16.25 17.5 16.25 17.5 16.25 17.5 16.25 17.5 16.42 aio-stress -17.5 aircrack-ng -16.87 17.77 16.9 16.9 16.87 16.9 aobench 18.27 18.12 18.05 18.07 apache 16.62 16.67 16.62 16.65 16.65 blake2s 19.45 19.32 19.47 19.47 19.42 19.47 blogbench_read 19.37 19.35 19.35 19.3 blogbench_write 13.85 13.77 13.95 13.8 13.62 bork 15.2 14.97 15.17 14.97 15.15 14.95 15.17 15.17 botan_AES-256 14.97 14.95 botan_Blowfish 14.87 14.9 14.87 14.85 14.9 botan_CAST-256 14.85 14.9 14.87 14.85 14.85 botan_KASUMI 15.1 26.57 24.35 15.1 26.6 24.27 15.1 26.5 15.1 26.55 15.1 26.52 botan_Twofish brlcad -24.3 21.6 24.32 24.32 build-gcc -21.65 21.55 21.62 21.6 build-gdb 27.97 26.8 20.95 27.95 26.77 20.92 23.07 27.97 26.8 20.95 23.07 28.25 26.82 28 26.8 build-linux-kernel build-llvm -20.97 20.95 build-php -23.12 23.1 build2 -23.1 18.62 18.6 18.62 18.62 18.6 byte dhry2 18.35 18.32 18.35 18.32 18.3 18.3 18.3 18.3 byte_float -18.32 18.32 18.3 18.3 18.3 byte int byte_register 18.32 18.3 14.55 22.87 15.9 16 14.55 22.87 15.9 14.57 22.85 15.87 14.55 22.87 14.52 22.87 bzip2 c-ray 15.87 15.9 achebench memcpy 16.02 15.97 15.97 16 achebench_memset 18.77 18.75 18.77 18.75 18.8 cachebench mixed 15.67 15.9 15.65 15.85 15.67 15.9 15.67 15.65 cachebench_read 15.87 15.9 cachebench_write 12.07 12.02 12.1212.05 12.05 assandra_mixed_1_1 12.1 12.07 12.05 12.05 12.02 assandra mixed 1 3 12.12 12.07 12.05 12.05 12.02 cassandra_read 11.77 11.8 11.87 11.8 cassandra write 20.4 20.35 20.32 20.32 20.32 cloverleaf 18.45 mpilebench compile 18.42 18.72 18.52 bench initial create -18.5 18.4 18.42 18.45 18.45 18.5 18.42 18.4 cp2k cpp-perf-bench atol 18.3 18.3 18.32 18.32 18.3 p-perf-bench_ctype -16.3 16.3 16.3 16.27 16.3 14.45 22.45 14.47 22.45 14.42 14.45 14.45 nch_functionobjects -perf-bench_mathlib 22.42 22.42 22.45 -peri-bench_mathlib ch_random_numbers tepanov_abstraction ch_stepanov_vector cpuminer-opt_deep cpuminer-opt_lbry cpuminer-opt_m7m -16.35 16.35 16.32 16.35 16.35 18.62 18.65 18.67 18.67 18.65 18.97 18.97 18.95 18.95 18.95 18.8 18.82 18.8 18.8 18.8 19.07 18.75 19.1 19.1 19.07 19.05 18.72 puminer-opt_myr-gr -uminer-opt_sha256t -18.75 18.75 18.72 18.85 18.85 18.85 18.85 18.85 18.82 18.8 18.8 18.8 18.8 cpuminer-opt_skein -15.77 17.55 20.77 15.8 crafty -15.8 21.82 20.4 ctx clock dacapo_eclipse -20.82 20.8 20.77 20.8 dacapo_h2 -dacapo_jython -18.07 18.07 18.05 18.05 18 17.45 19.47 17.42 19.6 17.45 19.55 17.42 19.55 17.42 19.62 dacapo tradebeans -15.6 15.57 15.62 15.6 15.55 dacapo_tradesoap -17.7 arktable benchSRW -17.7 17.7 17.67 17.7 15.52 15.5 ctable_masskrugNEF -15.52 15.5 15.5 ble_server_roomNEF -imera_10b_1080pivf -himera_8b_1080pivf -14.97 14.95 14.95 14.97 14.95 23.37 19.32 19.32 19.3 19.3 19.3 ner_nature_1080pivf -ummer_nature_4kivf -dbench_1 -16.52 19.92 16.52 19.95 16.55 16.55 16.55 19.95 21.25 21.22 21.22 21.22 21.22 dbench_12 -dbench_128 -21.37 21.4 21.42 21.42 21.4 21.65 21.75 21.57 21.7 21.8 21.67 21.7 21.7 dbench_256 -21.8 21.6 21.6 21.6 21.6 dbench_48 dbench 6 21.32 21.27 21.27 21.3 15.42 15.45 15.45 15.45 dcraw · 27 deepspeech -18.57 18.55 18.57 18.57 18.55 ebizzy · 21.92 21.92 nbree_asian_dragon -21.9 21.9 22.32 22.42 22.32 22.45 22.32 e_asian_dragon_obj embree_crown -15.12 15.1 15.07 15.07 encode-flac encode-mp3 -16.25 16.25 16.25 16.25 16.25 14.2 19.52 14.17 19.52 14.17 19.47 14.2 19.52 ffmpeg fhourstones -14.5 14.5 .000_Files_1MB_Size 14.52 14.6 14.55 17.52 17.52 17.55 17.52 17.5 _Sub_Dirs_1MB_Size -19.97 19.97 17.65 20 19.97 LMB_Size_4_Threads gegl_antialias -gegl_cartoon -17.67 17.65 17.67 17.65 19.8 19.8 19.85 19.82 gegl_color-enhance -18.22 18.25 18.27 18.22 13.67 13.7 13.67 13.7 gegl_crop gegl_reflect -16.67 16.7 16.65 16.67 16.67 17.65 17.67 17.67 17.65 17.65 egl rotate-on-center gegl_scale-size 12.87 16.8 16.85 16.87 16.82 16.82 gegl_tile-glass gegl_wavelet-blur -18.5 18.52 13.6 -bench bench-asinh -13.6 13.57 13.47 13.47 13.5 13.6 -bench_bench-atanh -13.65 13.65 13.47 15.4 15.32 15.35 15.4 15.37 bc-bench bench-cos -16.42 16.45 16.42 16.42 16.4 oc-bench_bench-exp ibc-bench_bench-ffs ibc-bench_bench-ffsl c-bench_bench-log2 c-bench_bench-modf cench-pthread_once ibc-bench_bench-sin bench_bench-sinb-13.52 13.55 13.47 13.47 13.55 13.52 13.6 13.52 13.6 13.62 13.45 13.57 13.55 13.57 13.52 13.45 13.6 13.67 13.55 13.52 13.47 13.45 13.55 13.42 15.42 15.42 15.37 15.35 15.25 15.25 15.22 15.17 15.2 13.75 13.7 13.6 c-bench_bench-sinh -13.72 13.7 13.6 oc-bench_bench-sqrt -c-bench_bench-tanh -glmark2_1024x768 -13.62 13.6 13.65 13.72 13.42 - 24 glmark2_1920x1080 -glmark2_2560x1440 -glmark2_800x600 -23.7 23.75 22.77 22.65 17.45 19.55 22.82 22.8 22.8 gmpbench -22.65 17.47 22.65 cs-magick_gaussian -17.47 17.47 17.47 phics-magick_minify -19.55 19.55 phics-magick_resizé -19.55 19.5 19.02 18.97 19.05 phics-magick_rotate -19.1 19.05 iics-magičk_sharpen -18.55 18.57 18.6 18.6 himeno -21.8 21.77 21.8 21.8 21.8 hint_double hint float 15.25 22.97 20.1 15.27 22.97 15.25 22.97 hmmer hpcg -20.1 20.1 20.07 20.1 digobench_bedroom -20.12 20.07 20.12 20.1 20.12 digobench supercar -15.75 16.42 15.8 15.77 15.77 15.77 inkscape iozone_-s2096000 -iozone_-s4096000 -16.55 16.52 16.67 18.92 18.85 18.85 18.72 18.87 21.47 iozone -s8126000 -21.65 21.62 21.57 21.6 14.22 14.17 14.17 14.17 14.2 iperf_tcp -14.17 14.17 14.15 iperf_udp -14.15 j2dbench_all -22.77 22.75 20.57 22.75 22.75 22.75 j2dbench_graphics -20.57 20.57 20.6 20.6 j2dbench_images -14.9 14.92 14.87 14.92 14.9 j2dbench_text java-jmh 16.02 15.95 16.02 16.05 15.97 javascimark2 -18.45 20.57 18.45 20.57 18.45 20.57 18.42 20.55 18.42 20.57 nn-the-ripper_bcrypt -:he-ripper_md̄5crypt -15.2 15.22 15.25 15.25 15.25 jxrend -23.57 Izbench -ebrotli 23.57 23.57 21.65 21.65 21.65 21.65 21.67 lzbench_-elibdeflate -|zbench_-exz -- 21 Izbench_-ezstd -19.92 19.92 19.92 19.95 19.92 m-queens -15.02 18.5 15.02 18.47 15.05 15 mbw_1024 18.47 mbw_4096 13.32 mbw_512 mcperf_add 15.95 16.7 16.57 16.25 16.62 16.55 15.77 16.4 15.8 16.4 16.1 mcperf_append -15.62 15.57 14.87 mcperf_delete -15.75 15.52 14.87 15.17 mcperf_get -16.52 mcperf_prepend -16.4 16.4 15.77 15.77 15.95 17.27 mcperf replace -16.52 16.4 16.42 16.1 16.6 17.3 16.7 17.3 16.57 17.3 mcperf_set -17.3 minion · kl-dnn_conv_alexnet 17.3 17.27 26.15 22.27 16.92 26.15 22.27 26.15 22.27 26.15 22.3 mkl-dnn conv all -26.15 22.27 _conv_googlenet_v3 mkl-dnn_ip_1d -mkl-dnn_ip_all -16.95 16.95 16.95 16.95 19.37 19.37 19.37 19.4 19.37 nkl-dnn_rnn_training -19.1 19.1 19.1 19.12 19.1 mt-dgemm nero2d network-loopback -17.85 18.25 18.12 18.02 18.1 17.9 17.87 19.52 17.87 17.85 17.85 nexuiz 1024x768 -19.5 19.5 nexuiz_1920x1080 -nexuiz_2560x1440 -19.5 19.5 19.55 19.5 19.5 nexūiz_800x600 -17.15 17.1 17.1 17.1 17.1 18.15 18.3 17.77 18.07 18.1 nginx -14.57 14.5 14.5 14.37 de-express-loadtest -14.5 numenta-nab 13.95 14.05 13.95 octave-benchmark 18.42 oidn 18.42 18.42 18.45 18.42 enarenaG_1024x768 -narenaG_1920x1080 -narenaG_2560x1440 -22.2 24.15 22.1<mark>7</mark> 24.15 22.17 24.15 22.1<mark>7</mark> 24.15 22.2 24.15 20.6 20.6 20.57 20.6 20.6 - 18 enarenāG_800x600 -21.27 21.32 21.3 21.27 21.27 15.17 16.1 15.12 15.95 15.17 16.07 15.15 15.72 15.15 openssl -16.22 sbench_create_files ch_create_processes 16.95 16.85 16.97 16.9 16.7 ench_create_threads -ch_launch_programs -15.5 15.92 15.75 15.87 15.77 15.57 15.42 15.92 15.87 osbench_mem_alloc -gnetic_reconnection -ospray_san_miguel -ospray_xfrog_forest 15.57 18.72 18.72 18.7 19.37 19.35 19.37 19.37 19.37 23.02 18.62 23.05 18.67 23.02 18.65 18.65 18.65 p7zip -- p7zip aview_manyspheres 22.4 22.4 22.4 22.42 22.37 iew_waveletcontour -18.05 18.05 18.05 18.05 18.72 /iew_waveletvolume -14.75 17.02 14.72 phpbench -17.02 17.02 17.07 16.97 postmark -21.85 21.85 21.85 21.85 21.85 povray primesieve -20.12 20.12 20.12 20.12 20.1 15.95 15.9 15.92 15.97 15.9 pybench -16.95 17 16.9 16.9 16.9 pymongo -18.25 18.2 18.17 rformance-run 2to3 18.22 18.17 15.72 15.47 formance-run_c̄haos · 15.72 15.72 15.75 15.72 ce-run_crypto_pyaes -un_django_template -15.47 16.5 16.52 16.5 16.5 16.47 rformance-run_float -performance-run_go -15.5 17.42 15.95 17.45 17.45 17.42 15.95 ance-run_json_loads 15.95 15.95 15.65 15.62 15.65 15.62 15.62 ormance-run_nbody 16.45 ormance-run_pathlib 16.62 16.55 16.55 _pickle_pure_python -18.8 -run_python_startup mance-run_raytrace -e-run_regex_compile -qgears_-image -qgears_-render -qgears_COMPO -gears_GEARSFANCY -19.12 19.12 19.12 19.1 19.12 16.92 20.07 19.97 20.6 20.47 20.45 20.65 20.45 15 16.42 14.9 20.65 20.47 20.45 20.45 19.97 19.65 19.37 18.75 [–] qgears_TEXT -19.37 19.37 ramspeed_add_float -ramspeed_add_int -amspeed_copy_float -ramspeed_copy_int -20.75 20.67 20.65 20.72 20.7 20.67 20.67 20.65 amspeed_scale_float -ramspeed_scale_int -amspeed_traid_float -ramspeed_traid_int -20.75 20.67 20.65 20.72 20.7 20.67 20.65 20.67 rawtherapee -18.82 rays1bench -rbenchmark -18.8 18.8 17.2 14.55 redis_get -redis_lpop -14.62 14.57 14.5 14.5 14.45 redis_lpush redis_sadd -14.42 14.57 14.55 redis set -14.62 enaissance_akka-uct -16.25 16.35 16.25 15.3 15.27 renaissance_als ssance_db-shootout -renaissance_dotty -ance_finagle-chirper -15.97 15.97 15.82 14.67 14.65 14.65 14.67 14.67 14.92 ssance_naive-bayes -laissance_page-rank -enaissance_reactors -rocksdb_fillrandom -15.9 18.07 18.1 16.67 17.75 17.1 16.82 16.8 16.85 17.87 17.2 17.12 rocksdb_fillseq -ocksdb_readrandom -euler3d_cpu_double -rodinia_lavamp -17.8 17.8 17.8 19.27 19.27 19.25 19.25 23.07 18.72 23.05 18.72 23.05 18.72 rodinia_sc_omp -14.77 14.65 rsvg -17.32 rust-prime 17.32 17.32 17.32 17.32 12 16.9 17.5 17.52 16.9 17.5 16.9 17.5 16.87 17.5 16.9 17.5 schbench_2 schbench_4 schbench_8 -17.95 17.97 17.95 scikīt -17.95 16.35 17.95 16.35 17.95 16.35 17.97 scimark2 -16.32 smallpt -sqlitebench -17.12 17.02 17.05 17.07 17.07 17.05 stockfish -19.32 17.77 19.3 17.52 16.55 19.3 17.75 stream -17.65 17.67 stress-ng_fork -16.7 16.62 stress-ng_matrix stress-ng_msg -stress-ng_sem -17.32 16.97 stress-ng_sock -stress-ng_switch -18.22 18.15 18.17 17.02 17.02 stress-ng_vecmath -17.02 15.52 17.92 sudokut sunflow -19.2 19.17 19.2 svt-av1 svt-hevc -svt-vp9_tune_0 -18.4 18.37 18.4 18.37 20.87 20.87 20.87 20.9 20.87 20.87 20.87 svt-vp9_tune_1 -20.87 svt-vp9_tune_2 swet sysbench_cpu -18.22 18.22 18.22 18.22 13.87 sysbench_memory -13.7 13.37 t-test1 tensorflow -19.97 20.02 20.05 21.5 18.45 tinymembench -21.72 21.67 21.37 bench_random_read -bench_random_write -18.42 19.62 19.57 19.67 tiobench_read -tiobench_write -18.55 18.5 18.5 18.57 18.27 15.8 18.32 18.3 18.22 18.3 tjbench -15.8 15.8 15.8 tscp ttsiod-renderer -tungsten_hair -19.6 20.25 20.25 20.22 20.25 en_non-exponential -17.77 17.77 17.75 n_volumetric-caustic [.] gsten_water-caustic -e-heaven_1024x768 --heaven_1920x1080 --heaven_2560x1440 -19.15 26.12 ne-heaven_800x600 -23.6 ne-valley 1024x768 24.75 25.95 e-valley_1920x1080 e-valley_2560x1440 -gine-valley_800x600 -23.05 23.05 23.05 23.05 23.05 18.22 19.82 18.27 19.82 18.22 19.82 18.25 19.82 18.22 $anterrorG_1024x768$ nterrorG_1920x1080 -19.82 17.05 17.55 17.05 17.05 17.05 17.05 nterrorG⁻2560x1440 oanterrorG_800x600 -17.55 17.55 17.55 17.6 17.72 17.7 17.7 17.7 17.72 vpxenc -16.47 17.27 16.47 16.47 16.47 16.47 x264 -17.3 17.3 17.3 17.3 x265 26.77 26.77 26.77 26.77 26.77 xonotic 1024x768 26.77 26.77 26.77 26.77 26.77 26.77 26.77 26.77 26.77 26.77 26.77 xonotic 1920x1080 -26.77 26.77 26.77 26.77 xonotic 2560x1440 -26.77 xonotic 800x600 -20.22 20.2 20.2 xsbench -20.2 20.2 18.47 18.47 18.45 18.45 18.45 XZ -14.9 14.9 14.9 14.9 zstd -14.87 Stock Meltdown Spectre MDS **AllOff**