

CPU Inference Engines:	Xeon® 2124G	Xeon® W1290P	Xeon® Gold 6238L	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® Gold 6238L CPU @ 2.10GHz	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* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS
Kernel version	6.2.0-31-generic	6.2.0-31-generic	6.8.0-40-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
NUMA nodes	1	1	2	2
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	4	10	44	32
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	71	125	140	105
CPU Price on 9/6/2024, Prices may vary	\$249	\$594	\$6,427	\$1,572

CPU Inference Engines:	Xeon® Platinum 8280	Intel® Xeon® Silver 4316	Intel® Xeon® Platinum 8380	Intel® Xeon® Platinum 8480+
Motherboard	Intel Corporation / S2600STB	M50CYP2SB1U Coyote Pass	M50CYP2SB1U Coyote Pass	Intel Corporation / Archer City
CPU	Intel® Xeon® Platinum 8280 CPU @ 2.70GHz	Intel® Xeon® Silver 4316 CPU @ 2.30GHz	Intel® Xeon® Gold 8380 CPU @ 2.30GHz	Intel® Xeon® Gold 84880+ 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* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS
Kernel version	6.8.0-40-generic	6.8.0-40-generic	6.5.0-41-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
NUMA nodes	2	2	2	2
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	56	40	80	120
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	205	150	270	350
CPU Price on 9/6/2024, Prices may vary	\$11,460	\$1,137	\$9,359	\$10,710

CPU Inference Engines:	Xeon® Platinum 8580
Motherboard	Intel Corporation Archer City CRB
CPU	Intel® Xeon® Platinum 8580 CPU @ 2.0GHz
Hyper Threading	on
Turbo Setting	on
Memory	12 x 16 GB DDR5 5600MHz
Operating System	Ubuntu* 22.04.4 LTS
Kernel version	6.8.0-40-generic
BIOS Vendor	Intel Corporation
BIOS Version	EGSDREL1.SYS.1752.P05.2401050250
BIOS Release	1/5/2024
NUMA nodes	2
Precision	INT8/FP32
Number of concurrent inference requests	120
Test Date	9/6/2024
Power dissipation/socket, TDP in Watt	350
CPU Price on 9/6/2024, Prices may vary	\$10,710

CPU Inference Engines:	Intel Processor N100	Elkhart Lake	Alder Lake N	Intel® Celeron® 6305E
Motherboard	AZW-EQ	Elkhart Lake DDR4 CRB	Alder Lake N DDR4 RVP	Intel Corporation / TigerLake U DDR4 SODIMM RVP
CPU	Intel® Processor N100 @ 800 MHz	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	oon	on	on	on
Memory	1x16GB DDR5 @ 4800 MT/s	1 x 8 GB DDR4 3200MHz	1 x 4 GB DDR4 3200MHz	2 x 8 GB DDR4 3200MHz
Operating System	UB-22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS
Kernel version	6.8.0-40-generic	6.5.0-41-generic	6.5.0-35-generic	6.5.0-41-generic
BIOS Vendor	AMI	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	N95V106	SB_EHL.001.001.000.001.007.00015.R	EHLSFWI1.R00.2512.A01.2012171339	TGLIFUI1.R00.4391.A03.2201140438
BIOS Release	12/15/2023	7/12/2023	12/17/2020	1/14/2022
Batch size	1/1/1900	1	1	1
Precision	INT8/FP16/FP32	INT8/FP16/FP32	INT8/FP16/FP32	INT8/FP16/FP32
Number of concurrent inference requests	1/4/1900	4	4	2
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	6	12	12	15
CPU Price on 9/6/2024, Prices may vary	\$55	\$67	\$58	\$107

CPU Inference Engines:	Core i5-10500TE	Core i3-8100	Core i5-8500	Core i7-8700T
Motherboard	Gigabyte Technology Co., Ltd. / Z490 AORUS PRO AX	Gigabyte Technology Co., Ltd. / Z390 UD	ASUSTeK COMPUTER INC. / PRIME Z370-A	ASUSTek Computer Inc Prime Z370-A
CPU	Intel® Core™ i5-10500TE CPU @ 2.30GHz	Intel® Core™ i3-8100 CPU @ 3.60GHz	Intel® Core™ i5-8500 CPU @ 3.00GHz	Intel® Core™ i7-8700T CPU @ 2.40GHz
Hyper Threading	on	off	off	on
Turbo Setting	on	off	off	on
Memory	2 x 16 GB DDR4 @ 2666 MHz	4 x 8 GB DDR4 2400MHz	2 x 16 GB DDR4 2666MHz	4 x 16 GB DDR4 2400MHz
Operating System	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS
Kernel version	6.5.0-41-generic	6.2.0-31-generic	6.5.0-41-generic	6.5.0-41-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.
BIOS Version	F21	F10	3004	2401
BIOS Release	11/23/2021	11/5/2021	7/12/2021	7/12/2019
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	6	4	6	6
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	35	65	65	35
CPU Price on 9/6/2024, Prices may vary	\$214	\$117	\$192	\$303

CPU Inference Engines:	Core i9-10900TE	TGL-UP3	Core i5-13600K	Core i9-13900K
Motherboard	iEi / B595	NUC11TNKv7	Intel Corporation NUC13SBBi5 / M89887-303	Intel Corporation Alder Lake Client Platform
CPU	Intel® Core™ i9-10900TE CPU @ 1.80GHz	11th Gen Intel® Core™ i7-1185G7 @ 3.0GHz	Intel® Core™ i5-13600K CPU @ 3.5 GHz	Intel® Core™ i9-13900K CPU @ 3.0GHz
Hyper Threading	on	on	on	on
Turbo Setting	on	on	on	on
Memory	2 x 8 GB DDR4 @ 2400 MHz	2 x 32 GB DDR4 2667MHz	2 x 32 GB DDR5 4800MHz	2 x 32 GB DDR5 4800MHz
Operating System	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS
Kernel version	6.5.0-41-generic	6.5.0-35-generic	6.5.0-41-generic	6.5.0-41-generic
BIOS Vendor	American Megatrends Inc.	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	Z667AR10	TNTGLV57.9026.2020.0916.1340	SBRPL579.0053.2022.1125.0101	SBRPL579.0053.2022.1125.0101
BIOS Release	7/15/2020	9/16/2020	11/25/2022	11/25/2022
Batch size	1	1	1	1
Precision	INT8/FP32	INT8/FP16/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	10	4	14	24
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	35	28	125	125
CPU Price on 9/6/2024, Prices may vary	\$488	\$426	\$329	\$599

CPU Inference Engines:	ADL-P	MTL-H	RPL-P	TGL-UP3
Motherboard	NUC 12SNKi72	Intel Corporation CRB (Reef Ridge + Astral peak	NUC 13ANKi7	lel B622
CPU	Intel® Core™ i7-12700H	Intel® Core™ Ultra 7-165H	Intel® Core™ i7-1360P	11th Gen Intel® Core™ i7-1185GRE @ 2.8GHz
Hyper Threading	on	on	on	on
Turbo Setting	on	on	on	on
Memory	2 x 8 GB DDR4 3200MHz	2 x 16 GB DDR5 5600MHz	2 x 8 GB DDR4 3200MHz	1 x 16 GB DDR4 3200MHz
Operating System	Ubuntu* 22.04.4 LTS	Windows 11	Ubuntu* 22.04.4 LTS	Ubuntu* 22.04.4 LTS
Kernel version	6.5.0-27-generic	10.0.22631 Build 22631	6.5.0-41-generic	6.5.0-41-generic
BIOS Vendor	Intel Corporation	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	SNADL357.0056.2022.1102.1218	MTLPEM11.R00.3471.D56.2403181159	ANRPL357.0027.2023.0607.1754	B622AR02.BIN
BIOS Release	11/2/2023	3/18/2024	6/7/2023	9/29/2021
Batch size	1	1	1	1
Precision	INT8/FP16/FP32	INT8/FP32	INT8/FP16/FP32	INT8/FP16/FP32
Number of concurrent inference requests	14	20	12	4
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	45	28	28	15
CPU Price on 9/6/2024, Prices may vary	\$502	\$460	\$480	\$490

CPU Inference Engines:	ADL-P	RPL-P	RPL-P	MTL-H
Motherboard	Partaker	Giga-computing, GB-BRI5HS-1335	Giga-computing, GB-BRI7HS-1355	Lenovo, LNVNB161216
CPU	Intel® Core™ i5-1235U	Intel® Core™ i5-1335U	Intel® Core™ i7-1355U	Intel® Core Ultra 155H @ 1.4 GHz
Hyper Threading	on	on	on	on
Turbo Setting	on	on	on	on
Memory	1 x 32 GB DDR4 @ 2666 MHz	2 x 16 GB DDR4 @ 3200MT/s	2 x 16 GB DDR4 @ 3200MT/s	2 x 16 GB LPDDR5 @ 7467 MHz.
Operating System	UB-22.04.4 LTS	UB-22.04.4 LTS	UB-22.04.4 LTS	Windows 11, 23H2
Kernel version	6.8.0-40-generic	6.8.0-40-generic	6.8.0-40-generic	22631.4169
BIOS Vendor	AMI	AMI	AMI	Lenovo
BIOS Version	5.27	F03	F03	NPCN27WW
BIOS Release	2/22/2023	4/27/2023	4/27/2023	3/27/2024
Batch size	1	1	1	1
Precision	INT8/FP16/FP32	INT8/FP16/FP32	INT8/FP16/FP32	INT8/FP16/FP32
Number of concurrent inference requests	10	10	10	14
Test Date	9/6/2024	9/6/2024	9/6/2024	9/6/2024
Power dissipation/socket, TDP in Watt	15	15	15	28
CPU Price on 9/6/2024, Prices may vary	\$340	\$340	\$469	\$503

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	1	1	1
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 Heighth, Passively cooled	3/4L Full Heighth, Passively cooled	3/4L Full Heighth, Passively cooled
X ^e cores	16	32	32
EUs	256	512	512
Device ID	8086-56C0	8086-56C0	8086-5690
Test Date	9/6/2024	9/6/2024	9/6/2024
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* 22.04.4 LTS	Ubuntu 22.10	Ubuntu* 22.04.4 LTS
Kernel version	6.2.0-36-generic	5.19.0-46-generic	6.5.0-41-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 YZMB-00882-104 NF5280M5
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	Samsung 16 x 16GB @ 2666 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® Xeon® Platinum 8260M CPU @ 2.40GHz
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	162 W
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, date: 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 Z590-P	Wortman AG, Gigabyte Technology Z590M
Memory	Samsung 4 x 32GB @ 3200 MT/s DDR4	Kingston 2 x 32GB @ 2400 MT/s DDR4	Kingston 2 x 32GB @ 2400 MT/s DDR4	Samsung 4 x 32GB @ 3200 MT/s DDR4
CPU	Intel® Core™ i9-11900K CPU @ 3.50GHz	Intel® Core™ i3-10100 CPU @ 3.60GHz	Intel® Core™ i7-11700K CPU @ 3.60GHz	Intel® Core™ i9-11900K CPU @ 3.50GHz
Selected CPU Flags	Hyper Threading, Turbo Boost, DL Boost	-	Hyper Threading, Turbo Boost	Hyper Threading, Turbo Boost, DL Boost
CPU Thermal Design Power	125 W	65 W	125W	125 W
Operating System	Ubuntu* 22.04.6 LTS	Ubuntu 20.04.6 LTS	Ubuntu* 22.04.6 LTS	Ubuntu* 22.04.6 LTS
Kernel Version	5.15.0-47+prerelease6469.7	5.4.0-81-generic	5.15.0-87-generic	5.15.0-47+prerelease6469.7
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.
BIOS Version and Release Date	F7C, date: 08/04/2022	0407, date: 01/14/2021	1017, date: 07/12/2021	F7C, date: 08/04/2022
Docker Version	19.03.13	20.10.0	19.03.14	19.03.13
Network Speed	10 Gb/s		10 Gb/s	

OpenVINO™ Model Server Platform with Intel® Core™ i3-10100		
	Server Platform	Client Platform
Motherboard	ASUSTeK COMPUTER INC. PRIME Z590-P	ASUSTeK COMPUTER INC. PRIME Z590-P
Memory	Kingston 2 x 32GB @ 2400 MT/s DDR4	Kingston 2 x 32GB @ 2400 MT/s DDR4
CPU	Intel® Core™ i3-10100 CPU @ 3.60GHz	Intel® Core™ i7-11700K CPU @ 3.60GHz
Selected CPU Flags	-	Hyper Threading, Turbo Boost
CPU Thermal Design Power	65 W	125W
Operating System	Ubuntu 20.04.6 LTS	Ubuntu* 22.04.6 LTS
Kernel Version	5.4.0-81-generic	5.15.0-87-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.
BIOS Version and Release Date	0407, date: 01/14/2021	1017, date: 07/12/2021
Docker Version	20.10.0	19.03.14
Network Speed	10 Gb/s	