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* 20.04.3 LTS	Ubuntu* 20.04.3 LTS	Ubuntu* 20.04.3 LTS	Ubuntu* 20.04.3 LTS
Kernel version	5.4.0-42-generic	5.4.0-42-generic	5.3.0-24-generic	5.3.0-24-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	Intel Corporation	Intel Corporation
BIOS Version	1901	2302	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	Auto-batching	Auto-batching	Auto-batching	Auto-batching
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	Automatic	Automatic	Automatic	Automatic
Test Date	12/13/2022	12/13/2022	12/13/2022	12/13/2022
Power dissipation/socket, TDP in Watt	71	125	125	105
CPU Price on 12/13/2022, Prices may vary	$249	$594	$1,002	$1,572

CPU Inference Engines:	Xeon® Platinum 8270	Intel® Xeon® Platinum 6336Y	Atom x5-E3940	Core i3-8100
Motherboard	Intel Corporation / S2600STB	Intel Corporation / Whitley E63448-400		Gigabyte Technology Co., Ltd. / Z390 UD
CPU	Intel® Xeon® Platinum 8270 CPU @ 2.70GHz	Intel(R) Xeon(R) Gold 6336Y CPU @ 2.40GHz	Intel(R) Atom(TM) Processor E3940 @ 1.60GHz	Intel® Core™ i3-8100 CPU @ 3.60GHz
Hyper Threading	on	on	off	off
Turbo Setting	on	on	on	off
Memory	12 x 32 GB DDR4 2933MHz	8 x 16 GB DDR4 3200MHz	1 x 8 GB DDR3 1600MHz	4 x 8 GB DDR4 2400MHz
Operating System	Ubuntu* 20.04.3 LTS	Ubuntu* 20.04.5 LTS	Ubuntu* 20.04.3 LTS	Ubuntu* 20.04.3 LTS
Kernel version	5.3.0-24-generic	5.15.47+prerelease4158	5.4.0-42-generic	5.4.0-42-generic
BIOS Vendor	Intel Corporation	Intel Corporation	American Megatrends Inc.	American Megatrends Inc.
BIOS Version	SE5C620.86B.02.01.0009.092820190230	SE5C6200.86B.0027.P15.2205121306	5.12	F8
BIOS Release	9/28/2019	5/12/2022	9/6/2017	5/24/2019
Batch size	Auto-batching	Auto-batching	Auto-batching	Auto-batching
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	Automatic	Automatic	Automatic	Automatic
Test Date	12/13/2022	12/13/2022	12/13/2022	12/13/2022
Power dissipation/socket, TDP in Watt	205	185	9.5	65
CPU Price on 12/13/2022, Prices may vary	$8,477	$2,339	$34	$117

CPU Inference Engines:	Core i5-8500	Core i5-10500TE	Core i7-8700T	Core i9-12900K
Motherboard	ASUSTeK COMPUTER INC. / PRIME Z370-A	Gigabyte Technology Co., Ltd. / Z490 AORUS PRO AX	Gigabyte Technology Co., Ltd. / Z370M DS3H-CF	Intel Corporation Alder Lake Client Platform
CPU	Intel® Core™ i5-8500 CPU @ 3.00GHz	Intel® Core™ i5-10500TE CPU @ 2.30GHz	Intel® Core™ i7-8700T CPU @ 2.40GHz	Intel® Core™ i9-12900K CPU @ 2.40GHz
Hyper Threading	off	on	on	on
Turbo Setting	on	on	on	on
Memory	2 x 16 GB DDR4 2666MHz	2 x 16 GB DDR4 @ 2666 MHz	4 x 16 GB DDR4 2400MHz	4 x 8 GB DDR5 4800MHz
Operating System	Ubuntu* 20.04.3 LTS	Ubuntu* 20.04.3 LTS	Ubuntu* 20.04.3 LTS	Ubuntu* 22.04.1 LTS
Kernel version	5.4.0-42-generic	5.4.0-42-generic	5.4.0-42-generic	5.15.0-56-generic
BIOS Vendor	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.
BIOS Version	3004	F21	F14c	ADLSFWI1.R00.2257.A01.2106221245
BIOS Release	7/12/2021	11/23/2021	3/23/2021	6/22/2021
Batch size	Auto-batching	Auto-batching	Auto-batching	Auto-batching
Precision	INT8/FP32	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	Automatic	Automatic	Automatic	Automatic
Test Date	12/13/2022	12/13/2022	12/13/2022	12/13/2022
Power dissipation/socket, TDP in Watt	65	35	35	165
CPU Price on 12/13/2022, Prices may vary	$192	$214	$303	$658

CPU Inference Engines:	Core i9	TGL-UP3	Intel® Atom® x6425RE	Intel® Celeron® 6305E
Motherboard	iEi / B595	NUC11TNBi7	Intel Corporation / ElkhartLake LPDDR4x T3 CRB	Intel Corporation / TigerLake U DDR4 SODIMM RVP
CPU	Intel® Core™ i9-10900TE CPU @ 1.80GHz	11th Gen Intel(R) Core(TM) i7-1165G7 @ 2.80GHz	Intel Atom(R) x6425RE Processor @ 1.90GHz	Intel(R) Celeron(R) 6305E @ 1.80GHz
Hyper Threading	on	on	off	off
Turbo Setting	on	on	on	on
Memory	2 x 8 GB DDR4 @ 2400 MHz	2 x 32 GB DDR4 3200MHz	2 x 4 GB LPDDR4 3200MHz	2 x 8 GB DDR4 3200MHz
Operating System	Ubuntu* 18.04 LTS	Ubuntu* 20.04.5 LTS	Ubuntu 18.04.5 LTS	Ubuntu 20.04.5 LTS
Kernel version	5.8.0-05-generic	5.15.0-53-generic	5.8.0-050800-generic	5.15.0-53-generic
BIOS Vendor	American Megatrends Inc.	Intel Corporation	Intel Corporation	Intel Corporation
BIOS Version	Z667AR10	TNTGL357.0042.2020.1221.1743	EHLSFWI1.R00.3382.A06.2109291614	TGLIFUI1.R00.4391.A03.2201140438
BIOS Release	7/15/2020	12/21/2020	9/29/2021	1/14/2022
Batch size	1	Auto-batching	Auto-batching	Auto-batching
Precision	INT8	INT8/FP32	INT8/FP32	INT8/FP32
Number of concurrent inference requests	5	Automatic	Automatic	Automatic
Test Date	12/13/2022	12/13/2022	12/13/2022	12/13/2022
Power dissipation/socket, TDP in Watt	35	28	12	15
CPU Price on 12/13/2022, Prices may vary	$544	$469	$67	$118

CPU Inference Engines:	Core i5-10900TE
Motherboard	iEi Corporation basboard Z667
CPU	Intel® Core™ i5-10900TE CPU @ 1.80GHz
Hyper Threading	on
Turbo Setting	on
Memory	2 x 16 GB DDR4 @ 2400 MHz
Operating System	Ubuntu* 20.04.5 LTS
Kernel version	5.4.0-42-generic
BIOS Vendor	American Megatrends Inc.
BIOS Version	Z667AR10.BIN
BIOS Release	7/15/2020
Batch size	Auto-batching
Precision	INT8/FP32
Number of concurrent inference requests	Automatic
Test Date	12/13/2022
Power dissipation/socket, TDP in Watt	35
CPU Price on 12/13/2022, Prices may vary	$488