



NETWORK DIGITALIZATION IS PICKING UP THE PACE - WHAT'S NEXT?

Wei Yeang Toh - Senior Director, Market
Development, Data Center Group

Intel Corporation

EDGE ACCELERATED BY 5G



VIDEO
MANUFACTURING
TRANSPORTATION
SMART CITIES
PHONES
ETC.

DEVICES / THINGS

LATENCY EXPECTATION
VARIES <1 MS



SMALL CELLS LICENSED
& UNLICENSED
CUSTOMER PREMISE EQUIPMENT
(uCPE, SD-WAN, GATEWAY)

ON-PREMISE EDGE

LATENCY EXPECTATION
< 5 MS



WIRELINE FIXED ACCESS
(vCCAP, PON)
MULTI-ACCESS EDGE COMPUTING
NEXT GEN CENTRAL OFFICE
(vEPC, vBNG)
WIRELESS ACCESS
BASESTATIONS & RAN

NETWORK EDGE

LATENCY EXPECTATION
<10-40 MS



NETWORK CORE

LATENCY EXPECTATION
<60 MS



DATA CENTER | CLOUD

LATENCY EXPECTATION
<100 MS



**DRIVERS FOR EDGE
LATENCY, BANDWIDTH,
SECURITY, CONNECTIVITY**

INTEL'S END TO END TECHNOLOGY FOR EDGE & 5G

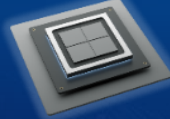
ON PREMISE EDGE



RADIO ACCESS / EDGE LOCATION



COMING 2H'19
SNOW RIDGE



FPGA for 5G
workloads



NEXT GENERATION CENTRAL OFFICE / CORE



NETWORK APPLICATION BUILDING BLOCKS



ACCELERATORS

INTEL®
QUICKASSIST
TECHNOLOGY



MEMORY



CONNECTIVITY



INTEL®
SILICON
PHOTONICS

INTEL'S FRAMEWORK FOR NETWORK PLATFORMS

Applications & Services
(IoT Verticals, Comms, Cloud, Enterprises)

Open
VINO

Open
Visual
Cloud

Other data centric Apps
(analytics, cloud)

Network Edge Software (OPENNESS)

Virtual Network Functions

Application & Service Orchestration/virtualization

Industry Standard Interfaces for
Efficient, Programmable, Scalable Data Plane



INTEL XEON™
PROCESSORS



INTEL ATOM™
PROCESSORS



INTEL CORE™
PROCESSORS



INTEL
VPU



INTEL®
FPGA



INTEL OPTANE DC
SOLID STATE DRIVE



INTEL® ETHERNET
CONTROLLER

ACCELERATE ECOSYSTEM SOLUTIONS

INNOVATE STANDARD & EASY-TO-CONSUME SOFTWARE

(Ex: OpenVino, OpenNESS, Open Visual Cloud,
DPDK, vSwitch, Intel® Select Solutions)

INNOVATE LEADING PLATFORM TECHNOLOGIES

INDUSTRY ENABLING NETWORK AND CUSTOM LOGIC GROUP

OPEN SOURCE & STANDARDS



INDUSTRY COLLABORATION

350+
Members

35+
Comms SPs

100+

POCs/Trials/Deployments
Based on Member Solutions

13,000+

Developer's Trained
worldwide

12,000+

Network Builder
University Program
Members

50+

Network Edge
Ecosystem Program
Members

**INTEL® NETWORK BUILDERS &
INTEL® DEVELOPER ZONE**

SOLUTIONS TO ACCELERATE TTM



NFVI NETWORK FUNCTIONS
VIRTUALIZATION
INFRASTRUCTURE



Lenovo

NOKIA



UCPE UNIVERSAL CUSTOMER
PREMISES EQUIPMENT

ADVANTECH



Lanner

PREMIER

Silicom
Connectivity Solutions



Intel® Select Solutions for Visual Cloud available Q2'19

INTEL NETWORK BUILDERS PROGRAM

Partnering with industry vendors and Communication Service providers to accelerate the next wave of technical innovation

ENABLING THE INDUSTRY



**Solution
Development**

**Global
Engagement**



**Technical
Innovation**



**Network
and Co-
Marketing**



TO TRANSFORM THE NETWORK

Broad Industry engagement

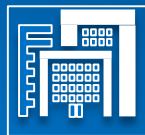
Communication Service Providers
Cloud Service Providers

Enterprises
TEMS, OEMS, NEMs & ODMS

Application Developers
ISVs & SIS

INTEL NETWORK BUILDERS **EDGE** PROGRAM

EDGE COMPUTING IS THE PLACEMENT OF



DATA CENTER GRADE NETWORK,
COMPUTE & STORAGE

CLOSER TO

**END
DEVICES**



TO IMPROVE SERVICE
CAPABILITIES



OPTIMIZE
TCO



COMPLY WITH DATA
LOCALITY



AND REDUCE APPLICATION
LATENCY



JOIN US AND HELP US LEAD THE WAY

From technical collaboration to training to go-to-market strategies, the time to engage is now.

Learn more at

<https://networkbuilders.intel.com/>



SUMMARY

ACCELERATE NETWORK TRANSFORMATION

PARTNERSHIP TO UNLOCK EDGE OPPORTUNITIES

IDENTIFY NEW SERVICES & APPLICATIONS FOR NEW REVENUE OPPORTUNITIES

NOTICES AND DISCLAIMERS

Intel does not control or audit third-party benchmark data or the web sites referenced in this document. You should visit the referenced web site and confirm whether referenced data are accurate.

Intel technologies may require enabled hardware, specific software, or services activation. Check with your system manufacturer or retailer. All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest Intel product specifications and roadmaps.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at www.intel.com

Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries

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

© 2019 Intel Corporation.

