



LEADING AT THE EDGE

TECHNOLOGY AND MANUFACTURING DAY

DISCLOSURES

Intel Technology and Manufacturing Day 2017 occurs during Intel's "Quiet Period," before Intel announces its 2017 first quarter financial and operating results. Therefore, presenters will not be addressing first quarter information during this year's program.

Statements in this presentation that refer to forecasts, future plans and expectations 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," "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 projections, uncertain events or assumptions also identify forward-looking statements. Such statements are based on management's expectations as of March 28, 2017, and involve many risks and uncertainties that could cause actual results to differ materially from those expressed or implied in these forward-looking statements. Important factors that could cause actual results to differ materially from the company's expectations are set forth in Intel's earnings release dated January 26, 2017, which is included as an exhibit to Intel's Form 8-K furnished to the SEC on such date. Additional information regarding these and other factors that could affect Intel's results is included in Intel's SEC filings, including the company's most recent reports on Forms 10-K, 10-Q and 8-K reports may be obtained by visiting our Investor Relations website at www.intc.com or the SEC's website at www.sec.gov.

STRATEGY OVERVIEW

STACY J. SMITH

Executive Vice President
Manufacturing, Operations and Sales

HOW SMALL IS 14 NM?



MARK
1.66 M

1,600,000,000 nm



FLY
7 MM

7,000,000 nm



MITE
300 UM

300,000 nm



BLOOD CELL
7 UM

7,000 nm



VIRUS
100 NM



TRANSISTOR
14 NM



SILICON ATOM
0.24 NM

10

1

100

10

1

100

10

1

100

10

1

METER

MILLIMETER

MICROMETER

NANOMETER

“The number of transistors and resistors on a chip doubles every 24 months”

-Gordon Moore

Two Implications:

1. Cost per square millimeter goes up over time
2. Doubling of transistors = “Scaling”
 - Improves performance
 - Cost per transistor declines

WHAT IF MOORE'S LAW IS APPLIED TO...

TRANSPORTATION?



We could travel to the Sun on a single gallon

AGRICULTURAL PRODUCTIVITY?



We could feed the world's population with 1km² of land

SPACE TRAVEL?

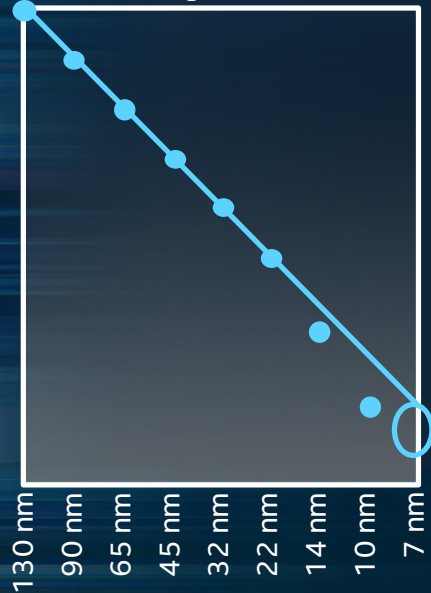


We could travel at 300x light-speed

IS MOORE'S LAW DEAD?

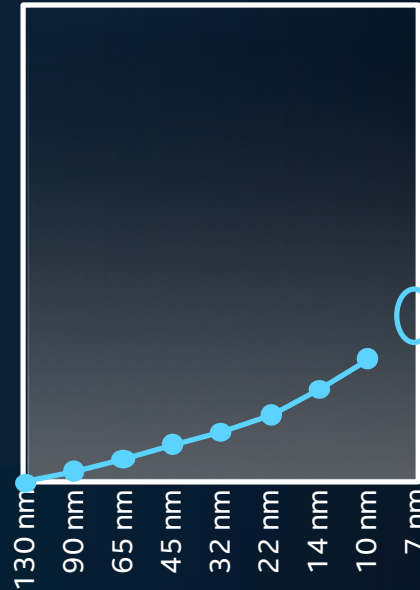
IS MOORE'S LAW DEAD? NO!

mm² / Transistor
(log scale)



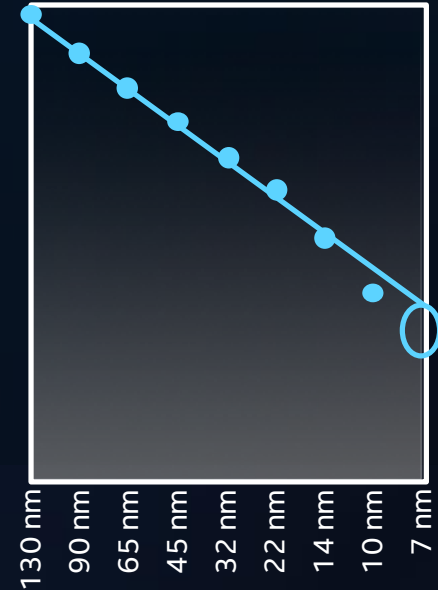
×

\$ / mm²
(log scale)



=

\$ / Transistor
(log scale)



10 nm and 7 nm forecasts are Intel estimates, based upon current expectations and available information. Source: Intel

*The time between nodes
has lengthened...*

**ARE YOU GETTING THE SAME
MOORE'S LAW BENEFIT?**

YES!

*Because we are getting
more scaling*

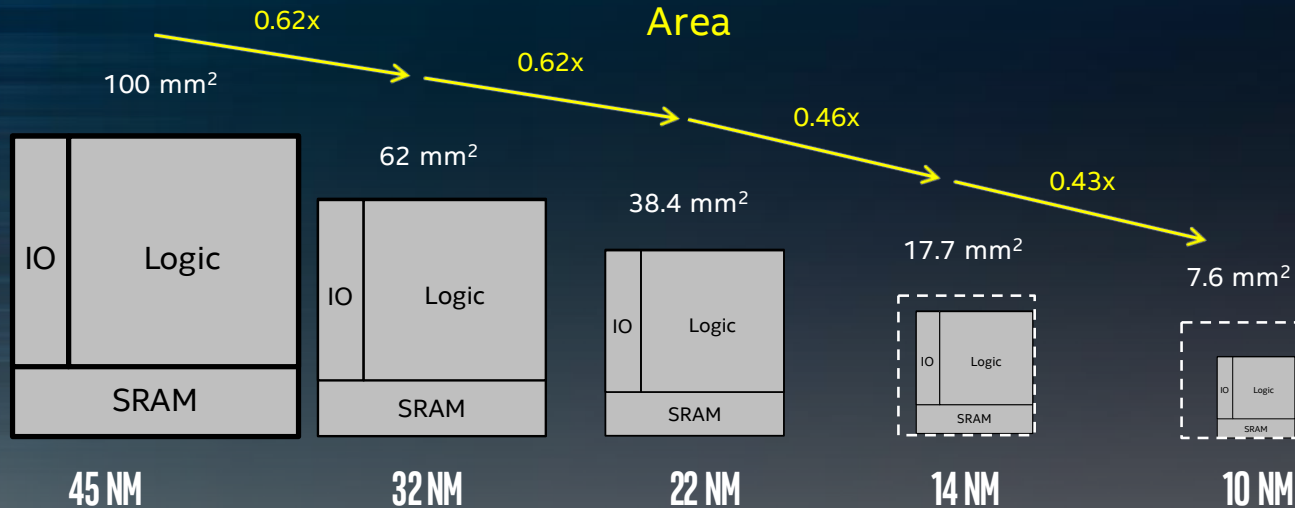
WE ARE HYPER SCALING

(on 14 nm & 10 nm)

*Hyper scaling enables us to achieve
accelerated density improvement*

*Intra-node optimizations enable an annual
cadence of product enhancements*

MICROPROCESSOR DIE AREA SCALING

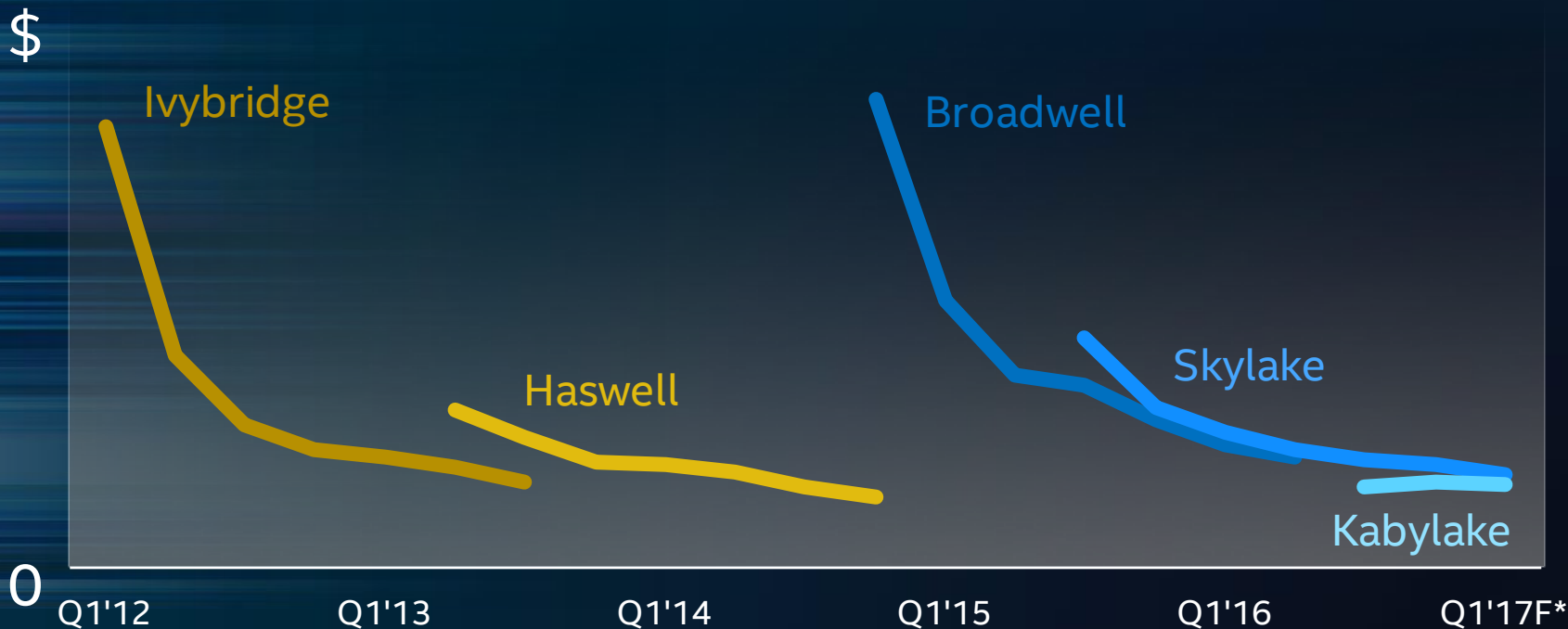


Hyper scaling delivers 0.46–0.43x die area scaling on 14 nm and 10 nm

10 nm forecast is an Intel estimate, based upon current expectations and available information.
Source: Intel

MOORE'S LAW TRANSLATES TO LOWER PRODUCT COSTS

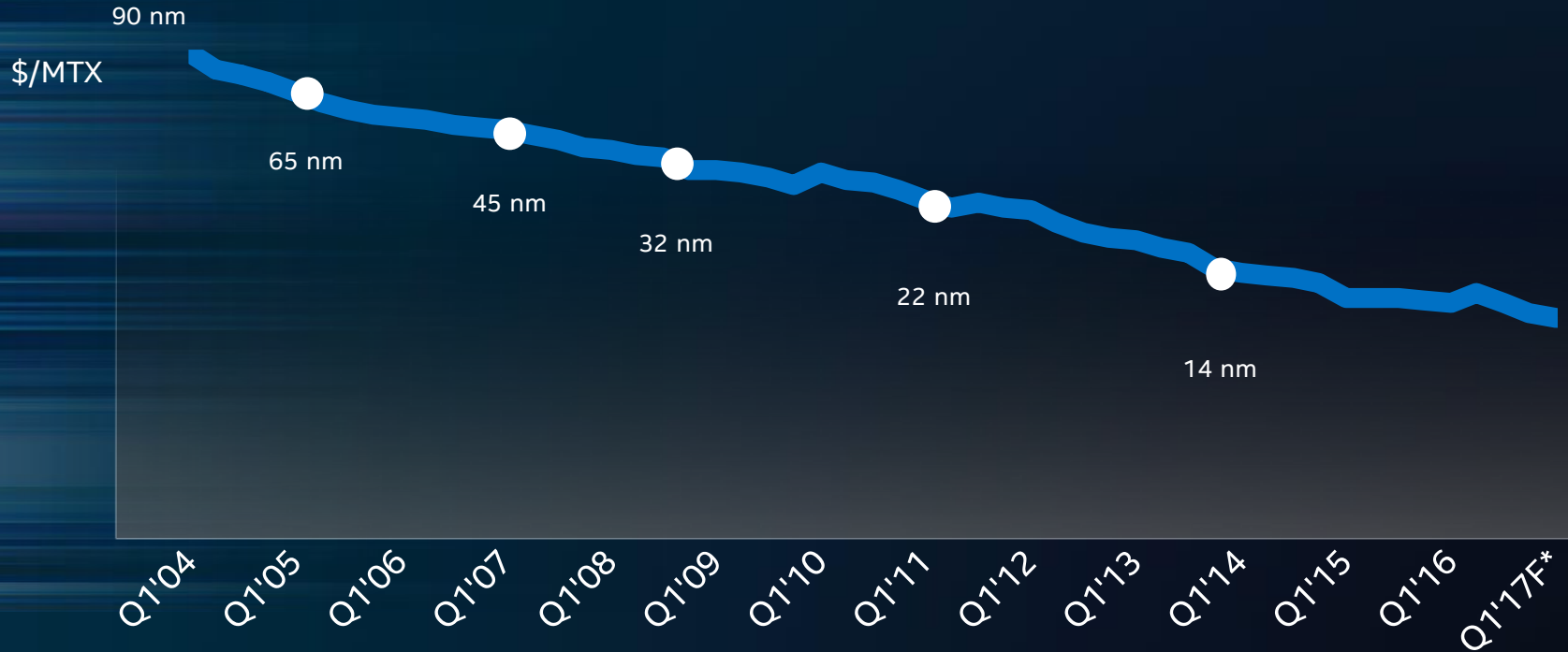
22 nm & 14 nm Client Cost Curves
(Launch + 5 quarters)



*Q1'17 forecast is an Intel estimate, based upon current expectations and available information.
Source: Intel

MOORE'S LAW IN ACTION...

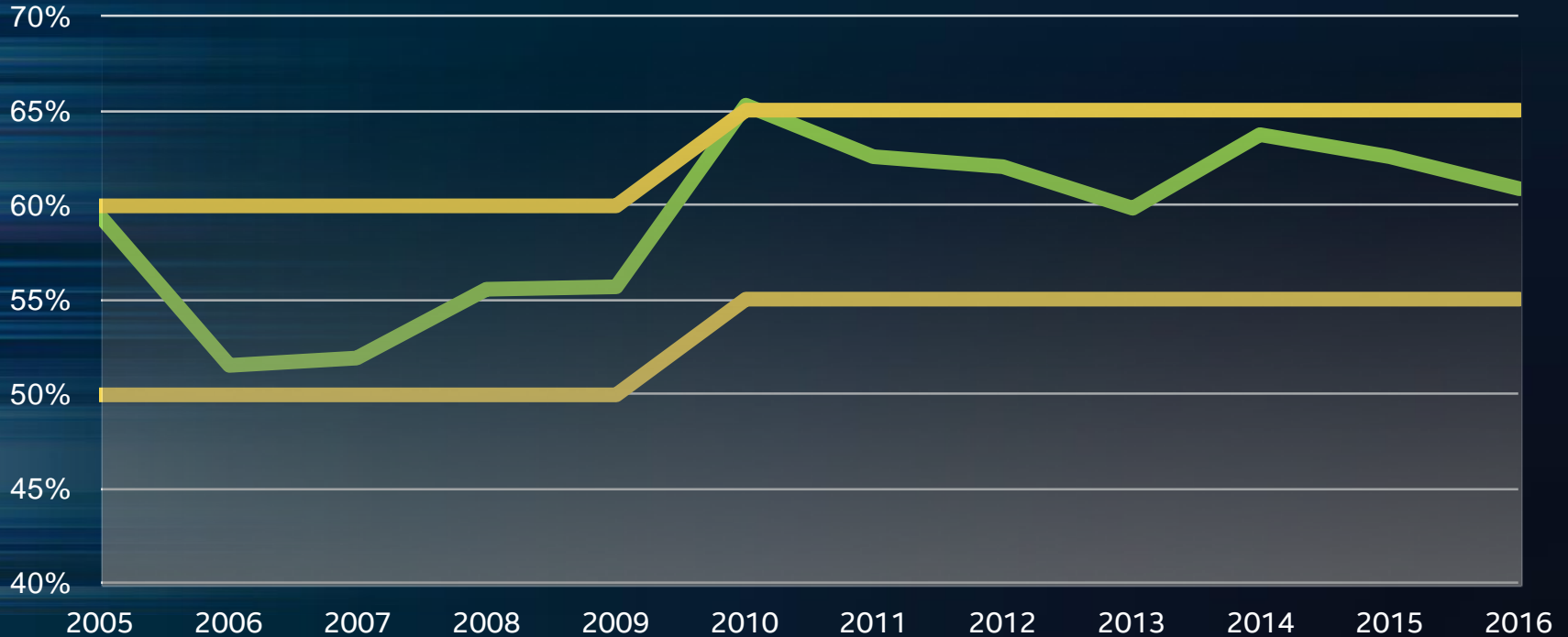
PC CPU Weighted Average Cost Per Transistor (\$/MTX)
(log scale normalized to 90 nm)



*Q1'17 forecast is an Intel estimate, based upon current expectations and available information.
Source: Intel

GROSS MARGINS

Gross Margin % Annual 2005 - 2016



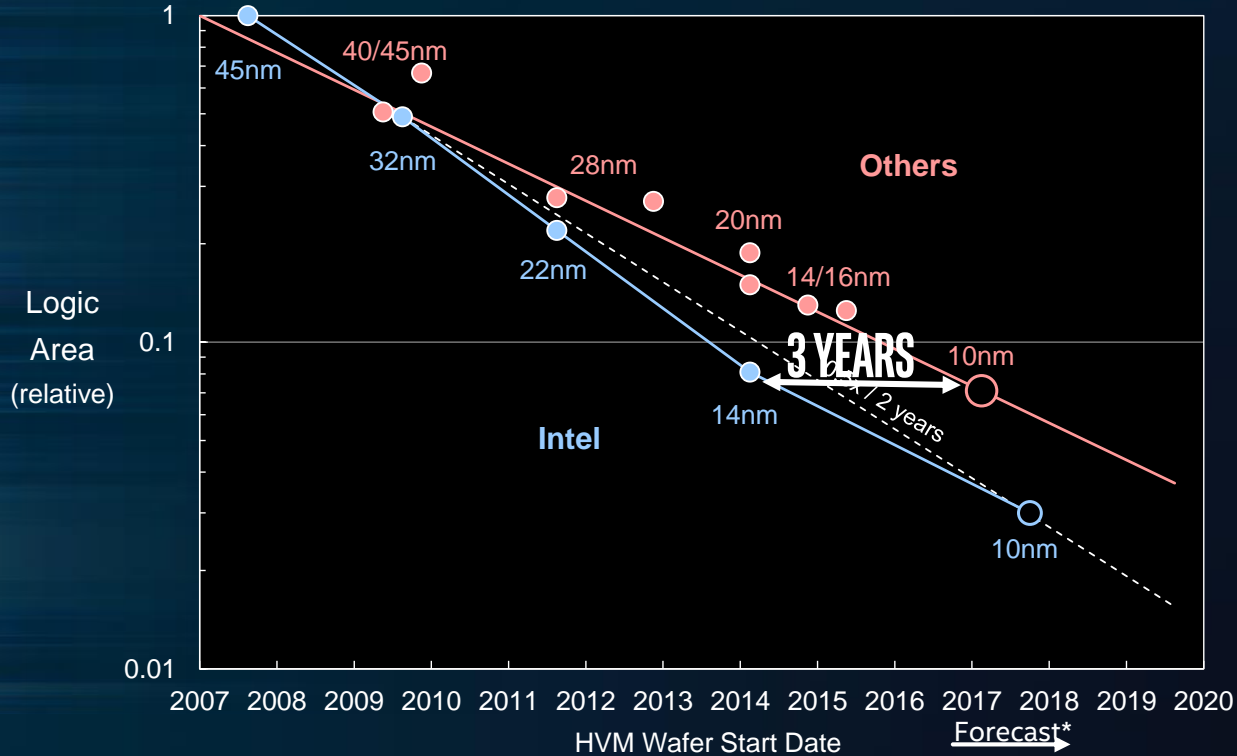
Source: Intel

*Competitors are
announcing 10nm this year...*

HAVE YOU LOST YOUR LEAD?

HAVE YOU LOST YOUR LEAD? NO!

14 NM IS ~3 YEARS AHEAD



*Forecast is an estimate, based upon current expectations and available information.
Source: Intel estimates.

OUR SCALE

INVESTMENT REQUIRED TO BUILD & EQUIP A LEADING EDGE WAFER FACTORY

~\$10B

Source: Intel

SI TECHNOLOGY IS BECOMING RARE

NUMBER OF PLAYERS WITH A LEADING EDGE LOGIC FAB



Other names and brands may be claimed as the property of others.
Source: Amalgamation of analyst data and Intel analysis.

FAB AND ASSEMBLY TEST SITES



Source: Intel

GLOBAL MANUFACTURING BY THE NUMBERS

INTEL EMPLOYEES

~30K

MANUFACTURING SPACE

>4M

SQUARE FEET
OF CLEANROOM

TRANSISTORS

>10B

MANUFACTURED
PER SECOND

UNITED STATES FOOTPRINT

US HIGH TECH JOBS

+50K

CONTRIBUTION
TO US GDP

~\$90B

\$24B DIRECT
GDP CONTRIBUTION

LARGEST US HIGH-TECH
CAPITAL INVESTOR

~\$7B

ANNUAL AVERAGE
2011 – 2015

Over half of our high tech manufacturing jobs are in the US
80% of our revenue comes from outside the US

Source: Amalgamation of analyst data and Intel analysis.

WORLD CLASS SUPPLY CHAIN

Gartner
Supply Chain Top 25

2016

MASTER Apple

MASTER Proctor & Gamble

1. Unilever

2. McDonald's

3. Amazon.com

4. Intel

5. H&M

6. Inditex

7. Cisco Systems

8. Samsung Electronics

9. The Coca-Cola Company

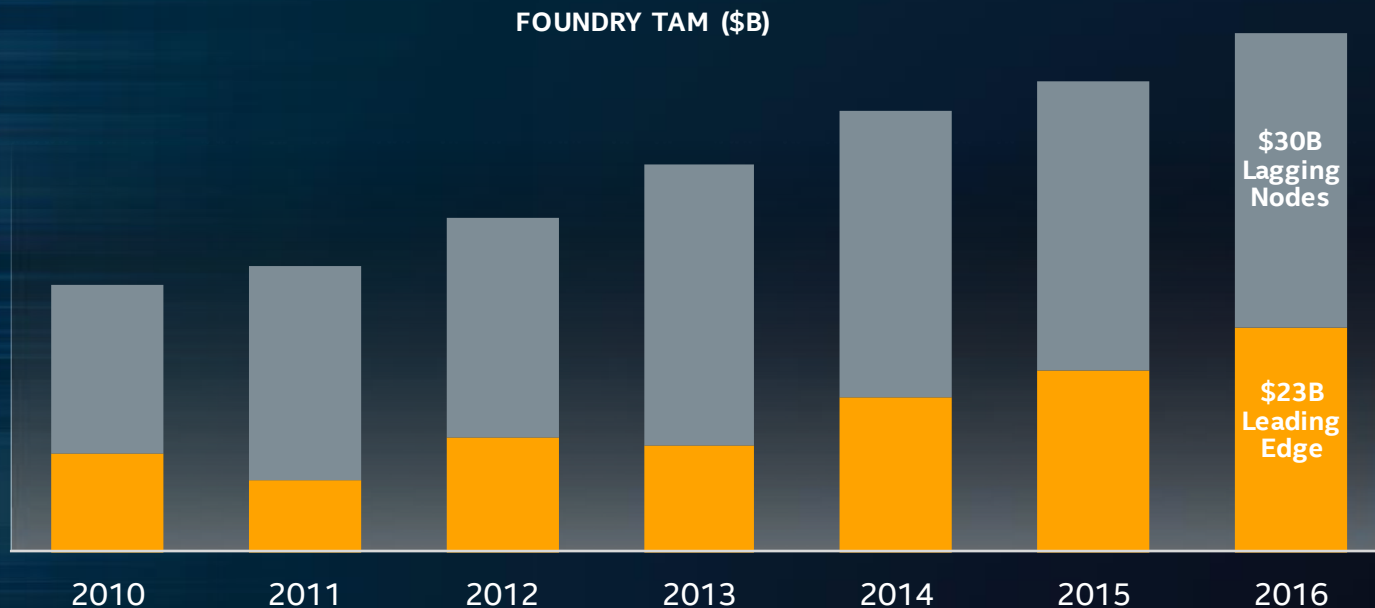
10. Nestlé

Other names and brands may be claimed as the property of others.

Source: Gartner

INTEL CUSTOM FOUNDRY

THE OPPORTUNITY ~ LEADING EDGE FOUNDRY MARKET IS GROWING

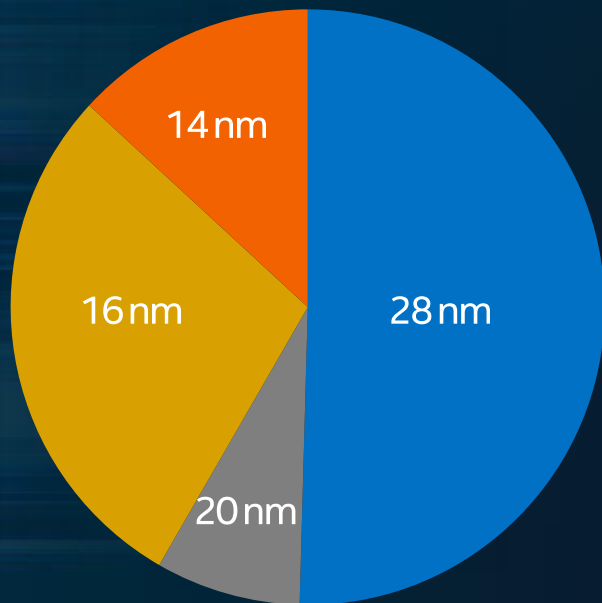


Note: Samsung and Intel internal are excluded from TAM. Leading edge defined as: 65nm and below for 2010, 45nm and below for 2011 and 2012, 32 nm and below for 2013-2016.

Source: Amalgamation of analyst data and Intel analysis.

2016 LEADING EDGE FOUNDRY MARKET

LEADING EDGE
FOUNDRY TAM BY NODE



2016 TAM (\$B)

\$23B

GROWING AT 14%
(CAGR 2010 - 2016)

Note: Samsung and Intel internal are excluded from TAM. Leading edge defined as: 28 nm and below for 2016.
Source: Amalgamation of analyst data and Intel analysis.

INTEL CUSTOM FOUNDRY

LEADERSHIP TECHNOLOGY & IP



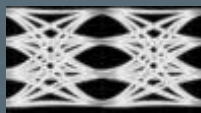
Strained Silicon



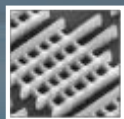
FPGA



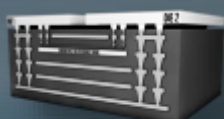
High-k Metal Gate



Optical & Serdes IP



FinFET Transistor



EMIB



ROBUST ECOSYSTEM

ANSYS

Mentor
Graphics

arasan
the IP business

NORTHWEST
LOGIC

Arcent

open-Silicon

ARM

SANKALP
semiconductor

asicNorth

SYNAPSE
design

cādence

SYNOPSYS

Imagination

WIPRO
Applying Thought



CO-OPTIMIZED
PROCESSES
IN CONJUNCTION
WITH
CUSTOMERS

Bringing tomorrow's technology today with comprehensive foundry services

Other names and brands may be claimed as the property of others.

INTEL CUSTOM FOUNDRY ~ ENABLING FINFET CAPABILITIES



1st gen FinFET technology focused on the networking market



2nd gen FinFET technology in mass production targeting networking, FPGA and mobile SOC markets



3rd gen FinFET technology, targeting high performance client and mobile markets

Proven Capability: Intel has manufactured ~7M FinFET wafers

INTRODUCING 22FFL PLATFORM

Extreme Integration Capability

Cost Effective Design



Fast Time to Market

FinFET for the masses



Automotive



Wearable Devices



Smartphones

Ideal for highly integrated, cost sensitive products requiring a combination of high performance and ultra low power

PUTTING IT ALL TOGETHER

We continue to advance Moore's Law
resulting in significant product and cost benefits

We continue to outpace the rest of the industry
(~3 year lead on 14nm)

Our scale is a unique competitive advantage

We are building a foundry franchise

Source: Intel estimates

ONE MORE THING...

INTEL'S LEADERSHIP RESPONSIBILITIES



Addressing critical Sustainability and Human Rights issues

- Sourcing minerals responsibly
- Caring for the environment
- Promoting human rights programs
- Supply chain free of forced and bonded labor
- Reducing waste, water and carbon footprint

Inspiring employees, shareholders, customers