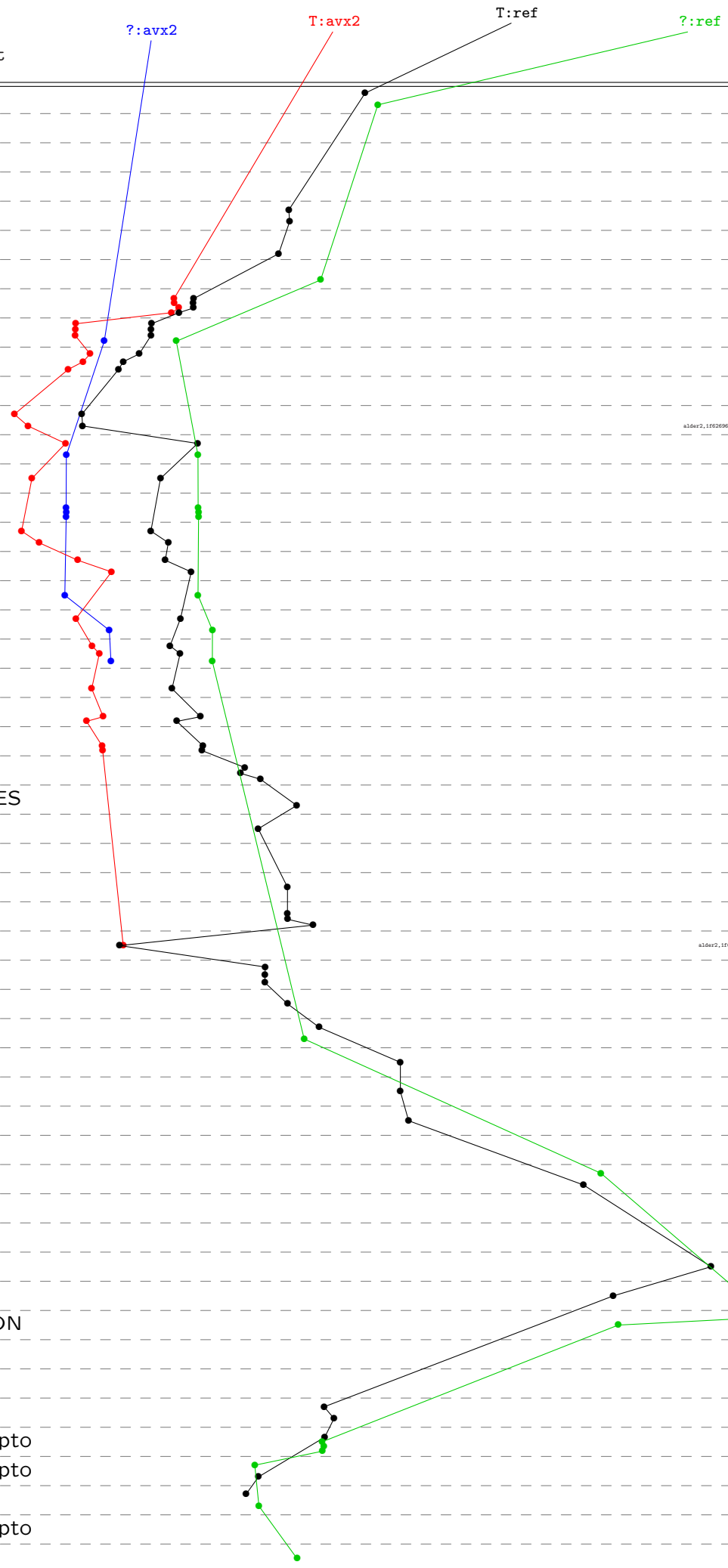


crypto_sign
 sphincsfs192shake256robust
 implementations
 amd64 Bobcat
 amd64 K8
 amd64 K10 65nm
 amd64 K10 45nm
 amd64 K10 32nm
 amd64 Bulldozer
 amd64 Piledriver
 amd64 Zen
 amd64 Zen 2
 amd64 Zen 3
 amd64 Knights Landing
 amd64 Golden Cove
 amd64 Cascade Lake
 amd64 Tiger Lake
 amd64 Skylake+512x2
 amd64 Ice Lake
 amd64 Comet Lake
 amd64 Cannon Lake
 amd64 Coffee Lake
 amd64 Kaby Lake
 amd64 Skylake
 amd64 Broadwell+AES
 amd64 Haswell+AES
 amd64 Ivy Bridge+AES
 amd64 Sandy Bridge+AES
 amd64 Sandy Bridge
 amd64 Westmere
 amd64 Core 2 45nm
 amd64 Core 2 65nm
 amd64 Gracemont
 amd64 Tremont
 amd64 Goldmont Plus
 amd64 Goldmont
 amd64 Airmont
 amd64 Silvermont
 amd64 Bonnell
 ppc32 G3
 riscv64 U54
 mipso32 Octeon II
 armeabi Armada
 armeabi Cortex-A7
 armeabi Cortex-A8
 armeabi Cortex-A9+NEON
 armeabi Cortex-A15
 aarch64 X-Gene
 aarch64 Cortex-A53
 aarch64 Cortex-A53+crypto
 aarch64 Cortex-A57+crypto
 aarch64 Cortex-A72
 aarch64 Cortex-A72+crypto
 aarch64 ThunderX2

https://bench.cr.y.p.to
 20230702



bBobcat: 2 x 1650MHz; 2011 AMD G-T56n; amd64; Bobcat (600f10); supercop-20230630
 m4e50: 2 x 1650MHz; 2011 AMD E-450; amd64; Bobcat (600f20); supercop-20200618
 nae: 2 x 2000MHz; 2006 AMD Athlon 64 X2; amd64; K8 (40f2b); supercop-20171005
 gcc16: 8 x 2194MHz; 2008 AMD Opteron 8354; amd64; K10 65nm (100f23); supercop-20171218
 hydra3: 6 x 3300MHz; 2010 AMD Phenom II X6 1100T; amd64; K10 45nm (100f0a); supercop-20171218
 sonnigstar: 4 x 3200MHz; 2009 AMD Phenom II X4 955; amd64; K10 45nm (100f42); supercop-20170904
 hBae: 1 x 1700MHz; 2010 AMD Athlon II Neo K125; amd64; K10 45nm (100f63); supercop-20171218
 hydra4: 4 x 2600MHz; 2011 AMD A6-3850; amd64; K10 32nm (300f10); supercop-20230630
 hydra5: 4 x 2900MHz; 2011 AMD A8-3850; amd64; K10 32nm (300f10); supercop-20230630
 bobcat: 4 x 4000MHz; 2012 AMD FX-8350; amd64; Bulldozer (600f20); supercop-20171218
 calista: 4 x 4000MHz; 2012 AMD FX-8350; amd64; Bulldozer (600f20); supercop-20171218
 hydra6: 4 x 3100MHz; 2013 AMD FX-8120; amd64; Bulldozer (600f12); supercop-20171218
 saber210: 4 x 4000MHz; 2012 AMD FX-8350; amd64; Bulldozer (600f20); supercop-20230630
 hydra9: 2 x 3800MHz; 2012 AMD A10-5800K; amd64; Piledriver (610f01); supercop-20171218
 sPatriot: 2 x 2000MHz; 2012 AMD A10-4655M; amd64; Piledriver (610f01); supercop-20200618
 ryzen8: 8 x 3000MHz; 2017 AMD Ryzen 7 1700; amd64; Zen (800f11); supercop-20170905
 ryzen6: 6 x 3000MHz; 2017 AMD Ryzen 5 1600; amd64; Zen (800f11); supercop-20170905
 ryzen4: 4 x 3000MHz; 2017 AMD Ryzen 3 1300; amd64; Zen (800f11); supercop-20221122
 dall: 2 x 1700MHz; 2010 AMD Athlon II Neo K125; amd64; Zen (800f11); supercop-20210628
 ryzen9: 9 x 3000MHz; 2019 AMD EPYC 7742; amd64; Zen 2 (830f10); supercop-20230630
 ryzen7: 6 x 3000MHz; 2022 AMD Ryzen 5 4500U; amd64; Zen 2 (860f01); supercop-20230630
 lacienne: 4 x 2600MHz; 2021 AMD Ryzen 3 3300U; amd64; Zen 3 (820f11); supercop-20230630
 gwj1346: 64 x 2000MHz; 2019 AMD EPYC 7702; amd64; Zen 2 (830f10); supercop-20191017
 beeline: 6 x 4062MHz; 2021 AMD Ryzen 5 5600G; amd64; Zen 3 (a50f00); supercop-20211221
 saas: 16 x 3400MHz; 2020 AMD Ryzen 9 5950X; amd64; Zen 3 (a20f10); supercop-20220213
 cezanne: 6 x 3900MHz; 2021 AMD Ryzen 5 PRO 5650G; amd64; Zen 3 (a50f00); supercop-20230630
 gwj1291: 68 x 1400MHz; 2016 Intel Xeon Phi 7210; amd64; Knights Landing (506f71); supercop-20180818
 gwj1154: 64 x 1300MHz; 2016 Intel Xeon Phi 7210; amd64; Knights Landing (506f71); supercop-20170228
 alder: 4 x 3300MHz; 2022 Intel Core i3-12100; amd64; Golden Cove (906f3-00); supercop-20230630
 alder1.1f62690.1560000: 2 x 1600MHz; 2022 Intel Core i3-1215U performance cores; amd64; Golden Cove (906A4-40); supercop-20230630
 avx512math: 18 x 3000MHz; 2019 Intel Core i9-10980XE; amd64; Cascade Lake (506f7); supercop-20210126
 jomo076: 20 x 2500MHz; 2019 Intel Xeon Gold 6248; amd64; Cascade Lake (506f7); supercop-20191017
 pantbar: 4 x 2800MHz; 2020 Intel Core i7-1165G7; amd64; Tiger Lake (806c1); supercop-20230630
 sanj1024: 16 x 2100MHz; 2017 Intel Xeon Gold 6140; amd64; Skylake-SP (80641); supercop-20170804
 sanj0768: 8 x 2500MHz; 2017 Intel Core i7-9750; amd64; Skylake-SP (80641); supercop-20171212
 gwj1291: 68 x 1400MHz; 2016 Intel Xeon Phi 7210; amd64; Knights Landing (506f71); supercop-20210213
 gwj1154: 64 x 1300MHz; 2016 Intel Xeon Phi 7210; amd64; Knights Landing (506f71); supercop-20191017
 icelake2: 4 x 1000MHz; 2019 Intel Core i3-1035G1; amd64; Ice Lake (706e5); supercop-20221005
 icelake: 4 x 1100MHz; 2020 Intel Core i5-1030NG7; amd64; Ice Lake (706e5); supercop-20200626
 cubis0: 2 x 2100MHz; 2019 Intel Core i3-10110U; amd64; Comet Lake (806ec); supercop-20230630
 coast: 2 x 2100MHz; 2019 Intel Core i3-10110U; amd64; Comet Lake (806ec); supercop-20230630
 cannon: 2 x 2200MHz; 2018 Intel Core i3-8121U; amd64; Cannon Lake (90663); supercop-20190910
 r4000: 4 x 3300MHz; 2018 Intel Xeon E-2124; amd64; Coffee Lake (906e3); supercop-20230630
 n13v16: 6 x 3200MHz; 2017 Intel Core i7-8700; amd64; Coffee Lake (906e3); supercop-20190910
 kiazaba: 4 x 3000MHz; 2017 Intel Xeon E3-1220 v6; amd64; Kaby Lake (906e9); supercop-20230630
 shoufara: 2 x 2400MHz; 2017 Intel Core i7-8700; amd64; Kaby Lake (906e9); supercop-20211222
 intalacul1: 4 x 3100MHz; 2018 Intel Core i7-8809G; amd64; Kaby Lake (906e9); supercop-20191017
 saas: 2 x 3300MHz; 2015 Intel Pentium G4400; amd64; Skylake (506c3); supercop-20171218
 saaba: 4 x 3000MHz; 2015 Intel Xeon E3-1220 v5; amd64; Skylake (506c3); supercop-20230630
 gwj1461: 28 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20180818
 sanj157: 16 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20170228
 sanj0768: 8 x 2500MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20171212
 bolsh: 18 x 1700MHz; 2015 Intel Core i7-5500U; amd64; Broadwell+AES (50664); supercop-20230630
 saas: 2 x 3000MHz; 2015 Intel Xeon E3-1220 v5; amd64; Skylake (506c3); supercop-20230630
 gwj1461: 28 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20180818
 sanj157: 16 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20170228
 sanj0768: 8 x 2500MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20171212
 gwj1461: 28 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20180818
 sanj157: 16 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20170228
 sanj0768: 8 x 2500MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20171212
 gwj1461: 28 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20180818
 sanj157: 16 x 2400MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20170228
 sanj0768: 8 x 2500MHz; 2016 Intel Xeon E5-2650 v4; amd64; Broadwell+AES (406f3); supercop-20171212
 hedeira: 4 x 2500MHz; 2012 Intel Xeon E3-1265L V2; amd64; Ivy Bridge+AES (306a9); supercop-20210326
 hedeira: 4 x 2500MHz; 2012 Intel Xeon E3-1265L V2; amd64; Ivy Bridge+AES (306a9); supercop-20210326
 robia281: 8 x 2600MHz; 2012 Intel Xeon E5-4650L; amd64; Sandy Bridge+AES (206d7); supercop-20170228
 hydra7: 4 x 3100MHz; 2011 Intel Xeon E3-1225; amd64; Sandy Bridge+AES (206a7); supercop-20230630
 hSaandy: 2 x 2100MHz; 2011 Intel Core i3-2310M; amd64; Sandy Bridge (206a7); supercop-20221122
 gwjsw: 2 x 3200MHz; 2010 Intel Core i5-650; amd64; Westmere (20652); supercop-20171016
 wolfdale: 2 x 3060MHz; 2009 Intel Core 2 Duo E7600; amd64; Core 2 45nm (1067a); supercop-20230630
 kstana: 2 x 2137MHz; 2006 Intel Core 2 Duo E6400; amd64; Core 2 65nm (6f6); supercop-20171016
 tsrdant: 2 x 2000MHz; 2007 Intel Core 2 Duo T7300; amd64; Core 2 65nm (6f6); supercop-20230630
 nargant: 4 x 2604MHz; 2007 Intel Core 2 Quad Q6600; amd64; Core 2 65nm (6f6); supercop-20230630
 lafour: 4 x 2394MHz; 2007 Intel Core 2 Quad Q6600; amd64; Core 2 65nm (6f6); supercop-20201130
 alder2.1f62690.3300000: 4 x 1600MHz; 2022 Intel Core i3-1215U efficiency cores; amd64; Gracemont (906A4-20); supercop-20230630
 Jasper2: 2 x 1100MHz; 2021 Intel Celeron N4500; amd64; Tremont (906c0); supercop-20230630
 Jasper3: 4 x 2000MHz; 2021 Intel Celeron N5105; amd64; Tremont (906c0); supercop-20230630
 Jasper: 4 x 1100MHz; 2021 Intel Pentium Silver N6000; amd64; Tremont (906c0); supercop-20230630
 gemini: 2 x 1100MHz; 2019 Intel Celeron N4020; amd64; Goldmont Plus (706a8); supercop-20230630
 wooden: 4 x 1500MHz; 2016 Intel Celeron J3455; amd64; Goldmont (506c9); supercop-20230630
 sov1M8h1: 16 x 2100MHz; 2017 Intel Atom C3955; amd64; Goldmont (506f1); supercop-20191017
 mcccc: 4 x 1600MHz; 2015 Intel Pentium N3700; amd64; Airmont (406c3); supercop-20230630
 cherry: 4 x 1440MHz; 2016 Intel Atom i5-Z8350; amd64; Silvermont (406c4); supercop-20230630
 hBaton: 2 x 1866MHz; 2011 Intel Atom D2500; amd64; Bonnell (306f1); supercop-20230630
 alntendosilll1auxg: 1 x 720MHz; 2006 IBM PowerPC Broadway; ppc32; G3 (G3); supercop-20191221
 h1fivuanleashetvics: 4 x 1400MHz; 2017 SiFive Freedom U540; riscv64; U54 (sifive,u54-mc); supercop-20191221
 riscvuanleashetvics000: 4 x 1000MHz; 2017 SiFive Freedom U540; riscv64; U54 (sifive,u54-mc); supercop-20210326
 gcc23: 2 x 2000MHz; 2011 Cavium Octeon II CN6120; mipso32; Octeon II (cmnips64v2); supercop-20230630
 epyoffazf2: 2 x 2000MHz; 2011 Cavium Octeon II CN6120; mipso32; Octeon II (cmnips64v2); supercop-20220213
 teside: 1 x 1200MHz; 2010 Marvel Armada 310; armeabi; Armada (562f3111); supercop-20170718
 berry2: 4 x 900MHz; 2016 Broadcom BCM2836; armeabi; Cortex-A7 (410f075); supercop-20230630
 nBlack: 1 x 1000MHz; 2012 TI Sitara XAM3359AZC12100; armeabi; Cortex-A8 (413fc082); supercop-20230630
 arkix: 4 x 1200MHz; 2011 Freescale i.MX6 Quad; armeabi; Cortex-A9+NEON (412f09a); supercop-20200702
 arkie: 4 x 1200MHz; 2012 Samsung Exynos 44127; armeabi; Cortex-A9+NEON (413f090); supercop-20191221
 aoveaaaax: 4 x 1200MHz; 2011 Freescale i.MX6 Quad; armeabi; Cortex-A9+NEON (412f09a); supercop-20191221
 jstsoast1: 4 x 2065MHz; 2014 NVIDIA Tegra K1; armeabi; Cortex-A15 (413fc0f3); supercop-20170728
 gcc16: 8 x 1600MHz; 2014 APM 88320B-X1; aarch64; X-Gene (500f000); supercop-20171218
 p13hapla: 4 x 1400MHz; 2018 Broadcom BCM2837B0; aarch64; Cortex-A53 (410f034); supercop-20230630
 p13hapla: 4 x 1400MHz; 2018 Broadcom BCM2837B0; aarch64; Cortex-A53 (410f034); supercop-20221122
 sude: 8 x 1600MHz; 2018 AMD Ryzen 7 1700; aarch64; Cortex-A53+crypto (410f034); supercop-20170404
 leptostan1818: 4 x 1800MHz; 2019 AMD Ryzen 5 5600G; aarch64; Cortex-A53+crypto (410f034); supercop-20230630
 goglacraslav: 4 x 1500MHz; 2019 NXP i.MX 8M; aarch64; Cortex-A53+crypto (410f034); supercop-20191221
 renegeadecloak839c: 4 x 1800MHz; 2019 Rockchip RK3398; aarch64; Cortex-A53+crypto (410f034); supercop-20230630
 jstsoast1: 4 x 1734MHz; 2015 NVIDIA Tegra X1; aarch64; Cortex-A57+crypto (418f071); supercop-20191017
 varbear: 8 x 2000MHz; 2016 AMD Opteron A1100; aarch64; Cortex-A57+crypto (4116072); supercop-20200626
 pi4h: 4 x 1500MHz; 2019 Broadcom BCM2711; aarch64; Cortex-A72 (410f083); supercop-20221122
 rpi4buntu64: 4 x 1500MHz; 2019 Broadcom BCM2711; aarch64; Cortex-A72 (410f083); supercop-20191221
 a72: 2 x 2100MHz; 2015 Mediatek MT8173; aarch64; Cortex-A72+crypto (418f080); supercop-20190904
 jmo145: 64 x 2500MHz; 2018 Cavium ThunderX2 CN9980; aarch64; ThunderX2 (431f0a1); supercop-20191017

Time 268435456 536870912 1073741824 2147483648 4294967296