



## QUICK REFERENCE GUIDE

# 10<sup>th</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> vPro<sup>®</sup> Processors

## Computing That Works Hard for Business

### Performance & User Experience

NEW! Improved productivity with significant incremental performance gains over previous-generation commercial systems.

NEW! Nearly 3x faster Gigabit speeds and improved performance in dense environments with integrated Intel<sup>®</sup> Wi-Fi 6 (Gig+).<sup>1</sup>

Rapid responsiveness, worry-free battery life, and instant resume with modern laptops.<sup>2</sup>

### Modern Lifecycle Management

Save time and money on desktide support, PC maintenance, and employee downtime with seamless remote manageability of devices, whether on-premises or in the cloud, with Intel<sup>®</sup> Active Management Technology.

### NEW! Intel<sup>®</sup> Endpoint Management Assistant (EMA)

With this tool, IT can remotely and more securely manage Intel<sup>®</sup> Core<sup>™</sup> vPro<sup>®</sup> processor-based devices beyond the firewall from the cloud.

### A More Secure Foundation

Intel<sup>®</sup> Hardware Shield provides built-in platform protection features that helps prevent malware attacks—now with advanced threat detection and extended protection beyond system memory to help protect critical resources.

Intel<sup>®</sup> Platform Trust Technology integrated Trusted Platform Module for Intel<sup>®</sup> vPro<sup>®</sup> systems with Intel<sup>®</sup> TXT, and is Federal Information Protection Standard 140-2 L1 certified.

Intel<sup>®</sup> Transparent Supply Chain helps enable the traceability and authenticity of PC components for greater peace of mind.

### Smooth, Stable Operations

2020 Intel<sup>®</sup> SIPP platform including full PV support for additional (post TTM) Windows 10 Enterprise SAC releases; including up to 2 previous OS releases (RS5).

## New 10<sup>th</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> vPro<sup>®</sup> Processors

Up to

# 40%

**better overall  
application  
performance<sup>6</sup>**

(vs. a three-year-old laptop)

Up to

# 36%

**better office  
productivity<sup>7</sup>**

(vs. a three-year-old laptop)



### 10th Gen Intel® Core™ vPro® processors

**S-Series:** Mainstream commercial desktop platform

- Amazing performance for business productivity in a stationary form factor
- Built-in, hardware-based security features
- Lower power options for AIO and small form factor designs
- Best-in-class connectivity<sup>4</sup>
- Business productivity applications and workloads
- Data visualization
- Collaboration
- Manage large data sets

S-SERIES DESKTOP PROCESSORS	ELIGIBLE SKU	BASE FREQ. (GHz)	CORES/THREADS	CACHE	TDP
10th Gen Intel® Core™ i9 vPro® Processor	i9-10900K	3.7	10C/20T	20 MB	125 W
	i9-10900	2.8	10C/20T	20 MB	65 W
	i9-10900T	1.9	10C/20T	20 MB	35 W
10th Gen Intel® Core™ i7 vPro® Processor	i7-10700K	3.8	8C/16T	16 MB	125 W
	i7-10700	2.9	8C/16T	16 MB	65 W
	i7-10700T	2.0	8C/16T	16 MB	35 W
10th Gen Intel® Core™ i5 vPro® Processor	i5-10600K	4.1	6C/12T	12 MB	125 W
	i5-10600	3.3	6C/12T	12 MB	65 W
	i5-10600T	2.4	6C/12T	12 MB	35 W
	i5-10500	3.1	6C/12T	12 MB	65 W
	i5-10500T	2.3	6C/12T	12 MB	35 W
10th Gen Intel® Xeon® Processor	W-1290P	3.7	10C/20T	20 MB	125 W
	W-1270P	3.8	8C/16T	16 MB	125 W
	W-1250P	4.1	6C/12T	12 MB	125 W
	W-1290	3.2	10C/20T	20 MB	80 W
	W-1270	3.4	8C/16T	16 MB	80 W
	W-1250	3.3	6C/12T	12 MB	80 W
	W-1290T	1.9	10C/20	20 MB	35 W



### 10th Gen Intel® Core™ vPro® processors

**H-Series:** Mobile workstations and commercial performance notebooks

- Premium mobile performance
- Built-in, hardware-based security features
- Advanced wireless connectivity
- Business productivity applications and workloads
- 3D modeling
- Product design
- Media editing
- Data visualization
- Manipulation of high-density files
- Compute-intensive business applications

H-SERIES MOBILE PROCESSORS	ELIGIBLE SKU	BASE FREQ. (GHz)	CORES/THREADS	CACHE	TDP
10th Gen Intel® Core™ i9 vPro® Processor	i9-10885H	2.4	8C/16T	16 MB	45 W
10th Gen Intel® Core™ i7 vPro® Processor	i7-10875H	2.3	8C/16T	16 MB	45 W
	i7-10850H	2.7	6C/12T	12 MB	45 W
10th Gen Intel® Core™ i5 vPro® Processor	i5-10400H	2.6	4C/8T	8 MB	45 W
10th Gen Intel® Xeon® Processor	W-10885M	2.4	8C/16T	16 MB	45 W
	W-10855M	2.8	6C/12T	12 MB	45 W



**10th Gen Intel® Core™ vPro® processors**  
**U-Series:** Mainstream commercial mobile PC platform

- Latest in mobility, connectivity and style
- Built-in, hardware-based security features
- Advanced wireless connectivity
- Long mobile battery life
- Project Athena innovation program-based designs
- Business productivity applications and workloads
- Data visualization
- Collaboration
- Manage large data sets

U-SERIES MOBILE PROCESSORS	ELIGIBLE SKU	BASE FREQ. (GHz)	CORES/THREADS	CACHE	TDP
10th Gen Intel® Core™ i7 vPro® Processor	i7-10810U	1.1	6C/12T	12 MB	15 W
	i7-10610U	1.8	4C/8T	6 MB	15 W
10th Gen Intel® Core™ i5 vPro® Processor	i5-10310U	1.7	4C/8T	6 MB	15 W

## Compelling Features Built for Business



**Intel® Core™ vPro® Processors**  
 With the latest processors inside, you can take advantage of a number of technologies designed to keep employees productive and effective.



**Intel® Wi-Fi 6 (Gig+)**  
 Step up to the latest generation of wireless connectivity with fast, responsive & reliable Wi-Fi experiences for today's ultra-connected lifestyles: Nearly 3X faster<sup>4</sup> vs. standard 802.11ac 2x2 and nearly 40% higher peak data rates<sup>5</sup> vs. dual spatial stream 802.11ac.



**Support for Thunderbolt™ 3**  
 Fast data transfers and connection to the latest peripherals.



**Intel® Hardware Shield**  
 Protection is built right into the hardware with this security innovation. Built to secure PCs against a new generation of attacks aimed at the root hardware level.



**Intel® Active Management Technology<sup>3</sup>**  
 Makes it easy for IT to support worker productivity and remotely and securely manage devices, inside and outside the firewall or over the cloud.

# For more information, visit [intel.com](https://www.intel.com)

## System Configuration Details:

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 [www.intel.com/benchmarks](https://www.intel.com/benchmarks).

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details. No product or component can be absolutely secure.

Your costs and results may vary.

Intel technologies may require enabled hardware, software or service activation.

Intel does not control or audit third-party data. You should consult other sources to evaluate accuracy.

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Intel Preproduction Processor: Intel® Core™ i7-10810U (CML-U 6+2) PL1=15W, 6C12T, Turbo up to 4.9GHz, Memory: 2x16GB DDR4-2667 2Rx8, Storage: Intel® 760p M.2 PCIe NVMe SSD, Display Resolution: 1920x1080, OS: Windows® 10 19H2-18363. ent.rx64.691-Appx68. Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode & Tamper Protection Disabled / Defender Disabled, Graphics driver: 2020-02-11-ci-master-4102-revenue-pr-1007926-whql, Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018.

vs.

FOR SYSMARK 2018 SCORES USE 8/15/19 TESTING - Processor: Intel® Core™ i7 -7600U (KBL-U 2+2) PL1=15W, 2C4T, Turbo up to 3.9GHz, Memory: 2 X 4GB DDR4, Storage: Intel® 660p M.2 PCIe NVMe SSD, Display Resolution: 1920x1080, OS: Windows 10 Pro 10.0.18362.175. Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode & Tamper Protection Disabled / Defender Disabled, Graphics driver: n/a, Bios version: n/a, Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018.

FOR WEBXPRT3 AND OFFICE 365 WORKLOAD MEASUREMENTS USE 5/4/20 TESTING - Processor: Intel® Core™ i7 -7600U

(KBL-U 2+2) PL1=15W, 2C4T, Turbo up to 3.9GHz, Memory: 8117 MB (DDR4 SDRAM), Storage: Intel® 660p M.2 PCIe NVMe SSD, Display Resolution: 1920x1080, OS: 10.0.18363.657 (Win10 19H2 [1909] November 2019 Update). Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode & Tamper Protection Disabled / Defender Disabled, Graphics driver: 25.20.100.6374, Bios version: KBLSE2R1.R00.X146.P02.1812100910 , Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018.

1 Theoretical performance compared to standard 802.11ac. For more information about the data presented, visit [www.intel.com/wifi6disclaimers](https://www.intel.com/wifi6disclaimers).

2 Intel's design verification process ensures that certain product specifications for user experience are included. Intel does not guarantee specific performance of any system. Actual performance will vary with use, system configurations, and settings.

3 For more information about the data presented, visit [www.intel.com/wifi6disclaimers](https://www.intel.com/wifi6disclaimers)

4 802.11ax 2x2 160MHz enables 2402Mbps maximum theoretical data rates, ~3X (2.8X) faster than standard 802.11ac 2x2 80MHz (867Mbps) as documented in IEEE 802.11 wireless standard specifications, and require the use of similarly configured 802.11ax wireless network routers.

5 Intel® Wireless-AX claims are based on the comparison (39%) of the expected maximum theoretical data rates for dual spatial stream 802.11ax 80 MHz (1201 Mbps) vs. dual spatial stream 802.11ac 80 MHz (867 Mbps) Wi-Fi solutions as documented in IEEE 802.11ax draft 2.0 spec and IEEE 802.11 wireless standard specifications, and require the use of similarly configured 802.11ax wireless network routers.

6 As measured by SYSmark 2018 Overall Score on pre-production 10th Gen Intel® Core™ i7-10810U vs. 8/15/19 testing of 7th Gen Intel® Core™ i7-7600U

7 As measured by SYSmark 2018 Productivity Subtest Score on pre-production 10th Gen Intel® Core™ i7-10810U vs. 8/15/19 testing of 7th Gen Intel® Core™ i7-7600U