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Intel Core i7 3960X Linux, Intel Sandy Bridge vs. AMD Bulldozer, Intel Core i5 2500K

First tests of the Intel Core i7 3960X Sandy Bridge Extreme Edition processor under Linux. Using an Ubuntu 12.04 LTS 64-bit snapshot with the Linux 3.2 kernel. More tests are on the way on Phoronix.com by Michael Larabel. Thanks to Intel Corp for sending out the Core i7 3960X, the Intel X79 motherboard, and the Intel water cooling kit for Sandy-E.

Intel Sandy Bridge vs. AMD Bulldozer: Intel Core i5 2500K Sandy Bridge, Intel Core i5 2400S Sandy Bridge, AMD FX-8150 Bulldozer benchmarking under Linux with an early Ubuntu 12.04 LTS Precise Pangolin 64-bit snapshot on the Linux 3.2 kernel. Testing by Michael Larabel of Phoronix.com.

Intel Core i5 2500K: Intel Core i5 2500K benchmarking under Linux with an early Ubuntu 12.04 LTS Precise Pangolin 64-bit snapshot on the Linux 3.2 kernel. Testing by Michael Larabel of Phoronix.com.

Automated Executive Summary

Core i5 2500K had the most wins, coming in first place for 51% of the tests.

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

C-Ray (Total Time) at 4.701x
Himeno Benchmark (Poisson Pressure Solver) at 3.778x
Smallpt (Global Illumination Renderer; 100 Samples) at 3.582x
Timed Linux Kernel Compilation (Time To Compile) at 2.282x

x264 (H.264 Video Encoding) at 1.76x
7-Zip Compression (Compress Speed Test) at 1.749x
GraphicsMagick (Operation: Sharpen) at 1.711x
NAS Parallel Benchmarks (Test / Class: IS.C) at 1.702x
TSCP (AI Chess Performance) at 1.69x
GraphicsMagick (Operation: Local Adaptive Thresholding) at 1.659x.

Test Systems:

Intel Core i7 3960X

Processor: Intel Core i7-3960X @ 3.30GHz (12 Cores), Motherboard: Intel DX79SI, Chipset: Intel Sandy DMI2, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: AMD Radeon HD 6900 2048MB (800/1250MHz), Audio: Realtek ALC892, Monitor: DELL P2210H, Network: Intel 82579LM Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-3-generic (x86_64), Desktop: Unity 4.24.0, Display Server: X Server 1.10.4, Display Driver: fglrx 8.91.4 Catalyst 11.11, OpenGL: 4.1.11251, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

System Notes: Compiz was running on this system.

AMD Phenom II X4 955 @ 3.60GHz

Processor: AMD Phenom II X4 955 @ 3.60GHz (4 Cores), Motherboard: Gigabyte GA-880GM-UD2H, Chipset: AMD RS780 + SB700/SB800, Memory: 6144MB, Disk: 500GB Seagate ST3500320AS, Graphics: AMD Radeon HD 4250, Audio: Realtek ALC892, Monitor: SyncMaster, Network: Realtek RTL8111/8168B

OS: Fedora 14, Kernel: 2.6.35.14-103.fc14.i686.PAE (i686), Desktop: KDE 4.6.5, Display Server: X Server 1.9.5, Display Driver: radeon 6.13.99, OpenGL: 2.1 Mesa 7.9, Compiler: GCC 4.6.0, File-System: ext2/ext3, Screen Resolution: 1280x1024

System Notes: Firefox was running on this system. AMD CnQ was enabled.

Core i5 2500K

Processor: Intel Core i5-2500K @ 3.30GHz (4 Cores), Motherboard: ASRock Z68 Pro3, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: AMD Radeon HD 6900 2048MB (800/1250MHz), Audio: Realtek ALC892, Monitor: DELL P2210H, Network: Realtek RTL8111/8168B

OS: Ubuntu 12.04, Kernel: 3.2.0-3-generic (x86_64), Desktop: Unity 4.24.0, Display Server: X Server 1.10.4, Display Driver: fglrx 8.91.4 Catalyst 11.11, OpenGL: 4.1.11251, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

System Notes: Compiz was running on this system.

Core i5 2400S

Processor: Intel Core i5-2400S @ 2.50GHz (4 Cores), Motherboard: ASRock Z68 Pro3, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: AMD Radeon HD 6900 2048MB (800/1250MHz), Audio: Realtek ALC892, Monitor: DELL P2210H, Network: Realtek RTL8111/8168B

OS: Ubuntu 12.04, Kernel: 3.2.0-3-generic (x86_64), Desktop: Unity 4.24.0, Display Server: X Server 1.10.4, Display Driver: fglrx 8.91.4 Catalyst 11.11, OpenGL: 4.1.11251, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

System Notes: Compiz was running on this system.

FX-8150

Processor: AMD FX-8150 Eight-Core @ 3.61GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: AMD Radeon HD 6900 2048MB (800/1250MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-3-generic (x86_64), Desktop: Unity 4.24.0, Display Server: X Server 1.10.4, Display Driver: fglrx 8.91.4 Catalyst 11.11, OpenGL: 4.1.11251, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

System Notes: Compiz was running on this system.

Intel Core i5 2500K: Core i5 2500K

Processor: Intel Core i5-2500K @ 3.30GHz (4 Cores), Motherboard: ASRock Z68 Pro3, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: AMD Radeon HD 6900 2048MB (800/1250MHz), Audio: Realtek ALC892, Monitor: DELL P2210H, Network: Realtek RTL8111/8168B

OS: Ubuntu 12.04, Kernel: 3.2.0-3-generic (x86_64), Desktop: Unity 4.24.0, Display Server: X Server 1.10.4, Display Driver: fglrx 8.91.4 Catalyst 11.11, OpenGL: 4.1.11251, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

System Notes: Compiz was running on this system.

Intel Core i5 2500K: Core i5 2400S

Processor: Intel Core i5-2400S @ 2.50GHz (4 Cores), Motherboard: ASRock Z68 Pro3, Chipset: Intel 2nd Generation Core Family DRAM, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: AMD Radeon HD 6900 2048MB (800/1250MHz), Audio: Realtek ALC892, Monitor: DELL P2210H, Network: Realtek RTL8111/8168B

OS: Ubuntu 12.04, Kernel: 3.2.0-3-generic (x86_64), Desktop: Unity 4.24.0, Display Server: X Server 1.10.4, Display Driver: fglrx 8.91.4 Catalyst 11.11, OpenGL: 4.1.11251, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

System Notes: Compiz was running on this system.

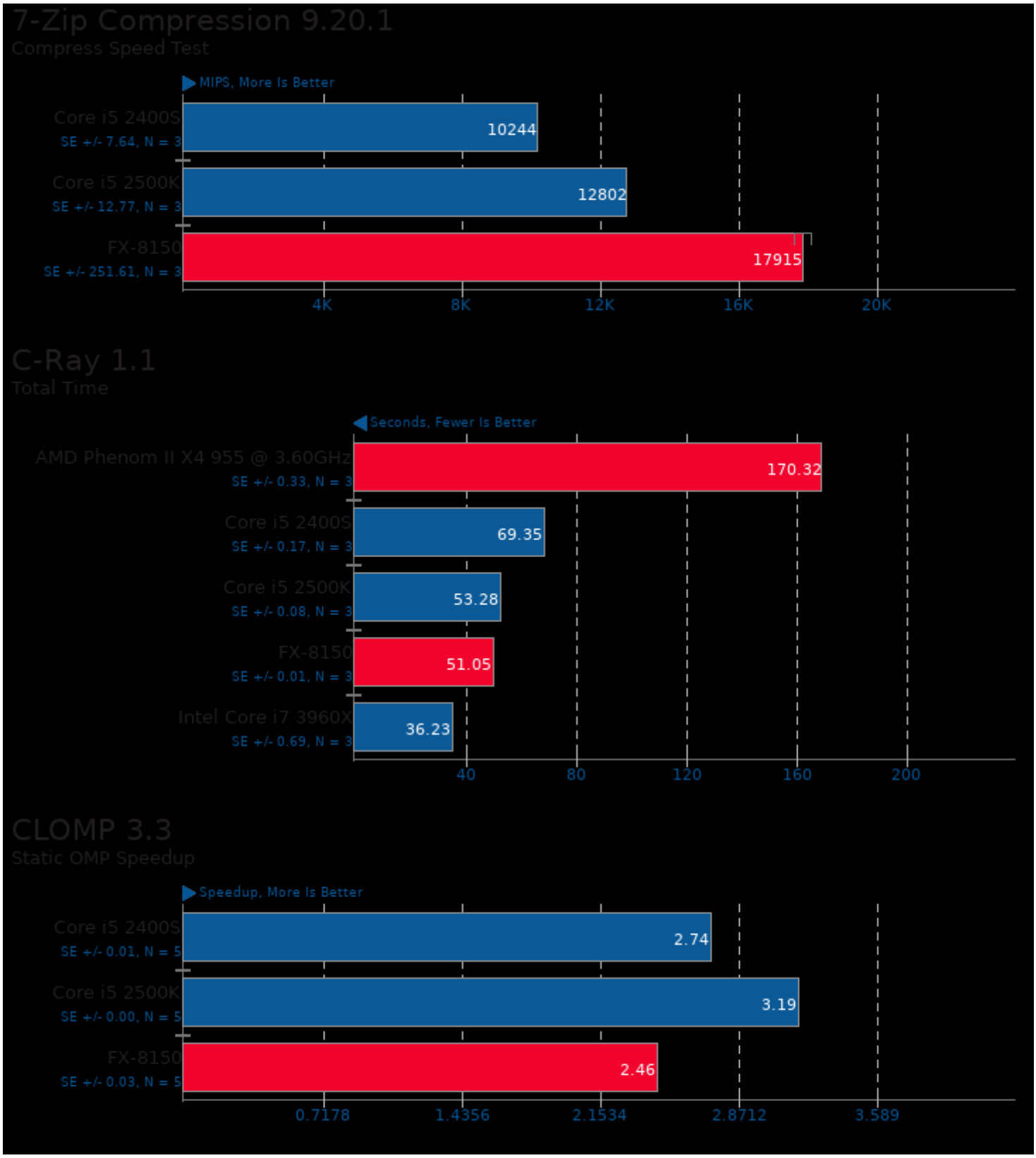
Intel Core i7 3960X Linux, Intel Sandy Bridge vs. AMD Bulldozer, Intel Core i5 2500K

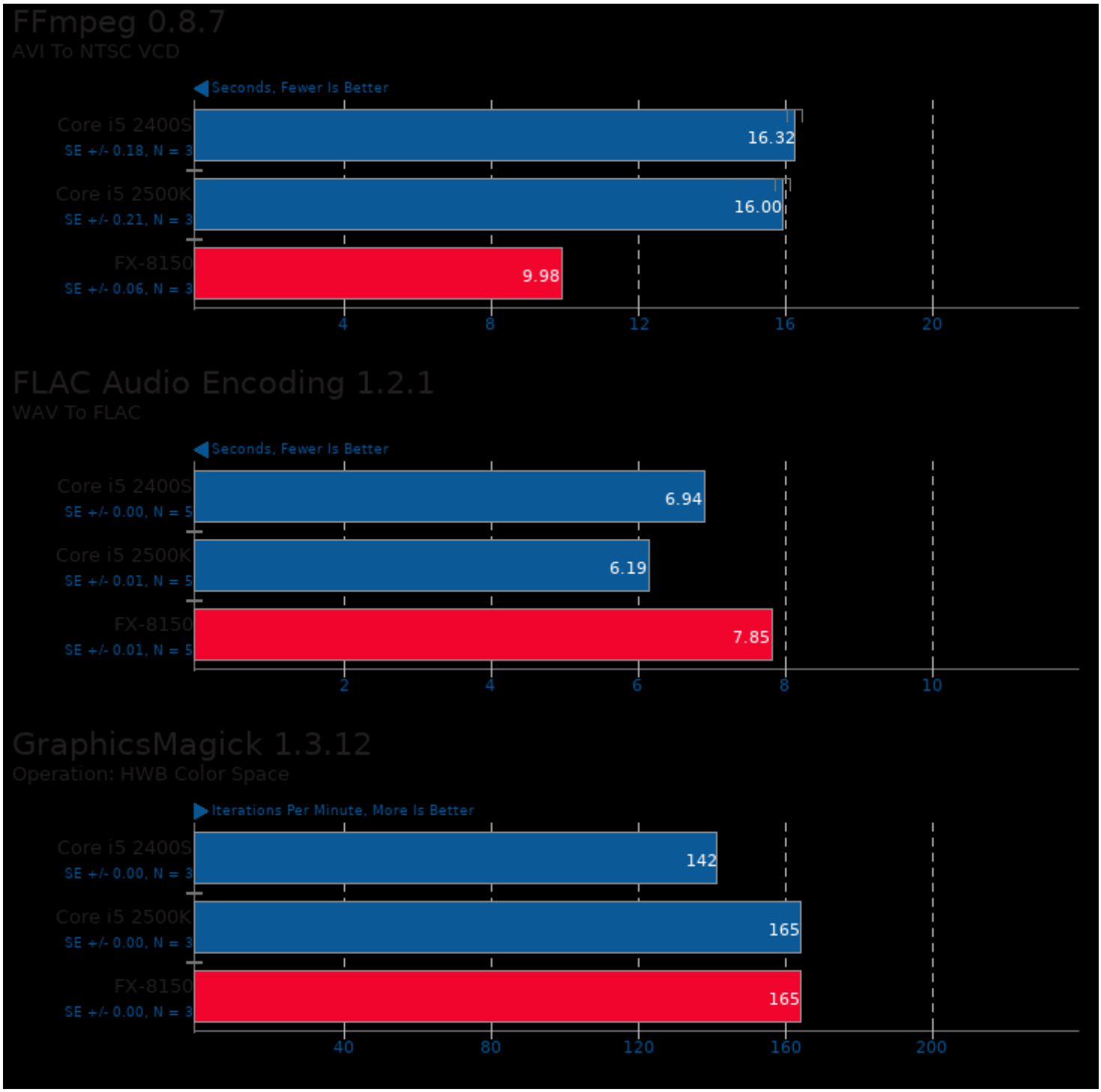
	Intel Core i7 3960X	AMD Phenom II X4 955 @ 3.60GHz	Core i5 2500K	Core i5 2400S	FX-8150	Intel Core i5 2500K: Core i5 2500K	Intel Core i5 2500K: Core i5 2400S
7-Zip Compression - C.S.T (MIPS)			12802	**10244**	**17915**		
Normalized			71.46%	57.18%	100%		
Standard Deviation			0.2%	0.1%	2.4%		
C-Ray - Total Time (sec)	**36.23**	**170.32**	53.28	69.35	51.05		
Normalized	100%	21.27%	68%	52.24%	70.97%		
Standard Deviation	3.3%	0.3%	0.3%	0.4%	0%		
CLOMP - Static OMP Speedup (Speedup)			**3.19**	2.74	**2.46**		
Normalized			100%	85.89%	77.12%		
Standard Deviation			0.3%	0.4%	2.7%		
FFmpeg - AVI To NTSC VCD (sec)			16.00	**16.32**	**9.98**		
Normalized			62.38%	61.15%	100%		
Standard Deviation			2.2%	2%	1%		
FLAC Audio Encoding - WAV To FLAC (sec)			**6.19**	6.94	**7.85**		
Normalized			100%	89.19%	78.85%		
Standard Deviation			0.2%	0.1%	0.2%		
GraphicsMagick - HWB Color Space			**165**	**142**	**165**		
Normalized			100%	86.06%	100%		
Standard Deviation			0%	0%	0%		
GraphicsMagick - Blur (Iterations/min)			97	**81**	**100**		
Normalized			97%	81%	100%		
Standard Deviation			0%	0.7%	1.2%		
GraphicsMagick - L.A.T (Iterations/min)			51	**41**	**68**		
Normalized			75%	60.29%	100%		
Standard Deviation			0%	0%	0%		
GraphicsMagick - Resizing (Iterations/min)			128	**107**	**133**		
Normalized			96.24%	80.45%	100%		
Standard Deviation			0%	0%	0%		
GraphicsMagick - Sharpen (Iterations/min)			48	**38**	**65**		
Normalized			73.85%	58.46%	100%		
Standard Deviation			0%	0%	0%		
Himeno Benchmark - P.P.S (MFLOPS)			**1414**	1255	**374.17**		
Normalized			100%	88.76%	26.47%		
Standard Deviation			1.4%	1.9%	0.4%		
John The Ripper - Traditional DES (Real C/S)			**5060667**	4513333	**4298667**		
Normalized			100%	89.18%	84.94%		
Standard Deviation			0.2%	0.2%	0.3%		

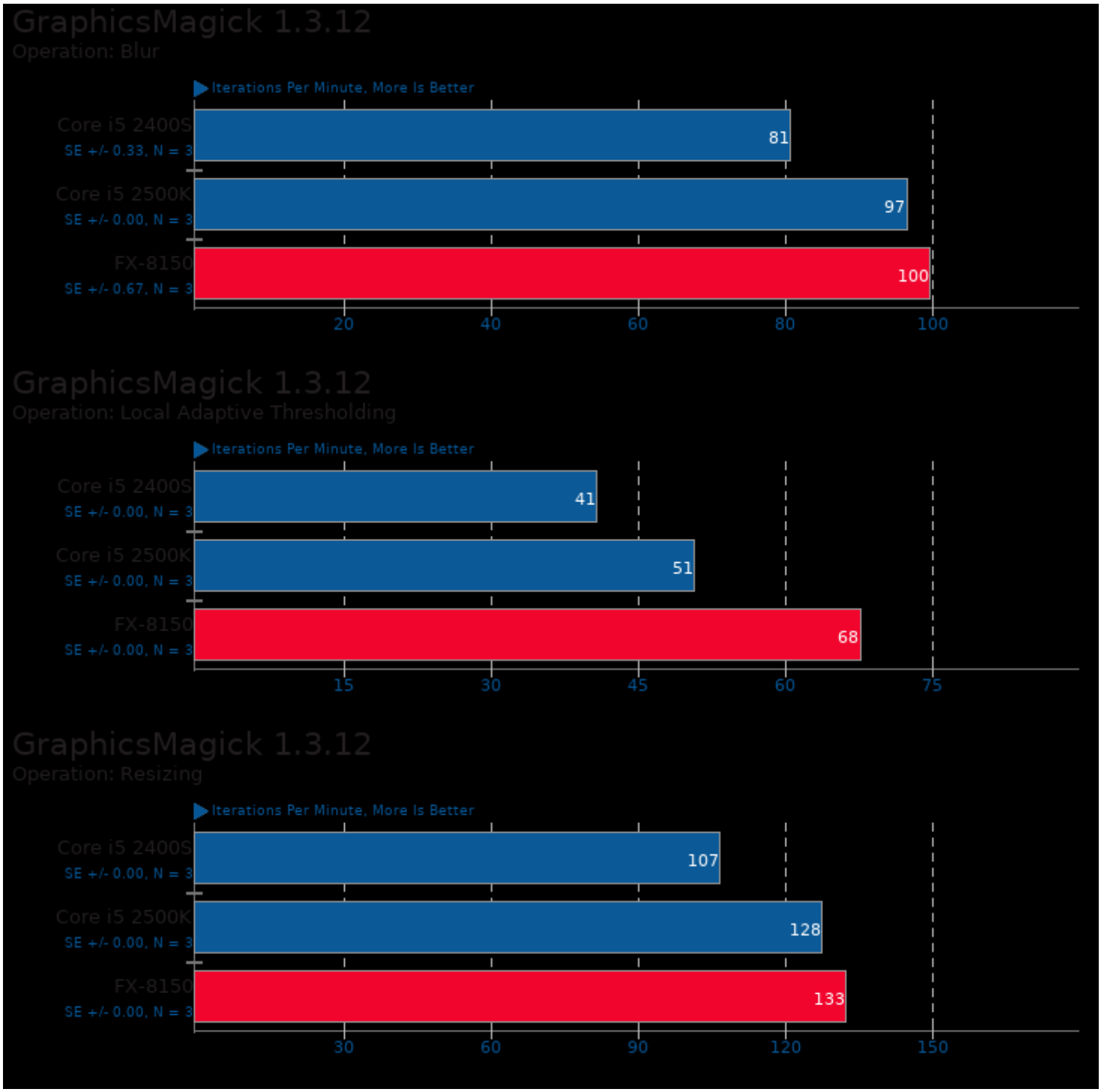
John The Ripper - MD5 (Real C/S)	14389	**12815**	**15381**
Normalized	93.55%	83.32%	100%
Standard Deviation	0.1%	0%	0.2%
John The Ripper - Blowfish (Real C/S)	916	**817**	**1002**
Normalized	91.42%	81.54%	100%
Standard Deviation	0.1%	0.1%	0%
LAME MP3 Encoding - WAV To MP3 (sec)	**14.27**	16.01	**19.56**
Normalized	100%	89.13%	72.96%
Standard Deviation	0.1%	0.2%	0.2%
Minion - Bibd (sec)	**121.11**	135.79	**167.25**
Normalized	100%	89.19%	72.41%
Standard Deviation	0.5%	0.4%	0.7%
Minion - Graceful (sec)	**70.09**	78.21	**86.34**
Normalized	100%	89.62%	81.18%
Standard Deviation	0.2%	0%	0.3%
Minion - Quasigroup (sec)	**157.50**	178.03	**198.52**
Normalized	100%	88.47%	79.34%
Standard Deviation	0.3%	1.2%	1%
Minion - Solitaire (sec)	**111.31**	124.86	**160.48**
Normalized	100%	89.15%	69.36%
Standard Deviation	0.4%	0.7%	1.1%
NAS Parallel Benchmarks - BT.A (Mop/s)	**11947**	**9567**	11152
Normalized	100%	80.08%	93.35%
Standard Deviation	0%	0%	0.7%
NAS Parallel Benchmarks - CG.B (Mop/s)	**2787**	**2430**	2495
Normalized	100%	87.21%	89.55%
Standard Deviation	0.3%	0.1%	0.1%
NAS Parallel Benchmarks - EP.B (Mop/s)	133.90	**102.44**	**163.08**
Normalized	82.11%	62.82%	100%
Standard Deviation	0%	0%	1.9%
NAS Parallel Benchmarks - FT.B (Mop/s)	6014	**4819**	**6410**
Normalized	93.82%	75.18%	100%
Standard Deviation	0.1%	0.1%	0.4%
NAS Parallel Benchmarks - IS.C (Mop/s)	**182.66**	163.66	**107.33**
Normalized	100%	89.6%	58.76%
Standard Deviation	0.1%	0.1%	0.1%
NAS Parallel Benchmarks - LU.A (Mop/s)	10228	**8174**	**11631**
Normalized	87.94%	70.28%	100%
Standard Deviation	0.5%	0.3%	0.2%
NAS Parallel Benchmarks - MG.B (Mop/s)	**6319**	5796	**4369**
Normalized	100%	91.72%	69.15%
Standard Deviation	0.1%	0.3%	0.1%

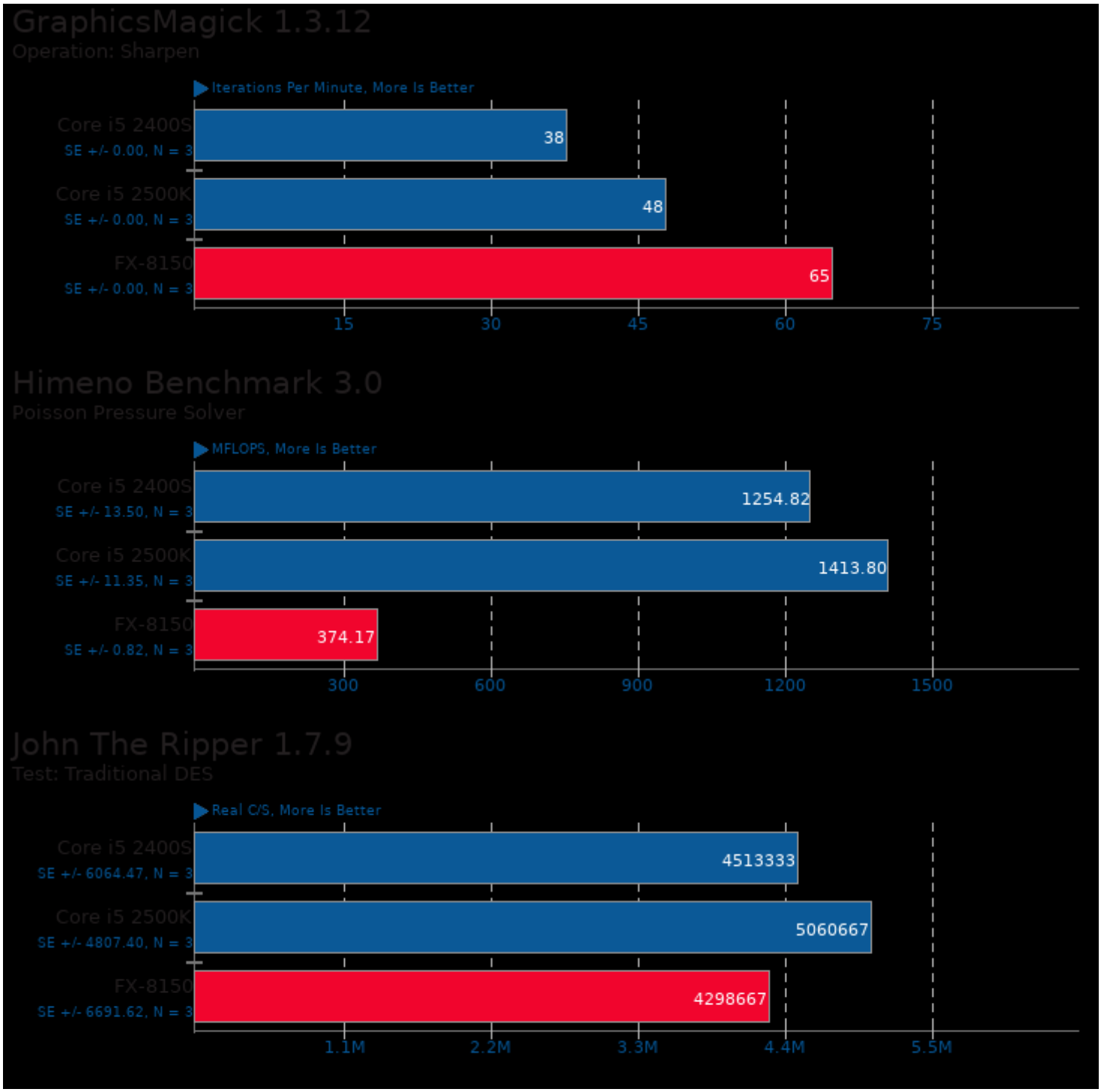
NAS Parallel Benchmarks - SP.A (Mop/s)			6180	5436	5379
Normalized			100%	87.95%	87.04%
Standard Deviation			0.3%	0.3%	1.1%
NAS Parallel Benchmarks - UA.A (Mop/s)			36.98	31.33	40.14
Normalized			92.13%	78.05%	100%
Standard Deviation			0.3%	0.2%	0.3%
Nexuiz - 1920 x 1080 - Yes - On (FPS)			135.89	123.11	116.74
Normalized			100%	90.6%	85.91%
Standard Deviation			0.7%	0.2%	0.3%
OpenSSL - R.4.b.P (Signs/sec)			86.88	77.65	68.50
Normalized			100%	89.38%	78.84%
Standard Deviation			0.6%	0.7%	0.9%
Smallpt - G.I.R.1.S (sec)	67	240	150	199	104
Normalized	100%	27.92%	44.67%	33.67%	64.42%
Standard Deviation	0%	0%	0.4%	2%	0.6%
Timed HMMer Search - P.D.S (sec)			14.56	18.74	13.52
Normalized			92.86%	72.15%	100%
Standard Deviation			0.5%	0.2%	3.6%
Timed Linux Kernel Compilation - Time To Compile (sec)	58.76	118.48	105.01	134.10	89.17
Normalized	100%	49.59%	55.96%	43.82%	65.9%
Standard Deviation	2.1%	1.4%	1%	0.8%	1.2%
Timed MAFFT Alignment - M.S.A (sec)			19.59	21.90	26.07
Normalized			100%	89.45%	75.14%
Standard Deviation			0.1%	0.1%	0.1%
Timed PHP Compilation - Time To Compile (sec)			32.65	39.71	30.39
Normalized			93.08%	76.53%	100%
Standard Deviation			0.1%	0.1%	0.2%
TSCP - A.C.P (Nodes/s)			531438	472953	314371
Normalized			100%	88.99%	59.15%
Standard Deviation			0.3%	0.7%	0.1%
TTSIOD 3D Renderer - P.R.W.S.S.M (FPS)			111.59	88.30	128.30
Normalized			86.98%	68.82%	100%
Standard Deviation			0.3%	0.2%	0.2%
VP8 libvpx Encoding - vpxenc (FPS)			27.86	21.98	20.54
Normalized			100%	78.89%	73.73%
Standard Deviation			1.3%	1.6%	0.6%
Warsow - 1920 x 1080 (FPS)			355.73	323.97	353.92
Normalized			100%	91.07%	99.49%
Standard Deviation			0.4%	0.3%	3.4%
x264 - H.2.V.E (FPS)			96.53	77.13	135.76
Normalized			71.1%	56.81%	100%

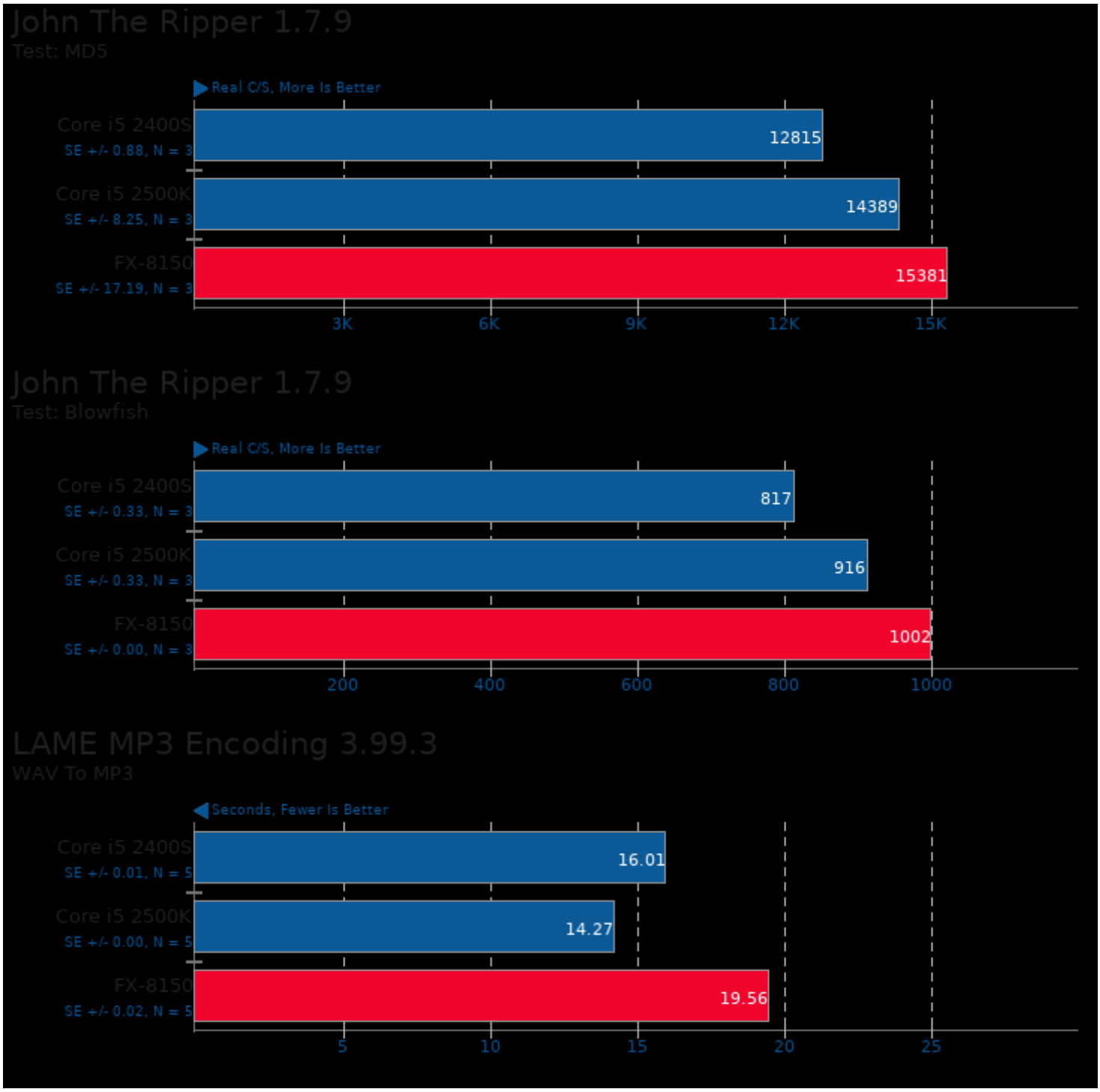
Standard Deviation	0.8%	1%	0.4%
Xonotic - 1920 x 1080 (FPS)	218.17	**212.43**	**232.40**
Normalized	93.88%	91.41%	100%
Standard Deviation	0.3%	0.2%	0.7%

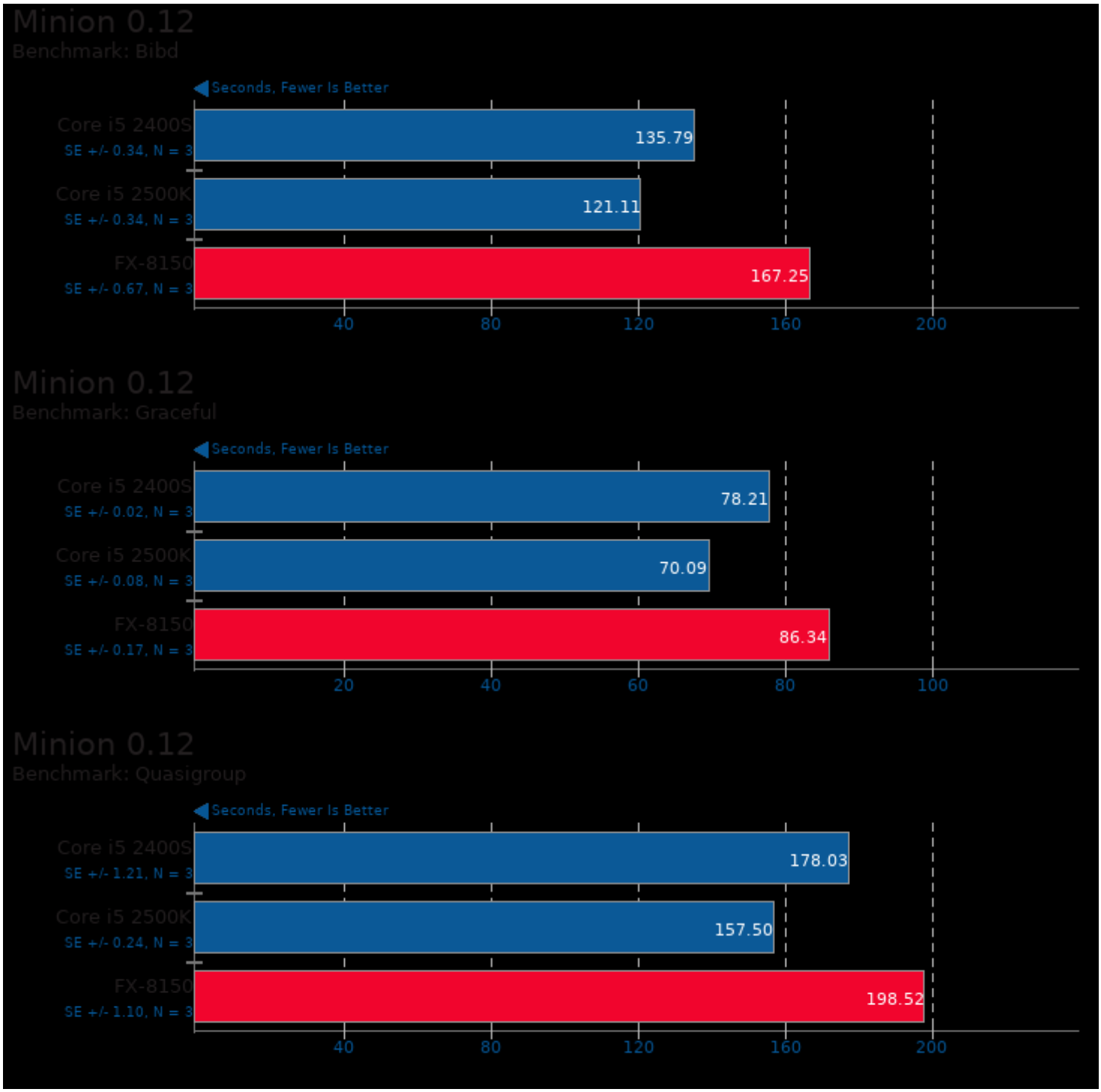

7-Zip Compression 9.20.1
Compress Speed Test
MIPS, More Is Better
Core i5 2400S
SE +/- 7.64, N = 3
10244
Core i5 2500K
SE +/- 12.77, N = 3
12802
FX-8150
SE +/- 251.61, N = 3
17915
4K
8K
12K
16K
20K
C-Ray 1.1
Total Time
Seconds, Fewer Is Better
AMD Phenom II X4 955 @ 3.60GHz
SE +/- 0.33, N = 3
170.32
Core i5 2400S
SE +/- 0.17, N = 3
69.35
Core i5 2500K
SE +/- 0.08, N = 3
53.28
FX-8150
SE +/- 0.01, N = 3
51.05
Intel Core i7 3960X
SE +/- 0.69, N = 3
36.23
40
80
120
160
200
CLOMP 3.3
Static OMP Speedup
Speedup, More Is Better
Core i5 2400S
SE +/- 0.01, N = 5
2.74
Core i5 2500K
SE +/- 0.00, N = 5
3.19
FX-8150
SE +/- 0.03, N = 5
2.46
0.7178
1.4356
2.1534
2.8712
3.589

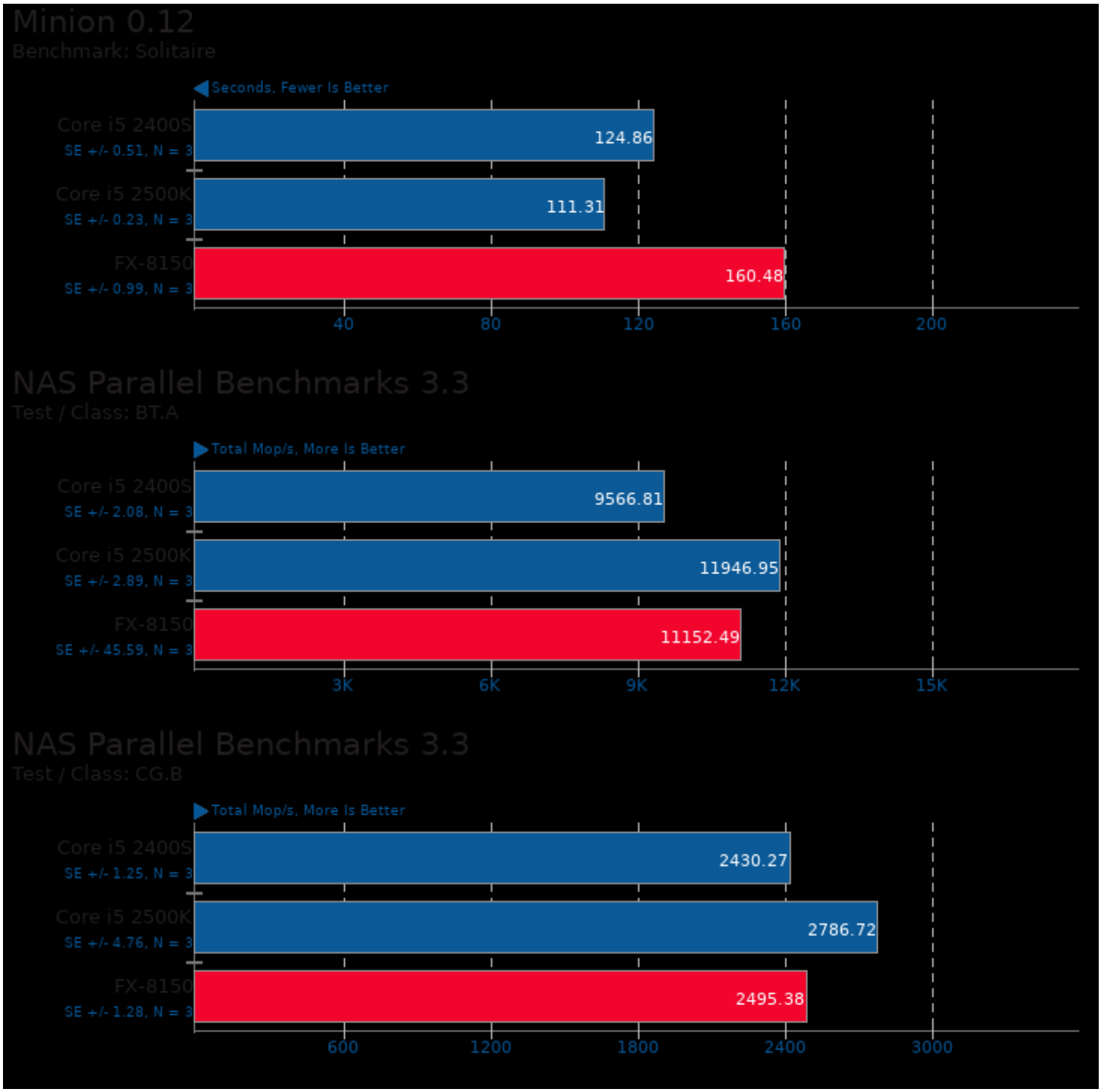

FFmpeg 0.8.7
AVI To NTSC VCD
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.18, N = 3
16.32
Core i5 2500K
SE +/- 0.21, N = 3
16.00
FX-8150
SE +/- 0.06, N = 3
9.98
4
8
12
16
20
FLAC Audio Encoding 1.2.1
WAV To FLAC
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.00, N = 5
6.94
Core i5 2500K
SE +/- 0.01, N = 5
6.19
FX-8150
SE +/- 0.01, N = 5
7.85
2
4
6
8
10
GraphicsMagick 1.3.12
Operation: HWB Color Space
Iterations Per Minute, More Is Better
Core i5 2400S
SE +/- 0.00, N = 3
142
Core i5 2500K
SE +/- 0.00, N = 3
165
FX-8150
SE +/- 0.00, N = 3
165
40
80
120
160
200

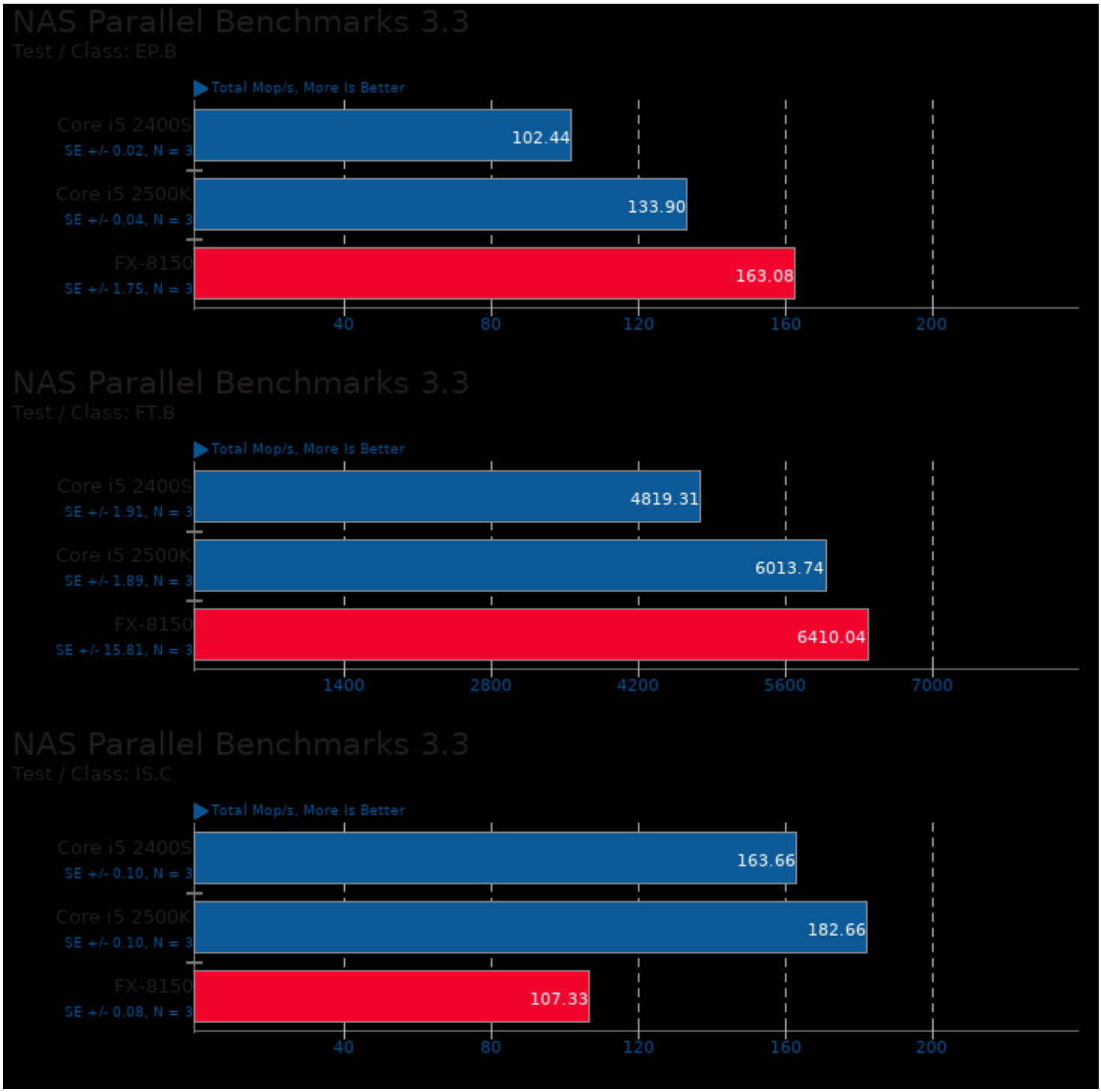

GraphicsMagick 1.3.12
Operation: Blur
Iterations Per Minute, More Is Better
Core i5 2400S
SE +/- 0.33, N = 3
81
Core i5 2500K
SE +/- 0.00, N = 3
97
FX-8150
SE +/- 0.67, N = 3
100
20
40
60
80
100
GraphicsMagick 1.3.12
Operation: Local Adaptive Thresholding
Iterations Per Minute, More Is Better
Core i5 2400S
SE +/- 0.00, N = 3
41
Core i5 2500K
SE +/- 0.00, N = 3
51
FX-8150
SE +/- 0.00, N = 3
68
15
30
45
60
75
GraphicsMagick 1.3.12
Operation: Resizing
Iterations Per Minute, More Is Better
Core i5 2400S
SE +/- 0.00, N = 3
107
Core i5 2500K
SE +/- 0.00, N = 3
128
FX-8150
SE +/- 0.00, N = 3
133
30
60
90
120
150

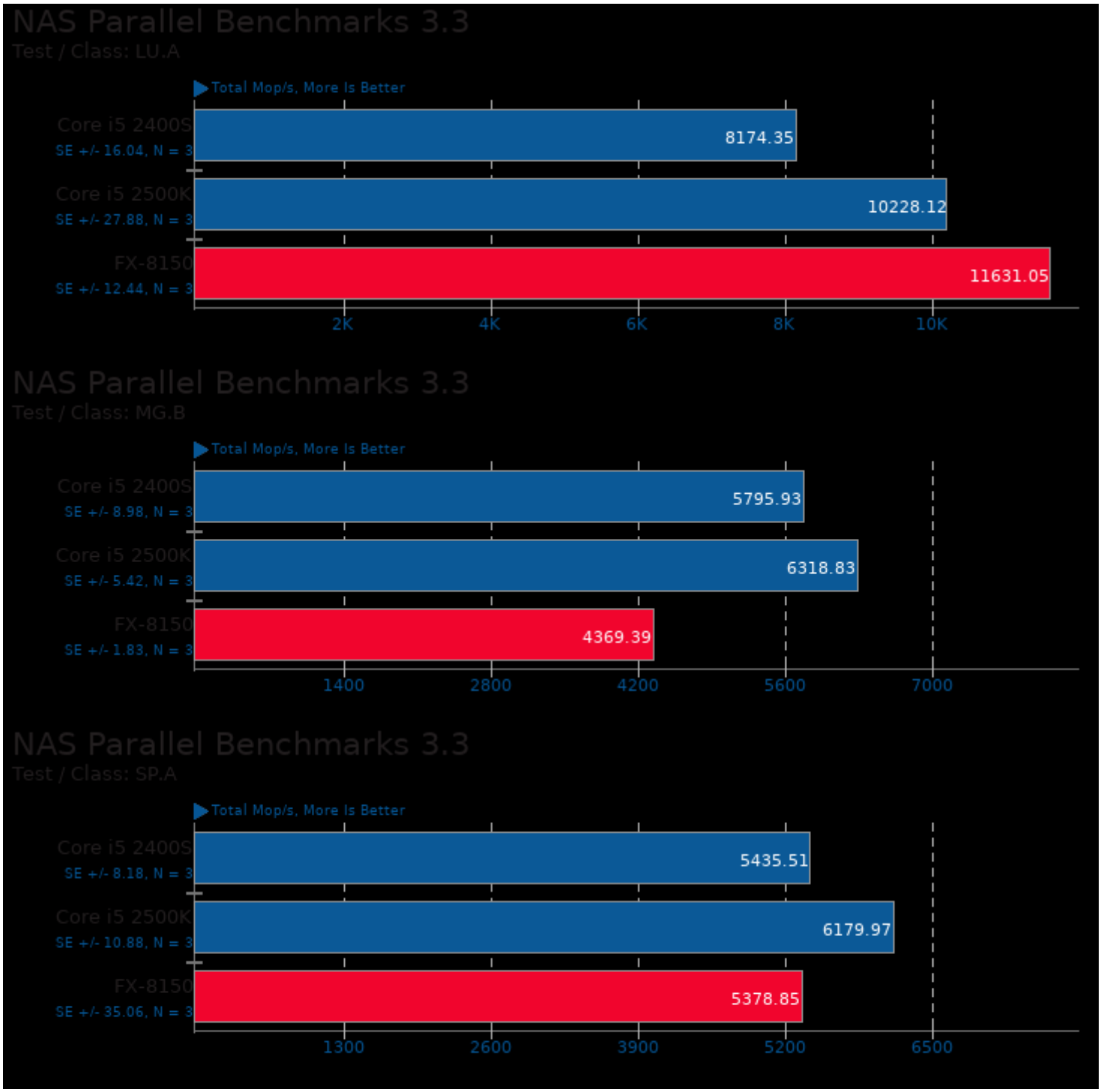

GraphicsMagick 1.3.12
Operation: Sharpen
Iterations Per Minute, More Is Better
Core i5 2400S
SE +/- 0.00, N = 3
38
Core i5 2500K
SE +/- 0.00, N = 3
48
FX-8150
SE +/- 0.00, N = 3
65
15
30
45
60
75
Himeno Benchmark 3.0
Poisson Pressure Solver
MFLOPS, More Is Better
Core i5 2400S
SE +/- 13.50, N = 3
1254.82
Core i5 2500K
SE +/- 11.35, N = 3
1413.80
FX-8150
SE +/- 0.82, N = 3
374.17
300
600
900
1200
1500
John The Ripper 1.7.9
Test: Traditional DES
Real C/S, More Is Better
Core i5 2400S
SE +/- 6064.47, N = 3
4513333
Core i5 2500K
SE +/- 4807.40, N = 3
5060667
FX-8150
SE +/- 6691.62, N = 3
4298667
1.1M
2.2M
3.3M
4.4M
5.5M

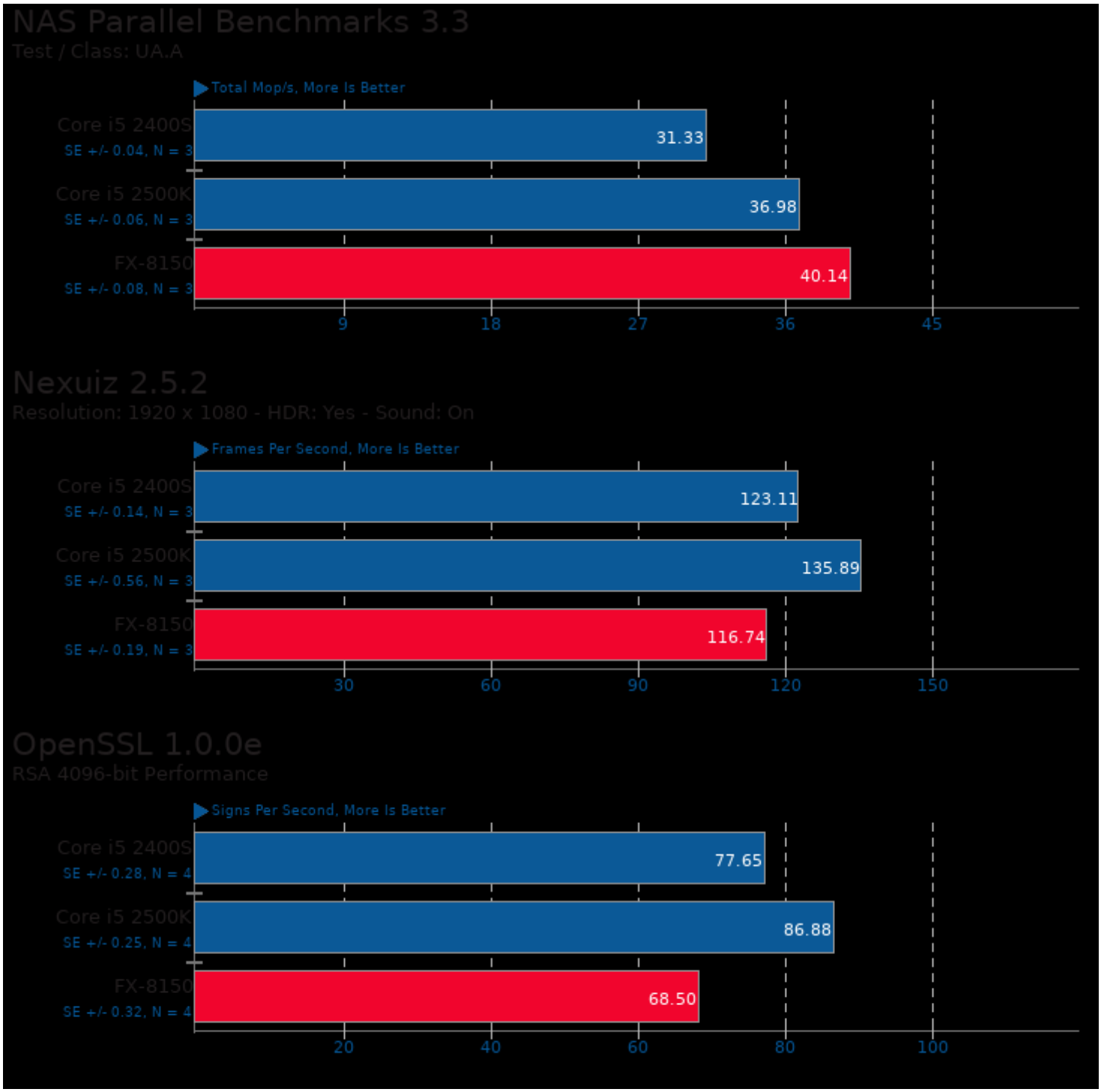

John The Ripper 1.7.9
Test: MD5
Real C/S, More Is Better
Core i5 2400S
SE +/- 0.88, N = 3
12815
Core i5 2500K
SE +/- 8.25, N = 3
14389
FX-8150
SE +/- 17.19, N = 3
15381
3K
6K
9K
12K
15K
John The Ripper 1.7.9
Test: Blowfish
Real C/S, More Is Better
Core i5 2400S
SE +/- 0.33, N = 3
817
Core i5 2500K
SE +/- 0.33, N = 3
916
FX-8150
SE +/- 0.00, N = 3
1002
200
400
600
800
1000
LAME MP3 Encoding 3.99.3
WAV To MP3
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.01, N = 5
16.01
Core i5 2500K
SE +/- 0.00, N = 5
14.27
FX-8150
SE +/- 0.02, N = 5
19.56
5
10
15
20
25


Minion 0.12
Benchmark: Bibd
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.34, N = 3
135.79
Core i5 2500K
SE +/- 0.34, N = 3
121.11
FX-8150
SE +/- 0.67, N = 3
167.25
40
80
120
160
200
Minion 0.12
Benchmark: Graceful
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.02, N = 3
78.21
Core i5 2500K
SE +/- 0.08, N = 3
70.09
FX-8150
SE +/- 0.17, N = 3
86.34
20
40
60
80
100
Minion 0.12
Benchmark: Quasigroup
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 1.21, N = 3
178.03
Core i5 2500K
SE +/- 0.24, N = 3
157.50
FX-8150
SE +/- 1.10, N = 3
198.52
40
80
120
160
200


Minion 0.12
Benchmark: Solitaire
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.51, N = 3
124.86
Core i5 2500K
SE +/- 0.23, N = 3
111.31
FX-8150
SE +/- 0.99, N = 3
160.48
40
80
120
160
200
NAS Parallel Benchmarks 3.3
Test / Class: BT.A
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 2.08, N = 3
9566.81
Core i5 2500K
SE +/- 2.89, N = 3
11946.95
FX-8150
SE +/- 45.59, N = 3
11152.49
3K
6K
9K
12K
15K
NAS Parallel Benchmarks 3.3
Test / Class: CG.B
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 1.25, N = 3
2430.27
Core i5 2500K
SE +/- 4.76, N = 3
2786.72
FX-8150
SE +/- 1.28, N = 3
2495.38
600
1200
1800
2400
3000

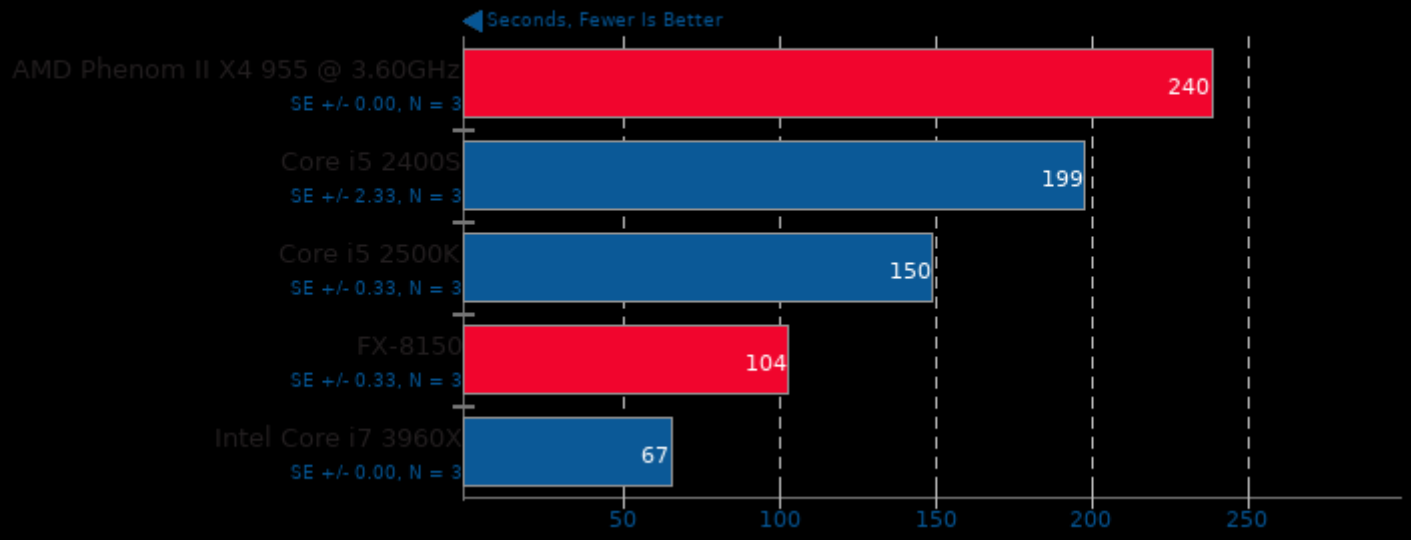

NAS Parallel Benchmarks 3.3
Test / Class: EP.B
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 0.02, N = 3
102.44
Core i5 2500K
SE +/- 0.04, N = 3
133.90
FX-8150
SE +/- 1.75, N = 3
163.08
40
80
120
160
200
NAS Parallel Benchmarks 3.3
Test / Class: FT.B
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 1.91, N = 3
4819.31
Core i5 2500K
SE +/- 1.89, N = 3
6013.74
FX-8150
SE +/- 15.81, N = 3
6410.04
1400
2800
4200
5600
7000
NAS Parallel Benchmarks 3.3
Test / Class: IS.C
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 0.10, N = 3
163.66
Core i5 2500K
SE +/- 0.10, N = 3
182.66
FX-8150
SE +/- 0.08, N = 3
107.33
40
80
120
160
200


NAS Parallel Benchmarks 3.3
Test / Class: LU.A
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 16.04, N = 3
8174.35
Core i5 2500K
SE +/- 27.88, N = 3
10228.12
FX-8150
SE +/- 12.44, N = 3
11631.05
2K
4K
6K
8K
10K
NAS Parallel Benchmarks 3.3
Test / Class: MG.B
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 8.98, N = 3
5795.93
Core i5 2500K
SE +/- 5.42, N = 3
6318.83
FX-8150
SE +/- 1.83, N = 3
4369.39
1400
2800
4200
5600
7000
NAS Parallel Benchmarks 3.3
Test / Class: SP.A
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 8.18, N = 3
5435.51
Core i5 2500K
SE +/- 10.88, N = 3
6179.97
FX-8150
SE +/- 35.06, N = 3
5378.85
1300
2600
3900
5200
6500


NAS Parallel Benchmarks 3.3
Test / Class: UA.A
Total Mop/s, More Is Better
Core i5 2400S
SE +/- 0.04, N = 3
31.33
Core i5 2500K
SE +/- 0.06, N = 3
36.98
FX-8150
SE +/- 0.08, N = 3
40.14
9
18
27
36
45
Nexuiz 2.5.2
Resolution: 1920 x 1080 - HDR: Yes - Sound: On
Frames Per Second, More Is Better
Core i5 2400S
SE +/- 0.14, N = 3
123.11
Core i5 2500K
SE +/- 0.56, N = 3
135.89
FX-8150
SE +/- 0.19, N = 3
116.74
30
60
90
120
150
OpenSSL 1.0.0e
RSA 4096-bit Performance
Signs Per Second, More Is Better
Core i5 2400S
SE +/- 0.28, N = 4
77.65
Core i5 2500K
SE +/- 0.25, N = 4
86.88
FX-8150
SE +/- 0.32, N = 4
68.50
20
40
60
80
100

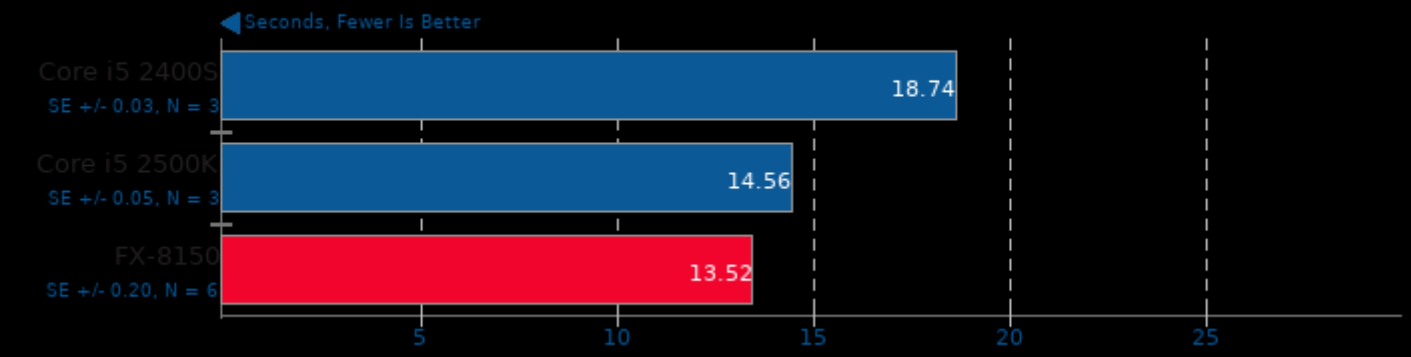
Smallpt 1.0

Global Illumination Renderer; 100 Samples



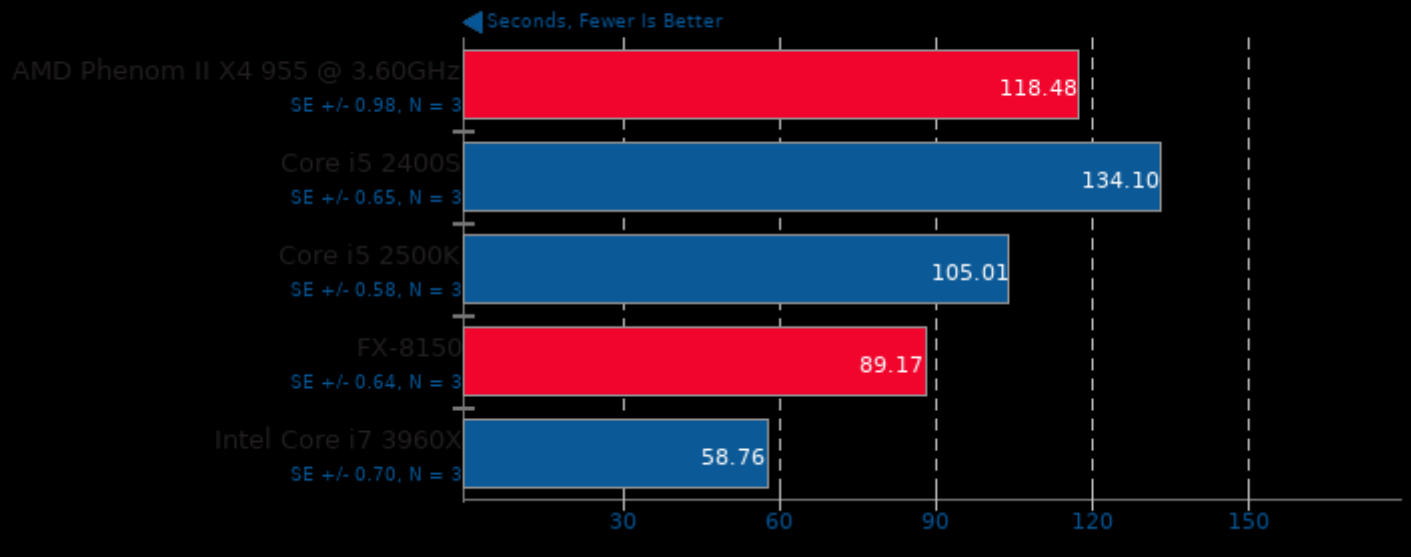
Timed HMMer Search 2.3.2

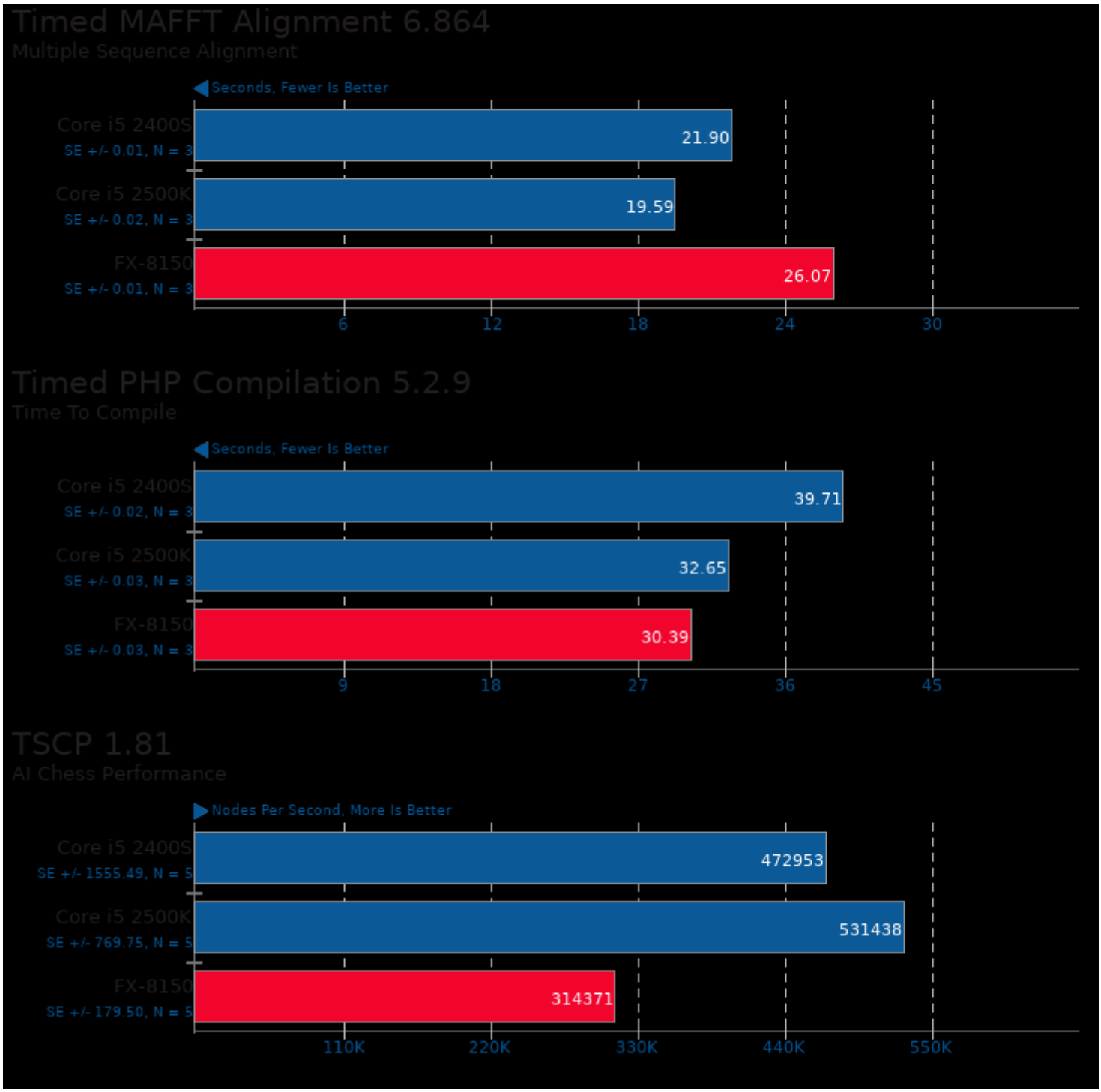
Pfam Database Search

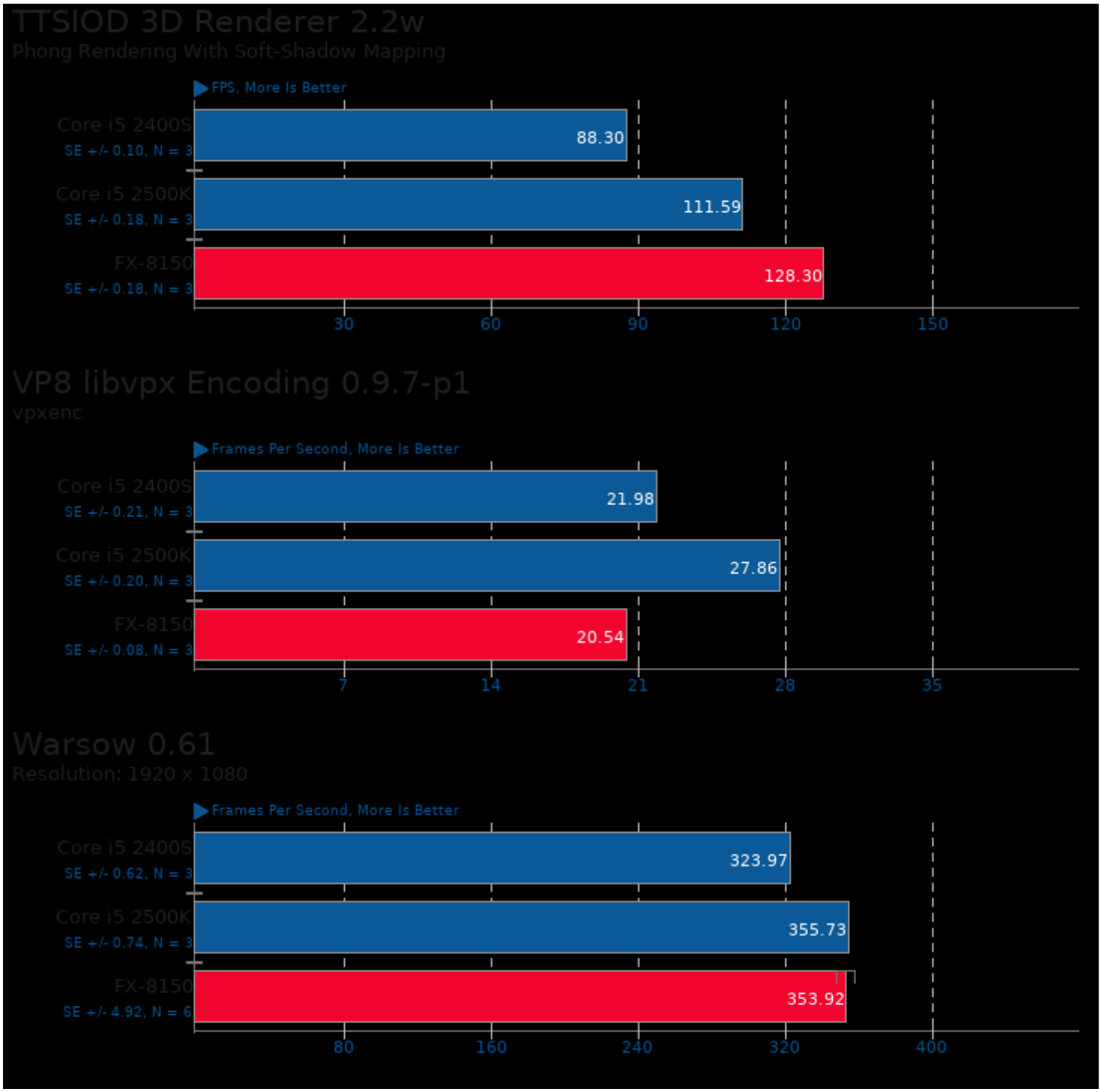


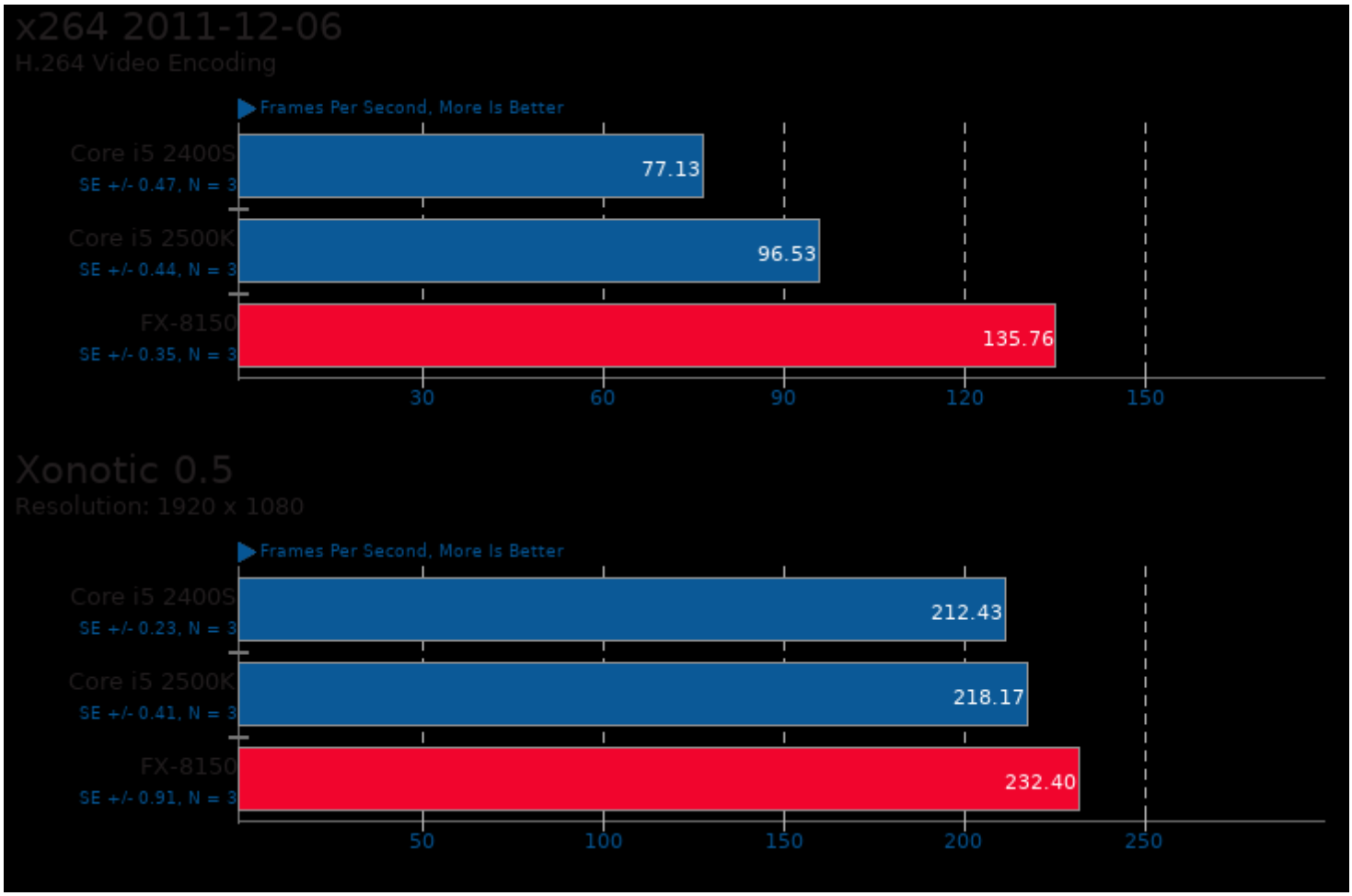
Timed Linux Kernel Compilation 3.1

Time To Compile




Timed MAFFT Alignment 6.864
Multiple Sequence Alignment
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.01, N = 3
21.90
Core i5 2500K
SE +/- 0.02, N = 3
19.59
FX-8150
SE +/- 0.01, N = 3
26.07
6
12
18
24
30
Timed PHP Compilation 5.2.9
Time To Compile
Seconds, Fewer Is Better
Core i5 2400S
SE +/- 0.02, N = 3
39.71
Core i5 2500K
SE +/- 0.03, N = 3
32.65
FX-8150
SE +/- 0.03, N = 3
30.39
9
18
27
36
45
TSCP 1.81
AI Chess Performance
Nodes Per Second, More Is Better
Core i5 2400S
SE +/- 1555.49, N = 5
472953
Core i5 2500K
SE +/- 769.75, N = 5
531438
FX-8150
SE +/- 179.50, N = 5
314371
110K
220K
330K
440K
550K


TTSIOD 3D Renderer 2.2w
Phong Rendering With Soft-Shadow Mapping
FPS, More Is Better
Core i5 2400S
SE +/- 0.10, N = 3
88.30
Core i5 2500K
SE +/- 0.18, N = 3
111.59
FX-8150
SE +/- 0.18, N = 3
128.30
30
60
90
120
150
VP8 libvpx Encoding 0.9.7-p1
vpxenc
Frames Per Second, More Is Better
Core i5 2400S
SE +/- 0.21, N = 3
21.98
Core i5 2500K
SE +/- 0.20, N = 3
27.86
FX-8150
SE +/- 0.08, N = 3
20.54
7
14
21
28
35
Warsow 0.61
Resolution: 1920 x 1080
Frames Per Second, More Is Better
Core i5 2400S
SE +/- 0.62, N = 3
323.97
Core i5 2500K
SE +/- 0.74, N = 3
355.73
FX-8150
SE +/- 4.92, N = 6
353.92
80
160
240
320
400



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 14:11.