

CPU Inference Engines:	Xeon® 2124G	Xeon® W1290P	Xeon® Silver 4216R	Xeon® Gold 5218T
Motherboard	ASUSTeK COMPUTER INC. / WS C246 PRO	ASUSTeK COMPUTER INC. / Pro WS W480-ACE	Intel Corporation / S2600STB	Intel Corporation / S2600STB
CPU	Intel® Xeon® E-2124G CPU @ 3.40GHz	Intel® Xeon® W-1290P CPU @ 3.70GHz	Intel® Xeon® Silver 4216R CPU @ 2.20GHz	Intel® Xeon® Gold 5218T CPU @ 2.10GHz
Hyper Threading	off	on	on	on
Turbo Setting	on	on	on	on
Memory	2 x 16 GB DDR4 2666MHz	4 x 16 GB DDR4 @ 2666 MHz.	12 x 32 GB DDR4 2666MHz	12 x 32 GB DDR4 2666MHz
Operating System	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS
Kernel version	6.2.0-31-generic	6.2.0-31-generic	6.2.0-39-generic	6.2.0-31-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	Intel Corporation	Intel Corporation
BIOS Version	1901	2301	SE5C620.86B.02.01.0013.121520200651	SE5C620.86B.02.01.0013.121520200651
BIOS Release	9/24/2021	7/8/2021	12/15/2020	12/15/2020
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	4	10	32	32
Test Date	1/16/2024	1/16/2024	1/16/2024	1/16/2024
Power dissipation/socket, TDP in Watt	71	125	100	105
CPU Price on 1/16/2024, Prices may vary	\$249	\$594	\$1,011	\$1,572

CPU Inference Engines:	Xeon® Platinum 8270	Intel® Xeon® Silver 4316	Intel® Xeon® Platinum 8380	Intel® Xeon® Platinum 8490H
Motherboard	Intel Corporation / S2600STB	M50CYP2SB1U Coyote Pass	M50CYP2SB1U Coyote Pass	Intel Corporation / Archer City
CPU	Intel® Xeon® Platinum 8270 CPU @ 2.70GHz	Intel® Xeon® Silver 4316 CPU @ 2.30GHz	Intel® Xeon® Gold 8380 CPU @ 2.30GHz	Intel® Xeon® Gold 84890H CPU @ 1.9 GHz.
Hyper Threading	on	on	on	on
Turbo Setting	on	on	on	on
Memory	12 x 32 GB DDR4 2933MHz	16 x 16 GB DDR4 3200MHz	16 x 16 GB DDR4 3200MHz	16 x 16 GB DDR5 4800MHz
Operating System	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.2 LTS	Ubuntu* 22.04.2 LTS	Ubuntu* 22.04.2 LTS
Kernel version	6.2.0-39-generic	6.2.0-39-generic	6.2.0-39-generic	6.2.0-36-generic
BIOS Vendor	Intel Corporation	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	SE5C620.86B.02.01.0009.092820190230	SE5C620.86B.01.01.0006.2207150335	SE5C620.86B.01.01.0006.2207150335	EGSDREL1.SYS.9409.P31.2302280828
BIOS Release	9/28/2019	7/15/2022	7/15/2022	2/28/2023
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	52	40	80	120
Test Date	1/16/2024	1/16/2024	1/16/2024	1/16/2024
Power dissipation/socket, TDP in Watt	205	150	270	350
CPU Price on 1/16/2024, Prices may vary	\$8,477	\$1,137	\$9,359	\$17,000

CPU Inference Engines:	Intel® N200	Elkhart Lake	Alder Lake N	Intel® Celeron® 6305E
Motherboard	Intel Corporation / Alder Lake N RVP	Elkhart Lake DDR4 CRB	Alder Lake N DDR4 RVP	Intel Corporation / TigerLake U DDR4 SODIMM RVP
CPU	Intel® N200 @ 1.0 GHz	11th Gen Intel® Atom™ x6425E @ 2.0GHz	12th Gen Intel® Atom™ x7425E @ 1.5 GHz	Intel® Celeron 6305E @ 1.80GHz
Hyper Threading	off	off	off	off
Turbo Setting	on	on	on	on
Memory	1 x 8 GB LPDDR5 4800MHz	2 x 8 GB DDR4 3200MHz	1 x 4 GB DDR4 3200MHz	2 x 8 GB DDR4 3200MHz
Operating System	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.2 LTS	Ubuntu* 22.04.2 LTS	Ubuntu* 22.04.3 LTS
Kernel version	6.2.0-39-generic	5.15.0-1045-intel-iotg	5.15.0-1045-intel-iotg	6.2.0-39-generic
BIOS Vendor	Intel Corporation	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	ADLNFWI1.R00.3301.A01.2208031342	EHLSFWI1.R00.2512.A01.2012171339	EHLSFWI1.R00.2512.A01.2012171339	TGLIFUI1.R00.4391.A03.2201140438
BIOS Release	8/3/2022	12/17/2020	12/17/2020	1/14/2022
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	4	4	4	2
Test Date	1/16/2024	1/16/2024	1/16/2024	1/16/2024
Power dissipation/socket, TDP in Watt	6	12	12	15
CPU Price on 1/16/2024, Prices may vary	\$80	\$67	\$58	\$107

CPU Inference Engines:	Core i3-8100	Core i5-8500	Core i7-8700T	Core i5-10500TE
Motherboard	Gigabyte Technology Co., Ltd. / Z390 UD	ASUSTeK COMPUTER INC. / PRIME Z370-A	ASUSTek Computer Inc Prime Z370-A	Gigabyte Technology Co., Ltd. / Z490 AORUS PRO AX
CPU	Intel® Core™ i3-8100 CPU @ 3.60GHz	Intel® Core™ i5-8500 CPU @ 3.00GHz	Intel® Core™ i7-8700T CPU @ 2.40GHz	Intel® Core™ i5-10500TE CPU @ 2.30GHz
Hyper Threading	off	off	on	on
Turbo Setting	off	off	on	on
Memory	4 x 8 GB DDR4 2400MHz	2 x 16 GB DDR4 2666MHz	4 x 16 GB DDR4 2400MHz	2 x 16 GB DDR4 @ 2666 MHz
Operating System	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS
Kernel version	6.2.0-31-generic	6.2.0-39-generic	6.2.0-39-generic	6.2.0-36-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.
BIOS Version	F10	3004	2401	F21
BIOS Release	11/5/2021	7/12/2021	7/12/2019	11/23/2021
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	4	6	6	6
Test Date	1/16/2024	1/16/2024	1/16/2024	1/16/2024
Power dissipation/socket, TDP in Watt	65	65	35	35
CPU Price on 1/16/2024, Prices may vary	\$117	\$192	\$303	\$214

CPU Inference Engines:	Core i9-10900TE	TGL-UP3	Core i9-12900TE	Core i5-13600K
Motherboard	iEi / B595	iEi B622	iEi Corporation baseboard Z667	Intel Corporation NUC13SBBi5 / M89887-303
CPU	Intel® Core™ i9-10900TE CPU @ 1.80GHz	11th Gen Intel® Core™ i7-1185GRE @ 2.80GHz	Intel® Core™ i9-12900TE CPU @ 1.10GHz	Intel® Core™ i5-13600K CPU @ 3.5 GHz
Hyper Threading	on	on	on	on
Turbo Setting	on	on	on	on
Memory	2 x 8 GB DDR4 @ 2400 MHz	2 x 16 GB DDR4 3200MHz	2 x 16 GB DDR4 2400MHz	2 x 32 GB DDR5 4800MHz
Operating System	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.6 LTS
Kernel version	6.2.0-36-generic	6.2.0-39-generic	6.2.0-31-generic	6.2.0-31-generic
BIOS Vendor	American Megatrends Inc.	AMI	AMI	Intel Corporation
BIOS Version	Z667AR10	B622AR02	Z667AR10	SBRPL579.0053.2022.1125.0101
BIOS Release	7/15/2020	9/29/2021	7/15/2020	11/25/2022
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	10	4	10	14
Test Date	1/16/2024	1/16/2024	1/16/2024	1/16/2024
Power dissipation/socket, TDP in Watt	35	15	35	125
CPU Price on 1/16/2024, Prices may vary	\$488	\$490	\$544	\$329

CPU Inference Engines:	Core i9-13900K	ADL-P	RPL-P
Motherboard	Intel Corporation Alder Lake Client Platform	NUC 12SNKi72	NUC13ANKi7
CPU	Intel® Core™ i9-13900K CPU @ 3.0GHz	Intel® Core™ i7-12700H	Intel® Core™ i7-1360P
Hyper Threading	on	on	on
Turbo Setting	on	on	on
Memory	2 x 32 GB DDR5 4800MHz	2 x 8 GB DDR4 3200MHz	2 x 8 GB DDR4 3200MHz
Operating System	Ubuntu* 22.04.6 LTS	Ubuntu* 22.04.3 LTS	Ubuntu* 22.04.3 LTS
Kernel version	6.2.0-31-generic	6.2.0-31-generic	6.2.0-39-generic
BIOS Vendor	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	SBRPL579.0053.2022.1125.0101	SNADL357.0056.2022.1102.1218	ANRPL357.0027.2023.0607.1754
BIOS Release	11/25/2022	11/2/2023	6/7/2023
Batch size	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	24	14	12
Test Date	1/16/2024	1/16/2024	1/16/2024
Power dissipation/socket, TDP in Watt	125	45	28
CPU Price on 1/16/2024, Prices may vary	\$599	\$502	\$480

GPU Inference Engines:	Data Center GPU	Data Center GPU	Intel® Dedicated Graphics Family GPU
GPU	Flex-140	Flex-170	ARC™ 770M
Connection	PCIe G4, 1x16	PCIe G4, 1x16	PCIe G4, 1x16
Batch size	Automatic	Automatic	Automatic
Precision	FP16, INT8	FP16, INT8	FP16, INT8
Number of concurrent inference requests	Automatic	Automatic	Automatic
Memory	12 GB DDR6, 336 GB/s	16 GB DDR6, 576 GB/s	16 GB DDR6, 512 GB/s
HPC & AI	FP32, FP16, BF16, INT8, INT4	FP32, FP16, BF16, INT8, INT4	FP32, FP16, BF16, INT8, INT4
Form Factor	3/4L Full Height, Passively cooled	3/4L Full Height, Passively cooled	3/4L Full Height, Passively cooled
X ^e cores	16	32	32
EUs	256	512	512
Device ID	8086-56C0	8086-56C0	8086-5690
Test Date	1/16/2024	1/16/2024	1/16/2024
TDP	75W	150 W	150 W
Host Machine	Xeon® Platinum 8490H	Xeon® gold 6348	Core™ i7-12700H, Serpent Canyon
Motherboard	Intel corp Archer City	Intel corp M50CYP2SBSTD	Intel corp NUC 12SNKi72
CPU	Intel® Xeon® Platinum 8490H CPU @ 1.90GHz	Intel® Xeon® Gold 6348 CPU @ 2.60GHz	Intel® Core™ i7-12700H CPU @ 2.30GHz
Hyper Threading	on	on	on
Turbo Setting	on	on	on
Memory	16 x 16 GB DDR5 4800MHz	16 x 16 GB DDR4 3200MHz	2 x 8 GB DDR4 3200MHz
Operating System	Ubuntu* 22.04.2 LTS	Ubuntu 22.10	Ubuntu 22.04.6 LTS
Kernel version	6.2.0-36-generic	5.19.0-46-generic	6.2.0-31-generic
BIOS Vendor	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	EGSDREL1.SYS.9409.P31.2302280828	SE5C620.86B.01.01.0007.2210270543	SNADL357.0056.2022.1102.1218
BIOS Release	2/28/2023	10/27/2022	11/2/2022

OpenVINO™ Model Server Platform with Intel® Xeon® Platinum 8260M			OpenVINO™ Model Server Platform with Intel® Xeon® Gold 6238	
	Server Platform	Client Platform	Server Platform	Client Platform
Motherboard	Inspur YZMB-00882-104 NF5280M5	Intel® Server Board S2600WF R2224WFTZSR	Inspur, NF5280M5, MB: YZMB-00882-104	Inspur, NF5280M5, MB: YZMB-00882-104
Memory	Samsung 16 x 16GB @ 2666 MT/s DDR4	Hynix 16 x 16GB @ 2933 MT/s DDR4	Kingston 16 x 16GB @ 2933 MT/s DDR4	Kingston 16 x 16GB @ 2933 MT/s DDR4
CPU	Intel® Xeon® Platinum 8260M CPU @ 2.40GHz	Intel® Xeon® Gold 6252 CPU @ 2.10GHz	Intel(R) Xeon(R) Gold 6238M CPU @ 2.10GHz	Intel(R) Xeon(R) Gold 6238M CPU @ 2.10GHz
Selected CPU Flags	Hyper Threading, Turbo Boost, DL Boost	Hyper Threading, Turbo Boost, DL Boost	Hyper Threading, Turbo Boost, DL Boost	Hyper Threading, Turbo Boost, DL Boost
CPU Thermal Design Power	162 W	150 W	140W	140W
Operating System	Ubuntu 20.04.6 LTS	Ubuntu 20.04.6 LTS	Ubuntu 20.04.6 LTS	Ubuntu 20.04.6 LTS
Kernel Version	5.4.0-166-generic	5.4.0-81-generic	5.4.0-163-generic	5.4.0-166-generic
BIOS Vendor	American Megatrends Inc.	Intel® Corporation	American Megatrends Inc.	American Megatrends Inc.
BIOS Version & Release	4.1.16, date: 06/23/2020	SE5C620.86B.02.01, date: 03/26/2020	4.1.16, 06/23/2020	4.1.16, 06/23/2020
Docker Version	20.10.3	20.10.3	20.10.3	20.10.3
Network Speed	40 Gb/s		40 Gb/s	

OpenVINO™ Model Server Platform with Intel® Core™ i9-11900K			OpenVINO™ Model Server Platform with Intel® Core™ i7-11700K	
	Server Platform	Client Platform	Server Platform	Client Platform
Motherboard	Wortman AG, Gigabyte Technology Z590M	ASUSTeK COMPUTER INC. PRIME Z590-P	ASUSTeK COMPUTER INC. PRIME Z370-P	ASUSTeK COMPUTER INC. PRIME Z590-P
Memory	Samsung 4 x 32GB @ 3200 MT/s DDR4	Kingston 2 x 32GB @ 2400 MT/s DDR4	Kingston 4 x 16GB @ 2133 MT/s DDR4	Kingston 2 x 32GB @ 2400 MT/s DDR4
CPU	Intel® Core™ i9-11900K CPU @ 3.50GHz	Intel® Core™ i7-11700K CPU @ 3.60GHz	Intel® Core™ i7-8700T CPU @ 2.40GHz	Intel® Core™ i7-11700K CPU @ 3.60GHz
Selected CPU Flags	Hyper Threading, Turbo Boost, DL Boost	Hyper Threading, Turbo Boost	Hyper Threading, Turbo Boost	Hyper Threading, Turbo Boost
CPU Thermal Design Power	125 W	125W	35W	125W
Operating System	Ubuntu* 22.04.6 LTS	Ubuntu* 22.04.6 LTS	Ubuntu* 20.04.5LTS	Ubuntu* 22.04.6 LTS
Kernel Version	5.15.0-47+prerelease6469.7	5.15.0-87-generic	5.4.0-107-generic	5.15.0-87-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.
BIOS Version and Release Date	F7C, date: 08/04/2022	1017, date: 07/12/2021	2401, date: 07/15/2019	1017, date: 07/12/2021
Docker Version	19.03.13	19.03.14	19.03.14	19.03.14
Network Speed	10 Gb/s		10 Gb/s	

OpenVINO™ Model Server Platform with Intel® Core™ i3-10100K		
	Server Platform	Client Platform
Motherboard	ASUSTeK COMPUTER INC. PRIME Z590-P	ASUSTeK COMPUTER INC. PRIME X299-A II
Memory	Kingston 2 x 32GB @ 2400 MT/s DDR4	Kingston 2 x 32GB @ 2666 MT/s DDR4
CPU	Intel® Core™ i3-10100 CPU @ 3.60GHz	Intel® Core™ i9-10920X CPU @ 3.50GHz
Selected CPU Flags	-	Hyper Threading, Turbo Boost, DL Boost
CPU Thermal Design Power	65 W	165 W
Operating System	Ubuntu 20.04.6 LTS	Ubuntu* 20.04.6 LTS
Kernel Version	5.4.0-81-generic	5.4.0-164-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.
BIOS Version and Release Date	0407, date: 01/14/2021	0702, date: 06/10/2020
Docker Version	20.10.0	19.03.13
Network Speed	10 Gb/s	