

Socket - Intel® Desktop Processors

(1)CPU information is based on Intel ARK, subject to change by Intel without notice. Please note the board specifications might not comply with Intel Cores/Threads/Frequency, but depending on Avalue board specifications.

(2)The 2 processors, i9-14901KE & Ultra 9 285T, are not listed on Intel ARK, for support needed, please contact with Avalue FAE/Sales.

Form Factor >>								Mini-ITX
SKUs(with Intel ARK Link)	TDP(W)	Total Cores	Total Threads	Processor Base Frequency	Performance-core Base Frequency	Efficient-core Base Frequency	Max Turbo Frequency	EMX-R680P
Intel® Core™ Ultra 9 Processor 285K	125W	24	24	-	3.7GHz	3.2GHz	5.7GHz	
Intel® Core™ Ultra 7 Processor 265KF	125W	20	20	-	3.9GHz	3.3GHz	5.5GHz	
Intel® Core™ Ultra 7 Processor 265K	125W	20	20	-	3.9GHz	3.3GHz	5.5GHz	
Intel® Core™ Ultra 5 Processor 245KF	125W	14	14	-	4.2GHz	3.6GHz	5.2GHz	
Intel® Core™ Ultra 5 Processor 245K	125W	14	14	-	4.2GHz	3.6GHz	5.2GHz	
Intel® Core™ Ultra 9 Processor 285T	35 W	24	24	-	4.7GHz	4.6GHz	5.4GHz	
Intel® Core™ i9 processor 14901KE	125W	8	16	-	3.8GHz	-	5.8GHz	
Intel® Core™ i9 processor 14901E	65W	8	16	-	2.8GHz	-	5.6GHz	
Intel® Core™ i9 processor 14901TE	45W	8	16	-	2.3GHz	-	5.5GHz	
Intel® Core™ i7 processor 14701E	65W	8	16	-	2.6GHz	-	5.4GHz	
Intel® Core™ i7 processor 14701TE	45W	8	16	-	2.1GHz	-	5.2GHz	
Intel® Core™ i5 processor 14501E	65W	6	12	-	3.3GHz	-	5.2GHz	
Intel® Core™ i5 processor 14501TE	45W	6	12	-	2.2GHz	-	5.1GHz	
Intel® Core™ i5 processor 14401E	65W	6	12	-	2.5GHz	-	4.7GHz	
Intel® Core™ i5 processor 14401TE	45W	6	12	-	2.0GHz	-	4.5GHz	
Intel® Core™ i9 processor 14900K	125W	24	32	-	3.2GHz	2.4GHz	6.0GHz	
Intel® Core™ i9 processor 14900	65W	24	32	-	2.0GHz	1.5GHz	5.8GHz	
Intel® Core™ i9 processor 14900T	35W	24	32	-	1.1GHz	0.8GHz	5.5GHz	
Intel® Core™ i7 processor 14700	65W	20	28	-	2.1GHz	1.5GHz	5.4GHz	
Intel® Core™ i7 processor 14700T	35W	20	28	-	1.3GHz	0.9GHz	5.2GHz	
Intel® Core™ i5 processor 14500	65W	14	20	-	2.6GHz	1.9GHz	5.0GHz	
Intel® Core™ i5 processor 14500T	35W	14	20	-	1.7GHz	1.2GHz	4.8GHz	
Intel® Core™ i5 processor 14400	65W	10	16	-	2.5GHz	1.8GHz	4.7GHz	
Intel® Core™ i5 processor 14400T	35W	10	16	-	1.5GHz	1.1GHz	4.5GHz	
Intel® Core™ i3 processor 14100	60W	4	8	-	3.5GHz	-	4.7GHz	
Intel® Core™ i3 processor 14100T	35W	4	8	-	2.7GHz	-	4.4GHz	
Intel® Processor 300	46W	2	4	-	3.9GHz	-	-	
Intel® Processor 300T	35W	2	4	-	3.4GHz	-	-	
Intel® Core™ i9-13900K Processor	125W	24	32	-	3.0GHz	2.2GHz	5.8GHz	V
Intel® Core™ i9-13900 Processor	65W	24	32	-	2.0GHz	1.5GHz	5.6GHz	V
Intel® Core™ i9-13900E Processor	65W	24	32	1.8GHz	1.8GHz	1.3GHz	5.2GHz	V
Intel® Core™ i9-13900TE Processor	35W	24	32	1.0GHz	1.0GHz	0.8GHz	5.0GHz	V
Intel® Core™ i7-13700 Processor	65W	16	24	-	2.1GHz	1.5GHz	5.2GHz	V
Intel® Core™ i7-13700E Processor	65W	16	24	1.9GHz	1.9GHz	1.3GHz	5.1GHz	V
Intel® Core™ i7-13700T Processor	35W	16	24	-	1.4GHz	1.0GHz	4.9GHz	V
Intel® Core™ i7-13700TE Processor	35W	16	24	-	1.1GHz	0.8GHz	4.8GHz	V
Intel® Core™ i5-13500 Processor	65W	14	20	-	2.5GHz	1.8GHz	4.8GHz	V
Intel® Core™ i5-13500E Processor	65W	14	20	2.4GHz	2.4GHz	1.5GHz	4.6GHz	V
Intel® Core™ i5-13500T Processor	35W	14	20	-	1.6GHz	1.2GHz	4.6GHz	V
Intel® Core™ i5-13500TE Processor	35W	14	20	1.3GHz	1.3GHz	1.1GHz	4.5GHz	V
Intel® Core™ i5-13400 Processor	65W	10	16	-	2.5GHz	1.8GHz	4.6GHz	V
Intel® Core™ i5-13400E Processor	65W	10	16	2.4GHz	2.4GHz	1.5GHz	4.6GHz	V
Intel® Core™ i3-13100 Processor	60W	4	8	-	3.4GHz	-	4.5GHz	V
Intel® Core™ i3-13100F Processor	58W	4	8	-	3.4GHz	-	4.5GHz	V
Intel® Core™ i3-13100T Processor	35W	4	8	-	2.5GHz	-	4.2GHz	V
Intel® Core™ i3-13100TE Processor	35W	4	8	2.4GHz	2.4GHz	-	4.1GHz	V
Intel® Core™ i3-13100E Processor	60W	4	8	3.3GHz	3.3GHz	-	4.4GHz	V
Intel® Core™ i9-12900K Processor	125W	16	24	-	3.2GHz	2.4GHz	5.2GHz	V
Intel® Core™ i9-12900 Processor	65W	16	24	-	2.4GHz	1.8GHz	5.1GHz	V
Intel® Core™ i9-12900E Processor	65W	16	24	-	2.3GHz	1.7GHz	5.0GHz	V
Intel® Core™ i9-12900TE Processor	35W	16	24	-	1.1GHz	1.0GHz	4.8GHz	V
Intel® Core™ i7-12700 Processor	65W	12	20	-	2.1GHz	1.6GHz	4.9GHz	V
Intel® Core™ i7-12700E Processor	65W	12	20	-	2.1GHz	1.6GHz	4.8GHz	V
Intel® Core™ i7-12700TE Processor	35W	12	20	-	1.4GHz	1.0GHz	4.6GHz	V
Intel® Core™ i5-12500 Processor	65W	6	12	-	3.0GHz	-	4.6GHz	V
Intel® Core™ i5-12500E Processor	65W	6	12	-	2.9GHz	-	4.5GHz	V
Intel® Core™ i5-12500TE Processor	35W	6	12	-	1.9GHz	-	4.3GHz	V
Intel® Core™ i5-12400 Processor	65W	6	12	-	2.5GHz	-	4.4GHz	V
Intel® Core™ i3-12100 Processor	60W	4	8	-	3.3GHz	-	4.3GHz	V
Intel® Core™ i3-12100E Processor	60W	4	8	-	3.2GHz	-	4.2GHz	V
Intel® Core™ i3-12100TE Processor	35W	4	8	-	2.1GHz	-	4.0GHz	V
Intel® Pentium® Gold G7400E Processor	46W	2	4	-	3.6GHz	-	-	V
Intel® Pentium® Gold G7400TE Processor	35W	2	4	-	3.0GHz	-	-	V
Intel® Pentium® Gold G7400 Processor	46W	2	4	-	3.7GHz	-	-	V
Intel® Pentium® Gold G7400T Processor	35W	2	4	-	3.1GHz	-	-	V
Intel® Celeron® Processor G6900	46W	2	2	-	3.4GHz	-	-	V
Intel® Celeron® Processor G6900T	35W	2	2	-	2.8GHz	-	-	V
Intel® Celeron® Processor G6900E	46W	2	2	-	3.0GHz	-	-	V
Intel® Celeron® Processor G6900TE	35W	2	2	-	2.4GHz	-	-	V
Intel® Xeon® W-1290P Processor	125W	10	20	3.7GHz	-	-	5.3GHz	
Intel® Xeon® W-1290 Processor	80W	10	20	3.2GHz	-	-	5.2GHz	
Intel® Xeon® W-1270P Processor	125W	8	16	3.8GHz	-	-	5.1GHz	
Intel® Xeon® W-1270 Processor	80W	8	16	3.4GHz	-	-	5.0GHz	
Intel® Xeon® W-1250P Processor	125W	6	12	4.1GHz	-	-	4.8GHz	
Intel® Xeon® W-1290T Processor	35W	10	20	1.9GHz	-	-	4.7GHz	
Intel® Xeon® W-1290E Processor	95W	10	20	3.5GHz	-	-	4.8GHz	
Intel® Xeon® W-1270E Processor	80W	8	16	3.4GHz	-	-	4.8GHz	
Intel® Xeon® W-1250E Processor	80W	6	12	3.5GHz	-	-	4.7GHz	
Intel® Xeon® W-1250TE Processor	35W	6	12	2.4GHz	-	-	3.8GHz	
Intel® Xeon® W-1270TE Processor	35W	8	16	2.0GHz	-	-	4.4GHz	
Intel® Xeon® W-1290TE Processor	35W	10	20	1.8GHz	-	-	4.5GHz	
Intel® Xeon® W-1250 Processor	80W	6	12	3.3GHz	-	-	4.7GHz	
Intel® Xeon® W-10855M Processor	45W	6	12	2.8GHz	-	-	5.1GHz	
Intel® Xeon® W-10885M Processor	45W	8	16	2.4GHz	-	-	5.3GHz	
Intel® Core™ i9-10850K Processor	125W	10	20	3.6GHz	-	-	5.2GHz	
Intel® Core™ i9-10885H Processor	45W	8	16	2.4GHz	-	-	5.3GHz	
Intel® Core™ i9-10900TE Processor	35W	10	20	1.8GHz	-	-	4.5GHz	
Intel® Core™ i9-10900E Processor	65W	10	20	2.8GHz	-	-	4.7GHz	
Intel® Core™ i9-10900T Processor	35W	10	20	1.9GHz	-	-	4.6GHz	
Intel® Core™ i9-10900 Processor	65W	10	20	2.8GHz	-	-	5.2GHz	

Intel® Core™ i9-10900F Processor	65W	10	20	2.8GHz	-	-	5.2GHz	
Intel® Core™ i9-10900KF Processor	125W	10	20	3.7GHz	-	-	5.3GHz	
Intel® Core™ i9-10900K Processor	125W	10	20	3.7GHz	-	-	5.3GHz	
Intel® Core™ i9-10980HK Processor	45W	8	16	2.4GHz	-	-	5.3GHz	
Intel® Core™ i7-10870H Processor	45W	8	16	2.2GHz	-	-	5.0GHz	
Intel® Core™ i7-10610U Processor	15W	4	8	1.8GHz	-	-	4.9GHz	
Intel® Core™ i7-10810U Processor	15W	6	12	1.1GHz	-	-	4.9GHz	
Intel® Core™ i7-10700TE Processor	35W	8	16	2.0GHz	-	-	4.4GHz	
Intel® Core™ i7-10700E Processor	65W	8	16	2.9GHz	-	-	4.5GHz	
Intel® Core™ i7-10700F Processor	65W	8	16	2.9GHz	-	-	4.8GHz	
Intel® Core™ i7-10700KF Processor	125W	8	16	3.8GHz	-	-	5.1GHz	
Intel® Core™ i7-10700K Processor	125W	8	16	3.8GHz	-	-	5.1GHz	
Intel® Core™ i7-10700T Processor	35W	8	16	2.0GHz	-	-	4.5GHz	
Intel® Core™ i7-10700 Processor	65W	8	16	2.9GHz	-	-	4.8GHz	
Intel® Core™ i7-10850H Processor	45W	8	12	2.7GHz	-	-	5.1GHz	
Intel® Core™ i7-10875H Processor	45W	8	16	2.3GHz	-	-	5.1GHz	
Intel® Core™ i7-10750H Processor	45W	6	12	2.6GHz	-	-	5.0GHz	
Intel® Core™ i7-10710U Processor	15W	6	12	1.1GHz	-	-	4.7GHz	
Intel® Core™ i7-10510U Processor	15W	4	8	1.8GHz	-	-	4.9GHz	
Intel® Core™ i5-10505 Processor	65W	6	12	3.2GHz	-	-	4.6GHz	
Intel® Core™ i5-10500H Processor	45W	6	12	2.5GHz	-	-	4.5GHz	
Intel® Core™ i5-10200H Processor	45W	4	8	2.4GHz	-	-	4.1GHz	
Intel® Core™ i5-10310U Processor	15W	4	8	1.7GHz	-	-	4.4GHz	
Intel® Core™ i5-10500TE Processor	35W	6	12	2.3GHz	-	-	3.7GHz	
Intel® Core™ i5-10500E Processor	65W	6	12	3.1GHz	-	-	4.2GHz	
Intel® Core™ i5-10600K Processor	125W	6	12	4.1GHz	-	-	4.8GHz	
Intel® Core™ i5-10600KF Processor	125W	6	12	4.1GHz	-	-	4.8GHz	
Intel® Core™ i5-10600T Processor	35W	6	12	2.4GHz	-	-	4.0GHz	
Intel® Core™ i5-10500T Processor	35W	6	12	2.3GHz	-	-	3.8GHz	
Intel® Core™ i5-10400T Processor	35W	6	12	2.0GHz	-	-	3.6GHz	
Intel® Core™ i5-10500 Processor	65W	6	12	3.1GHz	-	-	4.5GHz	
Intel® Core™ i5-10400F Processor	65W	6	12	2.9GHz	-	-	4.3GHz	
Intel® Core™ i5-10400 Processor	65W	6	12	2.9GHz	-	-	4.3GHz	
Intel® Core™ i5-10600 Processor	65W	6	12	3.3GHz	-	-	4.8GHz	
Intel® Core™ i5-10400H Processor	45W	4	8	2.6GHz	-	-	4.6GHz	
Intel® Core™ i5-10300H Processor	45W	4	8	2.5GHz	-	-	4.5GHz	
Intel® Core™ i5-10210U Processor	15W	4	8	1.6GHz	-	-	4.2GHz	
Intel® Core™ i3-10105F Processor	65W	4	8	3.7GHz	-	-	4.4GHz	
Intel® Core™ i3-10325 Processor	65W	4	8	3.9GHz	-	-	4.7GHz	
Intel® Core™ i3-10105T Processor	35W	4	8	3.0GHz	-	-	3.9GHz	
Intel® Core™ i3-10305T Processor	35W	4	8	3.0GHz	-	-	4.0GHz	
Intel® Core™ i3-10305 Processor	65W	4	8	3.8GHz	-	-	4.5GHz	
Intel® Core™ i3-10105 Processor	65W	4	8	3.7GHz	-	-	4.4GHz	
Intel® Core™ i3-10100F Processor	65W	4	8	3.6GHz	-	-	4.3GHz	
Intel® Core™ i3-10100E Processor	65W	4	8	3.2GHz	-	-	3.8GHz	
Intel® Core™ i3-10100TE Processor	35W	4	8	2.3GHz	-	-	3.6GHz	
Intel® Core™ i3-10320 Processor	65W	4	8	3.8GHz	-	-	4.6GHz	
Intel® Core™ i3-10300 Processor	65W	4	8	3.7GHz	-	-	4.4GHz	
Intel® Core™ i3-10300T Processor	35W	4	8	3.0GHz	-	-	3.9GHz	
Intel® Core™ i3-10100 Processor	65W	4	8	3.6GHz	-	-	4.3GHz	
Intel® Core™ i3-10100T Processor	35W	4	8	3.0GHz	-	-	3.8GHz	
Intel® Core™ i3-10110U Processor	15W	2	4	2.1GHz	-	-	4.1GHz	
Intel® Pentium® Gold G6405T Processor	35W	2	4	3.5GHz	-	-	-	
Intel® Pentium® Gold G6405 Processor	58W	2	4	4.1GHz	-	-	-	
Intel® Pentium® Gold G6505 Processor	58W	2	4	4.2GHz	-	-	-	
Intel® Pentium® Gold G6505T Processor	35W	2	4	3.6GHz	-	-	-	
Intel® Pentium® Gold G6605 Processor	58W	2	4	4.3GHz	-	-	-	
Intel® Pentium® Gold G6400E Processor	58W	2	4	3.8GHz	-	-	-	
Intel® Pentium® Gold G6400TE Processor	35W	2	4	3.2GHz	-	-	-	
Intel® Pentium® Gold G6500 Processor	58W	2	4	4.1GHz	-	-	-	
Intel® Pentium® Gold G6400 Processor	58W	2	4	4.0GHz	-	-	-	
Intel® Pentium® Gold G6400T Processor	35W	2	4	3.4GHz	-	-	-	
Intel® Pentium® Gold G6600 Processor	58W	2	4	4.2GHz	-	-	-	
Intel® Pentium® Gold G6500T Processor	35W	2	4	3.5GHz	-	-	-	
Intel® Pentium® Gold 6405U Processor	15W	2	4	2.4GHz	-	-	-	
Intel® Celeron® Processor G5905	58W	2	2	3.5GHz	-	-	-	
Intel® Celeron® Processor G5905T	35W	2	2	3.3GHz	-	-	-	
Intel® Celeron® Processor G5925	58W	2	2	3.6GHz	-	-	-	
Intel® Celeron® Processor G5900E	58W	2	2	3.2GHz	-	-	-	
Intel® Celeron® Processor G5900TE	35W	2	2	3.0GHz	-	-	-	
Intel® Celeron® Processor G5900	58W	2	2	3.4GHz	-	-	-	
Intel® Celeron® Processor G5920	58W	2	2	3.5GHz	-	-	-	
Intel® Celeron® Processor G5900T	35W	2	2	3.2GHz	-	-	-	
Intel® Celeron® Processor 5305U	15W	2	2	2.3GHz	-	-	-	
Intel® Celeron® Processor 5205U	15W	2	2	1.9GHz	-	-	-	
Intel® Xeon® E-2278GE Processor	80 W	8	16	3.3GHz	-	-	4.7GHz	
Intel® Xeon® E-2278GEL Processor	35 W	8	16	2.0GHz	-	-	3.9GHz	
Intel® Xeon® E-226GE Processor	80 W	6	6	3.4GHz	-	-	4.6GHz	
Intel® Xeon® E-2124G Processor	71 W	4	4	3.4GHz	-	-	4.5GHz	
Intel® Xeon® E-2176G Processor	80 W	6	12	3.7GHz	-	-	4.7GHz	
Intel® Core™ i7-9700TE Processor	35 W	8	8	1.8GHz	-	-	3.8GHz	
Intel® Core™ i7-9700E Processor	65 W	8	8	2.6GHz	-	-	4.4GHz	
Intel® Core™ i7-8700T Processor	35 W	6	12	2.4GHz	-	-	4.0GHz	
Intel® Core™ i7-8700 Processor	65 W	6	12	3.2GHz	-	-	4.6GHz	
Intel® Core™ i5-9500TE Processor	35 W	6	6	2.2GHz	-	-	3.6GHz	
Intel® Core™ i5-9500E Processor	65 W	6	6	3.0GHz	-	-	4.2GHz	
Intel® Core™ i5-8500T Processor	35 W	6	6	2.1GHz	-	-	3.5GHz	
Intel® Core™ i5-8500 Processor	65 W	6	6	3.0GHz	-	-	4.1GHz	
Intel® Core™ i3-9100TE Processor	35 W	4	4	2.2GHz	-	-	3.2GHz	
Intel® Core™ i3-9100E Processor	65 W	4	4	3.1GHz	-	-	3.7GHz	
Intel® Core™ i3-8100T Processor	35 W	4	4	3.1GHz	-	-	-	
Intel® Core™ i3-8100 Processor	65 W	4	4	3.6GHz	-	-	-	
Intel® Celeron® G4900 Processor	54 W	2	2	3.1GHz	-	-	-	
Intel® Celeron® G4900T Processor	35 W	2	2	2.9GHz	-	-	-	
Intel® Pentium® Gold G5400 Processor	58 W	2	4	3.7GHz	-	-	-	
Intel® Pentium® Gold G5400T Processor	35 W	2	4	3.1GHz	-	-	-	