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Mint 17.3 Testing

Intel Celeron N2840 testing with a Dell 0438P9 and Intel Device 0f31 on Solus 1.2 via the Phoronix Test Suite.

Automated Executive Summary

Solus 1.2 had the most wins, coming in first place for 88% of the tests.

Based on the geometric mean of all complete results, the fastest (Solus 1.2) was 1.555x the speed of the slowest (Ubuntu 16.04). Mint 17.3 Testing was 0.75x the speed of Solus 1.2 and Ubuntu 16.04 was 0.858x the speed of Mint 17.3 Testing.

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

System Libxml2 Parsing (Filesize: 700 KB) at 1.324x
System Libxml2 Parsing (Filesize: 500 KB) at 1.32x
System Libxml2 Parsing (Filesize: 600 KB) at 1.297x
System Libxml2 Parsing (Filesize: 750 KB) at 1.291x
System Libxml2 Parsing (Filesize: 800 KB) at 1.286x
System Libxml2 Parsing (Filesize: 900 KB) at 1.275x
System Libxml2 Parsing (Filesize: 950 KB) at 1.265x
System Libxml2 Parsing (Filesize: 1 MB) at 1.254x
System Libxml2 Parsing (Filesize: 850 KB) at 1.253x

System Libxml2 Parsing (Filesize: 112 MB) at 1.205x.

Test Systems:

Mint 17.3 Testing

Processor: Intel Celeron N2840 @ 2.58GHz (2 Cores), Motherboard: Dell 0438P9, Chipset: Intel Atom Z36xxx/Z37xxx, Memory: 2048MB, Disk: 500GB TOSHIBA MQ01ABF0, Graphics: Intel Atom Z36xxx/Z37xxx & Display (791MHz), Audio: Intel Atom Z36xxx/Z37xxx, Network: Qualcomm Atheros QCA9565 / AR9565

OS: LinuxMint 17.3, Kernel: 3.19.0-32-generic (x86_64), Desktop: Cinnamon 2.8.8, Display Server: X Server 1.17.1, Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 10.5.9, Compiler: GCC 4.8.4, File-System: ext4, Screen Resolution: 1366x768

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
Processor Notes: Scaling Governor: intel_pstate powersave

Ubuntu 16.04

Processor: Intel Celeron N2840 @ 2.58GHz (2 Cores), Motherboard: Dell 0438P9, Chipset: Intel Atom Z36xxx/Z37xxx, Memory: 2048MB, Disk: 500GB TOSHIBA MQ01ABF0, Graphics: Intel Atom Z36xxx/Z37xxx & Display (791MHz), Audio: Realtek ALC3234, Network: Qualcomm Atheros QCA9565 / AR9565

OS: Ubuntu 16.04, Kernel: 4.4.0-22-generic (x86_64), Desktop: Unity 7.4.0, Display Server: X Server 1.18.3, Display Driver: intel 2.99.917, Compiler: GCC 5.3.1 20160413, File-System: ext4, Screen Resolution: 1366x768

Compiler Notes: --build=x86_64-linux-gnu --disable-browser-plugin --disable-vtable-verify --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,ada,c++,java,go,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --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-default-libstdcxx-abi=new --with-multilib-list=m32,m64,mx32 --with-tune=generic -v
Processor Notes: Scaling Governor: intel_pstate powersave

Solus 1.2

Processor: Intel Celeron N2840 @ 2.58GHz (2 Cores), Motherboard: Dell 0438P9, Chipset: Intel Device 0f00, Memory: 2048MB, Disk: 500GB TOSHIBA MQ01ABF0, Graphics: Intel Device 0f31 (791MHz), Audio: Realtek ALC3234, Network: Atheros Device 0036

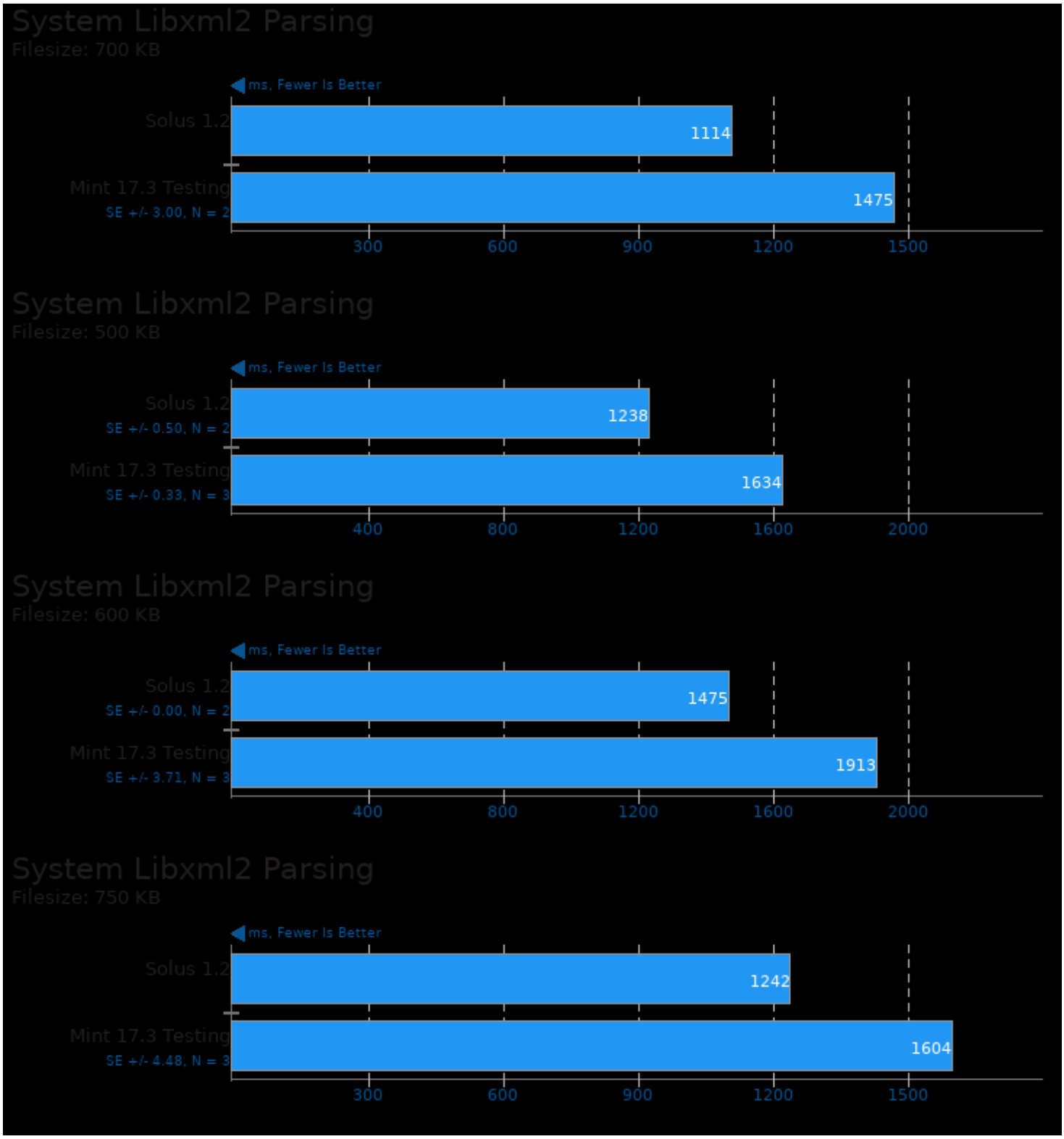
OS: Solus 1.2, Kernel: 4.4.11 (x86_64), Display Driver: intel 2.99.917, OpenGL: 3.3 Mesa 11.2.2, Compiler: GCC 5.3.0 + Clang 3.8.0 + LLVM 3.8.0, File-System: ext4, Screen Resolution: 1366x768

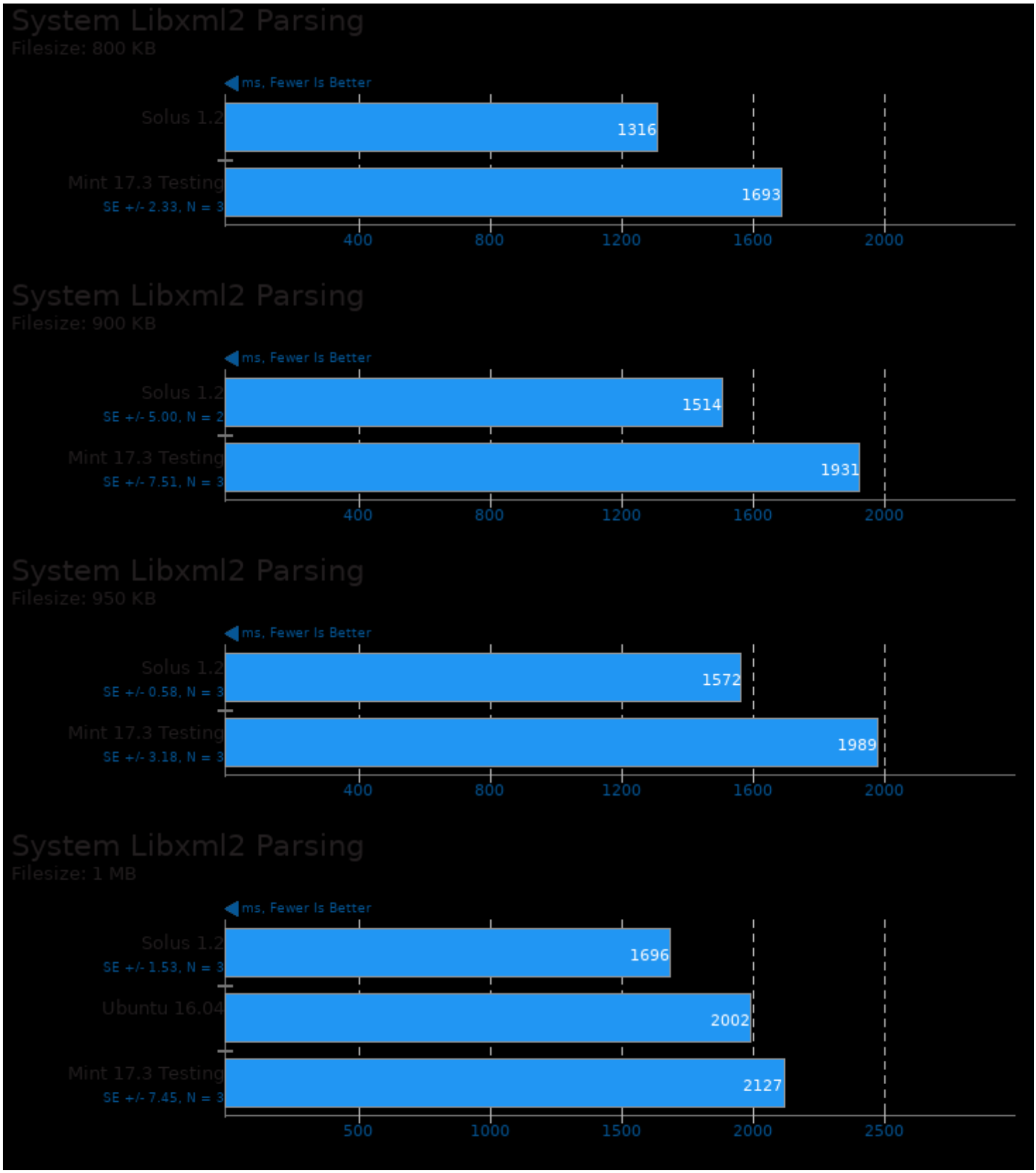
Compiler Notes: --build=x86_64-solus-linux --disable-gold --enable-__cxa_atexit --enable-clocale=gnu --enable-languages=c,c++,fortran --enable-ld=default --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --target=x86_64-solus-linux --with-arch_32=i686 --with-multilib-list=m32,m64
Processor Notes: Scaling Governor: intel_pstate powersave

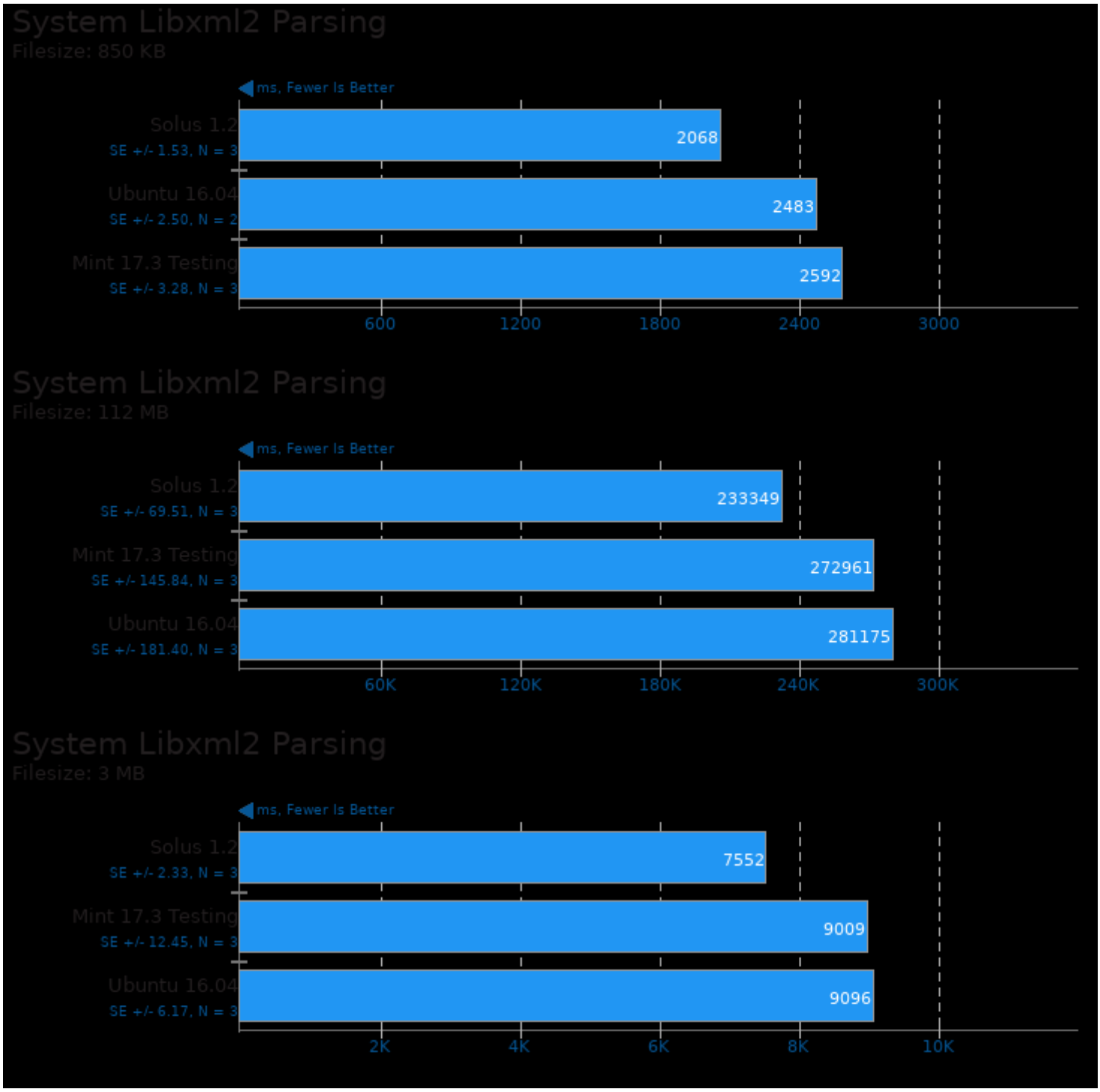
Mint 17.3 Testing

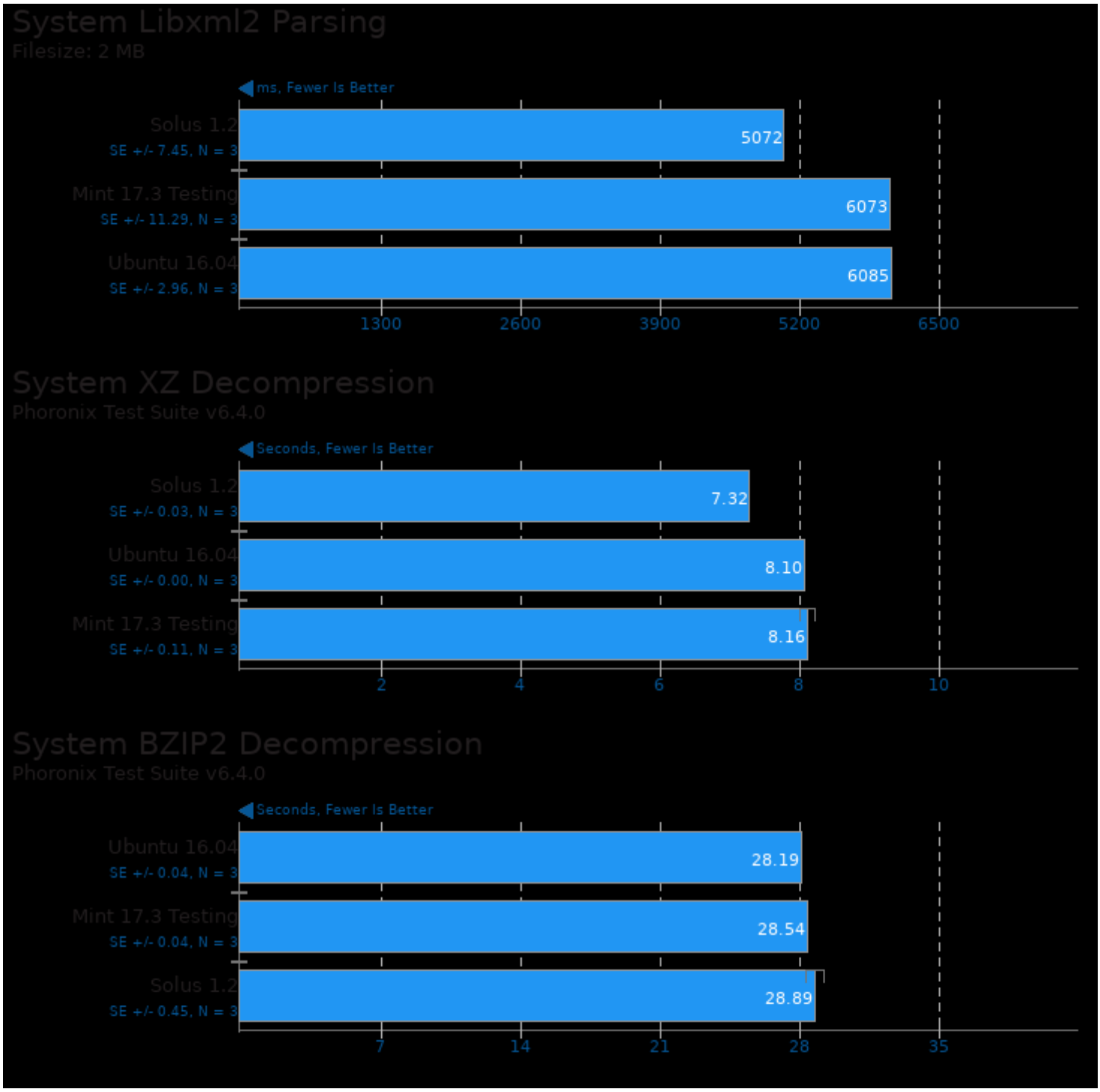
	Mint 17.3 Testing	Ubuntu 16.04	Solus 1.2
System Libxml2 Parsing - 700 KB (ms)	1475		1114
Normalized	75.53%		100%
Standard Deviation	0.3%		
System Libxml2 Parsing - 500 KB (ms)	1634		1238
Normalized	75.76%		100%
Standard Deviation	0%		0.1%
System Libxml2 Parsing - 600 KB (ms)	1913		1475
Normalized	77.1%		100%
Standard Deviation	0.3%		0%
System Libxml2 Parsing - 750 KB (ms)	1604		1242
Normalized	77.43%		100%
Standard Deviation	0.5%		
System Libxml2 Parsing - 800 KB (ms)	1693		1316
Normalized	77.73%		100%
Standard Deviation	0.2%		
System Libxml2 Parsing - 900 KB (ms)	1931		1514
Normalized	78.4%		100%
Standard Deviation	0.7%		0.5%
System Libxml2 Parsing - 950 KB (ms)	1989		1572
Normalized	79.03%		100%
Standard Deviation	0.3%		0.1%
System Libxml2 Parsing - 1 MB (ms)	2127	2002	1696
Normalized	79.74%	84.72%	100%
Standard Deviation	0.6%		0.2%
System Libxml2 Parsing - 850 KB (ms)	2592	2483	2068
Normalized	79.78%	83.29%	100%
Standard Deviation	0.2%	0.1%	0.1%
System Libxml2 Parsing - 112 MB (ms)	272961	281175	233349
Normalized	85.49%	82.99%	100%
Standard Deviation	0.1%	0.1%	0.1%
System Libxml2 Parsing - 3 MB (ms)	9009	9096	7552
Normalized	83.83%	83.03%	100%
Standard Deviation	0.2%	0.1%	0.1%
System Libxml2 Parsing - 2 MB (ms)	6073	6085	5072
Normalized	83.52%	83.35%	100%
Standard Deviation	0.3%	0.1%	0.3%
System XZ Decompression - P.T.S.v.4.0 (sec)	8.16	8.10	7.32
Normalized	89.71%	90.37%	100%
Standard Deviation	2.4%	0.1%	0.7%
System BZIP2 Decompression - P.T.S.v.4.0 (sec)	28.54	28.19	28.89
Normalized	98.77%	100%	97.58%
Standard Deviation	0.3%	0.2%	2.7%
FLAC Audio Encoding - WAV To FLAC (sec)	24.45	24.79	24.76
Normalized	100%	98.63%	98.75%
Standard Deviation	0.3%	1.8%	0.1%
System Libxml2 Parsing - 650 KB (ms)	1414		
Standard Deviation	0.2%		
System Libxml2 Parsing - 400 KB (ms)	1355		
Standard Deviation	0.4%		
OpenSSL - R.4.b.P (Signs/sec)	55.10		
Standard Deviation	0.2%		

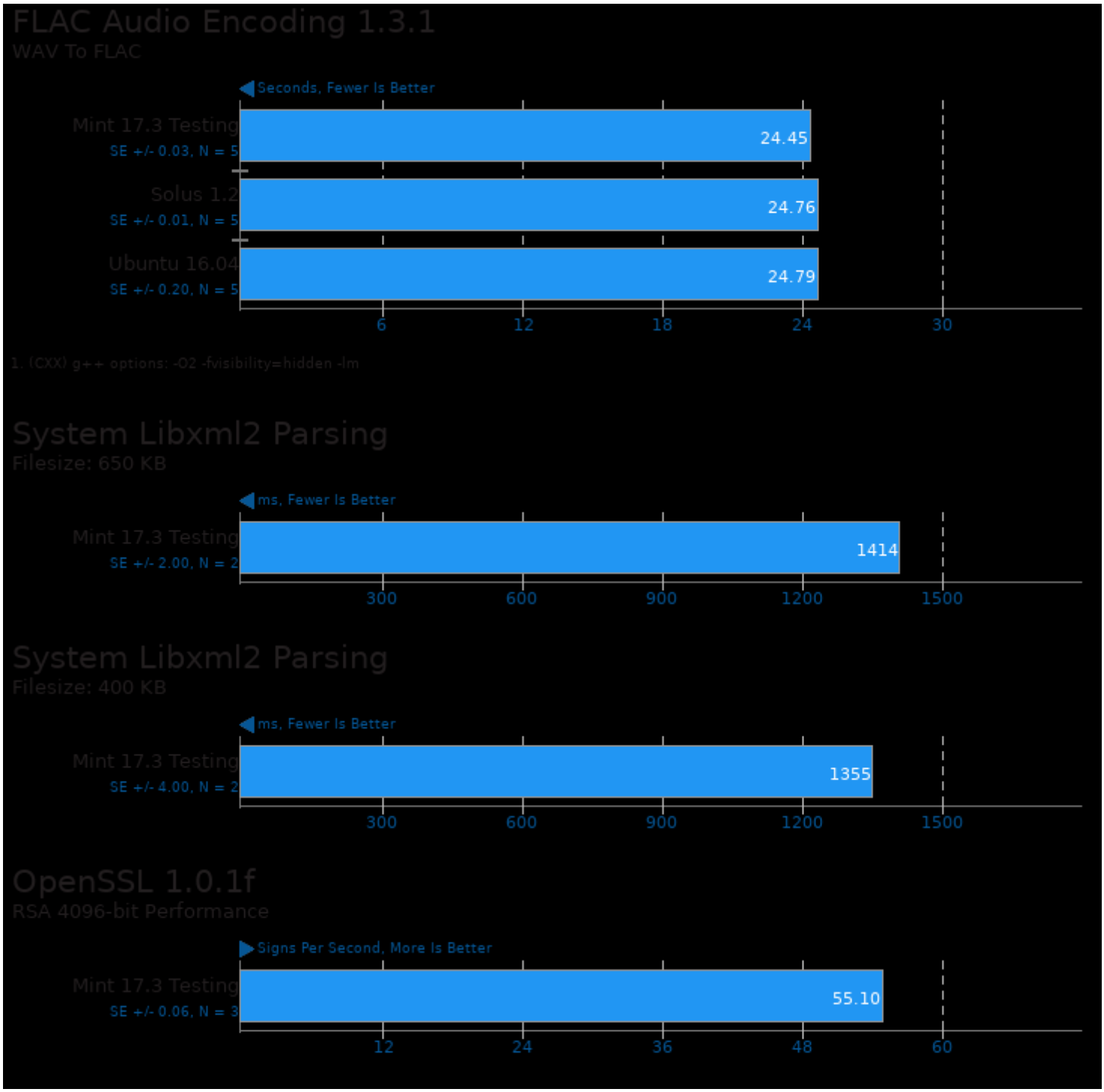
System JPEG Library Decode - Fast Integer (ms)	7.93	**14.80**	**3.72**
Normalized	46.91%	25.14%	100%
Standard Deviation	1.1%	17.8%	9.1%
System JPEG Library Decode - Integer (ms)	7.97	**14.75**	**3.72**
Normalized	46.68%	25.22%	100%
Standard Deviation	1.5%	15.4%	10.2%
System JPEG Library Decode - Float (ms)	9.32	**15.50**	**5.02**
Normalized	53.86%	32.39%	100%
Standard Deviation	65.6%	14.4%	110.1%

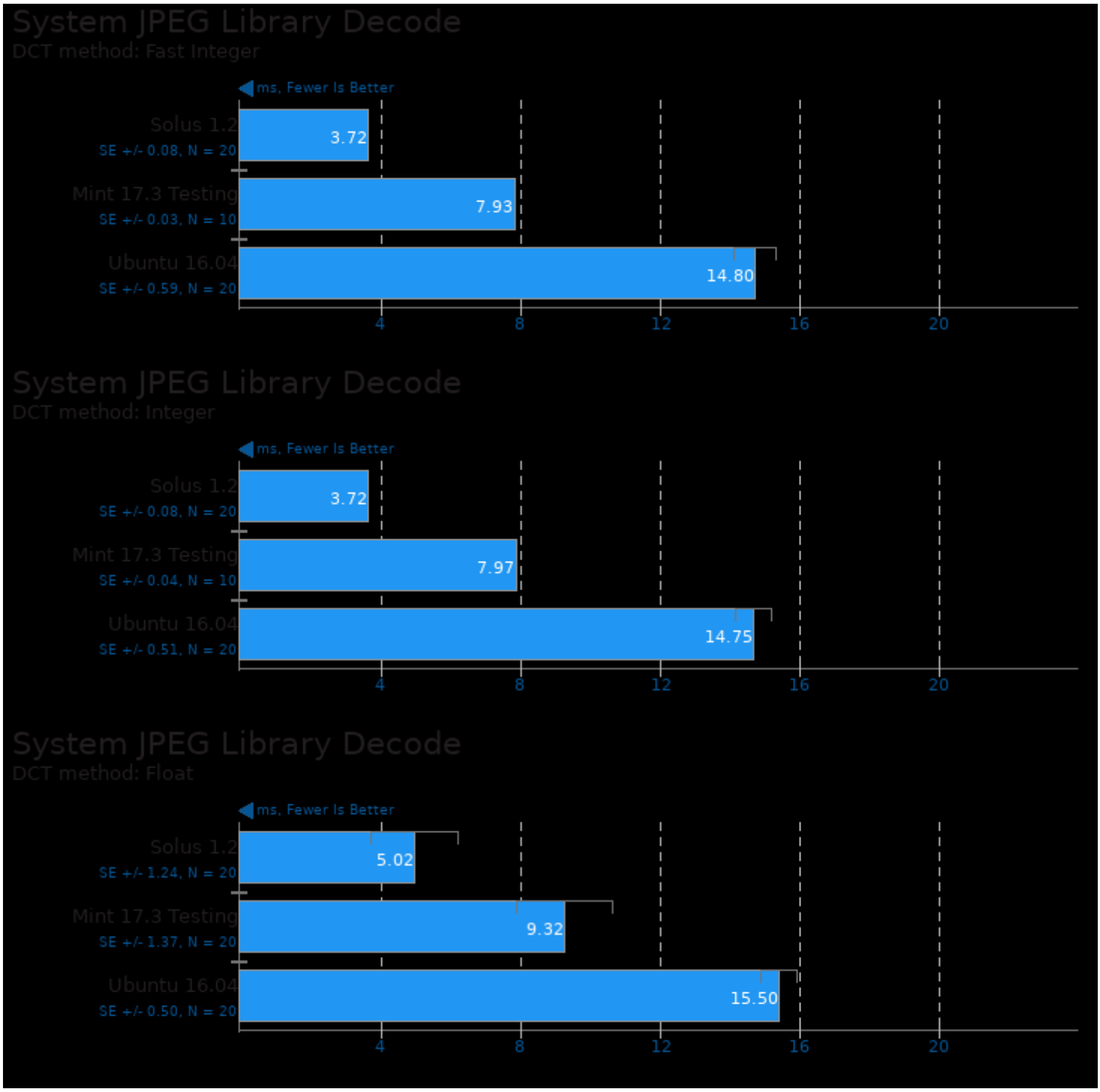

System Libxml2 Parsing
Filesize: 700 KB
ms, Fewer Is Better
Solus 1.2
1114
Mint 17.3 Testing
SE +/- 3.00, N = 2
1475
300
600
900
1200
1500
System Libxml2 Parsing
Filesize: 500 KB
ms, Fewer Is Better
Solus 1.2
SE +/- 0.50, N = 2
1238
Mint 17.3 Testing
SE +/- 0.33, N = 3
1634
400
800
1200
1600
2000
System Libxml2 Parsing
Filesize: 600 KB
ms, Fewer Is Better
Solus 1.2
SE +/- 0.00, N = 2
1475
Mint 17.3 Testing
SE +/- 3.71, N = 3
1913
400
800
1200
1600
2000
System Libxml2 Parsing
Filesize: 750 KB
ms, Fewer Is Better
Solus 1.2
1242
Mint 17.3 Testing
SE +/- 4.48, N = 3
1604
300
600
900
1200
1500


System Libxml2 Parsing
Filesize: 800 KB
ms, Fewer Is Better
Solus 1.2
1316
Mint 17.3 Testing
SE +/- 2.33, N = 3
1693
400
800
1200
1600
2000
System Libxml2 Parsing
Filesize: 900 KB
ms, Fewer Is Better
Solus 1.2
SE +/- 5.00, N = 2
1514
Mint 17.3 Testing
SE +/- 7.51, N = 3
1931
400
800
1200
1600
2000
System Libxml2 Parsing
Filesize: 950 KB
ms, Fewer Is Better
Solus 1.2
SE +/- 0.58, N = 3
1572
Mint 17.3 Testing
SE +/- 3.18, N = 3
1989
400
800
1200
1600
2000
System Libxml2 Parsing
Filesize: 1 MB
ms, Fewer Is Better
Solus 1.2
SE +/- 1.53, N = 3
1696
Ubuntu 16.04
2002
Mint 17.3 Testing
SE +/- 7.45, N = 3
2127
500
1000
1500
2000
2500


System Libxml2 Parsing
Filesize: 850 KB
ms, Fewer Is Better
Solus 1.2
SE +/- 1.53, N = 3
2068
Ubuntu 16.04
SE +/- 2.50, N = 2
2483
Mint 17.3 Testing
SE +/- 3.28, N = 3
2592
600
1200
1800
2400
3000
System Libxml2 Parsing
Filesize: 112 MB
ms, Fewer Is Better
Solus 1.2
SE +/- 69.51, N = 3
233349
Mint 17.3 Testing
SE +/- 145.84, N = 3
272961
Ubuntu 16.04
SE +/- 181.40, N = 3
281175
60K
120K
180K
240K
300K
System Libxml2 Parsing
Filesize: 3 MB
ms, Fewer Is Better
Solus 1.2
SE +/- 2.33, N = 3
7552
Mint 17.3 Testing
SE +/- 12.45, N = 3
9009
Ubuntu 16.04
SE +/- 6.17, N = 3
9096
2K
4K
6K
8K
10K

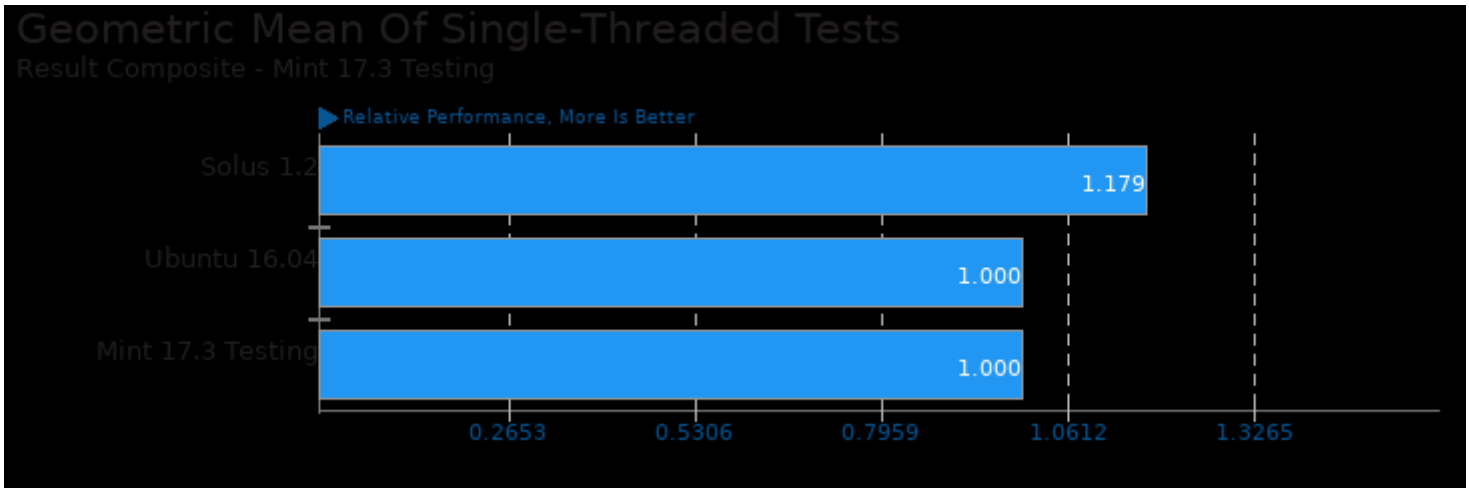

System Libxml2 Parsing
Filesize: 2 MB
ms, Fewer Is Better
Solus 1.2
SE +/- 7.45, N = 3
5072
Mint 17.3 Testing
SE +/- 11.29, N = 3
6073
Ubuntu 16.04
SE +/- 2.96, N = 3
6085
1300
2600
3900
5200
6500
System XZ Decompression
Phoronix Test Suite v6.4.0
Seconds, Fewer Is Better
Solus 1.2
SE +/- 0.03, N = 3
7.32
Ubuntu 16.04
SE +/- 0.00, N = 3
8.10
Mint 17.3 Testing
SE +/- 0.11, N = 3
8.16
2
4
6
8
10
System BZIP2 Decompression
Phoronix Test Suite v6.4.0
Seconds, Fewer Is Better
Ubuntu 16.04
SE +/- 0.04, N = 3
28.19
Mint 17.3 Testing
SE +/- 0.04, N = 3
28.54
Solus 1.2
SE +/- 0.45, N = 3
28.89
7
14
21
28
35


FLAC Audio Encoding 1.3.1
WAV To FLAC
Seconds, Fewer Is Better
Mint 17.3 Testing
SE +/- 0.03, N = 5
24.45
Solus 1.2
SE +/- 0.01, N = 5
24.76
Ubuntu 16.04
SE +/- 0.20, N = 5
24.79
6
12
18
24
30
1. (CXX) g++ options: -O2 -fvisibility=hidden -lm
System Libxml2 Parsing
Filesize: 650 KB
ms, Fewer Is Better
Mint 17.3 Testing
SE +/- 2.00, N = 2
1414
300
600
900
1200
1500
System Libxml2 Parsing
Filesize: 400 KB
ms, Fewer Is Better
Mint 17.3 Testing
SE +/- 4.00, N = 2
1355
300
600
900
1200
1500
OpenSSL 1.0.1f
RSA 4096-bit Performance
Signs Per Second, More Is Better
Mint 17.3 Testing
SE +/- 0.06, N = 3
55.10
12
24
36
48
60


System JPEG Library Decode
DCT method: Fast Integer
ms, Fewer Is Better
Solus 1.2
SE +/- 0.08, N = 20
3.72
Mint 17.3 Testing
SE +/- 0.03, N = 10
7.93
Ubuntu 16.04
SE +/- 0.59, N = 20
14.80
4
8
12
16
20
System JPEG Library Decode
DCT method: Integer
ms, Fewer Is Better
Solus 1.2
SE +/- 0.08, N = 20
3.72
Mint 17.3 Testing
SE +/- 0.04, N = 10
7.97
Ubuntu 16.04
SE +/- 0.51, N = 20
14.75
4
8
12
16
20
System JPEG Library Decode
DCT method: Float
ms, Fewer Is Better
Solus 1.2
SE +/- 1.24, N = 20
5.02
Mint 17.3 Testing
SE +/- 1.37, N = 20
9.32
Ubuntu 16.04
SE +/- 0.50, N = 20
15.50
4
8
12
16
20

Mint 17.3 Testing

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



Geometric mean based upon tests: pts/encode-flac and pts/system-libxml2

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 11:52.