Comparison of Intel® Desktop Core™ Processors

Product Collection	Processor Number	Quarter Launch	Year Launch	Lithography (nm)	# of Cores	# of Threads	Processor Base Frequency (GHz)	Cache (MB)	TDP (W)	Max Turbo 2.0 Frequency (GHz)	Intel® Turbo Boost Max Technology 3.0 Frequency (GHz)	Memory Types	Max Memory Size (dependent on memory type) GB	Max # of Memory Channels	Intel® Processor Graphics	Graphics Base Frequency (MHz)	Graphics Max Dynamic Frequency (GHz)	Max # of PCI Express Lanes	Sockets Supported	Intel® Optane™ Memory Supported	Intel® Turbo Boost Technology 2.0	Intel® Turbo Boost Max Technology 3.0	Intel® vPro™ Platform Eligibility	Intel® Deep Learning Boost (Intel® DL Boost)	Max Resolution (HDMI)‡	Max Resolution (DP)‡	Max Resolution (eDP Integrated flat Panel)‡
11th Gen i7	i7-11700	Q1	2021	14	8	16	2.50	16	65	4.80	4.90	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	Yes	Yes	Yes	4096x2304@24Hz	3840x2160@60Hz	3840x2160@60Hz
11th Gen i9	i9-11900T	Q1	2021	14	8	16	1.50	16	35	4.80	4.90	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	Yes	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i9	i9-11900KF	Q1	2021	14	8	16	3.50	16	125	5.10	5.20	DDR4 3200	128	2	No	N/A	N/A	20	LGA1200	Yes	Yes	Yes	No	Yes	N/A	N/A	N/A
11th Gen i9	i9-11900K	Q1	2021	14	8	16	3.50	16	125	5.10	5.20	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	Yes	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i9	i9-11900F	Q1	2021	14	8	16	2.50	16	65	5.00	5.10	DDR4 3200	128	2	No	N/A	N/A	20	LGA1200	Yes	Yes	Yes	No	Yes	N/A	N/A	N/A
11th Gen i9	i9-11900	Q1	2021	14	8	16	2.50	16	65	5.00	5.10	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	Yes	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i7	i7-11700T	Q1	2021	14	8	16	1.40	16	35	4.50	4.60	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	Yes	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i7	i7-11700KF	Q1	2021	14	8	16	3.60	16	125	4.90	5.00	DDR4 3200	128	2	No	N/A	N/A	20	LGA1200	Yes	Yes	Yes	No	Yes	N/A	N/A	N/A
11th Gen i7	i7-11700K	Q1	2021	14	8	16	3.60	16	125	4.90	5.00	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	Yes	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i7	i7-11700F	Q1	2021	14	8	16	2.50	16	65	4.80	4.90	DDR4 3200	128	2	No	N/A	N/A	20	LGA1200	Yes	Yes	Yes	No	Yes	N/A	N/A	N/A
11th Gen i5	i5-11600T	Q1	2021	14	6	12	1.70	12	35	4.10	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i5	i5-11600KF	Q1	2021	14	6	12	3.90	12	125	4.90	N/A	DDR4 3200	128	2	No	N/A	N/A	20	LGA1200	Yes	Yes	No	Yes	No	N/A	N/A	N/A
11th Gen i5	i5-11600K	Q1	2021	14	6	12	3.90	12	125	4.90	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i5	i5-11600F	Q1	2021	14	6	12	2.80	12	65	4.80	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i5	i5-11600T	Q1	2021	14	6	12	1.50	12	35	3.90	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i5	i5-11400	Q1	2021	14	6	12	2.70	12	65	4.40	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	Yes	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i5	i5-11400F	Q1	2021	14	6	12	2.60	12	65	4.40	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	No	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i5	i5-11400T	Q1	2021	14	6	12	1.30	12	35	3.70	N/A	DDR4 3200	128	2	UHD 750	350	1.30	20	LGA1200	Yes	Yes	No	No	Yes	4096x2304@24Hz	5120 x 3200 @60Hz	5120 x 3200 @60Hz
11th Gen i3	i3-10105F	Q1	2021	14	4	8	3.00	6	65	4.40	N/A	DDR4 2666	128	2	No	N/A	N/A	20	LGA1200	Yes	Yes	No	No	Yes	N/A	N/A	N/A
11th Gen i3	i3-10105	Q1	2021	14	4	8	3.70	6	65	4.40	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i9	i9-10850K	Q2	2020	14	10	20	3.60	20	125	5.20	N/A	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i9	i9-10900T	Q2	2020	14	10	20	1.90	20	35	4.50	4.60	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	Yes	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i9	i9-10900KF	Q2	2020	14	10	20	3.70	20	125	5.10	5.20	DDR4 2933	128	2	No	N/A	N/A	16	LGA1200	Yes	Yes	Yes	No	Yes	N/A	N/A	N/A
10th Gen i9	i9-10900K	Q2	2020	14	10	20	3.70	20	125	5.10	5.20	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	Yes	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i9	i9-10900F	Q2	2020	14	10	20	2.80	20	65	5.00	5.10	DDR4 2933	128	2	No	N/A	N/A	16	LGA1200	Yes	Yes	Yes	No	No	N/A	N/A	N/A
10th Gen i9	i9-10900	Q2	2020	14	10	20	2.80	20	65	5.00	5.10	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	Yes	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i7	i7-10700KF	Q2	2020	14	8	16	3.80	16	125	5.00	5.10	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	No	No	4096x2304@24Hz	3840x2160@60Hz	3840x2160@60Hz
10th Gen i7	i7-10700K	Q2	2020	14	8	16	3.80	16	125	5.00	5.10	DDR4 2933	128	2	No	N/A	N/A	16	LGA1200	Yes	Yes	Yes	No	No	4096x2304@24Hz	3840x2160@60Hz	3840x2160@60Hz
10th Gen i7	i7-10700F	Q2	2020	14	8	16	2.90	16	65	4.70	4.80	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	yes	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i7	i7-10700	Q2	2020	14	8	16	2.90	16	65	4.70	4.80	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10600KF	Q2	2020	14	6	12	4.10	12	125	4.80	N/A	DDR4 2933	128	2	No	N/A	N/A	16	LGA1200	Yes	Yes	No	No	No	N/A	N/A	N/A
10th Gen i5	i5-10600K	Q2	2020	14	6	12	4.10	12	125	4.80	N/A	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	No	Yes	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10600T	Q2	2020	14	6	12	2.40	12	35	4.00	N/A	DDR4 2933	128	2	UHD 630	350	1.20	16	LGA1200	Yes	Yes	Yes	No	Yes	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10500TE	Q2	2020	14	6	12	2.30	12	35	3.80	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	Yes	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10500T	Q2	2020	14	6	12	2.30	12	35	3.80	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	Yes	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10500H	Q2	2020	14	6	12	2.70	12	65	4.50	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	Yes	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10500	Q2	2020	14	6	12	2.90	12	65	4.50	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	Yes	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i5	i5-10400	Q2	2020	14	6	12	2.90	12	65	4.30	N/A	DDR4 2933	128	2	No	N/A	N/A	16	LGA1200	Yes	Yes	No	No	No	N/A	N/A	N/A
10th Gen i5	i5-10400F	Q2	2020	14	6	12	2.90	12	65	4.30	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10320	Q2	2020	14	4	8	3.80	8	65	4.60	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10305F	Q2	2020	14	4	8	3.00	8	35	3.90	N/A	DDR4 2933	128	2	UHD 630	350	1.10	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10305	Q2	2020	14	4	8	3.70	8	65	4.40	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10300T	Q2	2020	14	4	8	3.00	8	35	3.80	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10300	Q2	2020	14	4	8	3.70	8	65	4.40	N/A	DDR4 2933	128	2	UHD 630	350	1.15	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10100T	Q2	2020	14	4	8	3.00	6	35	3.80	N/A	DDR4 2933	128	2	UHD 630	350	1.10	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
10th Gen i3	i3-10100	Q2	2020	14	4	8	3.60	6	65	4.30	N/A	DDR4 2933	128	2	UHD 630	350	1.10	16	LGA1200	Yes	Yes	No	No	No	4096 x 2160@30Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i9	i9-9900KS	Q4	2019	14	8	16	4.00	16	127	5.00	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
X-series	i9-10980XE	Q4	2019	14	18	36	3.00	24.8	165	4.60	4.80	DDR4 2933	256	4	No	N/A	N/A	48	FCLGA2066	Yes	Yes	Yes	No	No	N/A	N/A	N/A
X-series	i9-10940X	Q4	2019	14	14	28	3.30	19.3	165	4.60	4.80	DDR4 2933	256	4	No	N/A	N/A	48	FCLGA2066	Yes	Yes	Yes	No	No	N/A	N/A	N/A
X-series	i9-10920X	Q4	2019	14	12	24	3.50	19.3	165	4.60	4.80	DDR4 2933	256	4	No	N/A	N/A	48	FCLGA2066	Yes	Yes	Yes	No	No	N/A	N/A	N/A
X-series	i9-10900X	Q4	2019	14	10	20	3.70	19.3	165	4.50	4.70	DDR4 2933	256	4	No	N/A	N/A	48	FCLGA2066	Yes	Yes	Yes	No	No	N/A	N/A	N/A
9th Gen i9	i9-9900T	Q2	2019	14	8	16	2.10	16	35	4.40	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i9	i9-9900K	Q2	2019	14	8	16	3.60	16	95	5.00	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	Yes	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i7	i7-9700T	Q2	2019	14	8	8	2.00	12	35	4.30	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	No	Yes	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i7	i7-9700KF	Q2	2019	14	8	8	3.60	12	65	4.70	N/A	DDR4 2666	128	2	No	N/A	N/A	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i7	i7-9700K	Q2	2019	14	8	8	3.60	12	95	4.90	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	Yes	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i7	i7-9700F	Q2	2019	14	8	8	3.00	12	65	4.70	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	Yes	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i7	i7-9700	Q2	2019	14	8	8	3.00	12	65	4.70	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	Yes	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9600T	Q2	2019	14	6	6	2.30	9	35	3.90	N/A	DDR4 2666	128	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	Yes	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9600	Q2	2019	14	6	6	3.10	9	65	4.60	N/A	DDR4 2666	128	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	Yes	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9500T	Q2	2019	14	6	6	2.20	9	35	3.70	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9500	Q2	2019	14	6	6	3.00	9	65	4.40	N/A	DDR4 2666	128	2	No	N/A	N/A	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9400T	Q2	2019	14	6	6	1.80	9	35	3.40	N/A	DDR4 2666	128	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9400F	Q2	2019	14	6	6	2.90	9	65	4.10	N/A	DDR4 2666	128	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9400	Q2	2019	14	6	6	2.90	9	65	4.10	N/A	DDR4 2666	128	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9350KF	Q2	2019	14	4	4	4.00	8	91	4.60	N/A	DDR4 2400	64	2	No	N/A	N/A	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
X-series	i9-9820X	Q4	2018	14	10	20	3.30	16.5	165	4.20	4.40	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	Yes	No	No	N/A	N/A	N/A
X-series	i9-9960X	Q4	2018	14	16	32	3.10	22	165	4.40	4.50	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	Yes	No	No	N/A	N/A	N/A
X-series	i9-9940X	Q4	2018	14	14	28	3.30	19.3	165	4.40	4.50	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	No	No	No	N/A	N/A	N/A
X-series	i9-9920X	Q4	2018	14	12	24	3.50	19.3	165	4.40	4.50	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	No	No	No	N/A	N/A	N/A
X-series	i9-9900X	Q4	2018	14	10	20	3.50	19.3	165	4.40	4.50	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i9	i9-9900KS	Q4	2018	14	8	16	3.60	16	95	5.00	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	No	Yes	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
X-series	i9-9820X	Q4	2018	14	10	20	3.30	16.5	165	4.10	4.20	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	No	No	No	N/A	N/A	N/A
X-series	i7-9820X	Q4	2018	14	8	16	3.60	16.5	165	4.00	4.20	DDR4 2666	128	4	No	N/A	N/A	44	FCLGA2066	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i7	i7-9700E	Q4	2018	14	8	8	1.80	12	65	4.50	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	Yes	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9600E	Q4	2018	14	6	6	1.70	9	65	4.60	N/A	DDR4 2666	128	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	Yes	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i5	i5-9500E	Q4	2018	14	6	6	1.80	9	65	4.40	N/A	DDR4 2666	128	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9350KF	Q4	2018	14	4	4	4.00	8	91	4.60	N/A	DDR4 2400	64	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9320	Q4	2018	14	4	4	3.70	8	62	4.40	N/A	DDR4 2400	64	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9300T	Q4	2018	14	4	4	3.20	8	35	3.80	N/A	DDR4 2400	64	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9300	Q4	2018	14	4	4	3.70	8	62	4.30	N/A	DDR4 2400	64	2	UHD 630	350	1.15	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9100T	Q4	2018	14	4	4	3.10	6	35	3.70	N/A	DDR4 2400	64	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i3	i3-9100F	Q4	2018	14	4	4	3.60	6	65	4.20	N/A	DDR4 2400	64	2	No	N/A	N/A	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i3	i3-9100	Q4	2018	14	4	4	3.60	6	65	4.20	N/A	DDR4 2400	64	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	4096 x 2304@24Hz	4096 x 2304@60Hz	4096 x 2304@60Hz
9th Gen i9	i9-9900KF	Q1	2019	14	8	16	3.60	16	95	5.00	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i9	i9-9900	Q1	2019	14	8	16	3.10	16	65	5.00	N/A	DDR4 2666	128	2	UHD 630	350	1.20	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i7	i7-9700KF	Q1	2019	14	8	8	3.60	12	95	4.90	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i7	i7-9700K	Q1	2019	14	8	8	3.60	12	95	4.90	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i7	i7-9700F	Q1	2019	14	8	8	3.00	12	65	4.70	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i7	i7-9700	Q1	2019	14	8	8	3.00	12	65	4.70	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9600KF	Q1	2019	14	6	6	3.70	9	95	4.60	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9600K	Q1	2019	14	6	6	3.70	9	95	4.60	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9600	Q1	2019	14	6	6	3.10	9	65	4.60	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9500F	Q1	2019	14	6	6	3.00	9	65	4.40	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9500	Q1	2019	14	6	6	3.00	9	65	4.40	N/A	DDR4 2666	128	2	UHD 630	350	1.10	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9400F	Q1	2019	14	6	6	2.90	9	65	4.10	N/A	DDR4 2666	128	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i5	i5-9400	Q1	2019	14	6	6	2.90	9	65	4.10	N/A	DDR4 2666	128	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i3	i3-9350KF	Q1	2019	14	4	4	4.00	8	91	4.60	N/A	DDR4 2400	64	2	No	N/A	N/A	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i3	i3-9300T	Q1	2019	14	4	4	3.20	8	35	3.80	N/A	DDR4 2400	64	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i3	i3-9300	Q1	2019	14	4	4	3.70	8	62	4.30	N/A	DDR4 2400	64	2	UHD 630	350	1.05	16	FCGA1151	Yes	Yes	No	No	No	N/A	N/A	N/A
9th Gen i3	i3-9100T	Q1	2019	14	4	4	3.10	6	35	3.70	N/A	DDR

4th Gen i3	i3-4130T	Q2	2014	22	2	4	3.00	3	35	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4400	200	1.15	16	FCBGA1150	No	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4150	Q2	2014	22	2	4	3.60	4	54	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	Yes	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4150T	Q2	2014	22	2	4	3.10	4	35	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	200	1.15	16	FCBGA1150	No	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4340	Q2	2014	22	2	4	3.70	4	54	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	Yes	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4460	Q2	2014	22	4	4	3.20	6	84	3.40	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4440S	Q2	2014	22	4	4	2.90	6	65	3.40	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4440S	Q2	2014	22	4	4	1.90	6	35	2.70	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4570S	Q2	2014	22	4	4	2.90	6	84	2.70	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4570S	Q2	2014	22	4	4	3.00	6	65	2.70	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4590T	Q2	2014	22	4	4	2.00	6	35	3.00	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670	Q2	2014	22	4	4	3.40	6	84	3.60	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670S	Q2	2014	22	4	4	3.10	6	65	3.10	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670T	Q2	2014	22	4	4	2.20	6	35	3.30	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4770K	Q2	2014	22	4	8	3.60	8	84	4.00	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4770S	Q2	2014	22	4	8	3.10	8	88	4.00	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.25	16	FCBGA1150	No	Yes	No	No	No	3840x2160@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4770T	Q2	2014	22	4	8	2.20	8	65	3.00	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4770T	Q2	2014	22	4	8	2.70	8	45	3.80	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	Yes	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4130	Q3	2013	22	2	4	3.40	3	54	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4400	350	1.15	16	FCBGA1150	Yes	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4130T	Q3	2013	22	2	4	2.90	3	35	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4400	200	1.15	16	FCBGA1150	No	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4140	Q3	2013	22	2	4	3.50	4	54	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i3	i3-4150T	Q3	2013	22	2	4	3.00	4	35	N/A	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	200	1.15	16	FCBGA1150	No	No	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4430	Q3	2013	22	4	4	3.00	6	84	3.20	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4440	Q3	2013	22	4	4	3.10	6	84	3.30	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4440S	Q3	2013	22	4	4	2.80	6	65	3.30	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	Yes	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4571	Q3	2013	22	4	8	3.50	6	84	3.90	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD4600	350	1.10	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
X-series	i7-4820K	Q3	2013	22	4	8	3.70	10	130	3.90	N/A	DDR3-1333/1600/1866	64	4	No	N/A	N/A	40	FCBGA2011	No	Yes	No	No	No	N/A	N/A	N/A
X-series	i7-4930K	Q3	2013	22	6	12	3.40	12	130	3.90	N/A	DDR3-1333/1600/1866	64	4	No	N/A	N/A	40	FCBGA2011	No	Yes	No	No	No	N/A	N/A	N/A
X-series	i7-4960X	Q3	2013	22	6	12	3.60	15	130	4.00	N/A	DDR3-1333/1600/1866	64	4	No	N/A	N/A	40	FCBGA2011	No	Yes	No	No	No	N/A	N/A	N/A
4th Gen i5	i5-4470	Q3	2013	22	4	4	3.00	6	84	3.20	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.10	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4570T	Q3	2013	22	4	4	2.70	6	45	3.30	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670	Q3	2013	22	4	4	3.20	6	84	3.60	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670R	Q3	2013	22	4	4	2.70	6	65	3.20	N/A	DDR3 and DDR3L 1333/1600	32	2	Iris™ Pro 5200	200	1.15	16	FCBGA1364	Yes	Yes	No	No	No	3840x2160@60Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670S	Q3	2013	22	4	4	2.90	6	65	3.00	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.15	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4570T	Q3	2013	22	4	4	2.90	6	45	3.60	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	200	1.15	16	FCBGA1150	Yes	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670	Q3	2013	22	4	4	3.40	6	84	3.80	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670S	Q3	2013	22	4	4	3.40	6	84	3.80	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670T	Q3	2013	22	4	4	2.30	6	35	3.30	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i5	i5-4670T	Q3	2013	22	4	4	3.30	6	35	3.60	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD 4600	350	1.20	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4765T	Q3	2013	22	4	8	2.00	8	35	3.00	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD4600	350	1.20	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4771	Q3	2013	22	4	8	3.50	8	84	3.90	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD4600	350	1.25	16	FCBGA1150	No	Yes	No	No	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4785T	Q3	2013	22	4	8	3.20	8	65	3.50	N/A	DDR3 and DDR3L 1333/1600	32	2	HD 5200	200	1.30	16	FCBGA1364	No	Yes	No	No	No	3840x2160@60Hz	3840x2160@24Hz	N/A
4th Gen i7	i7-4790	Q3	2013	22	4	8	3.10	8	65	3.90	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD4600	350	1.10	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz
4th Gen i7	i7-4790T	Q3	2013	22	4	8	2.50	8	45	3.70	N/A	DDR3-1333/1600, DDR3L-1333/1600	32	2	HD4600	350	1.10	16	FCBGA1150	No	Yes	No	Yes	No	4096x2304@24Hz	3840x2160@24Hz	3840x2160@60Hz

All Intel® Core™ Processors listed above has the Intel® AES New Instructions supported
All Intel® Core™ Processors listed above has the Intel® Virtualization Technology (VTx) ‡ supported