Bios enabled Turbo 4.6Ghz - R23 score of 15449 (10 min)

3. 10C/16T @ 3.69 GHz, 12th Gen Intel Core i5-12600K	17966*
4. 16C/32T @ 3.4 GHz, AMD Ryzen Threadripper 1950X 16-C	16315
5. 10C/16T @ 3.69 GHz, 12th Gen Intel Core i5-12600K	15449
6. 8C/16T @ 2.3 GHz, Intel Core i9-9880H CPU	9087

Max temp ~83 C

XTU speed optimizer 4.7Ghz - R23 score of 17966 (1 run)

Max temp ~100 C (TJ. Max - also drawing almost 200W)

Core Temp 1.17.1

File   Options   Tools   Help

Select CPU: Processor #0   ⌄   10 Core(s)   20 Thread(s)

Processor Information

Model: Intel Core i5 12600K (Alder Lake-S)
Platform:
Frequency: 597.79MHz (99.63 x 6.0)
VID: 0.7080 v   Modulation:
Revision: Lithography: 10 nm
CPUID: 0x90672   TDP: 125.0 Watts
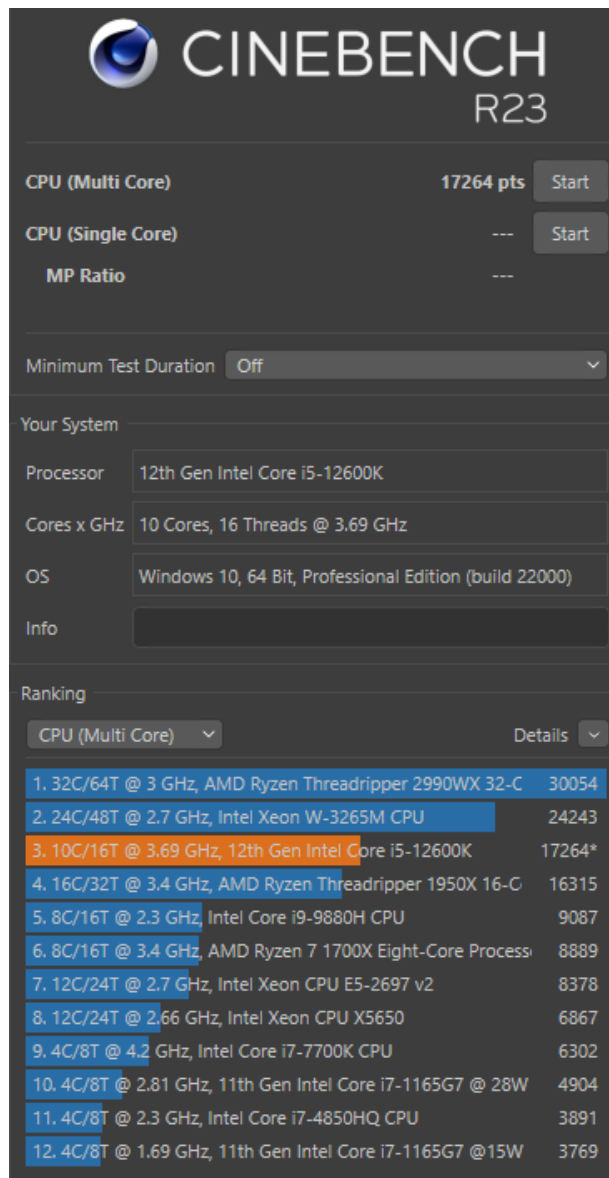
Processor #0: Temperature Readings

Power:	9.0W	7.3W	0.0W	1.8W	N/A
Tj. Max:	100°C		Min.	Max.	Load
Core #0:	29°C		0°C	100°C	9%
Core #1:	30°C		0°C	93°C	9%
Core #2:	32°C		0°C	100°C	2%
Core #3:	32°C		0°C	100°C	0%
Core #4:	33°C		0°C	94°C	4%
Core #5:	30°C		28°C	100°C	8%
Core #6:	34°C		31°C	78°C	0%
Core #7:	34°C		31°C	78°C	3%
Core #8:	34°C		30°C	78°C	0%
Core #9:	34°C		30°C	78°C	0%

CPU BRACKET CORRECTION

Bios enabled Turbo 4.6Ghz - R23 score of 17264 (10 min) - max temp ~ 75 C

CINEBENCH R23

CPU (Multi Core)	17264 pts	Start
CPU (Single Core)	---	Start
MP Ratio	---	

Minimum Test Duration: Off

Your System

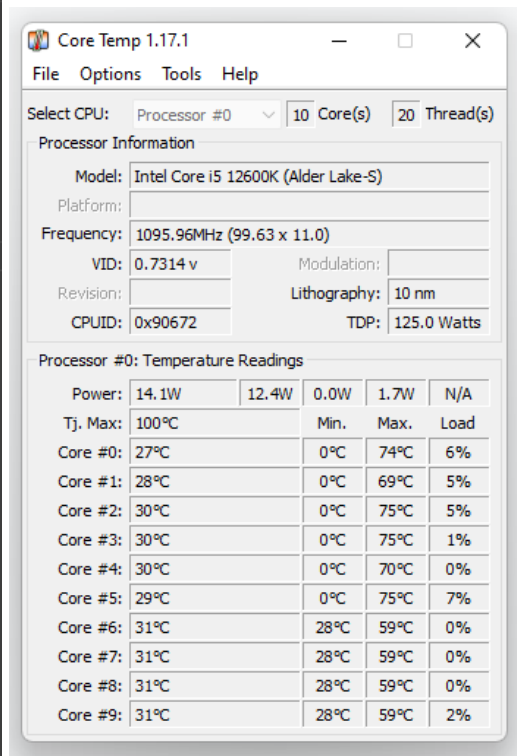| Processor | 12th Gen Intel Core i5-12600K |
Cores x GHz	10 Cores, 16 Threads @ 3.69 GHz
OS	Windows 10, 64 Bit, Professional Edition (build 22000)
Info	

Ranking

CPU (Multi Core)   Details

1. 32C/64T @ 3 GHz, AMD Ryzen Threadripper 2990WX 32-C	30054
2. 24C/48T @ 2.7 GHz, Intel Xeon W-3265M CPU	24243
3. 10C/16T @ 3.69 GHz, 12th Gen Intel Core i5-12600K	17264*
4. 16C/32T @ 3.4 GHz, AMD Ryzen Threadripper 1950X 16-C	16315
5. 8C/16T @ 2.3 GHz, Intel Core i9-9880H CPU	9087
6. 8C/16T @ 3.4 GHz, AMD Ryzen 7 1700X Eight-Core Process	8889
7. 12C/24T @ 2.7 GHz, Intel Xeon CPU E5-2697 v2	8378
8. 12C/24T @ 2.66 GHz, Intel Xeon CPU X5650	6867
9. 4C/8T @ 4.2 GHz, Intel Core i7-7700K CPU	6302
10. 4C/8T @ 2.81 GHz, 11th Gen Intel Core i7-1165G7 @ 28W	4904
11. 4C/8T @ 2.3 GHz, Intel Core i7-4850HQ CPU	3891
12. 4C/8T @ 1.69 GHz, 11th Gen Intel Core i7-1165G7 @15W	3769

Core Temp 1.17.1

File Options Tools Help

Select CPU: Processor #0   10 Core(s) 20 Thread(s)

Processor Information

Model:	Intel Core i5 12600K (Alder Lake-S)
Platform:	
Frequency:	1095.96MHz (99.63 x 11.0)
VID:	0.7314 v	Modulation:	
Revision:		Lithography:	10 nm
CPUID:	0x90672	TDP:	125.0 Watts

Processor #0: Temperature Readings

Power:	14.1W	12.4W	0.0W	1.7W	N/A
Tj. Max:	100°C		Min.	Max.	Load
Core #0:	27°C		0°C	74°C	6%
Core #1:	28°C		0°C	69°C	5%
Core #2:	30°C		0°C	75°C	5%
Core #3:	30°C		0°C	75°C	1%
Core #4:	30°C		0°C	70°C	0%
Core #5:	29°C		0°C	75°C	7%
Core #6:	31°C		28°C	59°C	0%
Core #7:	31°C		28°C	59°C	0%
Core #8:	31°C		28°C	59°C	0%
Core #9:	31°C		28°C	59°C	2%

Intel XTU speed optimizer (auto overclocking) 4.7Ghz - R23 score of 17933 (1 run)

Temperatures very comfortable, room for manual overclocking