

## Essentials

Product Collection	<a href="#">13th Generation Intel® Core™ i7 Processors</a>
Code Name	<a href="#">Products formerly Raptor Lake</a>
Vertical Segment	Mobile
Processor Number	i7-1360P
Lithography	Intel 7
Recommended Customer Price	\$480.00

### CPU Specifications

Total Cores	12
# of Performance-cores	4
# of Efficient-cores	8
Total Threads	16
Max Turbo Frequency	5.00 GHz
Performance-core Max Turbo Frequency	5.00 GHz
Efficient-core Max Turbo Frequency	3.70 GHz
Cache	18 MB Intel® Smart Cache
Processor Base Power	28 W
Maximum Turbo Power	64 W
Minimum Assured Power	20 W
Intel® Deep Learning Boost (Intel® DL Boost) on CPU	Yes

### Supplemental Information

Marketing Status	Launched
Launch Date	Q1'23
Embedded Options Available	No
Datasheet	<a href="#">View now</a>

### Memory Specifications

Max Memory Size (dependent on memory type)	96 GB
Memory Types	Up to DDR5 5200 MT/s Up to DDR4 3200 MT/s Up to LPDDR5/x 6400 MT/s Up to LPDDR4x 4267 MT/s
Max # of Memory Channels	2
ECC Memory Supported <sup>†</sup>	No

### GPU Specifications

GPU Name <sup>†</sup>	Intel® Iris® Xe Graphics eligible
Graphics Max Dynamic Frequency	1.50 GHz
Graphics Output	eDP 1.4b, DP 1.4a, HDMI 2.1
Execution Units	96
Max Resolution (HDMI) <sup>†</sup>	4096 x 2304 @ 60Hz
Max Resolution (DP) <sup>‡</sup>	7680 x 4320 @ 60Hz
Max Resolution (eDP - Integrated Flat Panel) <sup>‡</sup>	4096 x 2304 @ 120Hz
DirectX* Support	12.1
OpenGL* Support	4.6
OpenCL* Support	3.0
Multi-Format Codec Engines	2
Intel® Quick Sync Video	Yes
# of Displays Supported <sup>†</sup>	4
Device ID	0xA7A0
<b>Expansion Options</b>	

Intel® Thunderbolt™ 4	Yes
Microprocessor PCIe Revision	Gen 4
Chipset / PCH PCIe Revision	Gen 3
Max # of PCI Express Lanes	20
<b>Package Specifications</b>	

Sockets Supported	FCBGA1744
Max CPU Configuration	1
T <sub>JUNCTION</sub>	100°C
Package Size	50mm x25mm
<b>Advanced Technologies</b>	

Intel® Gaussian & Neural Accelerator	3.0
Intel® Thread Director	Yes
Intel® Image Processing Unit	6.0
Intel® Smart Sound Technology	Yes
Intel® Wake on Voice	Yes
Intel® High Definition Audio	Yes
MIPI SoundWire*	1.2
<b>Security &amp; Reliability</b>	

Intel® Adaptix™ Technology	Yes
Intel® Speed Shift Technology	Yes
Intel® Hyper-Threading Technology <sup>†</sup>	Yes
Instruction Set	64-bit
Instruction Set Extensions	Intel® SSE4.1, Intel® SSE4.2, Intel® AVX2
Thermal Monitoring Technologies	Yes
Intel® Flex Memory Access	Yes
Intel® Volume Management Device (VMD)	Yes
Intel vPro® Eligibility <sup>†</sup>	Intel vPro® Essentials
Intel® Threat Detection Technology (TDT)	Yes
Intel® Standard Manageability (ISM) <sup>†</sup>	Yes
Intel® Hardware Shield Eligibility <sup>†</sup>	Yes
Intel® Control-Flow Enforcement Technology	Yes
Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® Trusted Execution Technology <sup>†</sup>	Yes
Execute Disable Bit <sup>†</sup>	Yes
Intel® OS Guard	Yes
Intel® Boot Guard	Yes
Mode-based Execute Control (MBEC)	Yes
Intel® Virtualization Technology (VT-x) <sup>†</sup>	Yes
Intel® Virtualization Technology for Directed I/O (VT-d) <sup>†</sup>	Yes
Intel® VT-x with Extended Page Tables (EPT) <sup>†</sup>	Yes