668.49 1103.85 670.24 1100.97 668.8 715.01 1104.03 668.8 1099.61 aio-stress 1098.89 aircrack-ng -863.7 1386.56 868.11 868.35 858.66 861.79 aobench 1507.68 1416.64 1370.45 1224.64 apache 779.65 2435.03 777.87 2403.61 788.11 2431.87 790.02 2432.91 780.83 blake2s 2385.1 blogbench_read 2285.5 267.15 2300.36 251.74 2326.43 2314.65 2269.53 blogbench_write 256.08 234.67 248.41 bork 435.47 401.44 434.66 401.51 437.54 433.17 431.62 botan_AES-256 botan_Blowfish botan_CAST-256 403.25 397.23 399.37 387.28 389.11 388.24 385.49 383.65 botan_KASUMI 383.65 385.36 382.59 387.96 382.69 423.14 40465.5 16898.7 421.59 41321.3 16796.5 420.49 41616.5 **423.35** 40782.2 423.31 41889.7 botan_Twofish brlcad -16830 17039.2 16539.6 build-gcc 5729.98 73330.9 45488.4 4366.82 5587.19 72103.5 45052.3 4318.71 5695.86 73093.3 45569.4 4380.83 5666.76 build-gdb 5791.14 81490.8 72572 45302.5 4360.36 build-linux-kernel 45784.6 4403.27 build-llvm build-php 10329 10419.2 10352.1 10282.8 build2 10247.8 1734.43 1541.73 1730.32 1530.58 1709.77 1518.12 1728.49 1521.71 1715.16 1515.16 byte dhry2 byte_float 1514.5 1514.19 1536.79 1531.97 1525.06 1515.01 byte int byte_register 1543.09 1531.25 1536.75 1517.73 338.99 9437.51 580.11 340.15 9416.89 341.04 9380.7 336.24 9444.25 338.45 9430.24 bzip2 c-ray 574.18 575.72 578.48 578.42 achebench memcpy achebench_memset 601.39 602.23 608.35 596.15 603.94 1814.2 528.19 572.1 1832.76 528.17 1853.18 1824.65 532.64 1835.38 cachebench mixed 533.71 532.3 cachebench_read 581.46 576.49 578.93 578.35 cachebench_write 128.06 assandra_mixed_1_1 125.37 124.82 124.87 123.07 127.74 125.37 124.68 124.75 123.35 assandra mixed 1 3 125.09 111.92 125.9 112.94 127.99 124.63 123.32 cassandra_read -115.76 112.62 111.59 cassandra write 3519.32 3432.65 3403.48 3424.81 3414.72 cloverleaf mpilebench compile 1806.72 1664.87 1646.23 1609.31 1613.03 bench_initial_create -1586.68 1591.28 1598.78 n_read_compile_tree 1638.58 20879.4 22520.9 21820.2 21691.4 cp2k 1520.58 cpp-perf-bench_atol 1523.63 684.19 325.16 683.14 328.63 p-perf-bench_ctype 680.69 324.66 323.96 nch_functionobjects -perf-bench_mathlib 7931.82 7994.15 7893.43 7945.03 ch_random_numbers -tepanov_abstraction -tch_stepanov_vector -cpuminer-opt_deep -cpuminer-opt_lbry -cpuminer-opt_m7m -19022.3 19143.3 18787.5 19090.8 19095.1 690.16 1736.92 695.64 1750.3 697.41 1748.86 1754.85 1761.07 1995.62 1989.82 1968.46 1964.41 1977.76 1857.6 1867.06 1850.72 1849.67 1859.44 2076.46 1804.65 2084.59 2058.82 2075.01 1817.14 puminer-opt_myr-gr -uminer-opt_sha256t -1812.58 1809.97 1896.41 1884.47 1885.43 1890.29 1895.7 1865.7 1862.03 1854.9 1853.74 1862.63 cpuminer-opt_skein 556.49 550.48 crafty · 6192.51 3523.34 6178.19 3165.46 ctx clock dacapo_eclipse 4168.03 4091.11 4119.39 4093.85 4131.88 dacapo h2 1383.97 1348.47 1386.43 1370.39 1079.77 2491.52 dacapo_jython 1084.82 1070.55 1074.34 2433.62 dacapo tradebeans 518.17 dacapo_tradesoap 516.29 511.73 512.89 506.31 1184.09 1193.82 1191.66 1188.67 arktable benchSRW 1193.2 493.69 496.05 498.7 499.57 495.06 ctable_masskrugNEF 399.14 396.99 ble_server_roomNEF imera_10b_1080pivf 400.81 11522.8 11514.6 11473.8 11478.8 11461.2 2263.79 himera_8b_1080pivf 2280.7 2269.17 ner_nature_1080pivf -ummer_nature_4kivf -755.64 755.1 749.67 749.88 2941.17 2924.21 2935.22 2918.53 4921.57 4898.02 4908.41 4904.2 dbench_1 dbench_12 dbench_128 5266.53 5279.73 5292.43 5206.09 5256.68 5821.56 6014.54 5919.7 5933.63 5859.44 6146.17 dbench_256 6136.9 5609.52 5680.18 5659.23 dbench_48 dbench 6 5072.95 4982.12 5030.69 486.72 483.06 2235.34 477 dcraw 2232.01 deepspeech 75000 1681.5 6437.09 1674.57 1695.14 1700.44 1691.6 ebizzy 6438.13 6485.86 6451.98 nbree_asian_dragon 6468.34 7605.81 7601.69 7987.74 7577.91 7926.51 7573.28 7562.47 e_asian_dragon_obj 7946.05 embree_crown 424.45 420.55 420.8 419.48 418.46 encode-flac encode-mp3 666.24 667.16 670.95 291.54 293.33 294.51 292.69 293.01 ffmpeg -2488.57 2484.27 2461.96 2476.54 fhourstones 339.69 1109.77 333.48 336.42 346.87 331.64 .000_Files_1MB_Size 1127.89 1111.96 _Sub_Dirs_1MB_Size 2923.96 1168.55 2965.38 2985.69 IMB Size 4 Threads gegl_antialias -gegl_cartoon -1178.02 1166.47 2817.3 2780.63 2771.9 2835.33 gegl_color-enhance -1483.5 1470.71 241.89 239.63 gegl_crop 786.59 gegl_reflect -1177.16 1178.44 1170.5 1170.77 1164.84 egl rotate-on-center gegl_scale-size 842.22 1644.54 852.97 858.75 834.61 gegl_tile-glass 1665.28 231.71 gegl_wavelet-blur -220.96 -bench_bench-asinh 230.81 228.78 -bench_bench-atanh 475.44 bc-bench_bench-cos 476.75 467.13 460.53 471 oc-bench_bench-exp 718.94 715.35 ibc-bench bench-ffs oc-bench_bench-ffsll 231.89 230.09 c-bench_bench-log2 -bench_bench-modf 225.44 218 pench-pthread_once -bc-bench_bench-sin -bench_bench-sincos -218.86 470.09 442.87 435.14 447.95 448.11 439.64 232.59 237.29 c-bench_bench-sinh -242.51 241.14 231.41 232.97 oc-bench_bench-sqrt c-bench_bench-tanh glmark2_1024x768 230.87 240.2 13173 13273 13247 13199 13273 60000 glmark2_1024x708 - glmark2_1920x1080 - glmark2_2560x1440 - glmark2_800x600 13019 13312 13152 13120 13091 13162 13456 13382 13417 13361 13149 13127 13023 13007 13199 9077.59 9169.33 gmpbench -9235.15 9208.17 9203.02 8672.59 1091.69 8621.68 8645.46 cs-magick_gaussian -8651 8627.36 1086.24 1076.91 phics-magick_minify phics-magick_resize 1090.15 1086.3 2504.54 2514.64 2510.19 2463.95 phics-magick_rotate -ics-magick_sharpen -1991.9 2042.45 18257.6 1715.64 18236.5 1672.9 18281 18242.3 himeno -6146.04 6185.72 6136.57 6154.25 6110.83 hint_double -7962.18 hint float 8000.46 8140.62 8081.1 8030.24 hmmer -450.65 447.04 447.67 447.21 9878.42 9831.81 9865.21 9828.48 hpcg 3086 3109 3115 3106 3108 digobench_bedroom 3101 3136 3116 3143 3151 digobench supercar 544.8 717.57 556.19 551.5 552.89 550.68 inkscape 753.35 iozone_-s2096000 iozone_-s4096000 789.17 771.44 746.32 1939.36 1909.84 1796.16 1894.91 1888.02 iozone -s8126000 -5798.26 5709.21 5426.34 5733.67 5624.11 296.56 291.84 290.97 295.33 291.63 289.48 293.65 292.84 292.78 288.57 iperf tcp iperf_udp -13168 13207 13232 13153 13155 j2dbench_all j2dbench_graphics 9078 9019 9039 9039 9033 3796 3780 3770 3791 3780 j2dbench_images 393 j2dbench_text -22726. 22941.8 22729 22829.1 java-jmh javascimark2 610.59 594.65 599.18 612.19 1609.09 3753.43 1609.12 3756.62 1596.44 3760.13 1607.95 1603.37 nn-the-ripper bcrypt he-ripper_md5crypt 3765.12 3732.69 439 446 448 445 446 12516.4 lzbench_ebrotli 12551.7 12505.9 12424.3 12476.3 5810.66 13014.5 5790.99 5808.97 5820.97 5850.29 lzbench_-elibdeflate 13028.5 lzbench_-exz · lzbench_-ezstd · 13101.9 12936.2 12864.9 13698.8 13842 13721.7 13680.8 13685 45000 m-queens 2907.67 408.38 414.92 410.49 411.22 1641.21 mbw_1024 mbw_4096 1648.43 1636.64 204.34 mbw_512 mcperf_add 206.84 207.49 590.19 804.13 760.58 710.28 752.16 632.25 712.67 mcperf_append mcperf_delete -546.36 434.99 mcperf_get 748.86 710.49 mcperf_prepend 710.28 747.3 553.98 mcperf_replace 720.5 802.76 mcperf_set 766.18 1017.55 1018.03 1014.94 1022.2 1005.78 kl-dnn_conv_alexnet 35116.5 mkl-dnn conv all 35148.7 7463.64 _conv_googlenet_v3 mkl-dnn_ip_1d -mkl-dnn_ip_all -882.32 2325.36 88.088 883.37 881.33 879.72 2325.8 2323.62 2347.89 2340.46 2087.87 2095.8 2107.66 2099.55 12807.3 nkl-dnn_rnn_training -2090.6 12537.5 7414.68 mt-dgemm -13080.7 7451.91 7465.47 7413.92 7450.3 1267.09 1488.2 1415.31 1365.79 1398.58 network-loopback 1275 1291 1275 1272 nexuiz 1024x768 nexuiz_1920x1080 nexuiz_2560x1440 2496 2466 2458 2466 2462 2465 2463 2499 2461 nexuiz 800x600 962 943 943 1512.14 1406.23 1425.35 1388.81 1230.68 nginx de-express-loadtest 27361.8 27189.2 numenta-nab octave-benchmark 267.5 266.11 1597.98 1596.07 1591.65 1608.9 1596.05 oidn enarenaG_1024x768 narenaG_1920x1080 narenaG_2560x1440 7204 7168 7181 7188 15694 15758 15706 15811 3816 3784 enarenāG 800x600 4992 5091 5057 4989 5011 430.46 542.62 430.41 433.42 427.97 433.41 openssl 631.85 659.2 30000 osbench_create_files ch_create_processes 887.85 889.08 ench_create_processes ench_create_threads -ch_launch_programs -osbench_mem_alloc -gnetic_reconnection -ospray_san_miguel -ospray_xfrog_forest -588.07 549.33 574.74 550.26 494.25 584.33 480.16 514.08 508.88 501.22 1801.84 1788.59 1790.01 2329.34 2343.98 2337.27 2344.22 10070.6 10084 10166.2 10138.2 10111.7 1749.96 1756.97 1733.44 1745.14 1748.16 7842 7818 7816 7886 aview_manyspheres 19423 19456 19349 19408 19324 iew_waveletcontour 1367 1367 1372 367.59 /iew_waveletvolume -1808 362.66 359.62 361.61 365.21 phpbench -912.47 910.86 907.32 925.74 892.86 postmark -6270.33 6296.84 6292.09 6309.26 6310.17 povray primesieve 3158.11 3148.95 3138.84 3114.87 3145.81 pybench 583.89 600.05 590 883.42 901.21 866.91 870.28 867.78 pymongo 1485.14 1467.82 1436.61 rformance-run 2to3 1453.08 1438.17 formance-run_chaos 542.5 544.67 491.79 487.93 ce-run_crypto_pyaes 488.32 740.5 734.23 743.65 739.12 737.92 un_django_template rformance-run_float performance-run_go 488.13 496.8 490.02 493.68 1085.67 1075.56 1074.38 1070.01 1071.83 ance-run_json_loads 595.8 590.63 591.64 524.37 524.55 520.5 521.02 518.65 ormance-run_nbody 776.37 756.66 757.28 722.11 ormance-run_pathlib 744.75 _pickle_pure_python 1938.51 1902.06 2107.98 1923.07 1894 1850.25 -run_python_startup -2110.82 2105.94 2097.58 2110.35 mance-run_raytrace e-run_regex_compile -3080 2970 4081 3799 3767 qgears_-image · qgears_-render qgears_COMPO gears_GEARSFANCY 3590 3900 3622 719 391 388 390 216 3887 3617 3590 2971 2595 2333 2330 1824 qgears_TEXT 2322 15000 3961.76 ramspeed_add_float · 4031.18 4000.34 3914.99 3882.32 3920.88 3908.62 ramspeed_add_int amspeed_copy_float 4010.85 3896.48 4007.31 3914.82 3918.39 3882.23 ramspeed_copy_int 4029.14 4002.93 mspeed_scale_float -3884.82 3921.95 3934.62 3909.27 3854.07 ramspeed_scale_int amspeed_traid_float ramspeed_triad_int 4012.68 4020.39 3917.64 3925.07 1858.71 3932.08 3876.67 3920.16 3874.96 rawtherapee -1867.04 rays1bench rbénchmark 745.95 343.05 331.77 348.94 338.42 redis_lpop -325.62 330.73 340.6 326.54 redis lpush redis_sadd 334.37 349.78 670.68 enaissance_akka-uct renaissance als ssance_db-shootout renaissance_dotty 352.51 357.23 ance_finagle-chirper ssance_naive-bayes laissance_page-rank enaissance_reactors 591.57 581.1 842.19 834.91 853.62 1243.21 951.11 rocksdb_fillrandom 976.35 936.1 rocksdb_fillseq ocksdb_readrandom 1240.78 1241.8 euler3d_cpu_double -2234.69 rodinia_TavaMD -10198.3 10262 rodinia_sc_omp 1804.64 1802.06 1804.22 360.71 363.62 rsvg 1027.31 1027.02 rust-prime 1029.16 1026.45 1025 868.01 860.66 1099.43 866.03 schbench 2 868.46 867.8 1098.96 1099.33 1099.68 schbench 4 schbench_8 1113.58 1114.44 1112.9 scikīt · 1316.6 1319.11 scimark2 1325.73 1327.68 smallpt 944.65 sqlitebench 921.78 924.58 931.14 925.24 921.37 stockfish stream stress-ng_fork stress-ng_matrix 988.99 1024.72 519.94 stress-ng_msg -888.43 812.2 stress-ng_sem -1468.89 1309.01 stress-ng_sock -1392.27 1591.4 1431.87 1125.5 stress-ng_switch stress-ng_vecmath 1446.39 913.8 910.38 911.6 914.65 500.04 497.16 502.77 sudokut -1312.46 2192.94 1306.1 1309.43 sunflow 2174.68 2151.62 2163.01 2166.74 svt-av1 1564.84 1587.04 1576.16 svt-hevc 4272.83 4251.99 svt-vp9_tune_0 -4266.75 4250.58 4245.11 4259.1 4250.4 svt-vp9_tune_1 -4238.53 svt-vp9 tune 2 296.11 294.35 289.74 swet 1464.51 1467.15 sysbench_cpu 1469.12 1473.85 261.55 sysbench_memory 261.7 241.23 t-test1 2973.89 3019.41 3025.06 tensorflow 5950.71 5969.45 5848.75 5175.97 5440.59 tinymembench 1597.87 1578.84 1627.25 2488.21 1644.36 bench_random_read 2620.84 2518.83 pench random write tiobench_read tiobench_write 1673.31 1678.87 1638.51 1643.89 1536.18 1513.35 1470.03 1523 tjbench 560.94 561.16 tscp ttsiod-renderer 2561.17 3301.75 3314.02 3319.77 tungsten_hair 827.18 1224.15 en_non-exponential 1218.47 1220.56 1229.58 n volumetric-caustic gsten_water-caustic e-heaven_1024x768 2134.64 13439 20274 13483 13439 13406 13400 -heaven_1920x1080 -34735 -heaven_2560x1440 ne-heaven_800x600 12751 12745 12716 12704 12756 10959 11000 10920 10928 ne-valley 1024x768 e-valley_1̄920x1080 -20047 20053 19978 19887 32239 32402 32276 32382 31989 e-valley_2560x1440 gine-valley_800x600 10161 10181 10152 10136 10178 1486 1471 2791 1502 2786 1473 2784 1473 $anterrorG_1024x768$ 2800 2804 nterrorG_1̄920x1080 -917 917 925 916 921 nterrorG²⁵⁶⁰x1440 oanterrorG_800x600 -1142 1120 1125 1128 1128 1208.3 733.51 1201.78 1194.88 1196.5 1195.06 vpxenc -732.64 1017.09 730 734.33 732.21 x264 1017.39 44925 1016.26 44979 1018.76 44938 1010.4 x265 44937 44889 xonotic 1024x768 44904 44916 44873 44911 44906 xonotic 1920x1080 -44939 44992 44913 xonotic²⁵⁶⁰x1440 -44905 44934 44967 45011 44993 44926 44996 xonotic 800x600 3245.16 3242.57 3249.42 3270.78 3247.85 xsbench -1628.12 1612.95 1604.45 1617.94 1621.28 ΧZ 388.73 389.12 388.32 388.11 385.87 zstd -Stock MDS **AllOff** Meltdown Spectre