

Dataset	Algorithm	Size	Compressed-size byte	Compression-time	Compression-ratio	Compression-speed Mb/sec	Decompression-time	Decompression-speed Mb/sec	Comment	Processor	L1 Cache	L2 Cache	RAM	Operating system	Compiler
T1 LambdaVirus.fa	zip		48.502	14.465	0.022	70.18	2.10	0.006	2.30	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	gzip		48.502	14.316	0.015	70.48	3.08	0.008	1.71	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	bzip2		48.502	13.249	0.015	72.68	3.08	0.011	1.15	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	xz		48.502	13.468	0.033	72.23	0.39	0.012	1.07	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	L&Z		48.502	27.349	0.003	43.61	15.42	0.005	5.22	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	lzma		48.502	13.424	0.028	72.32	1.65	0.012	1.07	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	osdna		48.502	12.135	0.062	74.98	0.75	0.011	1.05	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	bwf512+osdna		48.502	12.135	0.162	74.98	0.29	0.012	0.96	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	osdna+zip		48.502	12.284	0.122	74.67	0.38	0.071	0.16	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	bwf512+osdna+zip		48.502	14.465	0.222	70.18	0.21	0.072	0.19	Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
T2 Homo_sapiens.GRCh38 dna_sm	zip	3.072.712.323	847.980.783	631.998	72.40	4.64	24.422	33.11		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	gzip	3.072.712.323	847.980.647	348.76	72.40	8.40	23.08	35.04		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	bzip2	3.072.712.323	775.099.444	285.627	74.77	10.26	130.907	5.65		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	xz	3.072.712.323	674.159.200	3414.41	78.06	0.86	38.56	16.67		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	L&Z	3.072.712.323	1.664.818.241	10.99	45.82	266.64	6.26	253.63		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	lzma	3.072.712.323	674.054.625	3505.86	78.06	0.84	39.59	16.24		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	osdna	3.072.712.323	767.229.085	218.004	75.03	13.44	87.46	8.37		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	bwf512+osdna	3.072.712.323	709.195.679	800.42	76.92	3.66	884.6	0.76		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	osdna+zip	3.072.712.323	732.059.606	246.236	76.18	11.90	95.94	7.28		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	bwf512+osdna+zip	3.072.712.323	671.318.220	832.89	78.15	3.52	698.68	0.71		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
T3 SRR741411_2	zip	7.982.945.875	2.254.125.397	1535.9	71.76	4.96	61	35.24		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	gzip	7.982.945.875	2.254.125.141	831.59	71.76	9.15	53.06	40.51		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	bzip2	7.982.945.875	2.040.455.140	638.4	74.44	11.93	313	6.22		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	xz	7.982.945.875	1.841.024.792	7724.07	76.94	0.99	89.17	19.69		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	L&Z	7.982.945.875	4.378.928.489	26.87	45.15	283.33	27.87	149.84		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	lzma	7.982.945.875	1.841.010.415	7844.97	76.94	0.97	93.18	18.84		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	
	osdna	7.982.945.875	1.985.110.985	303.87	75.13	25.05	237.11	7.98		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	bwf512+osdna	7.982.945.939	1.859.532.666	1593.44	76.71	4.78	1527.33	1.16		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	osdna+zip	7.982.945.875	1.951.229.051	376.87	75.56	20.20	310.23	6.00		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
	bwf512+osdna+zip	7.982.945.939	1.783.732.895	1680.99	77.66	4.53	1544.84	1.10		Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
T4 Mais	osdna	2.104.355.420	526.066.762	163	75.00	12.31				Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
T5 Cricetus	osdna	2.320.022.665	579.639.181	188	75.02	11.77				Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
T6 homo_sapiens	osdna	3.095.961.822	773.032.878	146	75.03	20.22				Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)
T7 Pinus	osdna	20.547.720.415	5.136.566.107	847	75.00	23.14				Intel Xeon Processor (Skylake, IBRS)	(32 Kb + 32 Kb) x 2	4 Mb + 16 Mb	8 Gb	Ubuntu 18.04.2 LTS	gcc version 7.3.0 (Ubuntu 7.3.0-27ubuntu1~18.04)