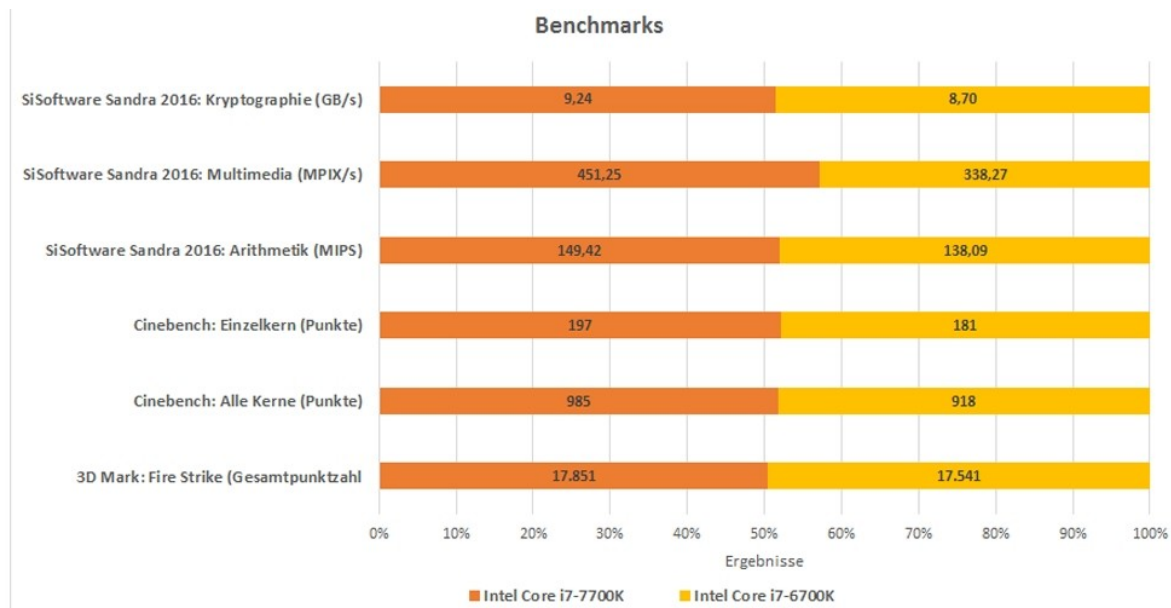


The „PC-Welt“ (PC-World), the No. 1 Computermagazine in Germany, has tested the new Intel Kabylake CPUs against the last Generation of Intel Skylake.

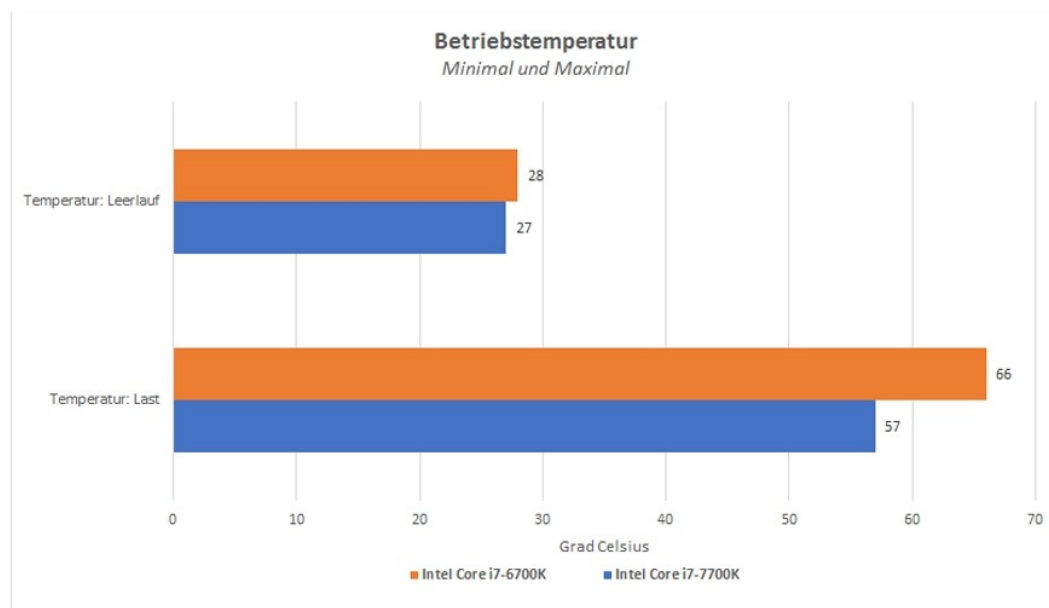
Link: <https://www.pcwelt.de/produkte/Kaby-Lake-Die-siebte-Intel-Core-CPU-Generation-im-Test-10048223.html>

At first they compared the performance of each CPU with different Benchmarks:



Summary: The new Kabylake was faster in all Benchmark.

At second they have measured the temperature of both CPUs:



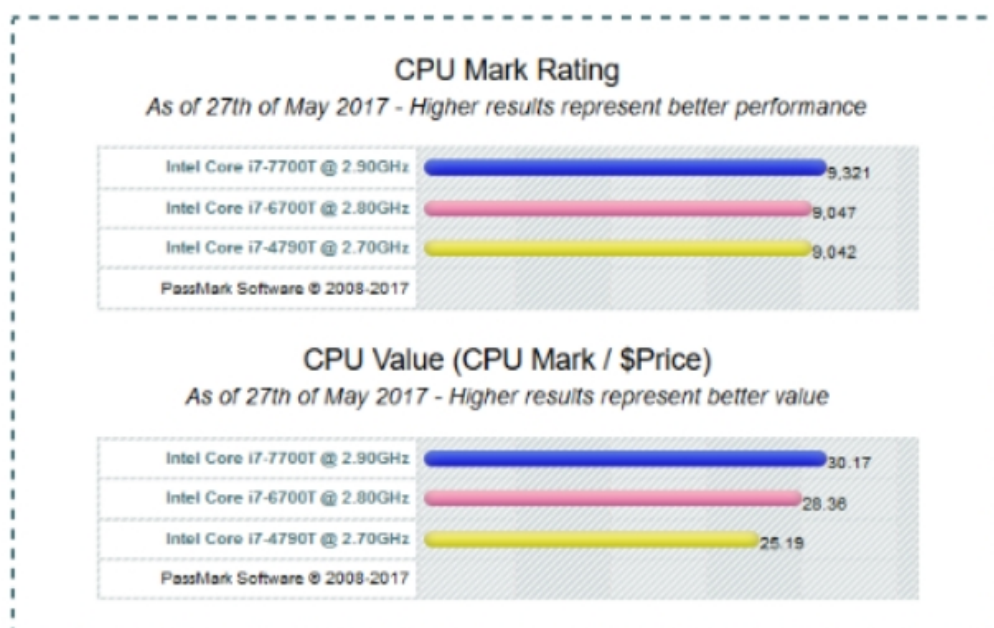
Summary: The Kabylake CPU was 9°C colder (-14%) comparing to the Skylake CPU. This is a huge advantage for the Kabylake CPU in a closed Housing and fanless Cooling System, because the temperature inside of the Computer will drops down a lot, especially in 24/7 use. The CPU Cores will not throttle down so fast, because of lower temperature, and the lifetime of the Computer will be much higher due to lower temperature levels.

Passmark Comparison CPU Generation Haswell, Kabylake and Skylake:

Link: http://www.cpubenchmark.net/high_end_cpus.html

	Intel Core i7-4790T @ 2.70GHz	Intel Core i7-7700T @ 2.90GHz	Intel Core i7-6700T @ 2.80GHz
Price	\$359 [†]	\$309 BUY NOW!	\$319 BUY NOW!
Socket Type	LGA1150	FCLGA1151	LGA 1151
CPU Class	Desktop	Desktop	Desktop
Clockspeed	2.7 GHz	2.9 GHz	2.8 GHz
Turbo Speed	Up to 3.9 GHz	Up to 3.8 GHz	Up to 3.6 GHz
# of Physical Cores	4 (2 logical cores per physical)	4 (2 logical cores per physical)	4 (2 logical cores per physical)
Max TDP	45W	35W	35W
First Seen on Chart	Q2 2014	Q1 2017	Q4 2015
# of Samples	65	18	208
Single Thread Rating	2190	2090	1970
CPU Mark	9042	9321	9047

[†] - Last seen price from our affiliates NewEgg.com & Amazon.com.



Also in the Passmark CPU Benchmark is the Kabylake CPU in the Lead and has 10W less Power Consumption comparing the old Haswell CPUs.

On the following Pages is the official comparison from the ARK Intel Website:

Link: <https://ark.intel.com/compare/80809,88200,97122>

ARK | Compare Intel® Products
5/27/2017

	Intel® Core™ i7-4790T	Intel® Core™ i7-6700T	Intel® Core™ i7-7700T
Code Name	Haswell	Skylake	Kaby Lake
Essentials			
Vertical Segment	Desktop	Desktop	Desktop
Processor Number	i7-4790T	i7-6700T	i7-7700T
Status	End of Life	Launched	Launched
Launch Date	Q2'14	Q3'15	Q1'17
Expected Discontinuance	07/14/2017		
Lithography	22 nm	14 nm	14 nm
Performance			
# of Cores	4	4	4
# of Threads	8	8	8
Processor Base Frequency	2.70 GHz	2.80 GHz	2.90 GHz
Max Turbo Frequency	3.90 GHz	3.60 GHz	3.80 GHz
Cache	8 MB SmartCache	8 MB SmartCache	8 MB SmartCache
Bus Speed	5 GT/s DMI2	8 GT/s DMI3	8 GT/s DMI3
TDP	45 W	35 W	35 W
# of QPI Links			0
Configurable TDP-down Frequency			1.90 GHz
Configurable TDP-down			25 W
Supplemental Information			
Embedded Options Available	No	No	Yes
Conflict Free	Yes	Yes	Yes
Memory Specifications			
Max Memory Size	32 GB	64 GB	64 GB
Memory Types	DDR3-1333/1600	DDR4-1866/2133	DDR4-2133/2400
Max # of Memory Channels	2	2	2
Max Memory Bandwidth	25.6 GB/s	34.1 GB/s	
ECC Memory Supported ‡	No	No	No
Graphics Specifications			
Processor Graphics ‡	Intel® HD Graphics 4600	Intel® HD Graphics 530	Intel® HD Graphics 630
Graphics Base Frequency	350.00 MHz	350.00 MHz	350.00 MHz
Graphics Max Dynamic Frequency	1.20 GHz	1.10 GHz	1.15 GHz
Graphics Video Max Memory	2 GB	64 GB	64 GB
Graphics Output	eDP/DP/HDMI/DVI/VGA	eDP/DP/HDMI/DVI	
Max Resolution (HDMI 1.4)‡	4096x2304@24Hz	4096x2304@24Hz	4096x2304@24Hz
Max Resolution (DP)‡	3840x2160@60Hz	4096x2304@60Hz	4096x2304@60Hz
Max Resolution (VGA)‡	1920x1200@60Hz	N/A	
DirectX* Support	11.2/12	12	12
OpenGL* Support	4.3	4.4	4.4
Intel® Quick Sync Video	Yes	Yes	Yes
Intel® InTru™ 3D Technology	Yes	Yes	Yes
Intel® Clear Video HD Technology	Yes	Yes	Yes
# of Displays Supported ‡	3	3	3
Device ID	0x412	0x1912	0x5912

4K Support		Yes, at 60Hz	Yes, at 60Hz
Intel® Clear Video Technology		Yes	Yes
Expansion Options			
Scalability	1S Only	1S Only	1S Only
PCI Express Revision	Up to 3.0	3.0	3.0
Max # of PCI Express Lanes	16	16	16
Package Specifications			
Sockets Supported	FCLGA1150	FCLGA1151	FCLGA1151
Max CPU Configuration	1	1	1
Thermal Solution Specification	PCG 2013B	PCG 2015A (35W)	PCG 2015A (35W)
T _{CASE}	71.45°C	66°C	
T _{JUNCTION}			80°C
Advanced Technologies			
Intel® Turbo Boost Technology	2.0	2.0	2.0
Intel® vPro™ Technology ‡	Yes	Yes	Yes
Intel® Hyper-Threading Technology ‡	Yes	Yes	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes	Yes	Yes
Intel® Virtualization Technology for Directed I/O (VT-d)	Yes	Yes	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes	Yes	Yes
Intel® TSX-NI	No	Yes	Yes
Intel® 64 ‡	Yes	Yes	Yes
Instruction Set	64-bit	64-bit	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX 2.0	SSE4.1/4.2, AVX 2.0	SSE4.1/4.2, AVX 2.0
Idle States	Yes	Yes	Yes
Enhanced Intel SpeedStep® Technology	Yes	Yes	Yes
Thermal Monitoring Technologies	Yes	Yes	Yes
Intel® Identity Protection Technology ‡	Yes	Yes	Yes
Intel® Stable Image Platform Program (SIPP)	Yes	Yes	Yes
Intel® Optane™ Memory Supported ‡		No	Yes
Intel® Data Protection Technology			
Intel® AES New Instructions	Yes	Yes	Yes
Secure Key	Yes	Yes	Yes
Intel® Software Guard Extensions (Intel® SGX)		Yes	Yes
Intel® Memory Protection Extensions (MPX)		Yes	Yes
Intel® Platform Protection Technology			
OS Guard	Yes	Yes	Yes
Trusted Execution Technology ‡	Yes	Yes	Yes
Execute Disable Bit ‡	Yes	Yes	Yes
Intel® Device Protection Technology with Boot Guard		Yes	Yes