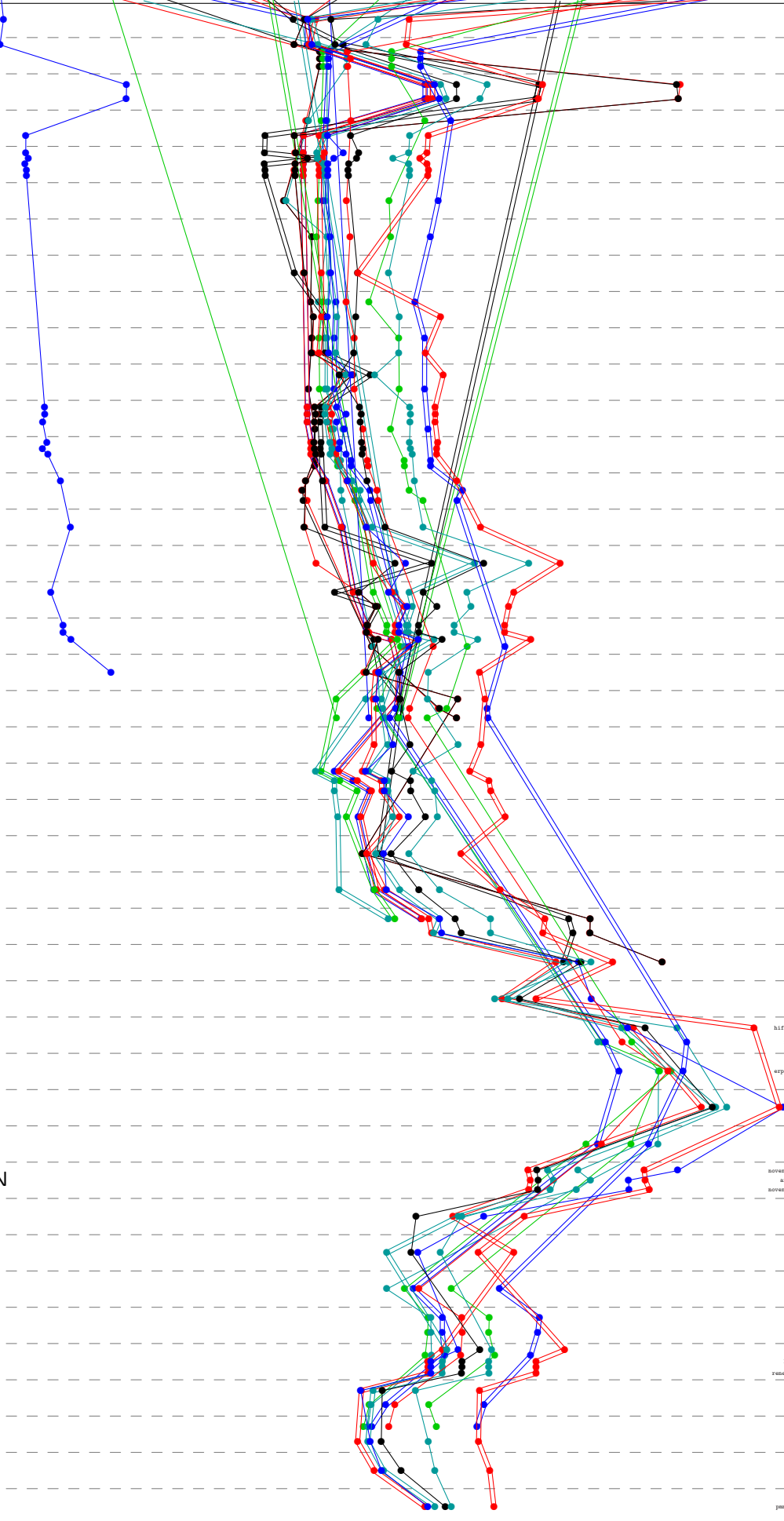


crypto\_hash  
echo512  
implementations

amd64 Zen2  
amd64 Zen  
amd64 KnLanding  
amd64 CascadeLake  
amd64 SL+512x2  
amd64 IceLake  
amd64 CometLake  
amd64 CannonLake  
amd64 CoffeeLake  
amd64 KabyLake  
amd64 Skylake  
amd64 BW+AES  
amd64 HW+AES  
amd64 IB+AES  
amd64 SB+AES  
amd64 Sandy Bridge  
amd64 Piledriver  
amd64 Bulldozer  
amd64 Westmere  
amd64 C2 65nm  
amd64 K10 32nm  
amd64 K10 45nm  
amd64 K10 65nm  
amd64 Goldmont  
amd64 K8  
amd64 Bobcat  
amd64 Atom  
ppc32 G3  
riscv64 U54  
mips32 Oction II  
armeabi Armada  
armeabi Cortex-A7  
armeabi Cortex-A9+NEON  
armeabi Cortex-A15  
aarch64 X-Gene  
aarch64 Skylark  
aarch64 A53  
aarch64 A53+crypto  
aarch64 A57+crypto  
aarch64 A72  
aarch64 A72+crypto  
aarch64 ThunderX2

T:core2/core2v64 ? :core2/core2v64 T:sphlib T:pentium/pentium4v64v1:powerpc/pp32cv2  
T:ccalix/aesni ? :ccalix/bitsliced ? :ccalix/permic/opt64 ? :sphlib-small ? :powerpc/pp32cv2  
T:ccalix/vperm ? :pentium/pentium4v64v2 ? :ccalix/aesni T:sphlib-small ? :generic/opt64 T:powerpc/pp32cv1  
? :aes/aes64 ? :pentium/pentium4v64v1:athlon/athlon64 ? :sphlib ? :generic/opt32 ? :powerpc/pp32cv1  
T:ccalix/bitsliced ? :athlon/athlon64 T:pentium/pentium4v64v2:generic/opt32



genj1346: 64 x 2000MHz; 2019 AMD EPYC 7702; amd64; Zen2 (830f10); supercop-20191017  
ryzen: 8 x 2994MHz; 2017 AMD Ryzen 7 1700; amd64; Zen (800f11); supercop-20170904  
ryzen: 8 x 3000MHz; 2017 AMD Ryzen 7 1700; amd64; Zen (800f11); supercop-20211108  
ryzen: 6 x 3200MHz; 2017 AMD Ryzen 5 1600; amd64; Zen (800f11); supercop-20211108  
ryzen: 4 x 3100MHz; 2017 AMD Ryzen 3 1200; amd64; Zen (800f11); supercop-20200908  
genj1291: 68 x 1400MHz; 2016 Intel Xeon Phi 7250; amd64; KnLanding (50671); supercop-20180818  
genj1154: 64 x 2000MHz; 2016 Intel Xeon Phi 7210; amd64; KnLanding (50671); supercop-20190229  
avx512ia3b: 18 x 3000MHz; 2019 Intel Core i9-10980XE; amd64; CascadeLake (50657); supercop-20210126  
pmo0876: 20 x 2500MHz; 2019 Intel Xeon Gold 6248; amd64; CascadeLake (50657); supercop-20191017  
aasay1024: 18 x 2700MHz; 2017 Intel Xeon Gold 6150; amd64; SL+512x2 (50654); supercop-20170904  
sl: 6 x 3500MHz; 2017 Intel Core i7-7800X; amd64; SL+512x2 (50654); supercop-20181123  
pmo0870: 20 x 2400MHz; 2017 Intel Xeon Gold 6148; amd64; SL+512x2 (50654); supercop-20191017  
genj1548: 40 x 2400MHz; 2017 Intel Xeon Gold 6148; amd64; SL+512x2 (50654); supercop-20191017  
genj1239: 32 x 2100MHz; 2017 Intel Xeon Gold 6130; amd64; SL+512x2 (50654); supercop-20191017  
icelake: 4 x 1100MHz; 2020 Intel Core i5-1030NG7; amd64; IceLake (70e65); supercop-20200829  
comet: 2 x 2100MHz; 2019 Intel Core i9-10110U; amd64; CometLake (80e6c); supercop-20211108  
cannon: 2 x 2200MHz; 2018 Intel Core i9-8121U; amd64; CannonLake (60663); supercop-20190910  
r2400: 4 x 3300MHz; 2018 Intel Xeon E-2124; amd64; CoffeeLake (906ea); supercop-20211108  
bitrise: 6 x 3200MHz; 2017 Intel Core i7-8700; amd64; CoffeeLake (906ea); supercop-20190910  
kiombo: 4 x 3000MHz; 2017 Intel Xeon E3-1220 v6; amd64; KabyLake (906e9); supercop-20211108  
intelauric: 4 x 3100MHz; 2018 Intel Core i7-8809G; amd64; KabyLake (906e9); supercop-20191017  
sandy: 2 x 3300MHz; 2015 Intel Pentium G4400; amd64; Skylake (506e3); supercop-20171218  
sandy: 4 x 3000MHz; 2015 Intel Xeon E3-1220 v5; amd64; Skylake (506e3); supercop-20211108  
genj1441: 28 x 2400MHz; 2016 Intel Xeon E5-2680 v4; amd64; BW+AES (406f1); supercop-20180818  
aasay087: 14 x 2400MHz; 2016 Intel Xeon E5-2680 v4; amd64; BW+AES (406f1); supercop-20170228  
genj1122: 28 x 2400MHz; 2016 Intel Xeon E5-2680 v4; amd64; BW+AES (406f1); supercop-20171020  
bakara: 8 x 1700MHz; 2016 Intel Xeon E5-2609 v5; amd64; BW+AES (406f1); supercop-20211108  
genj1460: 20 x 2300MHz; 2014 Intel Xeon E5-2650 v3; amd64; HW+AES (306f2); supercop-20180818  
genj1202: 24 x 2500MHz; 2014 Intel Xeon E5-2680 v3; amd64; HW+AES (306f2); supercop-20171020  
riscv64: 12 x 2500MHz; 2014 Intel Xeon E5-2680 v2; amd64; HW+AES (306f2); supercop-20171218  
bitpaper: 4 x 3100MHz; 2013 Intel Xeon E3-1220 v3; amd64; HW+AES (306c3); supercop-20211108  
11lav: 4 x 3000MHz; 2013 Intel Xeon E3-1272 v3; amd64; HW+AES (306c3); supercop-20211108  
aasay013: 12 x 2700MHz; 2013 Intel Xeon E5-2697 v2; amd64; IB+AES (306d4); supercop-20180818  
bakara: 4 x 2500MHz; 2012 Intel Xeon E3-1265L V2; amd64; IB+AES (306d9); supercop-20210926  
hydra: 4 x 3500MHz; 2012 Intel Xeon E3-1275 V2; amd64; IB+AES (306d9); supercop-20211108  
robis81: 8 x 2600MHz; 2012 Intel Xeon E5-4550L; amd64; SB+AES (206d7); supercop-20170228  
h6aandy: 2 x 2100MHz; 2011 Intel Core i3-2310M; amd64; Sandy Bridge (206a7); supercop-20200618  
hydra: 2 x 3800MHz; 2012 AMD A10-5800K; amd64; Piledriver (610f01); supercop-20171218  
lbrxiaty: 2 x 2000MHz; 2012 AMD A10-4655M; amd64; Piledriver (610f01); supercop-20200618  
bobcat: 4 x 4000MHz; 2012 AMD FX-8350; amd64; Bulldozer (600f20); supercop-20171218  
calvia: 4 x 4000MHz; 2012 AMD FX-8350; amd64; Bulldozer (600f20); supercop-20171218  
hydra: 4 x 3100MHz; 2011 AMD FX-8120; amd64; Bulldozer (600f12); supercop-20171218  
saber214: 4 x 4000MHz; 2012 AMD FX-8350; amd64; Bulldozer (600f20); supercop-20211108  
glynx: 2 x 3200MHz; 2010 Intel Core i5-650; amd64; Westmere (20652); supercop-20170105  
kataan: 2 x 2137MHz; 2006 Intel Core 2 Duo E6400; amd64; C2 65nm (6f6); supercop-20170105  
nagax: 4 x 2940MHz; 2007 Intel Core 2 Quad Q6600; amd64; C2 65nm (6f6); supercop-20211108  
lavor: 4 x 2940MHz; 2007 Intel Core 2 Quad Q6600; amd64; C2 65nm (6f6); supercop-20211108  
hydra: 4 x 2900MHz; 2011 AMD A8-3850; amd64; K10 32nm (300f10); supercop-20191221  
hydra: 6 x 3300MHz; 2010 AMD Phenom II X6 1100T; amd64; K10 45nm (100f60); supercop-20171218  
aasay049: 4 x 3200MHz; 2009 AMD Phenom II X4 955; amd64; K10 45nm (100f42); supercop-20170904  
hbaes: 1 x 1700MHz; 2010 AMD Athlon II Neo K125; amd64; K10 45nm (100f63); supercop-20170105  
gcc16: 8 x 2194MHz; 2008 AMD Opteron 8354; amd64; K10 65nm (100f23); supercop-20171218  
scv16831: 16 x 2100MHz; 2017 Intel Atom C3955; amd64; Goldmont (506f1); supercop-20191017  
nax: 2 x 2000MHz; 2006 AMD Athlon 64 X2; amd64; K8 (40fb2); supercop-20170105  
hbobcat: 2 x 1650MHz; 2011 AMD G-T56N; amd64; Bobcat (500f10); supercop-20171218  
h4e50: 2 x 1650MHz; 2011 AMD E-450; amd64; Bobcat (500f20); supercop-20200618  
hBataa: 2 x 1866MHz; 2011 Intel Atom D2500; amd64; Atom (306e1); supercop-20200618  
nintendovillainzang: 1 x 729MHz; 2006 IBM PowerPC Broadway; ppc32; G3 (G3); supercop-20191221  
hifiveunleashedriscv: 4 x 1400MHz; 2017 SiFive Freedom U540; riscv64; U54 (sifive,u54-mc); supercop-20191221  
riscvunleashed000: 4 x 1000MHz; 2017 SiFive Freedom U540; riscv64; U54 (sifive,u54-mc); supercop-20210926  
apprdfsfz: 2 x 2000MHz; 2011 Cavium Oction II CN6120; mips32; Oction II (cmnps64v2); supercop-20211108  
tasido: 1 x 1200MHz; 2010 Marvell Armada 310; armeabi; Armada (562f1311); supercop-20170718  
berry2: 4 x 900MHz; 2016 Broadcom BCM2836; armeabi; Cortex-A7 (410f075); supercop-20210604  
soreva13w: 4 x 1200MHz; 2011 Freescale i.MX6 Quad; armeabi; Cortex-A9+NEON (412f09a); supercop-20200702  
artik: 4 x 1200MHz; 2012 Samsung Exynos 4412?; armeabi; Cortex-A9+NEON (413f09c); supercop-20191221  
soreva1a6: 4 x 1200MHz; 2011 Freescale i.MX6 Quad; armeabi; Cortex-A9+NEON (412f09a); supercop-20191221  
jetsontxt: 4 x 2065MHz; 2014 NVIDIA Tegra K1; armeabi; Cortex-A15 (413f0f3); supercop-20170725  
gcc116: 8 x 1600MHz; 2014 APM 88320B-X1; aarch64; X-Gene (500f000); supercop-20171218  
gcc185: 32 x 3300MHz; 2018 Ampere eMAG 8180; aarch64; Skylark (503f002); supercop-20211108  
pi3plus: 4 x 1400MHz; 2018 Broadcom BCM2837B0; aarch64; A53 (410f034); supercop-20211108  
pi3plus: 4 x 1400MHz; 2018 Broadcom BCM2837B0; aarch64; A53 (410f034); supercop-20210604  
jaro: 4 x 2000MHz; 2016 Armlogic S905; aarch64; A53+crypto (410f034); supercop-20170718  
tasid6: 8 x 1600MHz; 2015 NXP QorIQ LS1088; aarch64; A53+crypto (410f034); supercop-20210604  
1qopteam019f6a: 4 x 1700MHz; 2016 Rockchip RK3328; aarch64; A53+crypto (410f034); supercop-20191221  
googlecraider: 4 x 1500MHz; 2018 NXP i.MX 8M; aarch64; A53+crypto (410f034); supercop-20191221  
rnsgeatckck3282c: 4 x 1512MHz; 2017 Rockchip RK3328; aarch64; A53+crypto (410f034); supercop-20191221  
jetsontxt: 4 x 1734MHz; 2015 NVIDIA Tegra X1; aarch64; A57+crypto (418f071); supercop-20191017  
varbear0: 8 x 2000MHz; 2016 AMD Opteron A1100; aarch64; A57+crypto (411f072); supercop-20200826  
pi4b: 4 x 1500MHz; 2019 Broadcom BCM2711; aarch64; A72 (410f083); supercop-20211108  
rpi4buntu64: 4 x 1500MHz; 2019 Broadcom BCM2711; aarch64; A72 (410f083); supercop-20191221  
a72: 2 x 2100MHz; 2015 Mediatek MT8173; aarch64; A72+crypto (418f080); supercop-20170904  
pmo0145: 64 x 2500MHz; 2018 Cavium ThunderX2 CN980; aarch64; ThunderX2 (431f0a1); supercop-20191017