www.phoronix-test-suite.com

J1900 Speed Tests

Running pts/blogbench-1.0.0, pts/ramspeed-1.4.0, pts/stream-1.2.0, pts/network-loopback-1.0.1, pts/cachebench-1.0.0, pts/pybench-1.0.0, pts/apache-1.6.1, pts/phpbench-1.1.0 via the Phoronix Test Suite.

Automated Executive Summary

i7-4700MQ + GT740M had the most wins, coming in first place for 95% of the tests.

Based on the geometric mean of all complete results, the fastest (i7-4700MQ + GT740M) was 2.224x the speed of the slowest (Celeron J1900 Xubuntu). G840 was 0.747x the speed of i7-4700MQ + GT740M and Celeron J1900 Xubuntu was 0.602x the speed of G840.

The results with the greatest spread from best to worst included:

Apache Benchmark (Static Web Page Serving) at 4.741x
PyBench (Total For Average Test Times) at 4.605x
Loopback TCP Network Performance (Time To Transfer 10GB Via Loopback) at 3.793x
CacheBench (Test: Read / Modify / Write) at 2.926x
System BZIP2 Decompression (Phoronix Test Suite v5.0.1) at 2.279x
BlogBench (Test: Read) at 1.961x
CacheBench (Test: Read) at 1.93x
Stream (Type: Triad) at 1.926x

Stream (Type: Add) at 1.919x
Stream (Type: Scale) at 1.812x.

Test Systems:

Celeron J1900 Xubuntu

Processor: Intel Celeron J1900 @ 2.90GHz (4 Cores), Motherboard: ASRock Q1900B-ITX, Chipset: Intel ValleyView SSA-CUnit, Memory: 16384MB, Disk: 120GB GOODRAM C50, Graphics: Intel ValleyView Gen7 (854MHz), Audio: Intel ValleyView HD Audio, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 14.04, Kernel: 3.15.0-031500rc2-generic (x86_64), Desktop: Xfce 4.10, Display Server: X Server 1.15.1, Display Driver: intel 2.99.911, OpenGL: 3.3 Mesa 10.2.0-devel (git-3a2885f trusty-oibaf-ppa), Compiler: GCC 4.8.2, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-libmudflap --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,c++,java,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,nobarrier,relatime,rw
Processor Notes: Scaling Governor: intel_pstate performance
System Notes: Disk Scheduler: DEADLINE. Python 2.7.6.

i7-4700MQ + GT740M

Processor: Intel Core i7-4700MQ @ 2.40GHz (8 Cores), Motherboard: MSI MS-1758, Chipset: Intel Xeon E3-1200 v3/4th, Memory: 16384MB, Disk: 120GB INTEL SSDSC2CT12 + 1000GB HGST HTS721010A9, Graphics: MSI NVIDIA GeForce GT 740M 2048MB (540/900MHz), Audio: Intel Xeon E3-1200 v3/4th, Network: Qualcomm Atheros AR8161 Gigabit + Realtek RTL8723AE PCIe Wireless

OS: Ubuntu 14.04, Kernel: 3.13.0-24-generic (x86_64), Desktop: Xfce 4.10, Display Server: X Server 1.15.1, Display Driver: NVIDIA 331.38, OpenGL: 4.3.0, Compiler: GCC 4.8.2, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-libmudflap --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,c++,java,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,nobarrier,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
System Notes: Disk Scheduler: DEADLINE. Python 2.7.6.

G840

Processor: Intel Pentium G840 @ 2.80GHz (2 Cores), Motherboard: Gigabyte Tecohnology H61MA-D3V, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 7168MB, Disk: 120GB GOODRAM C50, Graphics: Intel HD 2000 (1100MHz), Audio: Realtek ALC887-VD, Network: Realtek RTL8111/8168/8411

OS: Ubuntu 14.04, Kernel: 3.13.0-24-generic (x86_64), Desktop: Xfce 4.10, Display Server: X Server 1.15.1, Display Driver: intel 2.99.910, OpenGL: 3.1 Mesa 10.1.0, Compiler: GCC 4.8, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-libmudflap --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-gtk-cairo --enable-java-awt=gtk --enable-java-home --enable-languages=c,c++,java,go,d,fortran,objc,obj-c++ --enable-libstdcxx-debug

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--enable-libstdcxx-time=yes --enable-multiarch --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-arch-directory=amd64 --with-ecj-jar=/usr/share/java/eclipse-ecj.jar --with-java-home=/usr/lib/jvm/java-1.5.0-gcj-4.8-amd64/jre --with-jvm-jar-dir=/usr/lib/jvm-exports/java-1.5.0-gcj-4.8-amd64 --with-jvm-root-dir=/usr/lib/jvm/java-1.5.0-gcj-4.8-amd64 --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Disk Notes: DEADLINE / data=ordered,relatime,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
System Notes: Disk Scheduler: DEADLINE. Python 2.7.6.

	Celeron J1900 Xubuntu	i7-4700MQ + GT740M	G840
Apache Benchmark - S.W.P.S (Reqs/sec)	**6294**	**29843**	12507
Normalized	21.09%	100%	41.91%
Standard Deviation	3.5%	0.5%	0.2%
PyBench - T.F.A.T.T (Milliseconds)	**7534**	**1636**	2516
Normalized	21.71%	100%	65.02%
Standard Deviation	0.1%	0.3%	1.1%
Loopback TCP Network Performance - T.T.T.1.V.L (sec)	**60.73**	**16.01**	23.62
Normalized	26.36%	100%	67.78%
Standard Deviation	4.2%	0.4%	0.4%
CacheBench - R.M.W (MB/s)	**8488**	**24836**	20993
Normalized	34.18%	100%	84.53%
Standard Deviation	0%	0%	0%
System BZIP2 Decompression - P.T.S.v.0.1 (sec)	**33.70**		**14.79**
Normalized	43.89%		100%
Standard Deviation	0.1%		4.1%
BlogBench - Read (Final Score)	**336286**	**659408**	346552
Normalized	51%	100%	52.56%
Standard Deviation	1.5%	2%	2%
CacheBench - Read (MB/s)	**1488**	**2872**	2363
Normalized	51.81%	100%	82.28%
Standard Deviation	0%	0%	0%
Stream - Triad (MB/s)	**8372**	**16123**	13611
Normalized	51.92%	100%	84.42%
Standard Deviation	0.8%	0.4%	0.1%
Stream - Add (MB/s)	**8375**	**16070**	13643
Normalized	52.12%	100%	84.9%
Standard Deviation	0.4%	0.4%	0.2%
Stream - Scale (MB/s)	**7883**	**14285**	12239
Normalized	55.18%	100%	85.68%
Standard Deviation	0.8%	0.3%	0.1%
RAMspeed SMP - Add - Floating Point (MB/s)	**8621**	**15582**	12683
Normalized	55.33%	100%	81.4%
Stream - Copy (MB/s)	**8012**	**14380**	12248
Normalized	55.71%	100%	85.18%
Standard Deviation	0.3%	0.3%	0.2%
RAMspeed SMP - Triad - Floating Point	**8441**	**15035**	12920
Normalized	56.14%	100%	85.93%
RAMspeed SMP - Average - Floating Point (MB/s)	**8364**	**14824**	12356
Normalized	56.42%	100%	83.35%

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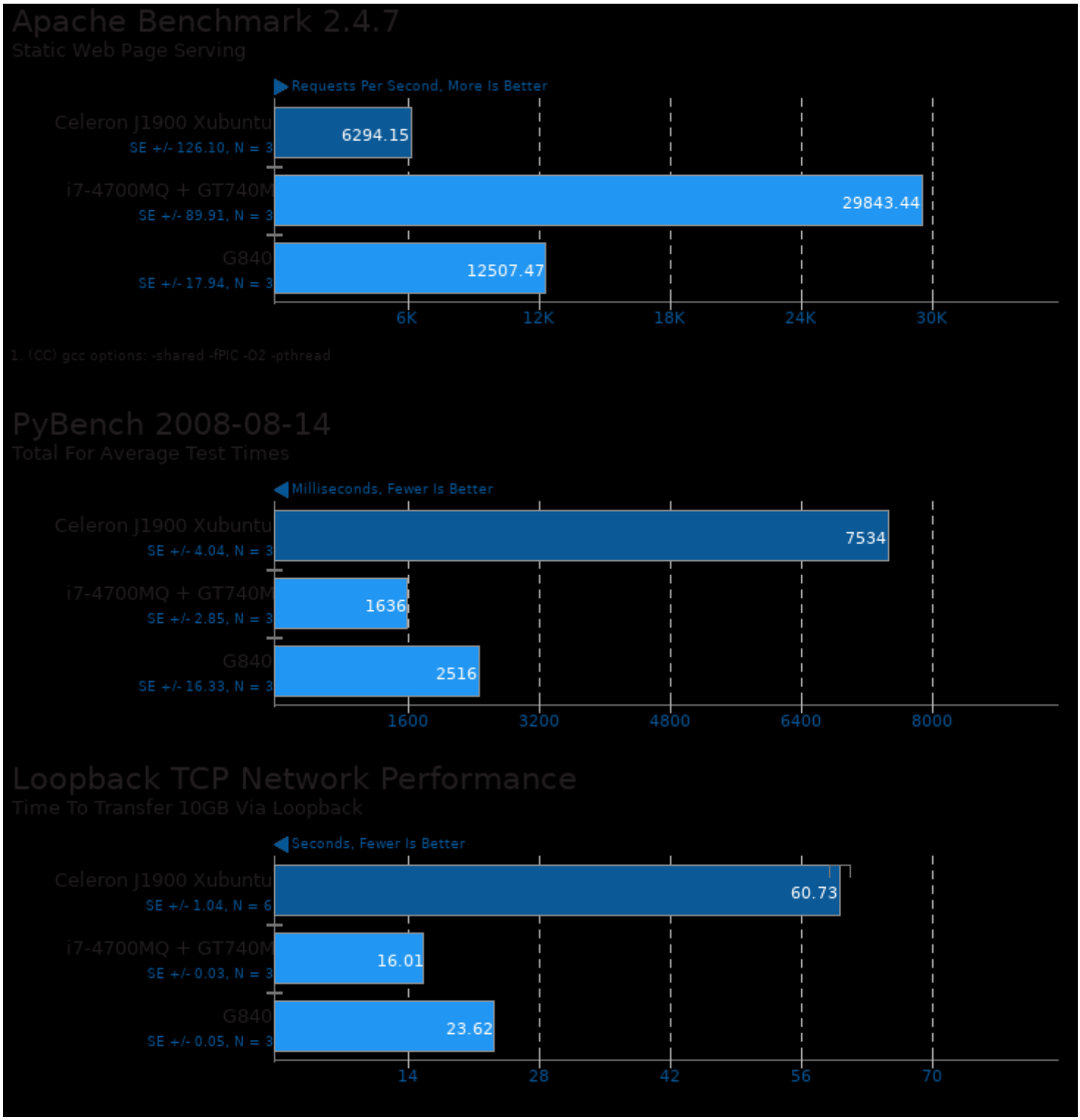
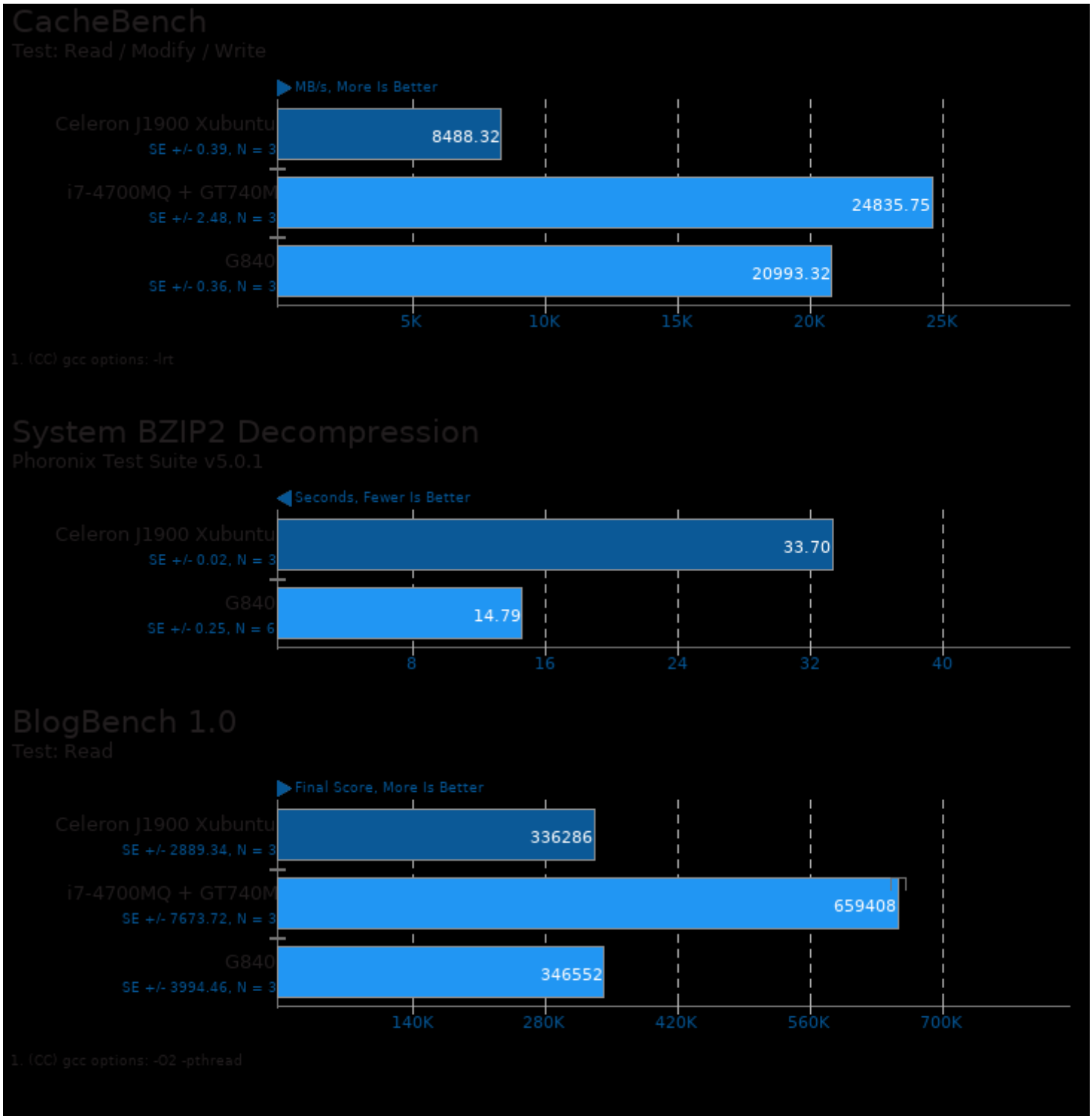
RAMspeed SMP - Average - Integer (MB/s)	**7905**	**13999**	11353
Normalized	56.47%	100%	81.1%
RAMspeed SMP - Copy - Integer (MB/s)	**8127**	**14248**	11974
Normalized	57.04%	100%	84.04%
RAMspeed SMP - Triad - Integer (MB/s)	**7925**	**13888**	11383
Normalized	57.07%	100%	81.96%
RAMspeed SMP - Scale - Integer (MB/s)	**8137**	**14231**	11980
Normalized	57.18%	100%	84.19%
RAMspeed SMP - Add - Integer (MB/s)	**7941**	**13763**	11550
Normalized	57.7%	100%	83.92%
RAMspeed SMP - Scale - Floating Point	**8108**	**14039**	11839
Normalized	57.75%	100%	84.33%
RAMspeed SMP - Copy - Floating Point	**8176**	**13991**	11852
Normalized	58.44%	100%	84.72%
PHPBench - P.B.S (Score)	**28698**	**128870**	83622
Normalized	22.27%	100%	64.89%
Standard Deviation	8.2%	0.3%	0.4%
CacheBench - Write (MB/s)	**4911**	**15383**	6635
Normalized	31.93%	100%	43.13%
Standard Deviation	1.4%	0.2%	6.3%

J1900 Speed Tests

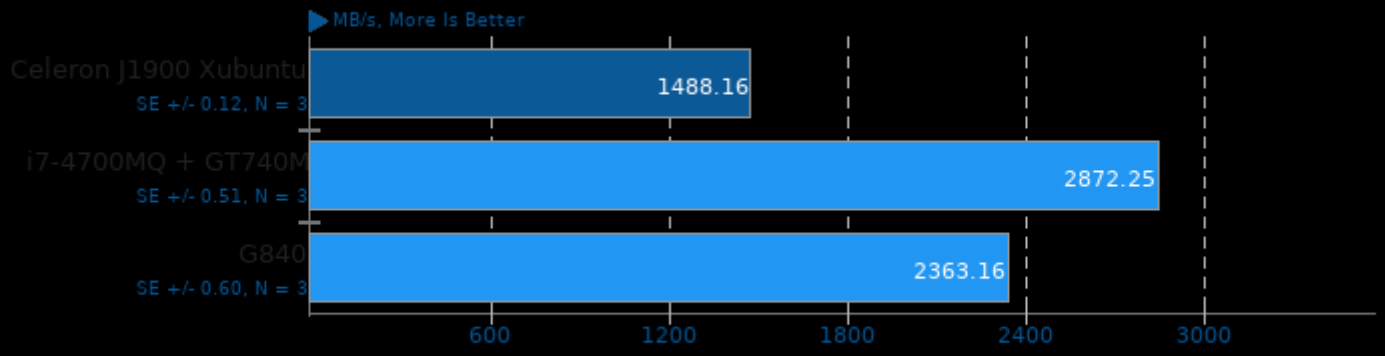


J1900 Speed Tests



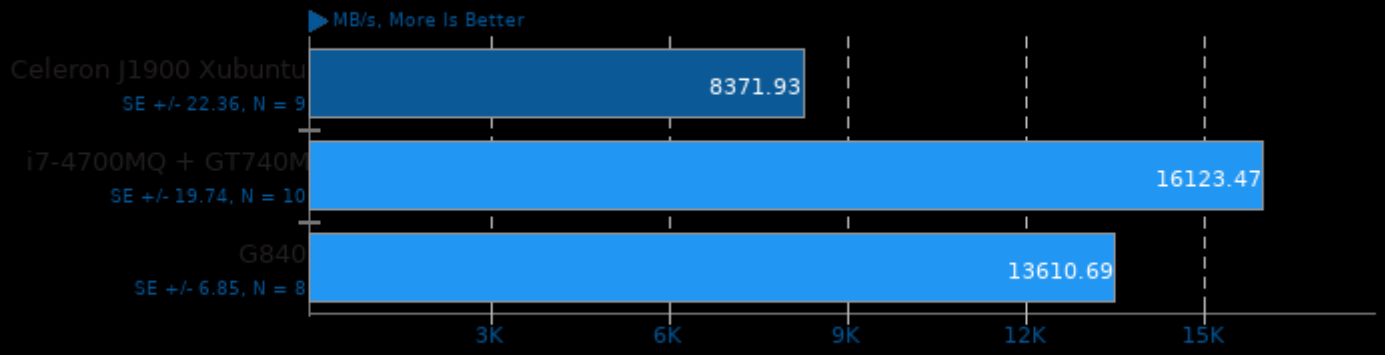
J1900 Speed Tests

CacheBench
Test: Read



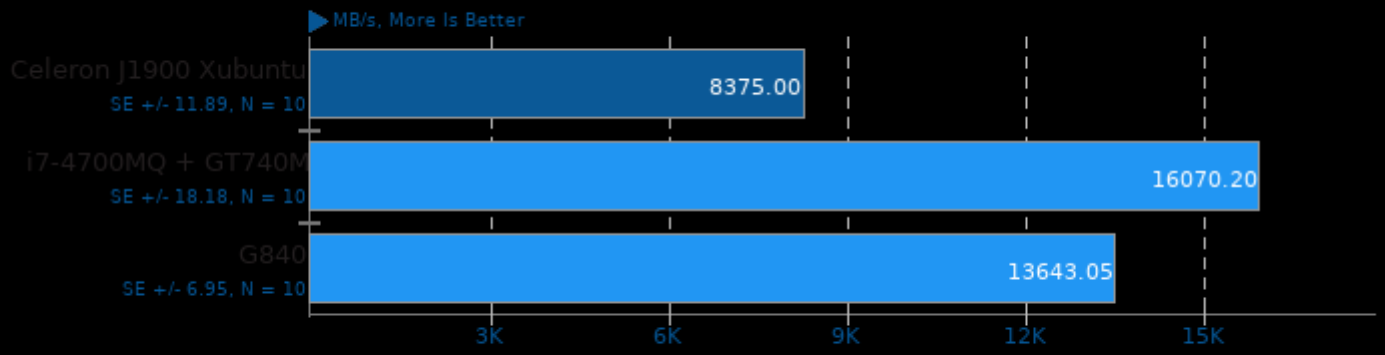
1. (CC) gcc options: -lrt

Stream 2013-01-17
Type: Triad



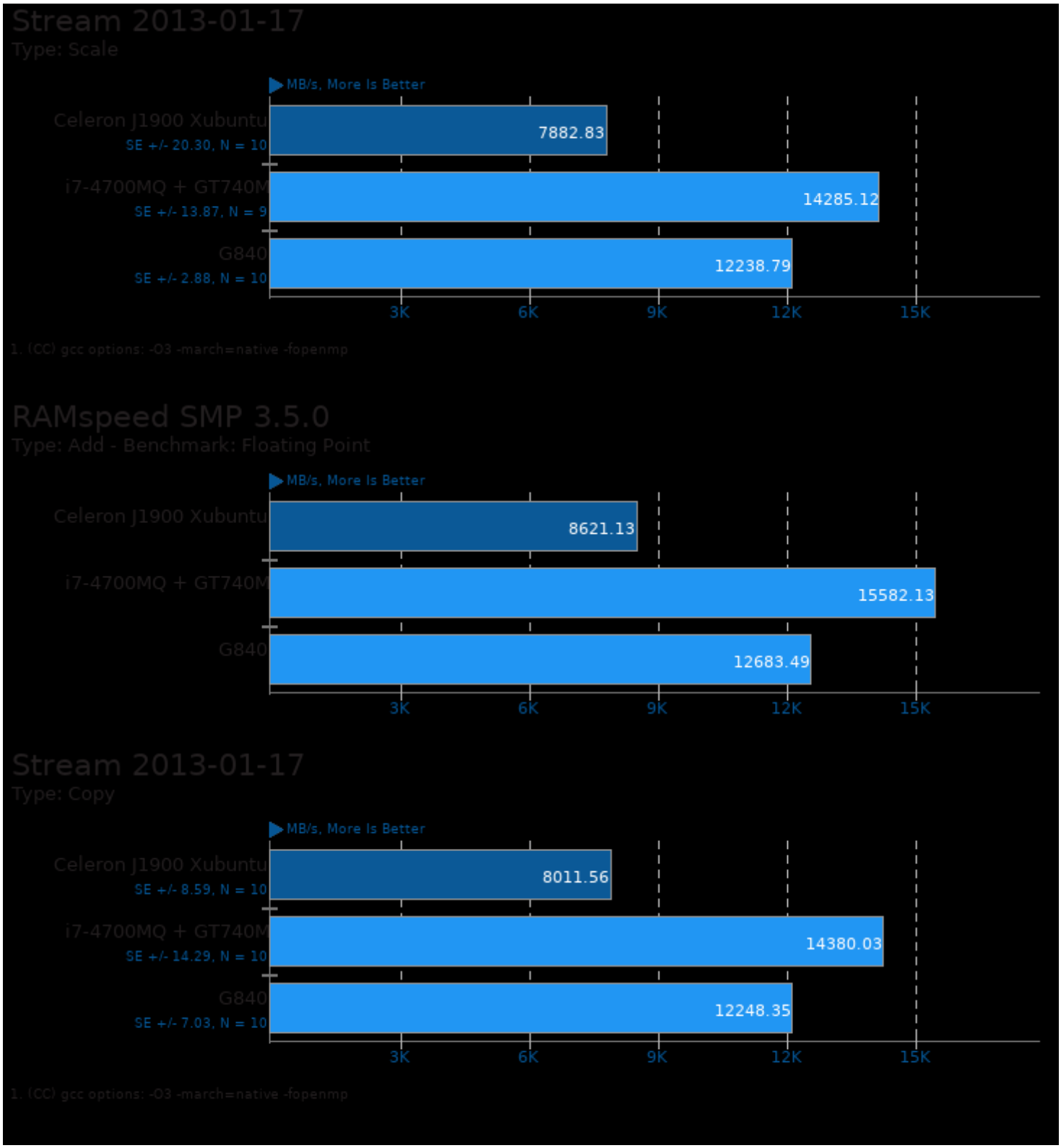
1. (CC) gcc options: -O3 -march=native -fopenmp

Stream 2013-01-17
Type: Add



1. (CC) gcc options: -O3 -march=native -fopenmp

J1900 Speed Tests



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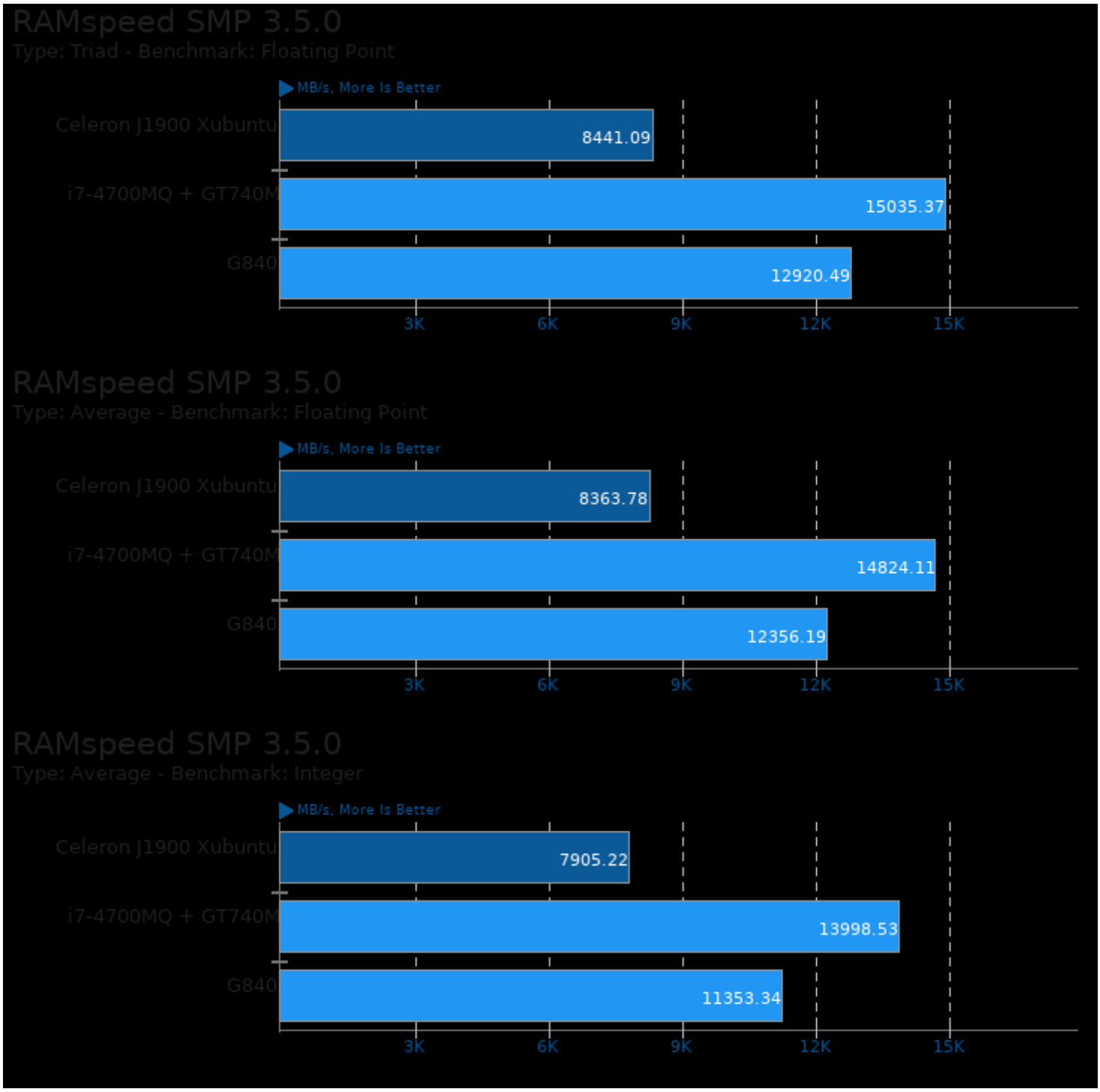

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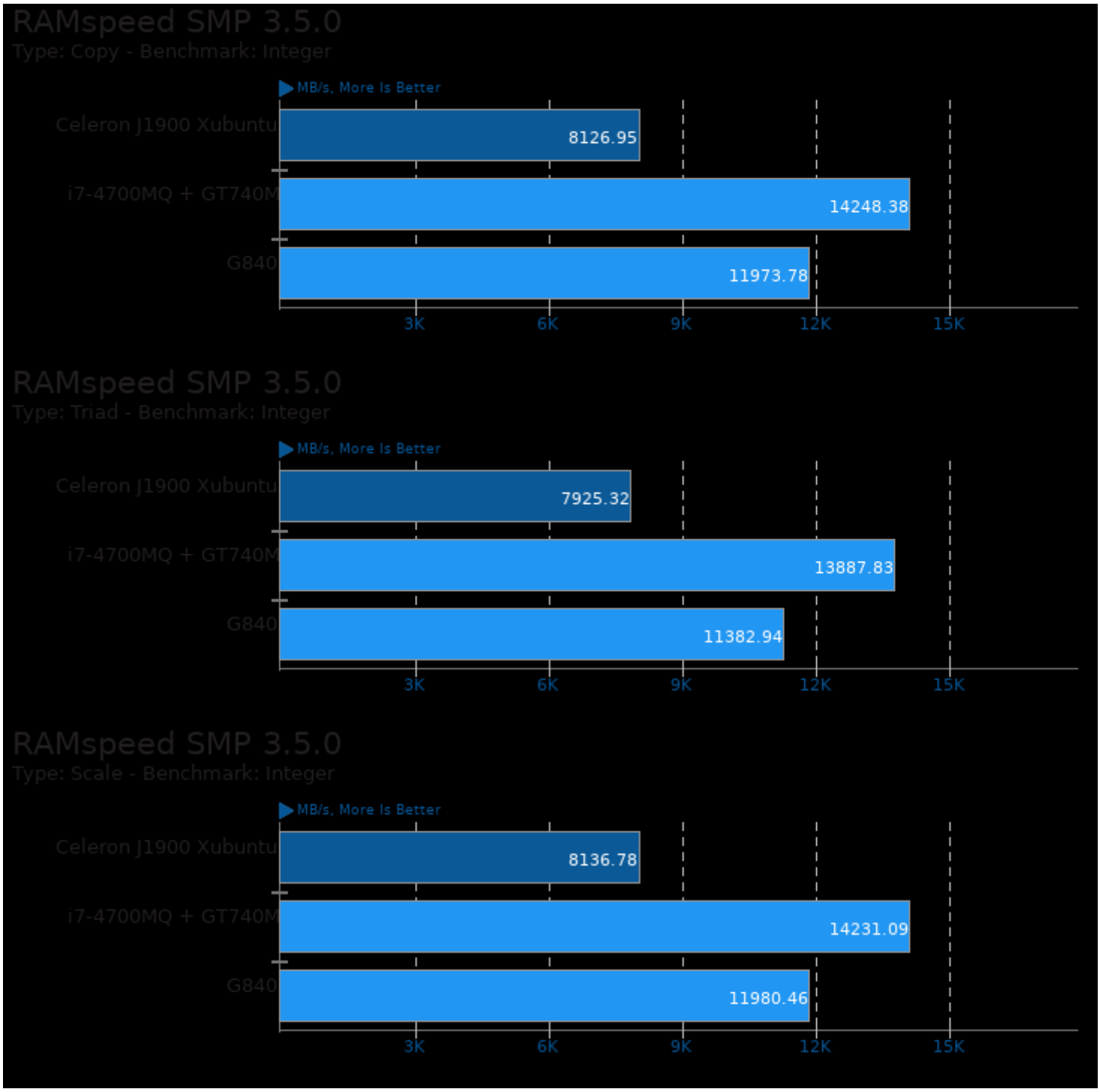

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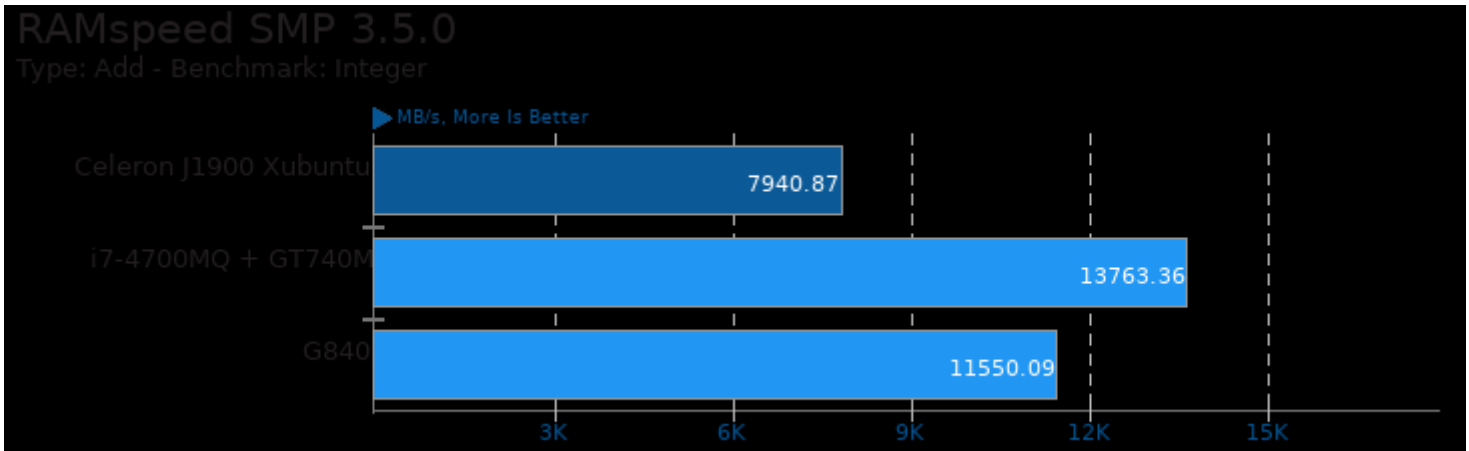
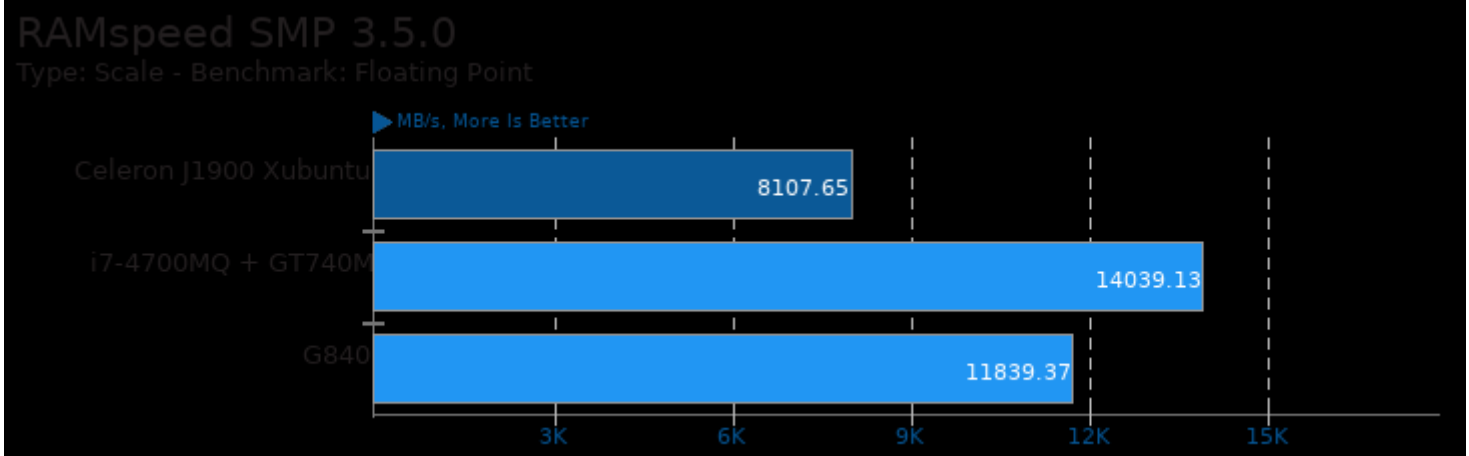
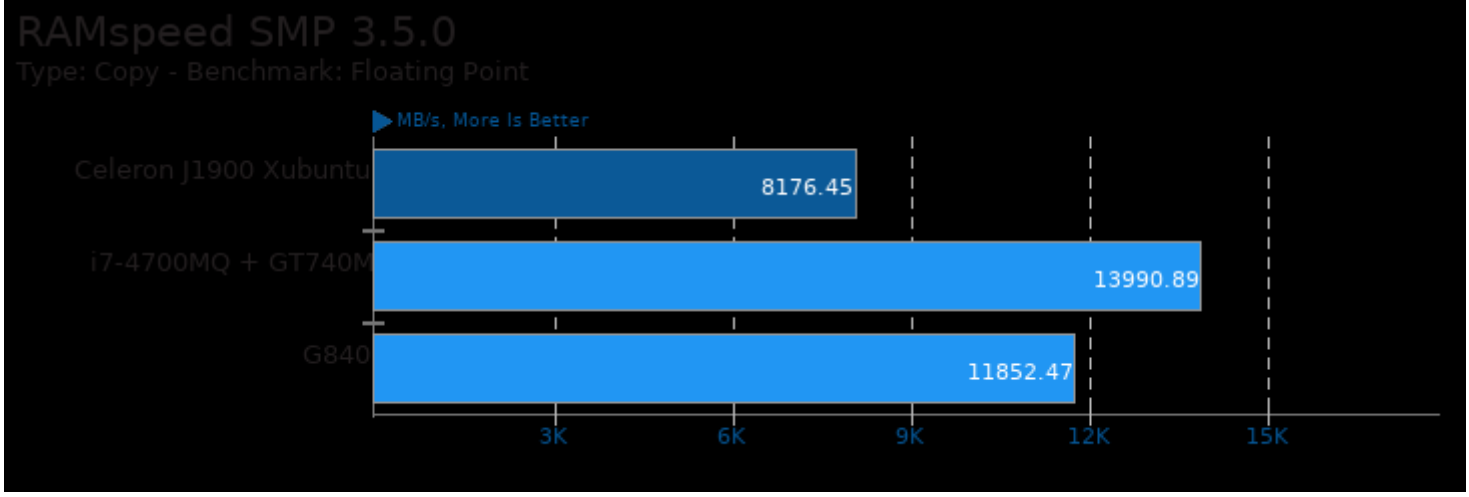
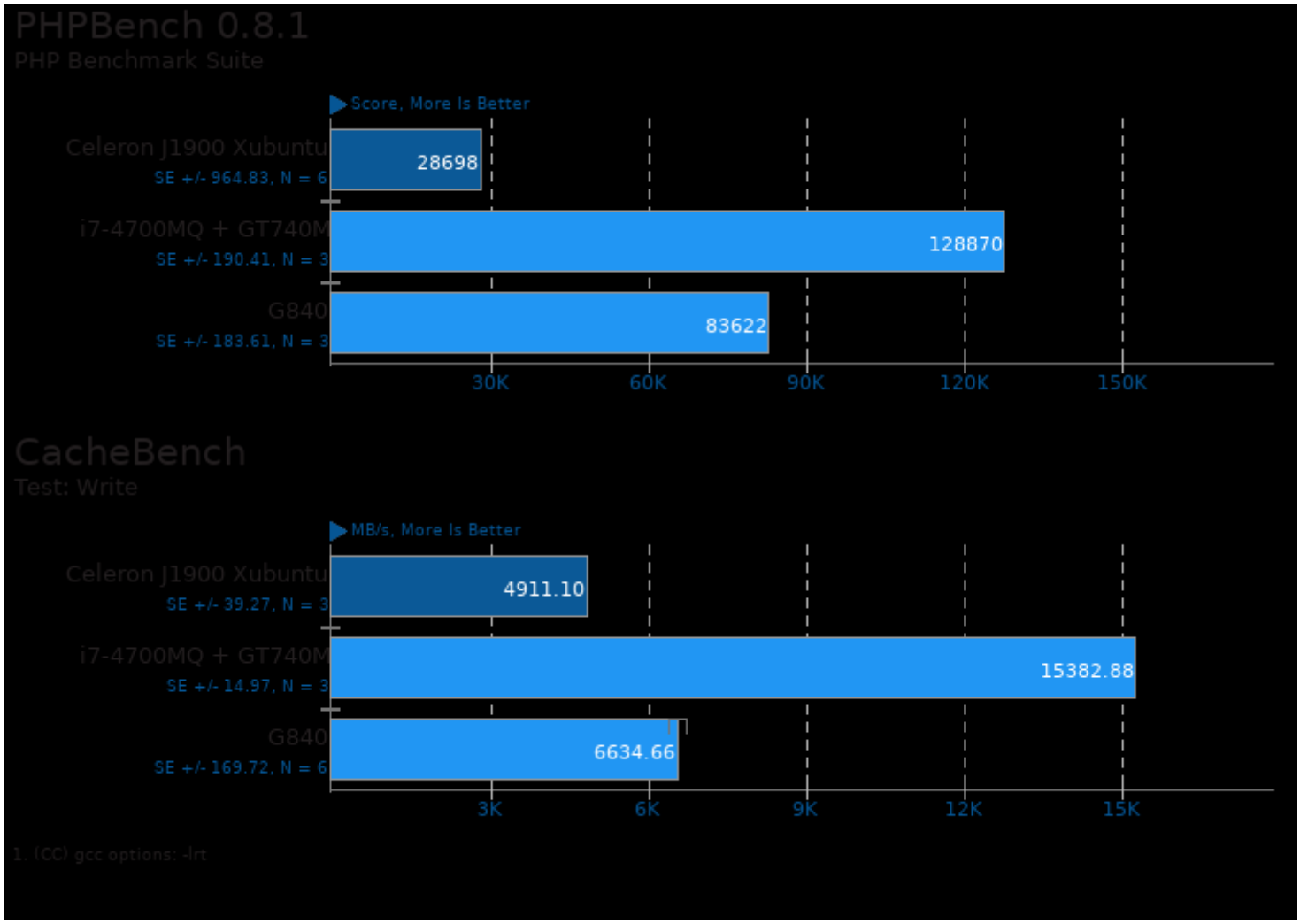




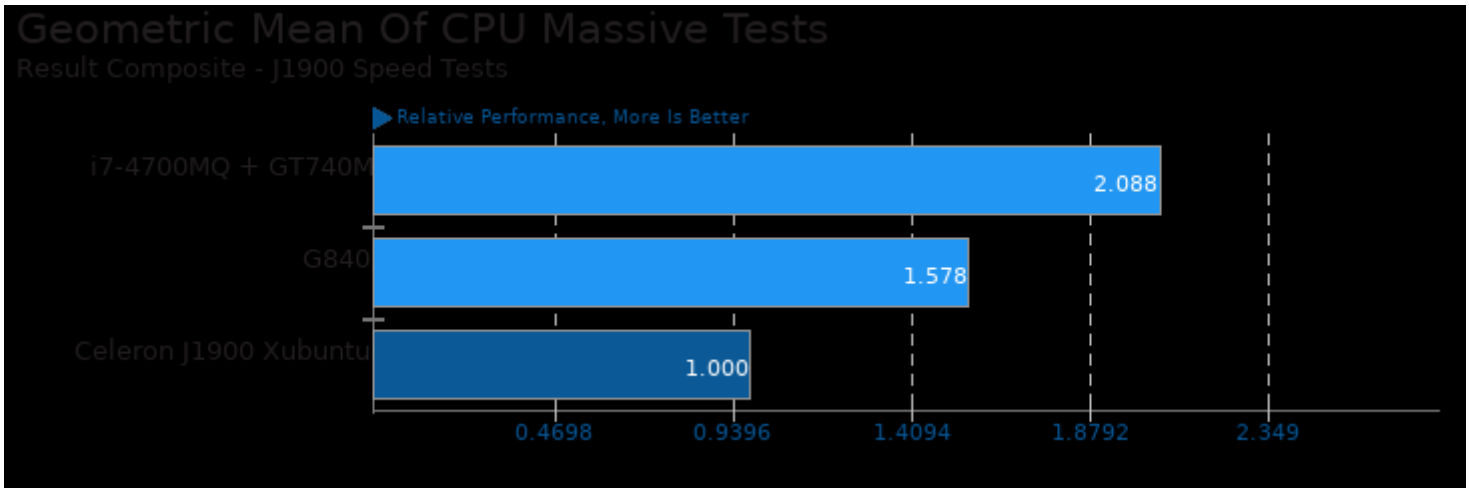


J1900 Speed Tests

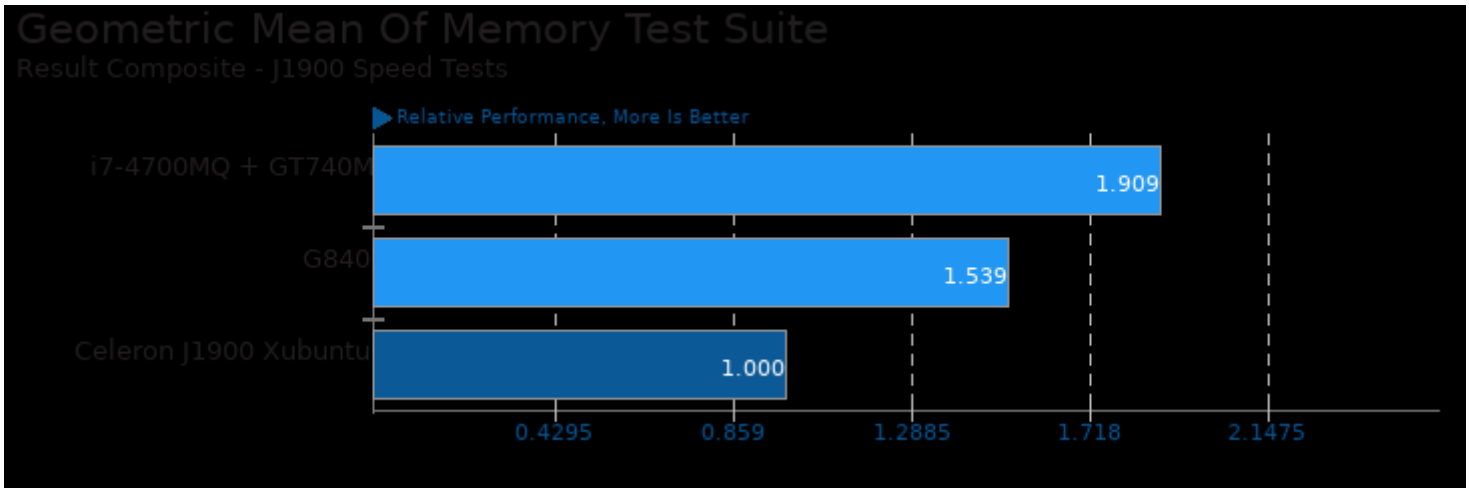


J1900 Speed Tests

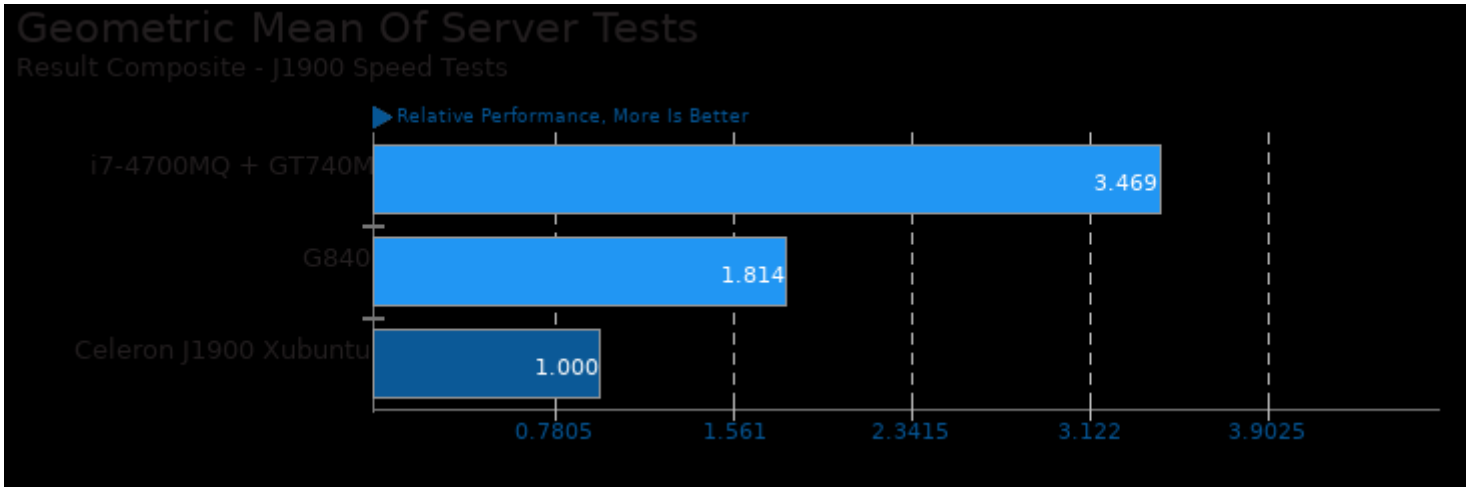
These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/apache, pts/blogbench, pts/cachebench, pts/phpbench, pts/ramspeed and pts/stream

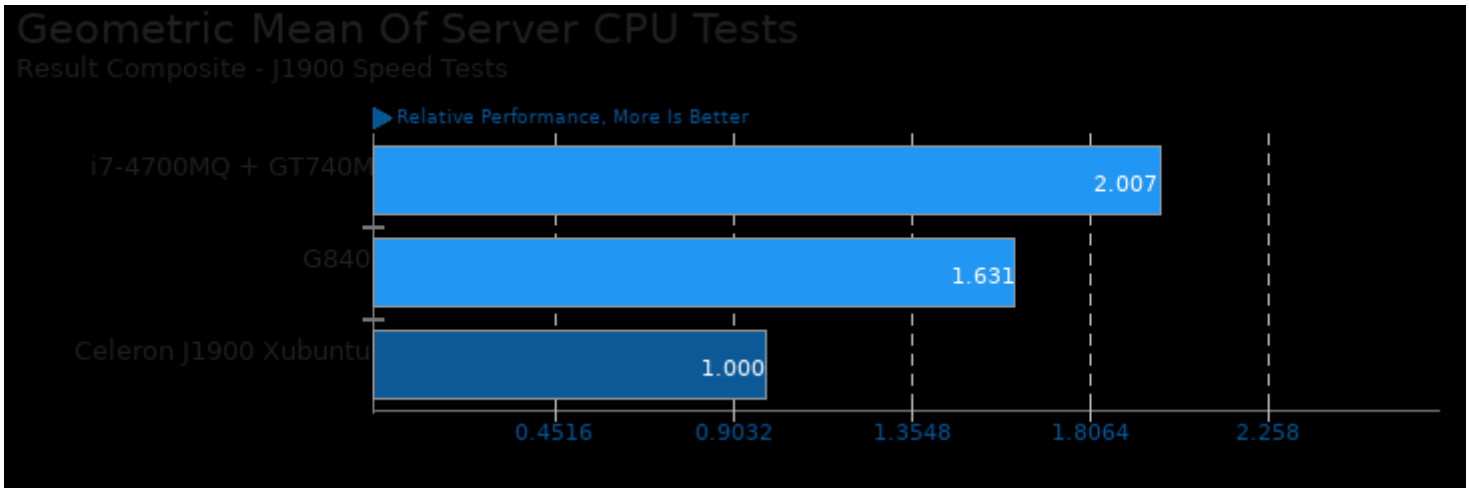


Geometric mean based upon tests: pts/ramspeed, pts/stream and pts/cachebench

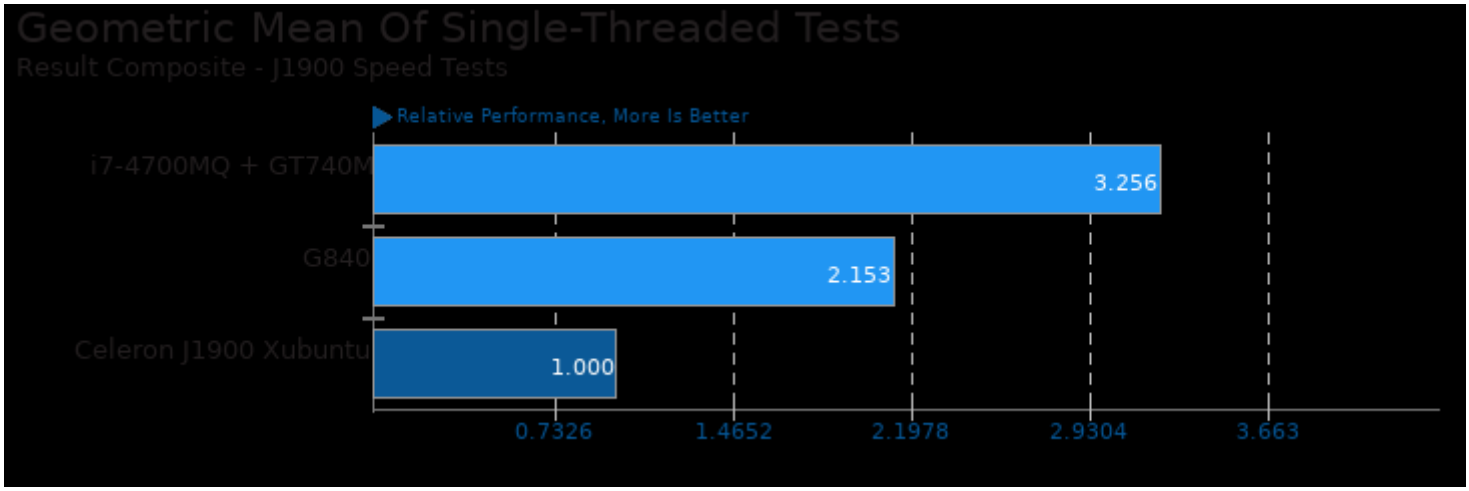


Geometric mean based upon tests: pts/apache, pts/blogbench and pts/phpbench

J1900 Speed Tests



Geometric mean based upon tests: pts/pybench, pts/phpbench, pts/ramspeed and pts/stream



Geometric mean based upon tests: pts/cachebench, pts/pybench and pts/phpbench

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 26 July 2024 20:51.