7TH GENERATION INTEL® CORE™ PROCESSOR

THE MODERN PC

THE MODERN PC

Versatile

2 IN 1
THIN & LIGHT

Muscular

ENTHUSIAST

Modular

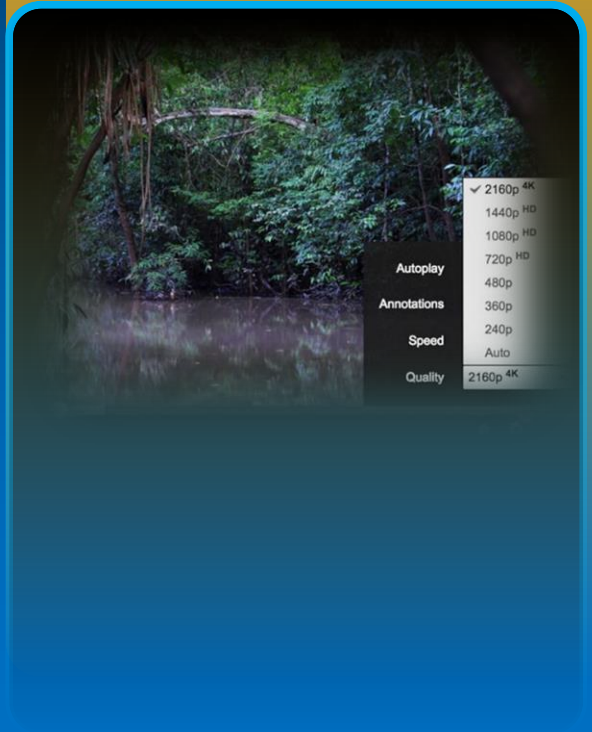
MINI PC

Cloud

CHROME

IMMERSIVE INTERNET

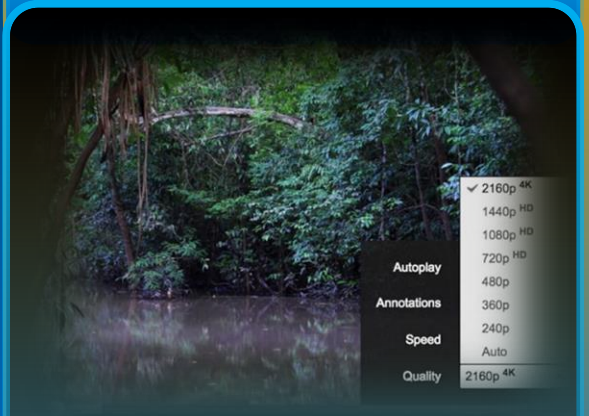
STUNNING • SENSORY • ACTIVE • ENGAGING



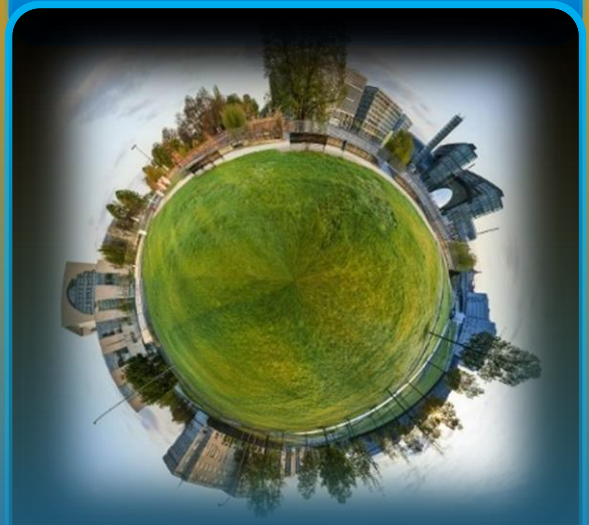
IMMERSIVE LIFE

STUNNING • SENSORY • ACTIVE • ENGAGING

4K UHD

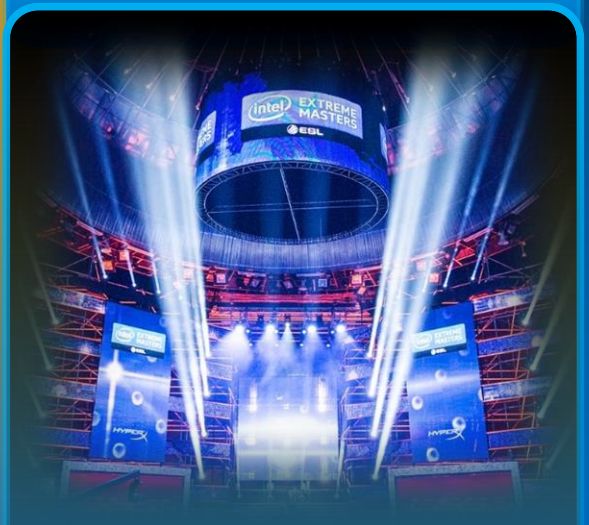


360° VIDEO



VR/MR

ESPORTS



TRANSFORMING THE PC EXPERIENCE

THE PC DELIVERS THE IMMERSIVE INTERNET

POWER TO VIEW

POWER TO CREATE

POWER TO PLAY

SCREEN SIZE, PERFORMANCE, EXPERIENCE

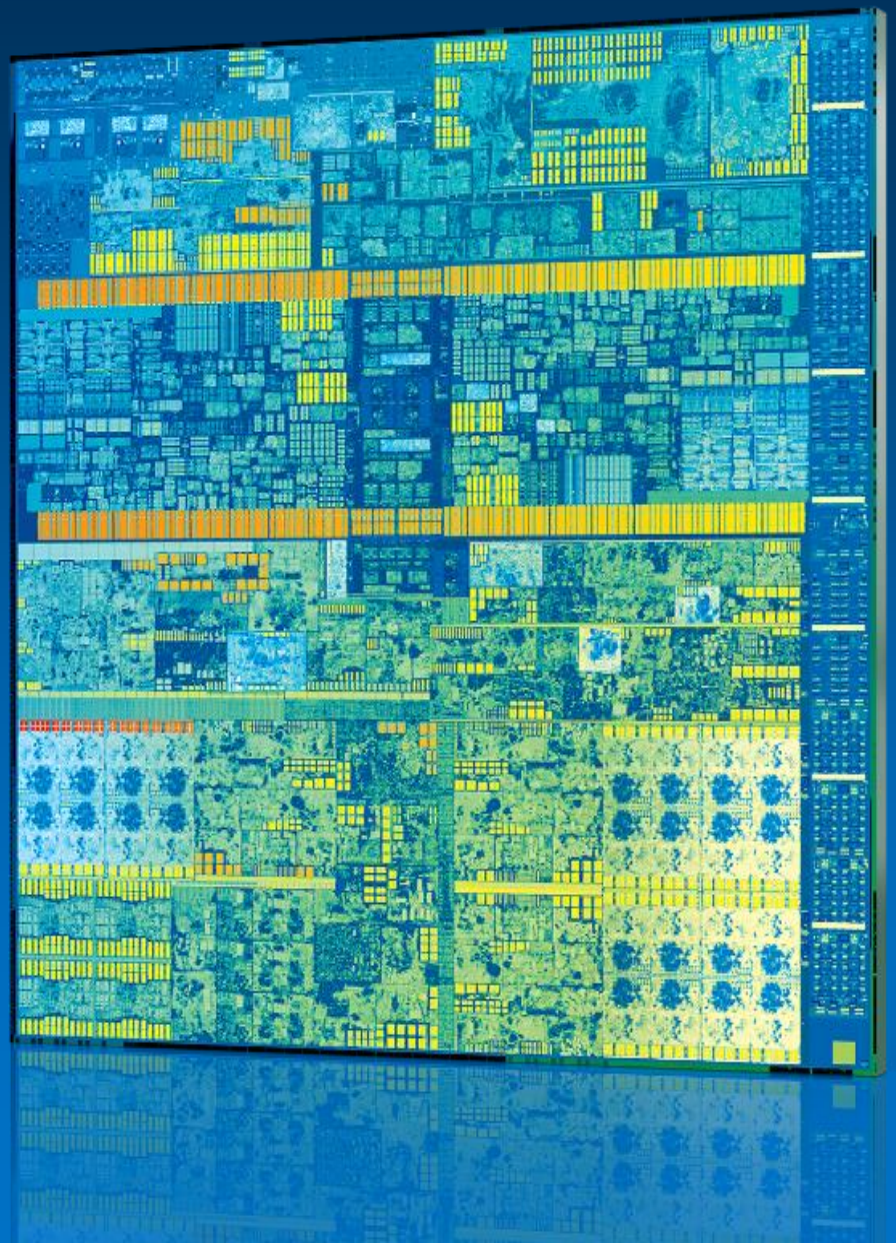
MEET THE NEW
7TH GENERATION
INTEL® CORE™ PROCESSORS

NOW

- New Intel® Core™ processors from 4.5W-15W
- Powering amazing 2 in 1s and ultrathin notebooks for consumer and small business
- >100 designs in Q4'16

JANUARY

- Additional products for enterprise, workstation, Intel® Iris™ Graphics and enthusiasts notebooks and desktops
- Additional form factors across hundreds of designs



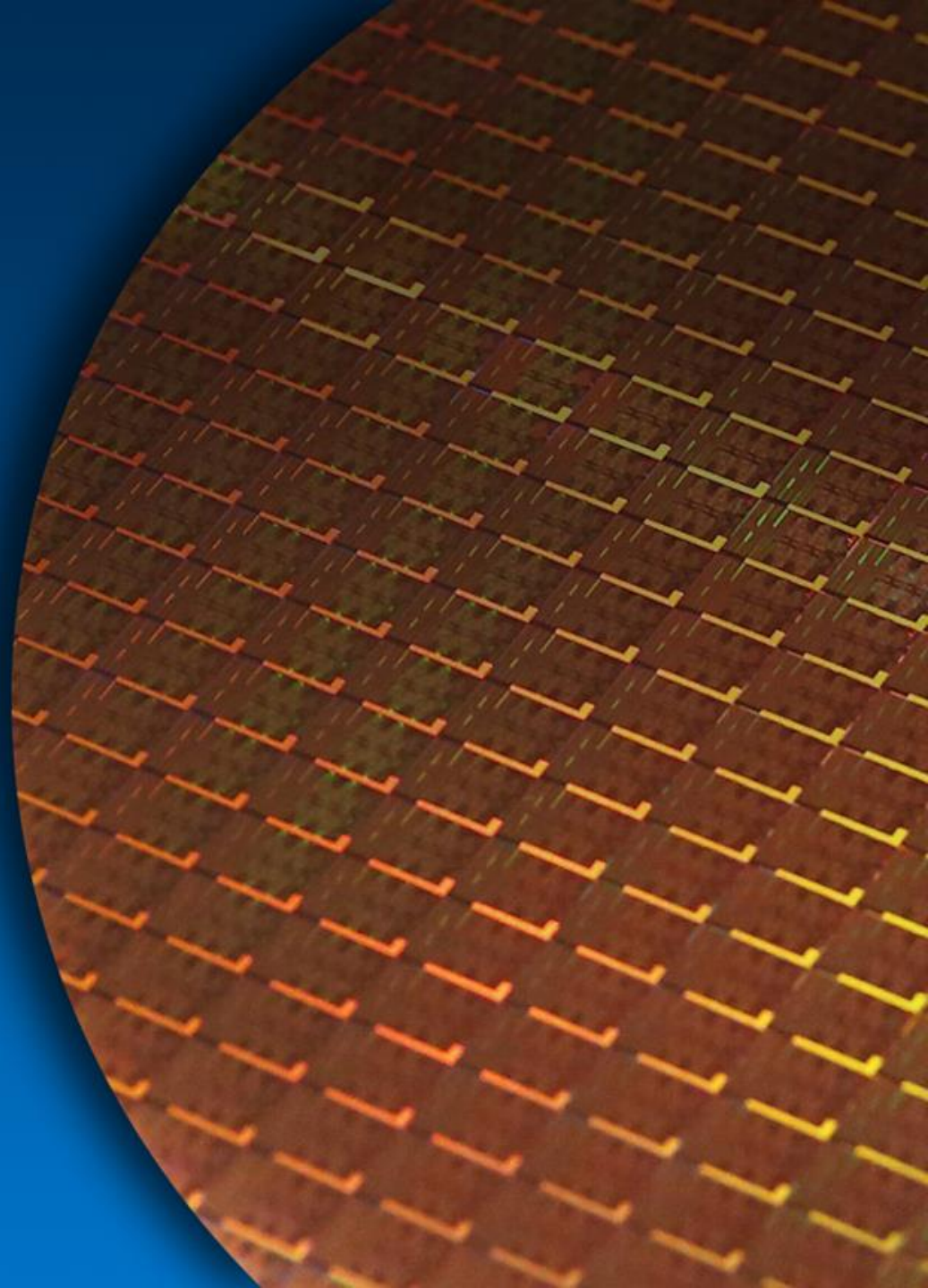
ARCHITECTURE & 14NM+ FUELS PERFORMANCE GAINS

Improved fin profile

Improved transistor channel strain

Integrated design & manufacturing

12% PROCESS PERFORMANCE INCREASE SUPPORTS LEADING EDGE PROCESSORS

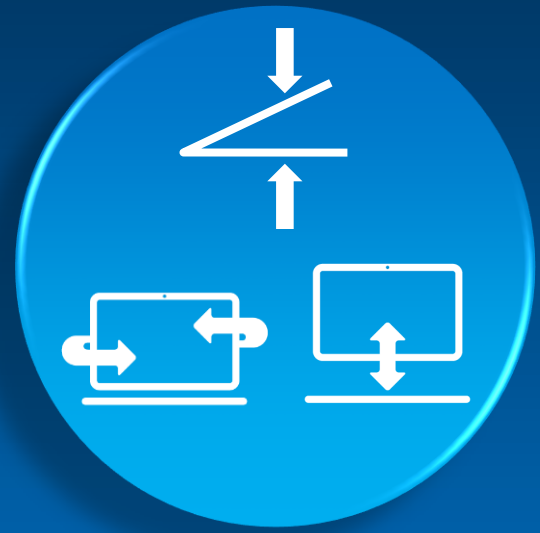


7TH GEN INTEL® CORE™ PROCESSORS

PERFORMANCE LEADERSHIP

EVERYTHING 4K UHD

FEATURE RICH

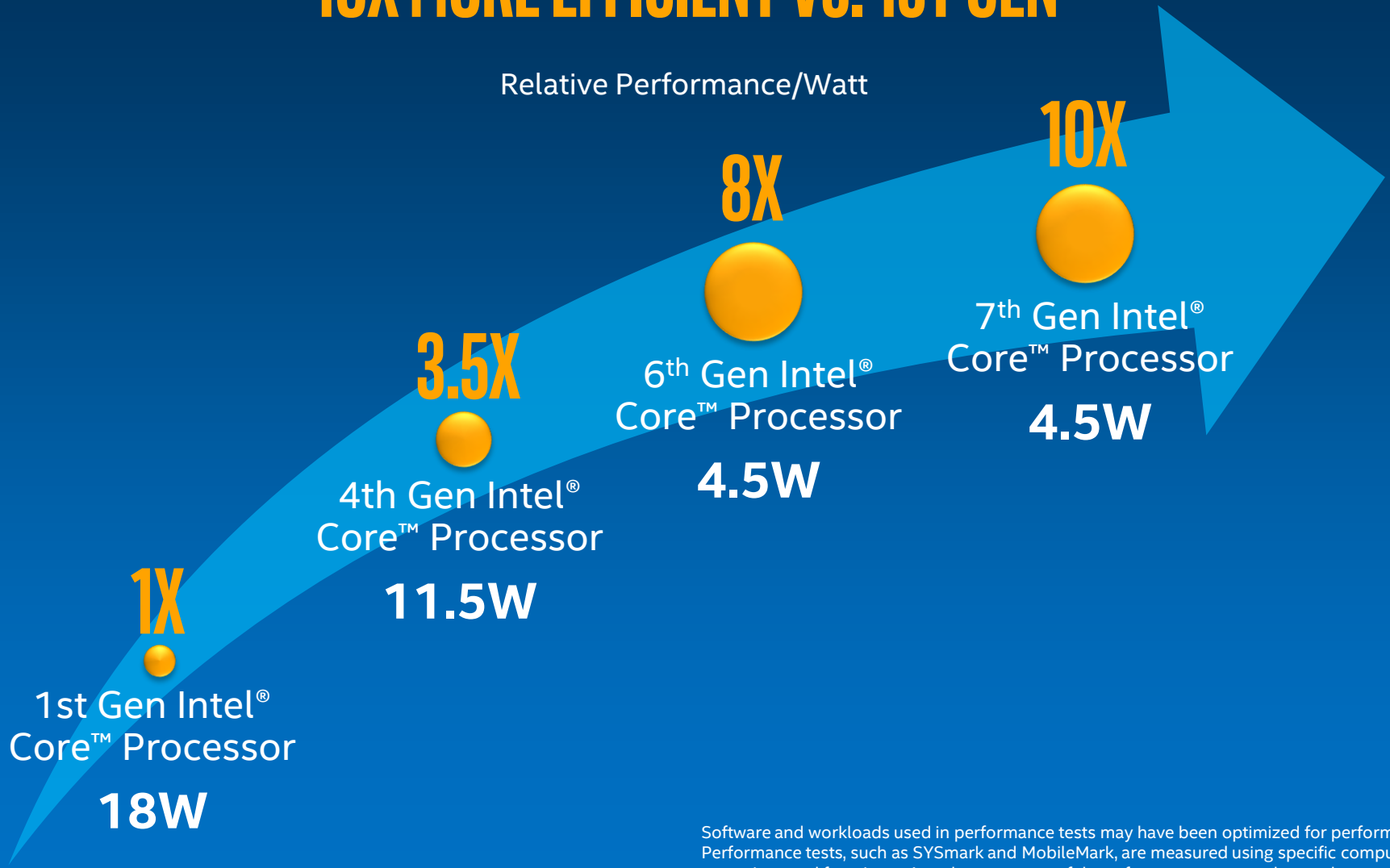


INNOVATIVE DESIGNS

EXTENDING PERFORMANCE & FEATURE LEADERSHIP IN INNOVATIVE DESIGNS

DRIVING PERFORMANCE & POWER EFFICIENCY

10X MORE EFFICIENT VS. 1ST GEN



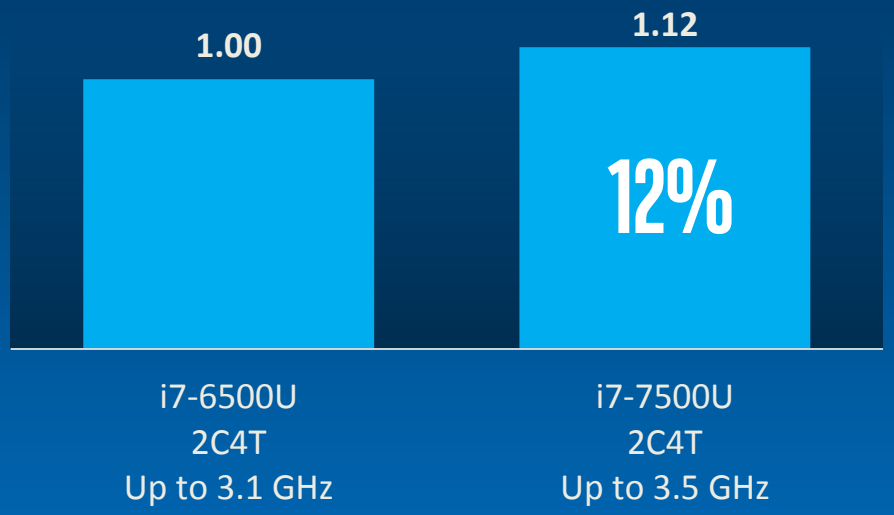
[1]Performance based on SYSMark 2014-Overall Performance @ Native Resolution
See appendix for configurations

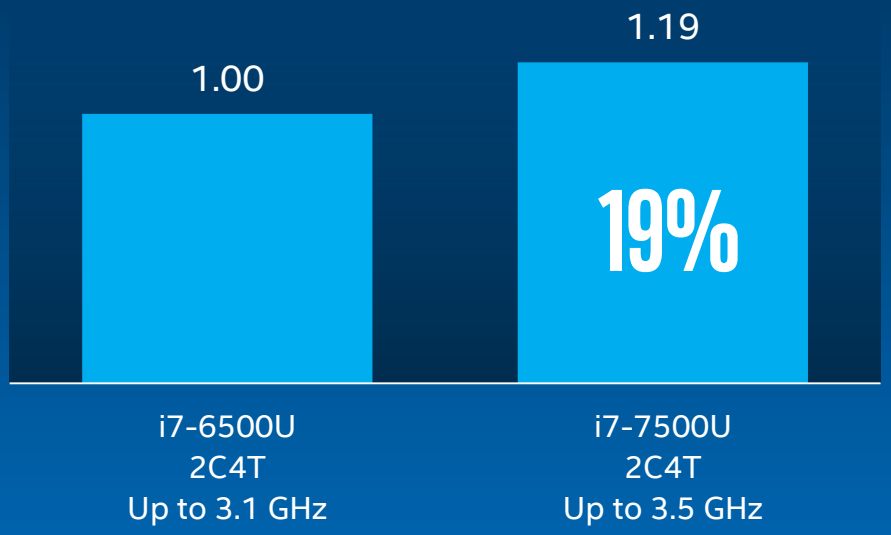
Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may 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 about performance and benchmark results, visit http://www.intel.com/benchmarks

7TH GEN INTEL® CORE™ PROCESSOR

15W U-SERIES PRODUCTIVITY & RESPONSIVENESS

VS. 6TH GEN INTEL® CORE™ PROCESSOR





UP TO 12% INCREASED PRODUCTIVITY

As Measured by SYSmark* 2014

UP TO 19% INCREASED WEB PERFORMANCE

As Measured by WebXPRT* 2015

PROCESS + CPU OPTIMIZATIONS → DOUBLE-DIGIT GAINS

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7TH GEN INTEL® CORE™ PROCESSORS WORK FASTER FOR YOU

MORE THAN 70%[1] FASTER MOBILE PRODUCTIVITY THAN A 5 YEAR OLD PC

WORK

Get work done **faster**

1.7X FASTER[1]

CREATE

Seamlessly create, edit and share 4K UHD 360 videos

8.6X FASTER[2]

GAME

Play your favorite games, like Overwatch*, on-the-go, in HD

3X BETTER[3]

LEAPS IN PERFORMANCE COMPARED TO 5-YR-OLD PC

[1]Based on SYSmark* 2014 Overall Score (Intel® Core™ i5-7200U vs. Intel® Core™ i5-2467M).
[2]Based on 4K 360 Video Creation Workload (Intel® Core™ i5-7200U vs. Intel® Core™ i5-2467M).
[3]Based on 3DMark* Cloud Gate Graphics Score (Intel® Core™ i5-7200U vs. Intel® Core™ i5-2467M).
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CREATE IN 4K UHD FASTER

VS. 5-YR-OLD PC

Create video highlights in near real-time

15X FASTER[1]

Convert a 1 hour 4K UHD video in 12 minutes

6.8X FASTER[2]

Create with ease using touch

INTUITIVE INTERACTION

[1]Based on MAGIX* Fastcut Video Create Wokrload (Intel® Core™ i5-7200U vs. Intel® Core™ i5-2467M).
[2]Based on 4K to 1080p H.26 Transcode Workload (Intel® Core™ i5-7200U vs. Intel® Core™ i5-2467M).
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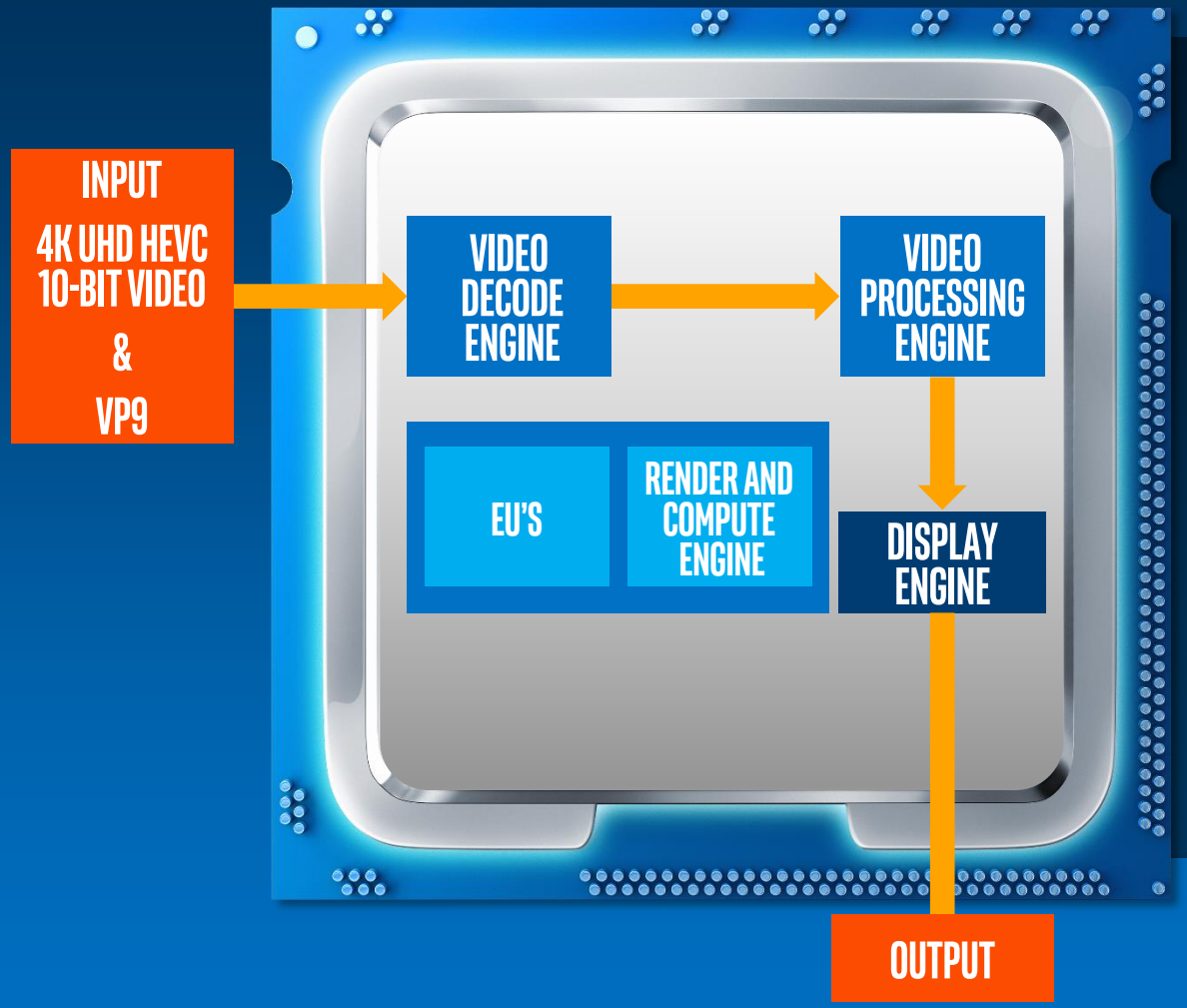
NEW MEDIA ENGINE



- Built upon Gen9 graphics architecture
- Dedicated media engine (video decode)
  - Designed for power efficiency
  - Parallel engines for more performance throughput
- Improved silicon process and design provides additional performance and better power efficiency
- Improved media experiences with HEVC 10-bit, VP9

BUILT FOR THE IMMERSIVE INTERNET

ENJOY 4K UHD LONGER ANYWHERE

New VP9 & HEVC 10-bit Decode Capability Delivers Efficient & Fluid Playback

6TH GEN CORE		7TH GEN CORE
Up to 1080p video streaming	Premium content (HEVC 10-bit)	Up to 4K UHD video streaming **"All Day 4K"** battery life (9.5hr)[1]
4 hours video battery life[2]	4K, 4K 360 YouTube* video (VP9)	**1.75X** longer video battery life (7hr)[2]
View multiple video streams simultaneously, up to 4K	Multi-video streaming	Support for additional formats of 4K 360 content streams

YOUR OWN 4K UHD THEATER ON THE GO

[1]Based on 4K 10bit HEVC Local Video Playback on Intel® Core™ i7-7500U vs. Intel® Core™ i7-6500U @ 66WHr battery and 4K panel
[2] As measured by 4K VP9 Streaming workload
*Other names abd brands may be claimed as the property of others
See appendix for configurations

FEATURE-RICH
7TH GEN INTEL® CORE™ PROCESSOR-BASED PCS

THUNDERBOLT™	**2X Designs (120+)** Gen Over Gen
Hello Windows 10 — Windows* Hello Capable Designs	**5X Designs (100+)** Gen Over Gen
4K UHD	**50+ Designs**

PACKED WITH EXPERIENCE-ENHANCING FEATURES

INNOVATIVE DESIGNS
POWERED BY 7TH GEN INTEL® CORE™ PROCESSORS

THINNEST * CONVERTIBLE
AT 10MM

CLAMSHELLS THINNER
THAN 10MM

FANLESS DETACHABLE
LESS THAN 7MM

FORM FACTOR INNOVATION CONTINUES TO THRIVE

* Based on availability as of 2016

7TH GEN INTEL® CORE™ PROCESSORS

PERFORMANCE LEADERSHIP

Work, multitask, create

1.7X – 15X[1] faster

BRINGING 4K UHD MAINSTREAM

"All Day 4K" battery life (9.5hr)[2]

Premium 4K UHD content on your PC

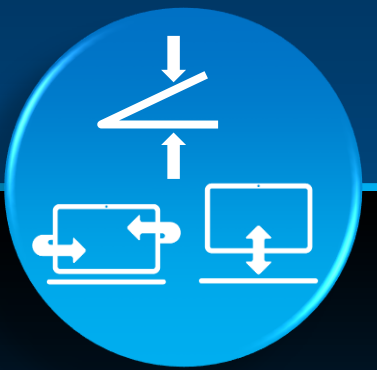
FEATURE RICH

120+ Thunderbolt™ 3

100+ Windows® Hello 4K

50+ 4K UHD

25+ Pen designs



INNOVATIVE DESIGNS

New levels of thin 2 in 1s and clamshells

>100 DESIGNS IN Q4'16 STARTING IN SEPTEMBER

[1]Range of performance scores on benchmarks in this presentation
[2] Based on 4K HEVC 10-bit local video playback on Intel® Core™ i7-7500U at 66WHr battery and 4K panel
See appendix for configurations

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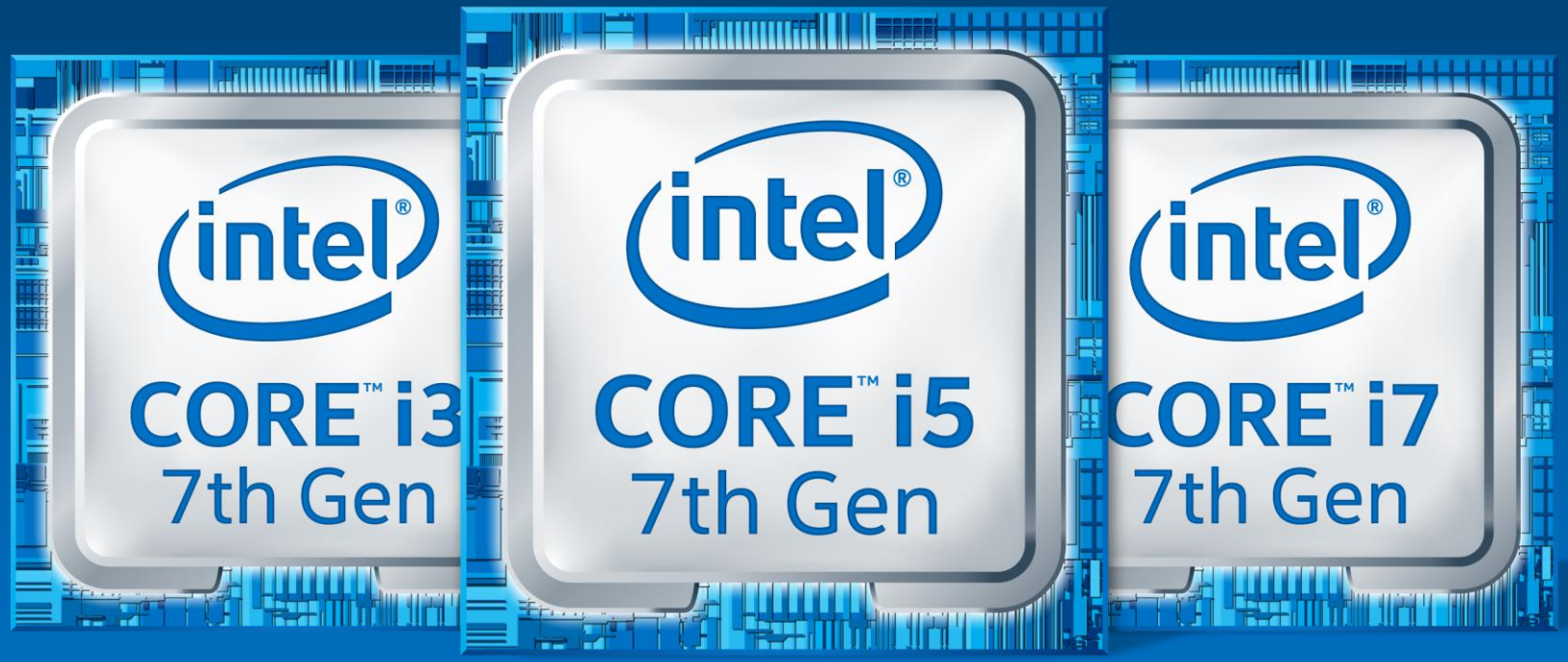
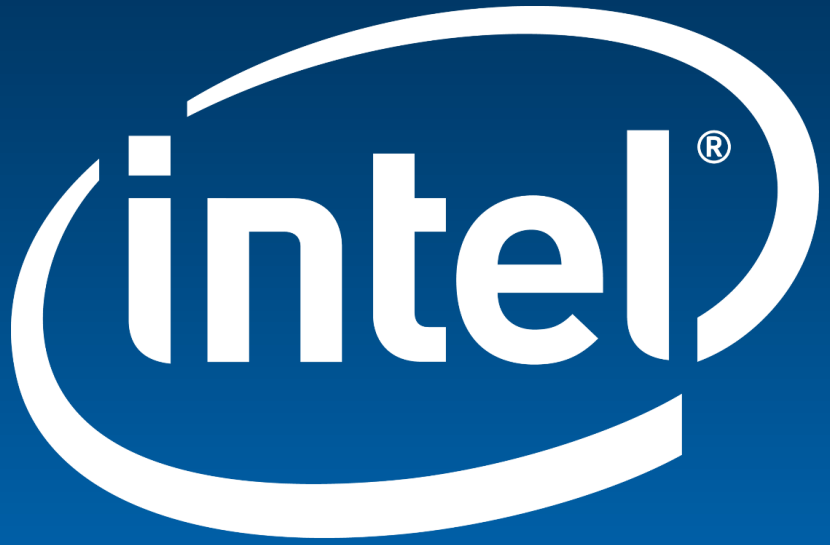
7TH GENERATION

INTEL® CORE™ PROCESSOR



DESIGNED FOR THE IMMERSIVE INTERNET



experience
what's inside™

LEGAL DISCLAIMERS

SYSTEM CONFIGURATIONS

Battery life and performance measurements on Intel Reference Platform unless otherwise noted
Intel Reference Platform is an example new system. Products available from systems manufacturers will not be identical in design, and performance will vary.
System power management policy: DC balanced for battery life measurements, AC balanced for performance measurements on 2nd Generation system and AC High Performance on 7th and 6th Generation systems. Wireless: On and connected.

7th Generation Measurements:
Intel® CRB, Intel® Core™ i5-7200U Processor, PL1=15W TDP, 2C4T, Turbo up to 3.1GHz, Memory: 2x4GB DDR4-2133, Storage: Intel SSD, Display Resolution:1920x1080. Intel HD, Graphics 620, OS: Windows* 10 TH2
Intel® CRB, Intel® Core™ i7-7500U Processor, PL1=15W TDP, 2C4T, Turbo up to 3.5GHz, Memory: 2x4GB DDR4-2133, Storage: Intel SSD, Display Resolution: 1920x1080, Intel HD Graphics 620, OS: Windows* 10 TH2

6th Generation Measurements:
Intel® CRB, Intel® Core™ i7-6500U Processor, PL1=15W TDP, 2C4T, Turbo up to 3.1, Memory: 2x4GB DDR4-2133, Storage: Intel SSD, Display Resolution: 1920x1080. Graphics Driver: 15.40.4254, OS: Windows* 10 TH2

Refresh Comparison Measurements:
Intel® Core™ i5-2467M Processor (1.6 GHz base, up to 2.3GHz 2C4T, 17W TDP) measured on Dell* XPS13-40002sLV 13” Ultrabook, RAM: 4GB DDR3, Storage: 128GB SSD, Display: 13.3” 1366x768 resolution, Battery: 46WHr, OS: Windows* 7

4K UHD VP9 Streaming Battery life
measured on OEM systems with the following configurations: Browser: Google* Chrome* Canary Build (Beta)
Intel® Core™ i7-7500U Processor –measured on HP* Envy, Battery Size: 64WHr, Panel: 4K 15”, OS: Windows* 10 Anniversary Edition , Storage: SSD
Intel® Core™ i7-6500U Processor – measured on HP* Battery Size: 64WHr, Panel: 4K 15”, OS: Windows* 10 Anniversary Edition , Storage: SSD

4K UHD HEVC 10-bit Battery Life
Intel® CRB, Intel® Core™ i7-7500U Processor, PL1=15W TDP, 2C4T, Turbo up to 3.5GHz, Memory: 2x4GB DDR4-2133, Storage: Intel SSD, Display Resolution: 4K, Intel HD Graphics 620, OS: Windows* 10 TH2, Battery: 66WHr

WORKLOAD DESCRIPTIONS

SYSmark* 2014 is a benchmark from the BAPCo* consortium that measures the performance of Windows* platforms. SYSmark tests three usage scenarios: Office Productivity, Media Creation and Data/Financial Analysis. SYSmark contains real applications from Independent Software Vendors such as Microsoft* and Adobe*. Reported metrics: SYSmark 2014 Rating and a rating for each scenario result (higher is better for all). Scaling efficiencies: CPU dominant, sensitive to frequency, core count and memory. QSV enabled.

WebXPRT* 2015 is a benchmark from Principled Technologies* that measures the performance of web applications using six usage scenarios: Photo Enhancements, Organize Album, Local Notes, Stock Option Pricing, Sales Graphs, and Explore DNA Sequencing. WebXPRT tests modern browser technologies such as HTML5 Canvas 2D, HTML5 Table, HTML5 Local Storage, as well as JavaScript*. **Reported metrics**: elapsed time in seconds (lower is better) for each scenario, plus an overall score (higher is better). **Scaling efficiencies**: CPU dominant (newer browsers are GPU accelerated), sensitive to frequency. WebXPRT is very sensitive to browser type and version. **OS support**: Any OS that supports an HTML5 browser.

3DMark* is a benchmark from Futuremark* that measures DX* 9 / OpenGL* ES 2.0, DX 10 and DX 11 gaming performance. There are three main tests: "Ice Storm" for DX 9 / OpenGL ES 2.0, "Cloud Gate" for DX 10, "Sky Diver" for DX11 and "Fire Strike" for DX 11 graphics. **Reported metrics**: Graphics Score (GPU), Physics Score (CPU), Combined Score (GPU & CPU) and an overall 3DMark Score (higher is better for all Scores). **Scaling efficiencies**: Graphics tests are GPU dominant, sensitive to graphics and CPU frequency, core count and memory. **OS support**: Desktop Windows*, Android*, iOS* and Windows RT.

Windows 10* 4K 24fps 10bit HEVC Local Video Playback Component Average Power Disconnect all USB devices, connect to a local WiFi access point and set the screen brightness to 200 nits (disable DPST, set brightness to 200 nits on a white background and enable DPST). Wait for 10 mins for the OS to completely idle. Launch Tears of Steel (4K H265 24fps) video using the Windows Movie & TV App. Measure and calculate average power for the duration of the video. Report 3 run median.

Content Creation Multitasking Workflow Workload: Using Adobe* Photoshop Elements Organizer 14 (20150827.m.80115), Adobe* Photoshop Elements 14, Cyberlink* PowerDirector 14, Windows* Movie& TV app; Windows* Media Player on 2nd Gen System - The workflow has one video playing in the background. Adobe Photoshop Elements Organizer is used to view the photos. Adobe Photoshop Elements is then opened to preview different effects on the photos, then goes back to Adobe Photoshop Elements Organizer in order to do a batch "Smart Fix". Cyberlink* Powerdirector* is then open and videos taken on a GoPro HERO4 Black camera is imported and added to the timeline. A video is then produced using the H.264 AVC MPEG-4 4K 3840x2160/30p profile. The details of the 2 subtests used are listed below:

- Video creation workload description:

The videos are a 1 min. 46 sec. and 30 sec. 3840x2160, ~60Mbps, 29.97 fps, H.264, .MP4 videos from a GoPro Hero4 Black camera. The videos are added to the Cyberlink* PowerDirector project timeline and produced into a 2 min. 16 sec. video file using the H.264 AVC MPEG-4 4K 3840 x 2160/30p profile.

MAGIX Fastcut Video Create Workload: Using MAGIX* Fastcut - The workload video is a 9min 21sec, 3840x2106, ~59.9Mbps, 30fps, H.264, 3.89GB, .mp4 file. The "A Cold Place" template is applied and is exported using the UHD setting. The output video is a 38s, 3840x2160, ~59Mbps, H.264, .mp4 file.

4K to 1080p H.264 Transcode Workload: Using Cyblerlink* MediaEspresso v7.5 - The workload file is a 12 minute and 14 second, ~1.5 GB, 3840x2160p, 17561 kbps, H.264 MP4 video file. The file is transcoded to a smaller 1920x1080, 8 Mbps, H.264, .m2ts file for reduced file size during internet transfers or for viewing on a portable device.

4K VP9 Streaming Workload: Measure time to rundown battery while streaming 4K content from YouTube website: https://youtu.be/-3nXNnBwI6w