



### Intel® Core™ i9 Desktop Processors Comparison Chart



#### INSTRUCTIONS

1. If the column heading is underlined, clicking on that will take you to a web site or document where you can get more information on that term.
2. Clicking on the individual processor number will take you to an Intel database that contains an expanded set of processor specifications.
3. Clicking on the individual box order code will take you to an Intel database that will show which Intel® Desktop Boards are compatible with that processor.

Processor Name and Collection				Ordering	Package Specification	Frequency/Cache/Cores/Threads/TDP						Processor Graphics		Security & Reliability	Advanced Technologies			Memory Specifications	
Processors Number	Collection	Box Order Number (Click to link to Compatible Motherboards)	Launch Year	Processor Socket	Processor Base Frequency (GHz)	Max Turbo Frequency	Intel® Turbo Boost Max 3.0 Frequency <sup>1</sup>	Cache (MB)	Cores/Threads	Intel® Hyper-Threading Technology	TDP (Thermal Design Power) (Watts)	Intel® Graphics Supported	Intel® Graphics	Intel® AES New Instructions (AES)	# of AVX-512 FMA / Fused Multiply Add. Instructions Units	Intel® Virtualization Technology (VT-x)	Intel® Optane™ Memory Supported	Max # of Memory Channels	* Maximum DDR4 / DDR3 Supported Memory Speed (MHz)
<a href="#">i9-9900</a>	9th Gen	<a href="#">BX80684199900</a>	Q2'19	LGA1151	3.10	5.00	N/A	16	8/16	Yes	65	Yes	UHD 630	Yes	N/A	Yes	Yes	2	2666 / NA
<a href="#">i9-9900T</a>	9th Gen	Not Boxed	Q2'19	LGA1151	2.10	4.40	N/A	16	8/16	Yes	35	Yes	UHD 630	Yes	N/A	Yes	Yes	2	2666 / NA
<a href="#">i9-9900KF</a>	9th Gen	<a href="#">BX80684199900KF</a>	Q1'19	LGA1151	3.60	5.00	N/A	16	8/16	Yes	95	No	N/A	Yes	N/A	Yes	Yes	2	2666 / NA
<a href="#">i9-9960X X-series</a>	Core™ X-series	<a href="#">BX80673199960X</a>	Q4'18	LGA2066	3.10	4.40	4.50	22	16/32	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-9940X X-series</a>	Core™ X-series	<a href="#">BX80673199940X</a>	Q4'18	LGA2066	3.30	4.40	4.50	19.25	14/28	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-9920X X-series</a>	Core™ X-series	<a href="#">BX80673199920X</a>	Q4'18	LGA2066	3.50	4.40	4.50	19.25	12/24	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-9900X X-series</a>	Core™ X-series	<a href="#">BX80673199900X</a>	Q4'18	LGA2066	3.50	4.40	4.50	19.25	10/20	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-9820X X-series</a>	Core™ X-series	<a href="#">BX80673199820X</a>	Q4'18	LGA2066	3.30	4.10	4.20	16.5	10/20	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i7-9800X X-series</a>	Core™ X-series	<a href="#">BX80673179800X</a>	Q4'18	LGA2066	3.80	4.40	4.50	16.5	8/16	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-9900K</a>	9th Gen	<a href="#">BX80684199900K</a>	Q4'18	LGA1151	3.60	5.00	N/A	16	8/16	Yes	95	Yes	UHD 630	Yes	N/A	Yes	Yes	2	2666 / NA
<a href="#">i9-7960X</a>	Core™ X-series	<a href="#">BX80673197960X</a>	Q3'17	LGA2066	2.80	4.20	4.40	22	16/32	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-7940X</a>	Core™ X-series	<a href="#">BX80673197940X</a>	Q3'17	LGA2066	3.10	4.30	4.40	19.25	14/28	Yes	165	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-7920X</a>	Core™ X-series	<a href="#">BX80673197920X</a>	Q3'17	LGA2066	2.90	4.30	4.40	16	12/24	Yes	140	No	N/A	Yes	2	Yes	Yes	4	2666 / NA
<a href="#">i9-7900X</a>	Core™ X-series	<a href="#">BX80673197900X</a>	Q2'17	LGA2066	3.30	4.30	4.50	13.75	10/20	Yes	140	No	N/A	Yes	2	Yes	Yes	4	2666 / NA

Technical Documents = Datasheets, Design Guides, etc.;

\* The value in column (Maximum DDR4/DDR3L/DDR3) is the maximum value, please refer to the [product specification page](#) for other possible values supported

#### Intel® Core™ i9 Processor Top Support Documents

<a href="#">Technical Documents (Datasheets, Design Guides, etc)</a>	Technical resources for the processors
<a href="#">Intel® Desktop Processors Motherboard Compatibility Tool</a>	Use this tool to find compatible motherboards for the Intel® Desktop Processor
<a href="#">Intel® Processor Installation Center</a>	This site contains installation material for this processors family and socket.

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