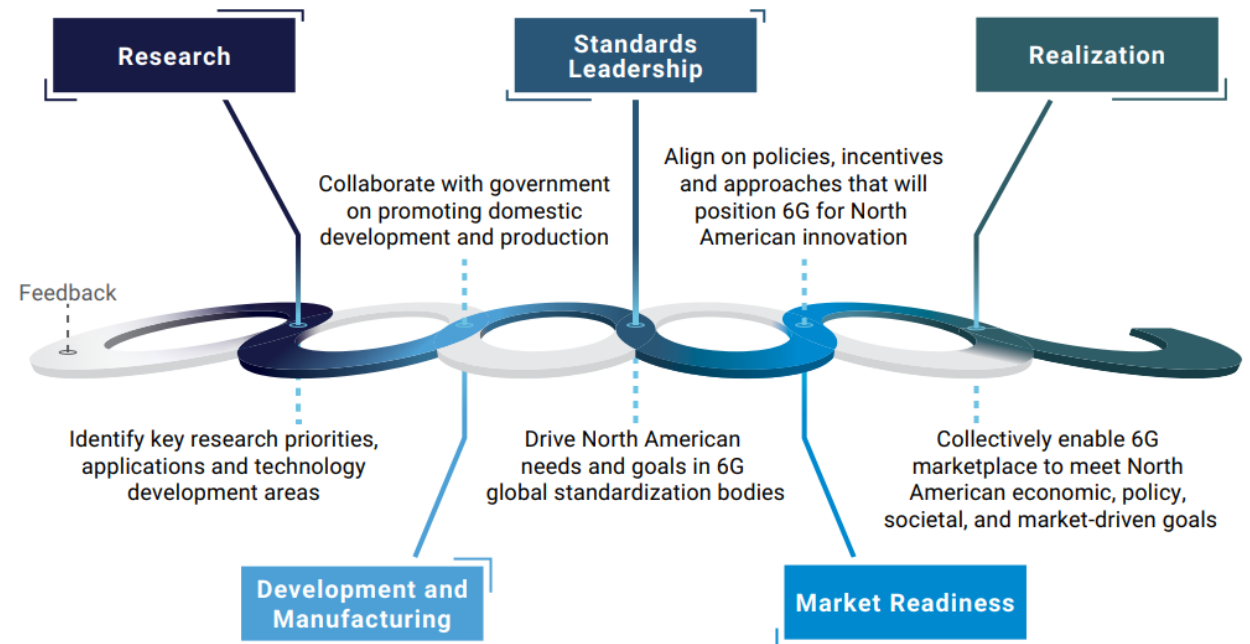


# Next G Alliance

## Working Groups



## 6G Roadmap Lifecycle





The Intel logo is centered on a solid blue background. It features the word "intel" in a white, lowercase, sans-serif font. A small blue square is positioned above the letter 'i'. To the right of the word "intel" is a registered trademark symbol (®).

intel®