

Quick Reference Guide

Intel® Core™ Ultra Mobile Processors (HX-SKUs)

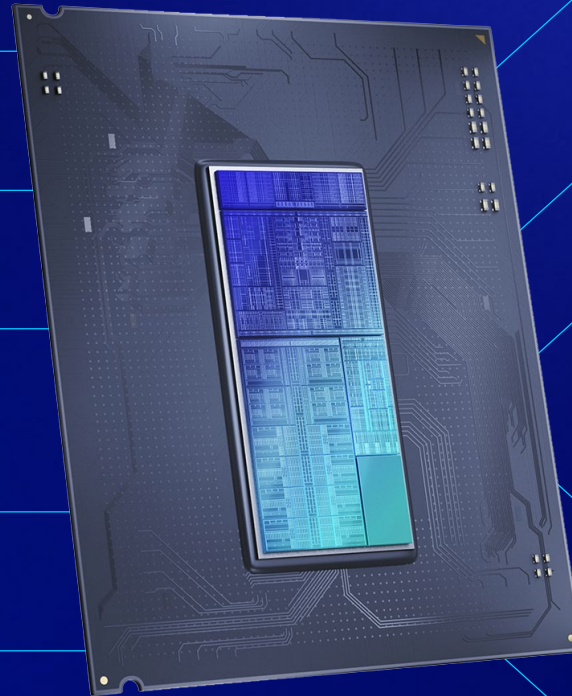
NEW Next Generation P-Cores + E-Cores

NEW PCIe Gen 4 / PCIe Gen 5

ENHANCED Intel® X^e LPG Architecture

NEW Ray Tracing Capabilities & AV1 Encode Support

NEW DDR5 6400 Support¹



NEW NPU, 13 TOPS²

NEW Intel® Silicon Security Engine and Linear Address Space Separation

NEW Accelerating AI Performance, up to 36 TOPS²

FEATURED Discrete Intel® Wi-Fi 7 (5 Gig)³ & Bluetooth® 5.4 Support

NEW Discrete Thunderbolt™ 5 (80/120G) Technology Support

FEATURED Integrated Thunderbolt™ 4 Ports

SKU Chart

Intel® Core™ Ultra Mobile Processors (HX-SKUs)

Processor Number	Processor Cores (P-cores + E-cores) ⁴	Processor Threads	Intel® Smart Cache (LLC)	Max Turbo Frequency ⁵	Base Frequency	Graphics Max Frequency	Processor Graphics	Total PCIe Lanes, Thunderbolt™ Technology, Wi-Fi	Max Memory Speed ¹	Memory Capacity/ Rank	Processor Base Power	Maximum Turbo Power
				P-core	P-core							
Intel® Core™ Ultra 9 Processor 285HX	24 (8+16)	24	36 MB	Up to 5.5 GHz	Up to 2.8 GHz	Up to 2.0 GHz	Intel® Graphics	4 PCIe Gen 5 + 4 PCIe Gen 4 Lanes 2 Integrated Thunderbolt™ 4 Ports + Discrete Thunderbolt™ 5 Integrated Wi-Fi 6E + Discrete Wi-Fi 7 ³	DDR5 6400	192 GB	55 W	160 W
Intel® Core™ Ultra 9 Processor 275HX	24 (8+16)	24	36 MB	Up to 5.4 GHz	Up to 2.7 GHz	Up to 1.9 GHz						
Intel® Core™ Ultra 7 Processor 265HX	20 (8+12)	20	30 MB	Up to 5.3 GHz	Up to 2.6 GHz	Up to 1.9 GHz						
Intel® Core™ Ultra 7 Processor 255HX	20 (8+12)	20	30 MB	Up to 5.2 GHz	Up to 2.4 GHz	Up to 1.85 GHz						
Intel® Core™ Ultra 5 Processor 245HX	14 (6+8)	14	24 MB	Up to 5.1 GHz	Up to 3.1 GHz	Up to 1.9 GHz						
Intel® Core™ Ultra 5 Processor 235HX	14 (6+8)	14	24 MB	Up to 5.1 GHz	Up to 2.9 GHz	Up to 1.8 GHz						

Notices & Disclaimers

Performance varies by use, configuration, and other factors. Learn more on the Performance Index site.

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.

All features may require software purchase, subscription, or enablement by a software or platform provider, or may have specific configuration or compatibility requirements. Details at www.intel.com/PerformanceIndex. Results may vary.

Your costs and results may vary.

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

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1. **Max Memory Speed:** For latest memory configurations and speeds, refer to ark.intel.com.
2. **TOPS:** All TOPS are “up to” and approximate until final IP frequency defined, different SKUs with different frequency & power targets will have different TOPS.
3. **Intel® Wi-Fi 7 (5 Gig):** While Wi-Fi 7 is backward compatible with previous generations, new Wi-Fi 7 features require PCs configured with Intel® Wi-Fi 7 solutions, PC OEM enabling, operating system support, and use with appropriate Wi-Fi 7 routers/Access Points/gateways. 6 GHz Wi-Fi 7 may not be available in all regions. Performance varies by use, configuration, and other factors. For details on performance claims, learn more at www.intel.com/performance-wireless.
4. **Core Counts:** Processor cores listed first are the total number of cores in the processor. The number of Performance-cores, Efficient-cores, and Low-power E-cores are listed in parentheses (P+E+LPE).
5. **Max Turbo Frequency:** The frequency of cores and core types varies by workload, power consumption, and other factors. Visit <https://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html> for more information.