Intel CPU

Year	Name/Link	tech	feature	Passmark	Geekbench 6
2008	https://en.wikipedia.org/wiki/Nehalem_(microarchitecture)	45 nm	• MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • VT-x, VT-d		
2010	https://en.wikipedia.org/wiki/Westmere_(microarchitecture)	32nm	• AES-NI, CLMUL • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • VT-x, VT-d		
2011	https://en.wikipedia.org/wiki/Sandy_Bridge	32nm	• MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, AVX • VT-x, VT-d • AES-NI, CLMUL, TXT		
2012	https://en.wikipedia.org/wiki/Ivy_Bridge_(microarchitecture)	Intel 22 nm	• MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, AVX, F16C • AES-NI, CLMUL, RDRAND, TXT • VT-x, VT-d		
2013	https://en.wikipedia.org/wiki/Haswell_(microarchitecture)	22 nm (Tri-Gate)	• AES-NI, CLMUL, RDRAND, TXT • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, FMA3, AVX, AVX2, and TSX (disabled via microcode, except for Haswell-EX) • VT-x, VT-d	Core i5-4250U (TDP 15W) 4248/1339 Intel nuc d54250	816/1617
2014	https://en.wikipedia.org/wiki/Broadwell_(microarchitecture) **Rockwell**	14 nm (Tri-Gate)	• MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, AVX, AVX2, TSX, FMA3 • AES-NI, CLMUL, RDRAND, TXT • VT-x, VT-d • encode: AVC ff, MPEG2, • decode: AVC, MPEG2, VC1, MJPEG, VP8, HEVC 8bit	Core i7-5500U (TDP 15W) 1655/5119 Gigabyte brix i7-5500	1037/2112
2015	https://en.wikipedia.org/wiki/Skylake_(microarchitecture)	14 nm (Tri-Gate)	• AES-NI, CLMUL, RDRAND, MPX, TXT, SGX[1] • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, ADX • AVX, AVX2, AVX-512 (Skylake-SP, Skylake-W & Skylake-X[2][3][4]), TSX, FMA3 • VT-x, VT-d • encode: AVC, MPEG2, MJPEG, VP8, HEVC 8bit • decode: AVC, MPEG2, VC1, MJPEG, VP8, HEVC 8bit	Core i7-6700HQ (TDP 45W) 2923/6530 Dell XPS 15 9550	1102/3879
2016	https://en.wikipedia.org/wiki/Kaby_Lake	Intel 14FF+	• MMX, AES-NI, CLMUL, FMA3, RDRAND • SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • AVX, AVX2, TXT, TSX, SGX • VT-x, VT-d • encode: AVC, MPEG2, MJPEG, VP8, HEVC 8/10bit • decode: AVC, MPEG2, VC1, MJPEG, VP8, HEVC 8/10bit, VP9 8/10bit		

2017	https://en.wikipedia.org/wiki/Coffee_Lake	Intel 14 nm++	• MMX, AES-NI, CLMUL, FMA3, RDRAND • SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • AVX, AVX2, TXT, TSX, SGX • VT-x, VT-d		
2018	https://en.wikipedia.org/wiki/Cannon_Lake_(microprocessor)	Intel 10 nm (tri-gate)	• MMX, AES-NI, CLMUL, RDRAND, FMA3, • SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, • AVX, AVX2, AVX-512, SHA, TXT, TSX, SGX, • VT-x, VT-d		
2018	https://en.wikipedia.org/wiki/Whiskey_Lake	14 nm (Tri-Gate)	• MMX, AES-NI, CLMUL, FMA3, RDRAND • SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • AVX, AVX2, TXT, TSX, SGX • VT-x, VT-d		
2019	https://en.wikipedia.org/wiki/Comet_Lake (Gen 9)	Intel 14 nm+	• MMX, AES-NI, CLMUL, RDRAND • SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • AVX, AVX2, TXT, SGX, FMA3 • VT-x, VT-d • encode: AVC, MPEG2, MJPEG, HEVC, VP8 • decode: AVC, MPEG2, MJPEG, HEVC*, VC1, VP8, VP9*	Core i7-10710U (TDP 12.5-25W) 2373/9691 Intel nuc 10	1431/6164
2019	https://en.wikipedia.org/wiki/Ice_Lake_(microprocessor)	Intel 10 nm			
2020	https://en.wikipedia.org/wiki/Tiger_Lake	Intel 10 nm SuperFin	• encode: AVC, MPEG2, MJPEG, HEVC, VP9 • decode: AVC, MPEG2, MJPEG, HEVC, VP9, AV1	Core i7-1185G (TDP 12W-28W) 2832/10532 Dell latitude 5520	1970/5738
2021	https://en.wikipedia.org/wiki/Rocket_Lake	Intel 14 nm++	• AES-NI, CLMUL, RDRAND, SHA, TXT • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2 • AVX, AVX2, AVX-512, FMA3 • VT-x, VT-d		
2021	https://en.wikipedia.org/wiki/Alder_Lake (Gen 12)	Intel 7 (10ESF)	• AES-NI, CLMUL, RDRAND, SHA, TXT, • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, • AVX, AVX2, FMA3, AVX-VNNI, • VT-x, VT-d • encode: AVC, MPEG2, MJPEG, HEVC, VP9 • decode: AVC, MPEG2, MJPEG, HEVC, VP9, AV1	N100 (TDP 6W) 1962/5584 N200 (TDP 6W) 1935/5202 Core i7-1260P (TDP 28W) 3323/17214 Core i9-12900K (TDP 125W) 5631/41360	1239/3145 1280/2793 2196/8934 2971/17742
2022	https://en.wikipedia.org/wiki/Raptor_Lake	Intel 7 (10ESF)	• AES-NI, CLMUL, RDRAND,SHA, TXT, • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, • AVX, AVX2, FMA3, AVX-VNNI, • VT-x, VT-d • encode: AVC, MPEG2, MJPEG, HEVC, VP9 • decode: AVC, MPEG2, MJPEG, HEVC, VP9, AV1	Core i3-13100T (TDP 35-69W) 3444/13210 Core i5-1335U (TDP 15-55W) 3543/16270 Core i5-1340P (TDP 28-64W) 3587/19584 Core i7-1360P (TDP 28-64W) 3561/19182 Core i9-13900H (TDP 45-115W) 3876/29375 Core i9-13900K (TDP 125-253W) 4641/59408	1703/4928 2298/8180 2397/9149 2333/7929 2640/13303 3269/24997

2023	https://en.wikipedia.org/wiki/Meteor_Lake	Intel 4 process TSMC N5	• AES-NI, CLMUL, RDRAND,SHA, TXT, • MMX, SSE, SSE2, SSE3, SSSE3, SSE4, SSE4.1, SSE4.2, • AVX, AVX2, FMA3, AVX-VNNI, • VT-x, VT-d	Core Ultra 7 165H (TDP 28-115W) 3942/32163	2320/12621
2024	https://en.wikipedia.org/wiki/Lunar_Lake				
	https://en.wikipedia.org/wiki/Arrow_Lake_(microprocessor)				

Processors vulnerabilities https://www.intel.com/content/www/us/en/developer/topic-technology/software-security-guidance/processors-affected-consolidated-product-cpu-model.html

Video encoding and decoding 7th-11th gen https://www.intel.com/content/www/us/en/developer/articles/technical/encode-and-decode-capabilities-for-7th-generation-intel-core-processors-and-newer.html

Wikipedia on Intel graphics - https://en.wikipedia.org/wiki/Intel_Graphics_Technology

CPU	i7-10710U	N200
/cpu/info bugs	spectre_v1 spectre_v2 spec_store_bypass swapgs itlb_multihit mmio_stale_data retbleed eibrs_pbrsb	spectre_v1 spectre_v2 spec_store_bypass swapgs

profiles	Intel Core i7-10710U	Intel N200	
VAProfileNone	VAEntrypointVideoProc VAEntrypointStats	VAEntrypointVideoProc VAEntrypointStats	
VAProfileMPEG2Simple	VAEntrypointVLD VAEntrypointEncSlice	VAEntrypointVLD VAEntrypointEncSlice	
VAProfileMPEG2Main	VAEntrypointVLD VAEntrypointEncSlice	VAEntrypointVLD VAEntrypointEncSlice	
VAProfileH264Main	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI VAEntrypointEncSliceLP	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI VAEntrypointEncSliceLP	
VAProfileH264High	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI VAEntrypointEncSliceLP	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI VAEntrypointEncSliceLP	
VAProfileVC1Simple	VAEntrypointVLD	VAEntrypointVLD	
VAProfileVC1Main	VAEntrypointVLD	VAEntrypointVLD	
VAProfileVC1Advanced	VAEntrypointVLD	VAEntrypointVLD	

VAProfileJPEGBaseline	VAEntrypointVLD VAEntrypointEncPicture	VAEntrypointVLD VAEntrypointEncPicture	
VAProfileH264ConstrainedBaseline	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI VAEntrypointEncSliceLP	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI VAEntrypointEncSliceLP	
VAProfileVP8Version0_3	VAEntrypointVLD VAEntrypointEncSlice	VAEntrypointVLD VAEntrypointEncSlice	
VAProfileHEVCMain	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI	VAEntrypointVLD VAEntrypointEncSlice VAEntrypointFEI **VAEntrypointEncSliceLP**	
VAProfileHEVCMain10	VAEntrypointVLD VAEntrypointEncSlice	VAEntrypointVLD VAEntrypointEncSlice **VAEntrypointFEI**	
VAProfileVP9Profile0	VAEntrypointVLD	VAEntrypointVLD VAEntrypointEncSlice	
VAProfileVP9Profile2	VAEntrypointVLD	VAEntrypointVLD **VAEntrypointEncSlice**	
VAProfileVP9Profile3		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCMain12		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCMain422_10		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCMain422_12		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCMain444		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCMain444_10		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCMain444_12		**VAEntrypointVLD**	
VAProfileHEVCSccMain		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCSccMain10		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileHEVCSccMain444		**VAEntrypointVLD** **VAEntrypointEncSlice**	
VAProfileAV1Profile0		**VAEntrypointVLD**	
VAProfileHEVCSccMain444_10		**VAEntrypointVLD** **VAEntrypointEncSlice**	