



# INVESTOR MEETING

## 2015 SANTA CLARA

**Diane Bryant**

Senior Vice President & General Manager  
Data Center Group



# KEY MESSAGES

Fundamental growth drivers remain strong

Adoption of cloud computing growing and transforming all segments

Non-CPU products contribute meaningful growth

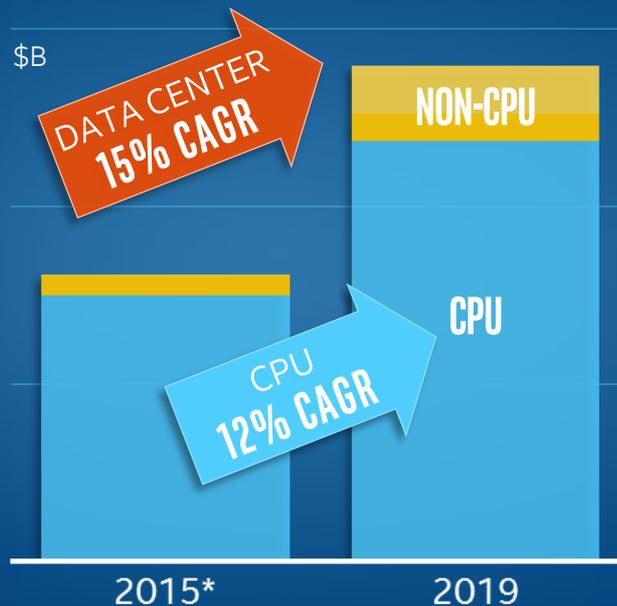
# DATA CENTER GROWTH FORECAST

## GROWTH BY END-USER SEGMENT

2015-2019\*

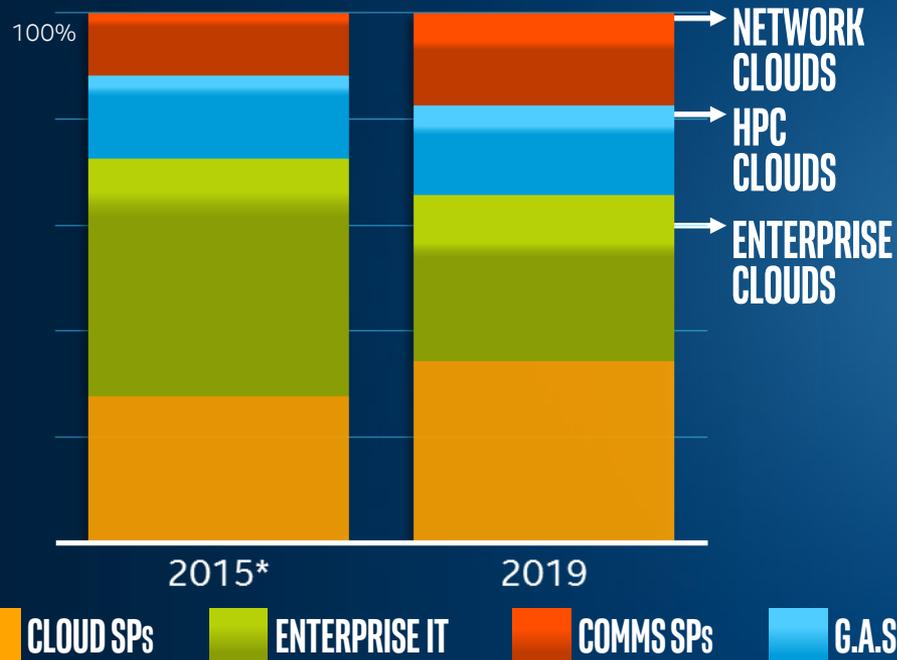


## CONTRIBUTION OF NON-CPU



# ADOPTION OF CLOUD COMPUTING ACROSS ALL SEGMENTS

## CLOUD COMPUTING GROWTH



Accelerated technology adoption

TAM expansion

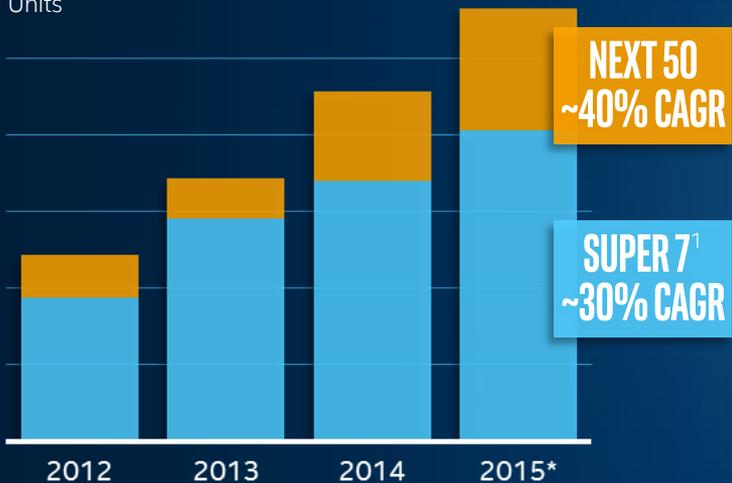
ASP uplift

# DIVERSIFICATION OF THE CLOUD SERVICE PROVIDER MARKET

## CLOUD SP GROWTH

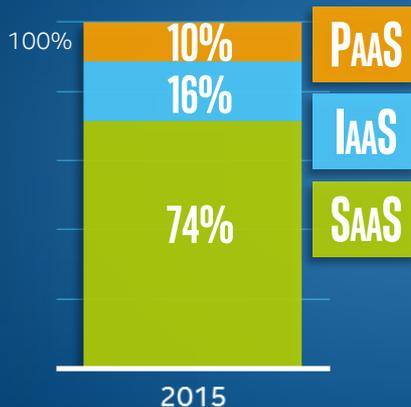
Cloud SP CPU Units

Units



## "AS A SERVICE" DYNAMICS

2015 Revenue<sup>2</sup>



## GROWTH OUTSIDE U.S.

1H'15 YoY Growth<sup>3</sup>

Americas  
**46%**

Europe &  
Middle East  
**57%**

Asia  
**55%**

1. Super 7 = Alibaba, Amazon, Baidu, Facebook, Google, Microsoft, Tencent

2. Source: IDC: Worldwide SaaS and Cloud Software 2015-2019 Forecast and 2014 Vendor Shares, August 2015

3. Source: '14-15 YoY growth based on top 41 CSPs in each region. Technology Business Research, Public Cloud Benchmark 2Q15

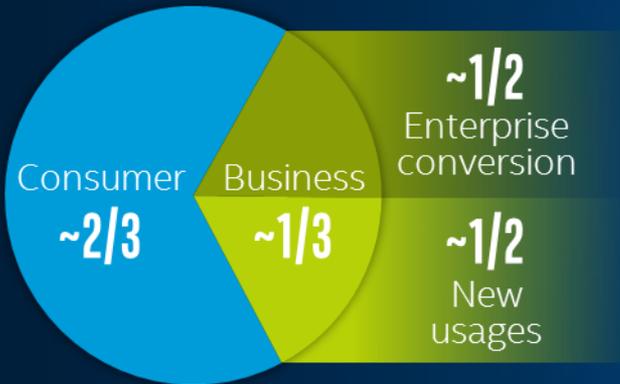
\*Forecast is based on current expectations given available information and is subject to change without notice

Source: Intel

# CLOUD SERVICE PROVIDER DYNAMICS

## CONSUMER vs. BUSINESS

2015 Volume<sup>1</sup>



## SUPER 7 VALUE PERFORMANCE

**5** have custom CPUs

**7** bought higher price point SKUs

**5** are in the Early Ship Program

**4** will sample FPGAs in Q1'16

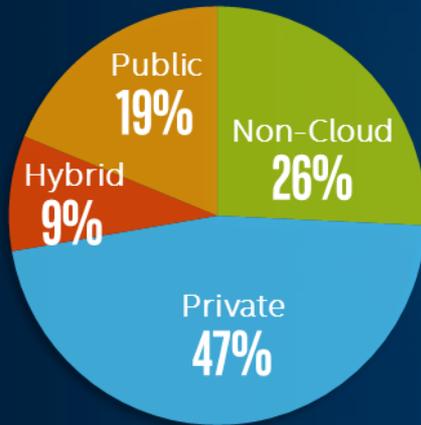
**2** have sampled Silicon Photonics

**BROAD** interest in 3D XPoint™

# CLOUD ENABLES NEW ENTERPRISE GROWTH

## PRIVATE CLOUD INVESTMENTS

Expected workload destination<sup>1</sup>  
2015-2016



## ENABLING NEW BUSINESSES<sup>2</sup>



Delivering an **end-to-end connected car** lifestyle through BMW Connected Drive



Making **industrial analytics** applications easier to deploy with Predix Cloud

Improving **first responder safety** through cloud connected devices



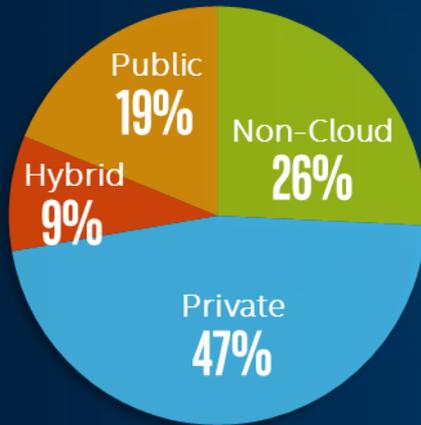
JOHN DEERE

Enabling **precision farming** through cloud-based analytics

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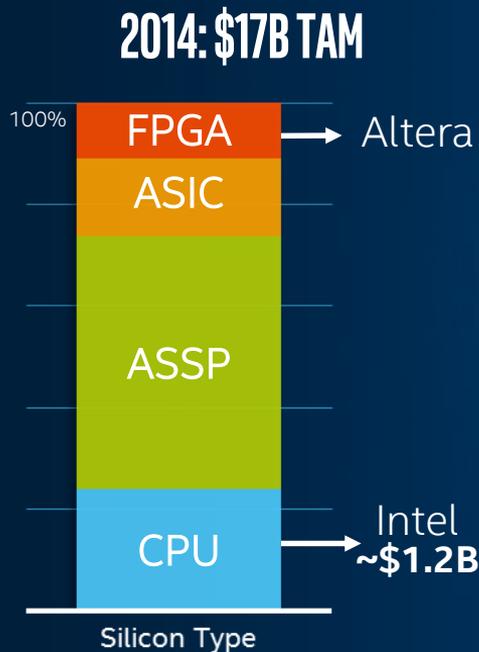


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# NETWORK MOVES TO CLOUD

## NETWORK OPPORTUNITY<sup>1</sup>



## IA MSS<sup>2</sup>



## NFV DEPLOYED ON INTEL ARCHITECTURE



## VALUE TO SERVICE PROVIDERS

**50%** OpEx & power reduction<sup>3</sup>  
-China Mobile

**97% reduction** in time to deployment  
of new services<sup>4</sup>  
-Telefonica

# DELIVERING NEW PRODUCTS

## INTEL SILICON PHOTONICS

Samples shipping

### ONLY ON-DIE INTEGRATED LASER

Longest reach at **2 km**

Highest port density

**>20%** cost advantage

**\$5B TAM**  
2020<sup>4</sup>

## INTEL OMNI-PATH ARCHITECTURE

1<sup>st</sup> production in December

### LEADERSHIP VS. INFINIBAND EDR

**10%** performance advantage<sup>1</sup>

**60%** lower system power<sup>2</sup>

**20%** system cost savings<sup>3</sup>

**\$1.6B TAM**  
2020<sup>5</sup>

## 3D XPOINT™ DIMMS

Sampling in 2016

### NEW CLASS OF NON-VOLATILE MEMORY

**4X** memory capacity

**1/2** the cost of DRAM

**\$34B TAM**  
2020<sup>6</sup>

1. Tests performed on Intel® Xeon® Processor E5-2697v3 dual-socket servers with 2133 MHz DDR4 memory, Intel® Turbo Boost Technology enabled and Intel® Hyper-Threading Technology disabled. Intel OPA, Open MPI 1.10.0 with FSN2. Pre-production Intel Corporation Device 2410 - Series 100 HFI ASIC Series 100 Edge Switch - 48 port 10G Non-posted Prefetch disabled in BIOS, EDR, Open MPI 1.5-mellanox (released with hpx-v1.3.336-icc-MLNX\_OFED\_LINUX-3.0-10.1-rc0-hat6.6-k80\_64.tbz, Mellanox EDR ConnectX-4 Single Port Rev 3 MCX455A HCA, Mellanox SB7700 - 36 Port EDR Infiniband switch, 17% claim: HPCCL 1.4.3 Random ordering latency, 16 nodes, 28 MPI ranks per node, 7% message rate claim: Ohio State Micro Benchmarks v. 4.4.1: osu\_mbw\_mv 28 MPI ranks per node, 8 byte message.

2. Assumes 750-node cluster, and number of switch chips required is based on a full bisectonal bandwidth (FBB) Fat-Tree configuration. Intel® OPA uses one fully-populated 768-port director switch, and Mellanox EDR solution uses a combination of director switches and edge switches. Mellanox power data based on Mellanox C57500 Director Switch, Mellanox SB7700/SB7790 Edge switch, and Mellanox ConnectX-4 VPI adapter card installation documentation posted on [www.mellanox.com](http://www.mellanox.com) as of November 1, 2015. Intel OPA power data based on product briefs posted on [www.intel.com](http://www.intel.com) as of November 16, 2015.

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4. Intel estimate

5. IDC, Intel estimate. Includes HPC deployments only.

6. Source: Gartner, IHS, Intel analysis

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# SUMMARY

## GROWTH BY END-USER SEGMENT

2015-2019\*

**COMMS SP**

**>20%**  
CAGR

**CLOUD SP**

**>20%**  
CAGR

**GOVERNMENT,  
ACADEMIA, SCIENCE**

**~20%**  
CAGR

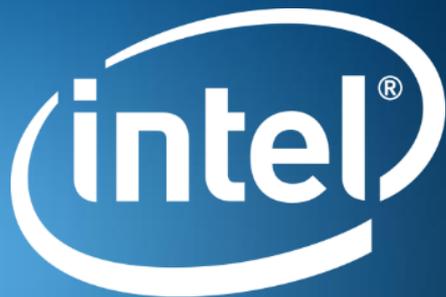
**ENTERPRISE IT**

**<5%**  
CAGR

Fundamental growth drivers remain strong

Adoption of cloud computing growing and transforming all segments

Non-CPU products contribute meaningful growth



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# RISK FACTORS

The statements in this presentation and other commentary that refer to 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," "should," 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. Many factors could affect Intel's actual results, and variances from Intel's current expectations regarding such factors could cause actual results to differ materially from those expressed in these forward-looking statements. Intel presently considers the following to be important factors that could cause actual results to differ materially from the company's expectations. Demand for Intel's products is highly variable and could differ from expectations due to factors including changes in business and economic conditions; consumer confidence or income levels; the introduction, availability and market acceptance of Intel's products, products used together with Intel products and competitors' products; competitive and pricing pressures, including actions taken by competitors; supply constraints and other disruptions affecting customers; changes in customer order patterns including order cancellations; and changes in the level of inventory at customers. Intel's gross margin percentage could vary significantly from expectations based on capacity utilization; variations in inventory valuation, including variations related to the timing of qualifying products for sale; changes in revenue levels; segment product mix; the timing and execution of the manufacturing ramp and associated costs; excess or obsolete inventory; changes in unit costs; defects or disruptions in the supply of materials or resources; and product manufacturing quality/yields. Variations in gross margin may also be caused by the timing of Intel product introductions and related expenses, including marketing expenses, and Intel's ability to respond quickly to technological developments and to introduce new products or incorporate new features into existing products, which may result in restructuring and asset impairment charges. Intel's results could be affected by adverse economic, social, political and physical/infrastructure conditions in countries where Intel, its customers or its suppliers operate, including military conflict and other security risks, natural disasters, infrastructure disruptions, health concerns and fluctuations in currency exchange rates. Results may also be affected by the formal or informal imposition by countries of new or revised export and/or import and doing-business regulations, which could be changed without prior notice. Intel operates in highly competitive industries and its operations have high costs that are either fixed or difficult to reduce in the short term. The amount, timing and execution of Intel's stock repurchase program could be affected by changes in Intel's priorities for the use of cash, such as operational spending, capital spending, acquisitions, and as a result of changes to Intel's cash flows or changes in tax laws. Product defects or errata (deviations from published specifications) may adversely impact our expenses, revenues and reputation. Intel's results could be affected by litigation or regulatory matters involving intellectual property, stockholder, consumer, antitrust, disclosure and other issues. An unfavorable ruling could include monetary damages or an injunction prohibiting Intel from manufacturing or selling one or more products, precluding particular business practices, impacting Intel's ability to design its products, or requiring other remedies such as compulsory licensing of intellectual property. Intel's results may be affected by the timing of closing of acquisitions, divestitures and other significant transactions. In addition, risks associated with our pending acquisition of Altera are described in the "Forward Looking Statements" paragraph of Intel's press release dated June 1, 2015, which risk factors are incorporated by reference herein. A detailed discussion of 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 Form 10-Q, Form 10-K and earnings release.