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Statements in this presentation 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," "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 estimates, forecasts, projections, uncertain events or assumptions, including statements relating to total addressable market (TAM) or market opportunity, future products and the expected availability and benefits of such products, and anticipated trends in our businesses or the markets relevant to them, also identify forward-looking statements. Such statements 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 in Intel's earnings release dated July 25, 2019, 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 and 10-Q. Copies of Intel's Form 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. Intel does not undertake, and expressly disclaims any duty, to update any statement made in this presentation, whether as a result of new information, new developments or otherwise, except to the extent that disclosure may be required by law.
INTEL INTERNET OF THINGS GROUP

Tom Lantzsch
SVP and GM
Internet of Things Group
Intel Corporation
IOT FUELS INTEL’S DATA-CENTRIC TRANSFORMATION

INTEL TAM
>$300B

IOT TAM
~$30B
2022

DEVICES / EDGE
NETWORK
CLOUD/DATA CENTER

AUTONOMOUS THINGS – EDGE – NETWORK – CLOUD

Source: TAM – 2022F SI TAM is based on amalgamation of analyst data and Intel analysis
INTEL’S INTERNET OF THINGS GROUP
HIGH PERFORMANCE COMPUTE SOLUTIONS FOR TARGETED VERTICALS
ALONG WITH HISTORIC EMBEDDED APPLICATIONS

ASP
$100+

Atom™ Core™ Xeon®

Revenue
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$-

YoY Growth
25%
20%
15%
10%
5%
0%

Revenue from Wind River

Note: Based on reported revenues for 2013-2019, the ASP and Product Mix based on 2018 CPU revenue
OUR FUTURE IS EDGE COMPUTING

Drivers for edge computing:
- Latency
- Bandwidth
- Security
- Connectivity

Devices / Things
Edge Compute Node
Network Hub or Regional Data Center
Core Network
Cloud Data Center
OUR STRATEGY

AGGREGATION AT THE EDGE
APPLICATIONS & DATA

HIGH PERFORMANCE COMPUTE

COMMON AND SEAMLESS DEVELOPER EXPERIENCE + SOFTWARE

VISION (VIDEO) INFERENCE

SCALING THE ECOSYSTEM TO DELIVER MARKET-READY SOLUTIONS
VERTICAL BUSINESS MODEL

SOLVE KEY VERTICAL MARKET CHALLENGES

PARTNER WITH MARKET LEADERS IN VERTICAL SEGMENTS

DIFFERENTIATE WITH SILICON, SYSTEM DESIGN AND DEVELOPER EXPERIENCE

RETAIL

INDUSTRIAL

SMART CITIES/VIDEO

TRANSPORTATION

PUBLIC SECTOR

EDUCATION

HEALTHCARE

FINANCIAL SERVICES

AUTOMOTIVE
SCALE OUR STRATEGY WITH DEVELOPER COMMUNITIES

- COMPUTER VISION
- NETWORK
- FUNCTIONAL SAFETY
- REAL-TIME CONTROL
- MANAGEABILITY
- SECURITY
ACCELERATE VISUAL INFERENCE AT THE EDGE

IMPROVE PERFORMANCE EXPONENTIALLY

DEVELOP ONCE, DEPLOY ON INTEL CPU, GPU, VPU & FPGA

RETAIL  PUBLIC SECTOR  SMART CITIES  TRANSPORTATION  INDUSTRIAL  HEALTHCARE
PERFORMANCE BOOST WITH OPENVINO™

SAME HARDWARE, BETTER SOFTWARE

**CORE i7+CAFFE**+**MKL**

- **28.7 FPS / 34.8 ms**
- Caffe with MKL

1 STREAM AT 28FPS

**CORE i7+OPENVINO™**

- **28.6 FPS / 34.8 ms**

16 STREAMS AT 20FPS

**CORE i7+iGPU+OPENVINO™**

- **30.0 FPS / 34.8 ms**

16 STREAMS AT 28FPS

**SCALE WITH ACCELERATOR**

**CORE i7+iGPU+HDDL R8+OPENVINO™**

- **25.0 FPS / 34.8 ms**

49 STREAMS AT 25FPS

FPS = Frames per Seconds
STREAMS = Cameras

For more complete information about performance and benchmark results, visit [www.intel.com/benchmarks](http://www.intel.com/benchmarks). Performance results are based on testing as of August 07th, 2019 and may not reflect all publicly available security updates. See configuration disclosure for detail end of the presentation. No product can be absolutely secure.

*Other names and brands may be claimed as the property of others.*
3.3X Faster for < 1 Second Result

RESULTS OF COLLAPSED-LUNG INFEERENCE MODEL

Time to Completion (Seconds)

<table>
<thead>
<tr>
<th></th>
<th>Collapsed Lung Detection</th>
<th>Overall Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Optimized</td>
<td>2.795</td>
<td>3.092</td>
</tr>
<tr>
<td>Optimized with OpenVINO</td>
<td>0.829</td>
<td>0.913</td>
</tr>
</tbody>
</table>


Performance results are based on testing as of September, 2018 and may not reflect all publicly available security updates. See configuration disclosure for detail end of the presentation. No product can be absolutely secure.

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

PRODUCTS

ECOSYSTEM

VERTICAL BUSINESSES

2022

IOT TAM

~$30B

Source: TAM – 2022F SI TAM is based on amalgamation of analyst data and Intel analysis
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Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. For more complete information about performance and benchmark results, visit [http://www.intel.com/benchmarks](http://www.intel.com/benchmarks).

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Testing by Intel as of August, 7th, 2019

Core™ i7: (for all scenarios)
Platform: Intel(R) Core(TM) i7-8700T CPU @ 2.40GHz / 6 cores x 2 Threads, HT ON, Turbo ON, Total Memory 64GB DDR4-2400MHz. Model Name: Z370M-DS3H-CF. BIOS Version: F11. Ubuntu 16.04.6 LTS with kernel 4.15.0-55-generic.

Caffe® with MKL
Public distribution of Caffe with Intel® MKL optimizations enabled, for more information visit http://caffe.berkeleyvision.org
MKL - Math Library for Intel®-Based Systems  for more information: https://software.intel.com/en-us/mkl

OpenVINO® (Scenarios Core™ i7 + OpenVINO™)
OpenVINO™ Toolkit R2’2019 for Linux. Topology: face-detection-retail-0004/INT8. Scenarios (Core™i7+OpenVINO™, Core™i7+iGPU+OpenVINO™) Precision: mixed FP32+INT8. Scenario (Core™i7+iGPU+HDDL R8+OpenVINO™) Precision: FP16.

HDDL R8 (Scenarios Core™ i7 + HDDL R8 + OpenVINO™)
Intel® Vision Accelerator Design with Intel® Movidius™ VPU PCIe card (HDDL-R8).

*Other names and brands may be claimed as the property of others.
Testing by GE Healthcare as of September, 2018

System Test Configuration Details:
Intel® Core™ i5-4590S CPU @ 3.00GHZ, x86_64, VT-x enabled, 16GB memory, OS: Linux magic x86_64 GNU/Linux, Ubuntu 16.04 inferencing service docker container. Test compares TensorFlow model total inferencing time of 3.092 seconds to the same model optimized by Intel® Distribution of OpenVINO™ Toolkit optimized TF model resulting in a total inferencing time of 0.913 seconds for 338% performance speedup.

OpenVINO™

System test configuration: Testing done by GE Healthcare, September 2018. 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 Intel.com. Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information, visit: http://www.intel.com/performance

For published case study, visit: https://www.intel.ai/solutions/gehc/#gs.uqkdyp