						SCENEO: IMPORT .CSV PRODUCED BY BENCHMARKING	MANDELBULB: IMPORT .CSV PRODUCED BY BENCHMARKING	Add plots from data
	FLOP Count	SCENE0		FLOR Count	ANDELBULB	(select cell 4Q, File > Import > Upload > ".csv > replace data at selected sheet > import)		Add plots from data
BASELINE	n FLOPs		Perf. SCENEO	n FLOPs	Cycles Perf. MANDEL	n Run 0 Run 1 Run 2 Run 3 AVG	n Run 0 Run 1 Run 2 Run 3 AVG	
DAGLLINE	100 420292896		0.1733372751	100 1100535906	Cycles Perf. MANDEL. 2044395351 0.5383185329	100 2429150842 2424228244 2423032284 2422434904 2424711568	100 2029336444 2038990326 2047723814 2061530820 2044395351	Peak
	200 1687865957	9763699284	0.1733372731	200 4426746245	8609961504 0.5141423969	200 9872325916 9734971088 9725076750 9722423384 9763699284	200 8493776360 8655743534 8663010882 8627315240 8609961504	4 Performance of Baseline on Intel i7-7700 CPU, 3,60GHz
MACHINE INFO [NIHAT]	300 3795440462	21926542394	0.1730979921	300 9989531072	18620920788 0.5364681578	300 21925180368 22030044058 2187864338 2187230176 2192654239	300 1907625848 1851693526 1845511248 1843537691 1862092078	4
Jbuntu 20.04 (Kaby Lake S+)	400 6753029980		0.1735922332	400 17773929411	33113010883 0.5367657285	400 38906350814 38943127150 3890060555 3885664738 3890168272	400 3295942718 3319043248 3330472061 3299746325 3311301088	Perf. MANDEL. Perf. SCENE0 Peak
7-7700 CPU, 3.60GHz (4.2 w. TB)	500 10551160856	60798294893	0.1735436968	500 27725099577	51559386413 0.5377313716	500 60741836150 60801456614 6078267491 6086721189 6079829489	500 5180768085 5155644794 5164288608 5123053078 5155938641	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
PERF: 4	600 15208083700	87775932176	0.1732602927	600 39879672580	74038848882 0.5386317208	600 87548005380 87748602742 8750730969 8829981089 8777593217	600 7402050627.7396151805.7399059322.7418277797.7403884888	4
	700 20688396451	119175321665	0.1735963131	700 54359017860	100485718836 0.5409626213	700 11925153967(11916718212: 1190898798 1191926850 1191753216	700 1014215276 1002726215 1001467945 1001019316 1004857188	4 3
d cache: 128 KiB	800 27045838300	155817575870	0.1735737329	800 70976478881	130832647728 0.5424982228	800 155739884111155859422811155891123215577987321558175758	800 1306372296 1307078262 1310527036 1309328313 1308326477	4 "
i cache: 128 KiB	900 34240284003	197182370452	0.1736477958	900 89910372876	165609045995 0.5429073776	900 19708277421; 19719251772; 1971032066 1973509832 1971823704	900 1654204112 1656333181 1657544331 1656280214 1656090459	4 g
2 cache: 1 MiB 3 cache: 8 MiB	1000 42237032851		0.1733079126	1000 110895695913	204885212142 0.5412576865	1000 24475002167 24331931715 2434744320 2432999559 2437109316	1000 2053465090 2049960397 2051106022 2040876975 2048852121	4 98 4
	1100 51118216382		0.1735114327	1100 134184685556	247063442153 0.5431183359	1100 29479297544-29445630592-2943296381 2948613849 2946100761	1100 2473731010 2468758476 2468641001 2471407197 2470634421	4 2
	1200 60828388510		0.1736033372	1200 159772821945	294262746383 0.5429597321	1200 35021491925; 35012537172; 3507092491 3504992891 3503872073	1200 2943685515 2940376045 2942620217 2943828077 2942627463	4
	1300 71406306703		0.1735307085	1300 187483754420	345221776237 0.543082063	1300 41175989126(41128929319) 4111151970 4117992020 4114908958	1300 3450704170 3451438717 3454057532 3452670629 3452217762	4
	1400 82775102722		0.1735585738	1400 217371293414	400256778408 0.5430796057	1400 47662140380 47724998536 4768084455 4770358347 4769289173	1400 4004992658 4001728886 3999995984 4003553606 4002567784	4 0 500 1000 1500 200
	1500 95054661362	547747656022	0.173537322	1500 249549114331	459326325008 0.5432937342	1500 54716597736 54798435065 5475692204 5482710755 5477476560	1500 4591006684 4594363321 4593317238 4594365756 4593263250	4
	1600 108144809447		0.1735668698	1600 283965550485	522852551565 0.543108281	1600 62347794182162311238614-6229035013 6227976914 6230728801	1600 5225292287 5230401515 5227162813 5231245447 5228525515	4 n(height)
	1700 122091663380		0.1735819477	1700 320580614654	590457838358 0.5429356574	1700 70354382255170293075274.703501623970348833477033661334	1700 5903215082 5905892842 5906742623 5902462985 5904578383	4
	1800 136904996758		0.1736417277	1800 359482314783	662367411467 0.542723432	1800 788716508374788157090044788256196178860516557884337400	1800 6619968335 6631403748 6622594573 6620729801 6623674114	4
	1900 152511689659	07 307 0002 100	0.1734919197	1900 400538262838	737799476731 0.542882281	1900 87863625694(87911614886) 8798269918 8787040110 8790708521	1900 7378415173 7378375859 7377915393 7377272642 7377994767	4
	2000 168978806442	973277728042	0.1736182814	2000 443774071817	817184805191 0.5430522802	2000 97323302014 97353546862 9732671569 9730752664 9732777280	2000 8173255173 8170075570 8174900859 8169160605 8171848051	4
						SCENEO: IMPORT .CSV PRODUCED BY BENCHMARKING	MANDELBULB: IMPORT .CSV PRODUCED BY BENCHMARKING	Add when from data
		SCENE0			ANDELBULB			Add plots from data
	FLOP Count			FLOP Count				
aster_opt1	n FLOPs	-,	Perf. SCENE0	n FLOPs	Cycles Perf. MANDEL.	n Run 0 Run 1 Run 2 Run 3 AVG	n Run 0 Run 1 Run 2 Run 3 AVG	Peak
	100 205672486		0.2629054843	100 947258331	1050083150 0.9020793553	100 783693156 780063834 784231758 781234464 782305803	100 1050783002 1050759726 1049639612 1049150260 1050083150	4
	200 826064127		0.2637996391	200 3810635562	4231545114 0.9005305295	200 3128750528 3125113974 3125484446 3146280424 3131407343	200 4235804460 4227889432 4238429310 4224057254 4231545114	Performance of OPT1 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT]	300 1857334533	7078801414	0.2623798048	300 8598864487	9555325097 0.8999028709 16987406275 0.9006569068	300 7150575658 7056346318 7042483178 7065800502 7078801414	300 9566253598 9550196182 9550067332 9554783278 9555325097 400 1699379799 1700396871 1697518719 1697667119 1698740627	4
ıntu 20.04	400 3304962820	12524733447	0.2638749027	400 15299824790		400 12545570374 12498195622 1252761047 1252755732 1252473344 500 19530461664 19502739374 1950610337 1951237227 1951291917	400 1699379799 1700396871 1697518719 1697667119 1698740627 500 2648968509 2648288171 2645752778 2646031450 2647260227	4 Perf. MANDEL. Perf. SCENEO Peak
7700 CPU, 3.60GHz (4.2 w. TB)	500 5163456797 600 7442682316	28141870271	0.2646173415	500 23865353419 600 34327978907	26472602274 0.9015114257 38059157540 0.9019637093	500 19530461664 19502/393/4 195061033/195123/22/195129191/ 600 28131660618 28119475400 2818574219 2813060287 2814187027	500 2648968509 2648288171 2645752778 2646031450 2647260227 600 3807201283 3805775951 3803764140 3806921640 3805915754	4 4
PERF: 4	600 7442682316 700 10124511449	28141870271 38353186409	0.264470067	700 46791607920	51953065025 0.9019637093	700 38250675330 38239243470 3862358075 3829924608 3835318640	700 5192854145 5186117636 5212857193 5189397034 5195306502	4
cache: 128 KiB	100 101011111		0.2639809726		67736532874 0.900651538	700 38250675330 38239243470 3862358075 3829924608 3835318640 800 50053982692 50053970606 5001580452 5015904402 5007070046	700 5192854145 5186117636 5212857193 5189397034 5195306502 800 6772790404 6772931255 6774051498 6774839991 6773653287	4
2 cache: 1 MiB 3 cache: 8 MiB	900 13235832743 900 16756755096		0.2643428716	900 61095667409 900 77393682877	85849470226 0.9019603575	900 63365360738 63307482562 6337679126 6339697323 6336165194	900 8582095547 8589761125 8586629455 8581301963 8584947022	4 , , , ,
L3 cache: 8 MiB	1000 16/56/55096 1000 20670177292	78104069264	0.2644620931	900 7/393682877 1000 95457123183	105972901703 0.9007691745	900 63365360738 63307482562 6337679126 6339697323 6336165194 1000 78121943826 78034581054 7817543394 7808431823 7810406926	900 85820955478589761125858662945585813019638584947022 1000 10583428561058008345105876353710638013291059729017	4 8
	1100 20670177292 1100 25016565979	78104069264 94599228193	0.2644478867	1000 9545/123183 1100 115504768549	128286178041 0.9007691745	1100 94969897750 94489142372 9447603855 9446183410 9459922819	1000 1058342856 1058008345 1058763537 1063801329 1059729017 1100 1280820124 1287349630 1281310089 1281967276 1282861780	4 5 2
	1200 29768789579		0.2646397078	1200 137530712605	152678920619 0.9007838937	1200 11252509896; 11257453856; 1123848685 1124674655 1124879929	1200 1526863618 1525971449 1528605557 1525716200 1526789206	4 50
	1200 29/68/895/9 1300 34945212067		0.2646397078	1200 13/530/12605 1300 161383964183	152678920619 0.9007838937	1200 11252509896;11257453856;1123848685;1124674655;1124879929 1300 13210542834;13254086054;1321083522;1319601144;1321786888	1200 1526863618 1525971449 1528605557 1525716200 1526789206	1 · · · · · · · · · · · · · · · · · · ·
	1400 40508658293		0.2643765648	1400 187110659224	207730769467 0.9010152502	1300 132105428341132540880541132108352213198011441321788888	1400 2081910542 2075440475 2075068299 2076811460 2077307694	4
	1500 46518472964		0.2647406125	1500 214809274136	238482564847 0.9007336627	1500 17657077620: 17574727861: 1759997398 1761951437 1761282346	1500 2386479382 2384213580 2385450587 2383159042 2384825648	4 0 500 1000 1500 20
	1600 52924016474		0.2643045762	1600 244434223427	271883298234 0.8990409673	1600 20036879854120057647831 1999599617 2000497390 2002387444	1600 2724284561 2717037750 2715658116 2718351500 2718832982	4 500 1000 1500 20
	1700 59750125522		0.2644109926	1700 275951892091	306410821729 0.9005944716	1700 225719570101225790494241226685373922570231482259744382	1700 3064593943 3064165994 3064544606 3063128324 3064108217	n(height)
	1800 66999058724		0.2642221805	1800 309437931494	343584505485 0.9006166651	1800 25328091133;25403624081;2536038883;2533625991;2535709099	1800 3434044720 3441551890 3433996422 3433787185 3435845054	
					0.0000100001			4
				1900 344779962910	383261716004 0 8005040504	1000 28200282402 28201180110 2820218065 2818160403 2822106427	1900 3832537437 3830509444 3841955806 3825465951 3832617160	4
			0.2644728796	1900 344779962910 2000 381996663889	383261716004 0.8995940594 423991775309 0.9009530046	1900 28209282402 28291189119 2820218065 2818160493 2822106427 2000 31282513752 31239226846 3125074899 3123467069 3125179007		4 4 4
	1900 74637061343	282210642780	0.2644728796	1000 044770002010	0.0000040004	2000 31282513752 31239226846 3125074899 3123467069 3125179007	1900 3832537437 3830509444 3841955806 3825465951 3832617160 2000 4240016089 4239094379 4239723250 4240837293 4239917753	4 4 4 4
	1900 74637061343	282210642780 312517900708	0.2644728796	2000 381996663889	0.0000040004	1000 202020240212020110110120202100002010100400202	1900 3832537437 3830509444 3841955806 3825465951 3832617160	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
	1900 74637061343 2000 82695569736	282210642780 312517900708 SCENE0	0.2644728796 0.2646106657	2000 381996663889 MAI FLOP Count	423991775309 0.9009530046	2000 31282513753 3128925846 3125074869 312347068 3125179007 SCENEO: MPORT CSV PRODUCED BY BENCHMARKING	1900 38325374377 3830509444 3841955806 3825465951 3832517160 2000 4240016089 4239094379 4239723250 4246337293 4239917753 MANDELBULB: IMPORT. CSV PRODUCED BY BENCHMARKING	4 4 4 Add plots from data
aster opt2	1900 74637061343 2000 82695569736 FLOP Count n FLOPs	282210642780 312517900708 SCENE0	0.2644728796 0.2646106657	2000 381996663889 MA FLOP Count n FLOPs	423991775309 0.9009530046 ANDELBULB Cycles Perf. MANDEL.	2000 31282513750-3129225846I 3125074899 3123474693 3125179007 SCENEO: MAPORT CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG	1900 3832537437.3830509444.3841955908 3825469596 13825817160 2000 4240016089 4259094379 4239723290 4240837293 4259917753 MANDELBULB: IMPORT. CSV PRODUCED BY BENCHMARKING n Run 0 Run 1 Run 2 Run 3 AVG	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
aster_opt2	1900 74637061343 2000 82695569736 FLOP Count n FLOPs 100 205672486	282210642780 312517900708 SCENE0 Cycles F	0.2644728796 0.2646106657 Perf. SCENE0 0.4180814515	2000 381996663889 MA FLOP Count n FLOPs 100 947258331	423991775309 0.9009530046 ANDELBULB Cycles Perf. MANDEL. 648456867 1.460788495	2000 31282513753-31239225846 3125074899 3123467068 3125179007 SCENEG: MPORT CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 496346306 496073182 4920471864 488536980 491943580	1900 382237247373830509444 384 1955905 3825469595 1 3832617 190 2000 4240016089 4239094379 4239723250 4240837283 4239917753 MANDELBULB: IMPORT. CSV PRODUCED SY BENCHMARKING In Run D Run 1 Run 2 Run 3 AVG 100 667175964 644063800 641422470 641165214 649456867	4 4 Add plots from data Peak 4
	1900 74637061343 2000 82695569736 FLOP Count n FLOPs 100 205672486 200 826064127	282210642780 312517900708 SCENE0 Cycles F 491943580 1948179327	0.2644728796 0.2646106657 Perf. SCENE0 0.4180814515 0.4240185262	2000 381996663889 MA FLOP Count n FLOPs 100 947258331 200 3810635562	423991775309 0.9009530046 ANDELBULB Cycles Perf. MANDEL. 648456867 1.460788495 2590997465 1.470721455	2000 31282513750-31239225846I 3125074899 3123477693 3125179007 SCENEO: MIRORIT CSIV PRODUCED BY BEINGHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 495345306 490073182 492417384 48933980 491943580 200 1959241738 1945695669 14940260800 1946459108 1948179327	1900 382/337437,359.0509444 384 1955908 3825469961 3825467160 2000 4240016089 4239094379 4239723230 4240837293 4259917753 MANDELBULB: IMPORT CSV PRODUCED BY BENICHMARKING In Run 1 Run 1 Run 2 Run 3 AVG 100 667173694 440405300 6144 22470 641165274 64565667 200 2916971636 25825291662 2582974662 425167444 2590697465	Pesk 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT]	## FLOP Count ##	282210642780 312517900708 SCENE0 Cycles F 491943580 1948179327 4378977804	0.2644728796 0.2646106657 Perf. SCENE0 0.4180814515 0.4240185262 0.424147967	2000 381996663889 MA FLOP Count n FLOPs 100 947258331 200 3810635562 300 8598864487	423991775309 0.9009530046 ANDELBULB Cycles Perf. MANDEL. 644455867 1.460788495 2560997465 1.4770271455 5829706392 1.475008156	2000 31282513753 31239225446 3125074699 3123467069 3125179007 SCENED: MPORT CSV PRODUCED BY BENCHMARKENG In Run 0 Run 1 Run 2 Run 3 AVG 100 469346306 490073182 492417854 488936980 491943590 200 1969241736 1945696666 1946925000 1946959101 1948179327 200 4481954694 4359057374 7375159446 63495904 2479877904	1900 382237247373390509444 384 1955905 3825465951 3323617160 2000 4240016089 4239094379 4239723250 4240837293 4239917753 MANDELBULB: IMPORT. CSV PRODUCED SV BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667175984 644063800 641422470 641165214 649456867 200 2616871635 62562536166 2365274624 2581607434 2596997465 300 6594041724 6582255854 586255557 636969316 65827076332	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT]	1900 74637061343 2000 82695569736 FLOP Count n FLOPs 100 205672486 200 826064127 300 1857334533 400 3304952820	282210642780 312517900708 SCENE0 Cycles # 491943580 1948179327 43789777804 7764900798	0.2644728796 0.2646106657 0.2646106657 0.4180814515 0.4240185262 0.424147967 0.4256284666	2000 381996653889 FLOP Count FLOPs 100 947258331 200 3810835622 300 8598864487 400 15299824790	423991775309 0.9009530046 ANDELBULB Cycles Perf. MANDEL 64845587 1.460788495 2590997465 1.4770721455 5829705332 1.475090158 1.07904192259 1.471958905	SCENED: MPORT CSV PRODUCED BY SENCHMARKANG	1900 382/337437,383000444 384 1965908 3825469969 1 3825817 190 2000 42400 1 6089 4239004376 4239723230 1 4240837293 4239917753	Pesk 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] ntu 20.04 1700 CPU, 3.60GHz (4.2 w. TB)	### 1900 74637061343 ### 2000 82695569736 FLOP Count FLOPs	282210642780 312517900708 SCENE0 Cycles F 491943580 1948179327 4378977804 7764900798 12105748254	0.2644728796 0.2646106657 0.2646106657 0.4180814515 0.4240185262 0.424147967 0.4256284666 0.4265293387	### PLOP Count FLOP Count	ANDELBULB Cycles Perf. MANDEL. 644458887 14.07021465 5820705392 14.77021465 10334192256 14.77038895 10334192256 14.770389895	2000 31282513752) 312392258449 3125074899 3123487069 3125179007 SCENED: MIPORT CSV PRODUCED BY BENCHMARKENG In Run D Run 1 Run 2 Run 3 AVG 100 486334300 480073182 4920417854 488536980 491943580 200 1966241735 1696696669 1946628090 1146695910 1948179327 300 44181954964 4359073374 57375153446 5045900 4376973004 400 7786474624 7756646859 7748171090 7756316662 775600768 500 12141427775 12102678916 217553347 120253991 1215533391 1215674625	1900 3832537437.3930509444.3841955908 3825469595 13825817160 2000 4240016089 4230094379 4239723220 4240837293 4259917753 MANDELBULB: IMPORT. CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667775964 644063800 641422470 641165274 69445695 200 2618671638 258255816 65829874624 258017434 2590197465 300 5830440124 5829253554 5828555576 5830596316 5829706392 400 1045587452 1037469901 1037233271 1037375227 1039419225 500 16189814207 1629345811 1617359021 24688744 1618767618	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT] ntu 20.04 1700 CPU, 3.60GHz (4.2 w. TB) ERF: 4	1900 74637061343 2000 82595569736 FLOP Count FLOP	282210642780 312517900708 SCENE0 Cycles F 491943580 1948179327 4378977804 7764900798 12105748254 17377664586	0.2644728796 0.2646106657 0.2646106657 0.4180814515 0.4240185262 0.425284666 0.425284666 0.4265293387 0.4265293387 0.4265293387	### PLOP Count FLOPs 100 947258331 200 3810635562 300 8598864487 400 15298624790 500 23865353419 600 34327978907	ANDELBULB Oycles Perf, MANDEL 250901715309 0.9009530046 Oycles Perf, MANDEL 2500007465 1.40772445 5522705392 1.475008158 10394192259 1.475088158 10394192259 1.475089159 122289780469 1.475089159 1.4750819159 1.4750819159	No.	1900 382/337437,3830000444 384 1965906 3825469969 1 3823617 190 2000 42400 1 6089 4239004376 4239723250 1 4240837293 4239917753	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT] ntu 20.04 700 CPU, 3.60GHz (4.2 w. TB) ERF: 4	1900 74637061343 2000 8259559736	282210642780 312517900708 SCENEO Cycles 8 491943580 1948179327 4378917804 7764900798 12105748254 12105748254 123553151075	0.2644728796 0.2646106657 Perf. SCENE0 0.4180814515 0.424185262 0.426284666 0.4265293387 0.4282901353 0.4280407045	## FLOP Count n	423991775309 0.9009530048 ANDELSULO Cycles Perl, MANDEL 644508667 1.460738495 2590937465 1.47002185 85827705322 1.47300418 1.6187376188 1.474291501 23289780464 1.473603 3172670474 1.474833309	2000 3128251375a) 312392258440 3125074869 3123467069 3125179007 SCENED: MIPORTY CSV PRODUCED BY BENCHMARKENG In Run D Run 1 Run 2 Run 3 AVG 100 4865346306 480073162 4822417854 486836800 487943580 200 1966241739 168696669 196606500 114646910 101 1948179327 300 4419156964 4355075374 5373153446 54985069 4379877804 400 7796474824 7795646859 7748171090 7795014662 774600798 500 12141427778 12102678981 2115533347 1023639981 4210574625 500 1216442778 12102678981 2115533347 1023639981 4210574625 500 22654689330 29266542720 256644224 2373796602 2365515107	1900 3832537437.3930509444.3841955908 3825469595 13825817160 2000 4240016089 4239094379 4239723230 4240837293 4259917753 MANDELBULB: IMPORT: CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667175964 644063800 641422470 641165214 648456867 200 2518671586 258253566 65825874624 259097445 259097465 300 680340124 65826253564 8526355576 680069316 65827076392 400 1045587452 1037480901 1037233321 1037375227 1039419225 500 16188412071 1621994511 1617386012 2161885744 1618767618 600 2325272698 23281325628 2328533131 12380275047 2238978046 700 3175058026 3173124081311 1617385012 2158858744 16187676194	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT] ntu 20.04 700 CPU, 3.50GHz (4.2 w. TB) ERF: 4 cache: 128 KiB cache: 128 KiB cache: 1 MiB	1900 74637061343 2000 82695569736	282210642780 312517900708 SCENE0 Cycles F 491943580 1948179327 4378977804 12105748254 17377664586 23653151075 30932555599	0.2644728796 0.2646106657 Perf. SCENE0 0.4180814515 0.4240185282 0.424147967 0.4255284666 0.4265293387 0.4282901353 0.428901353 0.428907045 0.4278936834	### FLOP Count n FLOPs 100 38199663889 ##################################	22991775309 0.9009530046 ANDELBULB Cycles Perf, MANDEL 2500097455 14.0072455 2500097455 14.7002145 2502976382 4.14750415 10394192256 14.17508965 16187576188 14.742457 32289780484 14.743833309 41421922730 14.74389971 14.743833309	2000 31282513753.312392258461 3125074899 3123467069 3125179007 SCENEO: MPORT CSV PRODUCED BY BENCHMARKING IN Run C Run 1 Run 2 Run 3 AVG 100 496346506 490073182 4920417854 488893890 491943590 200 19952041736 194699666 1940826900 1946959109 1949179327 300 441815864 4335075374 3375153446 43546502 4376917904 400 7798474824 77956940859 7749171900 7799316462 779600798 500 12141427776 12102579816 1211553347 1205335994 1210574825 500 17368169219 17373596892 17373792032 1737320194 1737796459 700 29825988330 2382654270 2364641224 2371 360900 236515107 500 30924582531 308979597974 307613622 30769062 235515107	1900 382:537437.3305009444 384 1955908 3825469969 13925917153 MANDELBULB: IMPORT CSV PRODUCED BY GENCEMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667175984 644053800 6541422470 641165214 64465867 200 51661715984 654053800 6541422470 641165214 64465867 200 51661715984 654053800 6541422470 641165214 6465687 200 51661715984 654053800 6541422470 641165214 61645687 200 51661715984 654053800 6541422470 641165214 61645687 200 51661715984 654053800 6541422470 641165214 61645687 200 5167175984 654053800 6540585976 8550568516 8562705382 400 1045567452 10374586901 1037233321 10373527547 123897046 200 516727688 23815280580 139253814178173279996 3172870946 700 3175058021 3172840849 3171240821 3172379996 3172870947 200 41462221194 13890555 4101698014 447483254 442162273	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT] ntu 20.04 700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74637061343 2000 82696569736 FLOP Count n FLOPs 100 205672486 200 826064127 300 18573346533 400 330469220 500 5163465797 600 7442682316 700 10124511449 800 13235832743 900 1876755096	282210642780 312517900708 SCENEO Cycles F 491943580 1948179327 4378977804 7764800788 12105748254 17377664586 23653151075 30932526599 39083999485	0.2644728796 0.2646106657 Perf. SCENEO 0.4180814515 0.4240185282 0.424147967 0.4258224666 0.4258224666 0.4265293387 0.4284047045 0.4278936834 0.428736593	## FLOP Count FLOP Count FLOP Signature	42991775309 0.9009530048 ANDELBULG Cycles Perf. MANDEL 648458867 1.4400788495 2509078745 1.47002185 8562776532 1.47008185 1.039416258 1.47105695 1.6187676188 1.474291501 3712670847 1.474695394 1.474695379 1.474696717 2528977809 1.474696717	2000 3128251375a3 312392258449 3123074899 3123487069 3125179007 SCENED: MIPORTY CSV PRODUCED BY BENCHMARKENG In Run 0 Run 1 Run 2 Run 3 AVG 100 4865346306 486073162 4822417854 486836890 4891943580 200 1985641735 185666669 19468651000 1946695101 185779327 300 4418195494 4350075374 7375153446 439691001 4478917304 400 7796474824 7795640685 7748171000 779531 1862 7796400798 500 1214142777 1210267896 1215533347 102369998 1210574625 500 121644277 1210267898 1215533347 10236900 23651515107 500 20024562313 20087687074 2001301282 20095395155 3003256969 500 3921577264 50024753500 5004406855 3005325655 30053256984	1900 382337437.3930509444 3841955908 3825469596 13825817160 2000 4240016089 4259094379 4239723250 4249837293 4259917753 MANDELBULB: MPORT. CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667775964 644063800 641422470 641165214 648456867 200 2618671636 2852550 6616 2852974624 259610743 4259097465 300 5830440124 6826250554 5826855976 5830680316 5829705802 5820705802 400 1045567452 103746001 1037233231 21037375277 1038141225 500 1618641207162183451116173690121616838744 1616767618 600 2329272698 22226153262 232523131 22350275047 2256878046 700 3175065021 3172040494 3171204621 317239966 3172579047 800 41462221194 1386692554 4101893114 447483254 412192273 800 5258933478 524069535 1624732625 550065316 5258971768	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT] ntu 20.04 700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74637061343 2000 82696569736	282210642780 312517900708 SCENE0 Cycles 5 491943580 1948179327 4378977804 17377644826 17377644826 23653151075 30932528599 48150653428	0.2644728796 0.2646106657 2erf. SCENEO 0.4180814515 0.4240185262 0.424147967 0.4256294387 0.4285293387 0.4282901353 0.4282901353 0.428396593 0.428396593	FLOP Count n FLOPs 100 94725831 200 381035562 300 859864487 400 15298624797 500 46791607920 600 77395862977 700 67723183	229991775309 0.9009530046 ANDELEULB Oycles Perf. MANDEL 2490967745 1.400788495 2590907465 1.47027445 8522705392 1.47508189 10394192256 1.475080818 16187876188 1.47429151 25289770464 1.47428933309 14121922730 1.474596373 52589777680 1.471650473 52589777680 1.471650473	2000 312825137533 312392258461 3125074899 3123467068 3125179007 SCENEO: MPORT CSV PRODUCED BY SENCHMARKING In Run 1 Run 2 Run 3 AVG 100 49653465306 490073182 492617264 488936980 491943590 200 19950241736 1945996666 1940826900 1946969108 1948179327 200 4481586944 4336075374 3375153446 43895690 4379817904 400 77986474824 77956946958 7748171090 7799316462 7796400798 500 1214412427778 12102679816 1215533347 12038964 2110574825 500 12144123781 51102679816 1215533347 12038916 151 30382526565 500 30362462513 1308679697874 03071622 509645515 30382526565 500 30362462513 1308679697874 03071622 509645515 30385256565 500 30362452770 44816711472 43624041916 43153220 4415065432 500 30362452770 44816711472 43624044196 43153220 4415065432	1900 382:537437.359009444 384 1955908 3825469961 3825461910 2000 4240016089 4239094379 4239723200 424901753 MANDELBULB: IMPORT CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667175804 64405300 614422470 641165214 648455667 200 2616971636 2595259166 2592374604 2281607434 2590597465 300 650440124 65925259166 2592374604 2281607434 2590597465 300 6505440124 65925259166 2592374604 2281607434 2590597465 300 1618941207 1621594511 1617358012 1616835744 1616767616 302 259272698 2328132062 232823131 1232075047 2325970046 700 3175058024 3172040649 3171204921 3172379996 3172670947 300 5289383747 \$249055381 5244722265 5290065316 5259971768 000 52893833747 \$249005381 5244722265 5290065316 5259971768	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz
MACHINE INFO [NIHAT] ntu 20.04 700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74537051343 2000 82565569736 FLOP Count n FLOP Count 100 205672486 200 8206477 300 157334533 400 33046737 600 7456257 700 10124511449 800 1252582743 800 16736727 100 20770177292 1100 20570177292	282210642780 312517900708 SGENE0 Cycles I 491943580 1948179327 4378977804 7764900798 12105748254 17377644586 23653151075 30932526599 39033999485 48150663428	0.2844728796 0.2848106657 0.2848106657 0.4180814515 0.4241185282 0.4265293387 0.4285294666 0.4265293387 0.428591353 0.4280407045 0.4278936894 0.4287386894 0.4287386893	FLOP Count n FLOPs 100 94726331 200 3810635662 100 94726331 200 310635662 300 836864467 400 1529862479 600 34327978607 700 46791607620 800 61065667400 900 7730686277 1000 95457123163	42991775309 0.9009530048 ANDELBULG Cycles Perf, MANDEL 648458867 1.4400788495 2509078745 1.47002185 65027705392 1.47500418 1.0394192286 1.47105031 1.22089780464 1.473603 3172670841 4.474835309 41421922730 1.47489917 64819319006 1.471564697 64819319006 1.471564698	2000 3128251375a3 312382258446 3123074899 3123467069 3125179007 SCENED: MIPORT: CSV PRODUCED BY BENCHMARKEN. In Run D Run 1 Run 2 Run 3 AVC 100 4685346306 480073182 4822417854 488836890 481843580 200 1986241736 198656660 19466250106 19466931010 1849179327 300 4416156644 4350073374 47375153446 43044693012 4378977904 400 7796474622 77756540895 7748717000 7756316402 7767407004 200 1214142777 1102078781 21121553347 102358961 211074625 200 1214142778 1102078781 21121553347 102358961 211074625 200 39021578245 30024753500 300466953 000545005 230515107 200 3902578745 30024753500 300466955 00054005 33005399648 100 40068270770 4816711772 480044168 4133222024 451066832	1900 382:537437.3930509444 384 1955908 3825469596 13825617160 2000 4240016089 429004379 4239723250 4240837293 4259917753 MANDELBULB: MPORT. CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667775964 644063800 641422470 641165274 649656867 202 20819671636 258253566 5825874624 586107344 2590997465 300 9830440124 6839253564 8526385976 8380569316 5826706393 400 1045867452 1037469010 1037233321 103735227 1039419225 500 1618941207 1621934511 1617385012 616838744 1618767618 600 2329072689 232812392331 233027594 7232967046 700 3175058021 3172040849 31712040821 3172379969 3172570947 800 4148222119 4138090225 410183914 1447483254 412192273 900 5289033747 5240905381 524874232655 5500058318 5258977758 1000 6477524539 6496905270 6496789616 440112108648 6418311930 1100 7820637341 7427524639 783811087 7820605316 5458955502	Peak 4 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] ntu 20.04 700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	### 1900 7-637061343 2000 82965696736 ### 1900 82965696736 ### 1900 82967248	282210642780 312517900708 SCENE0 Cycles F 491943580 1948179327 4378977804 77764900798 12105748254 12105748254 30933999485 48150663428 58462548018 69423877909	0.2844728796 0.2848106657 2.848106657 2.848106657 0.4180814515 0.4240185282 0.424147967 0.4258293887 0.428593883 0.428593883 0.428593883 0.428593883 0.428593883 0.427907555 0.4279907555	FLOP Count n FLOPs 947258331 200 381035562 300 859864467 400 1529862479 500 34327978907 700 4679167920 800 77395862977 100 9647723183 1100 115504785649	229991775309 0 9009530046 ANDELSULB Cycles Perf. MANDEL 64455867 1 4.6078849 2590907465 1 4.70721455 8529705382 1 4.75006159 10394192296 1 4.750619 22889780464 1 4.739650 3172670947 1 4.74869917 2288979464 1 4.74869917 2288979464 1 4.74869917 2288979464 1 4.74869917 2288979464 1 4.74869917 2288979464 1 4.74869917 22889717880 1 4.74869977 252895717880 1 4.728647897 2529535020 1 4.7506478	2000 312825137533 312392258461 3125074899 3123467068 3125179007 SCENEG: MPORT CSV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 4965346306 490073182 492417854 488536980 491943580 200 1959241736 1946995666 1949826900 1946959108 1948179327 400 7798474924 7755640859 7748171090 7759316462 775400798 500 1241442778 19408795 1212678816 121553347 10236991 4215074825 500 1241442778 12102678816 121553347 10236991 4215074825 500 30924582218 30697959704 3091361282 3069395155 3093252659 500 30924582218 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659 500 30924582318 30697959704 3091361282 3069395155 3093252659	1900 382:537437.359009444 384 1955908 3825469961 3825617169 2000 4240016089 4239094379 4239723250 4249837293 4239917753 MANDELBULB: IMPORT COV PRODUCED BY BENCHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 6671775804 54640530 644 422470 54155214 548455697 200 2816871638 28525816 682 285274624 259 1907434 2596997465 200 2816871638 28525816 8825852764624 259 1907434 2596997465 200 18594167 124 5952251565 88265557 168359631 6 5825976382 400 1945507452 1037469001 (1037253321 1037379227) 103981 10225 500 1618841267 1521934511 1617365012 1516835744 151676766 200 23257276986 23591 135925 135927591769 1325976964 700 3175698621 3172640949 3171264961 1372739969 3172670947 200 4185221164 1318560754 140185918 14478353 4 142762273 900 528938374 7246905381 524732265 525006331 85258971 768 100 64775424598 64998951 64998591 546912 1096 6481391 900 1100 7830637541 78472554399 78381 10878 782241 10918 7826855302 120 932210749 83241 54478365648985 382877849837746985 7400	Peak 4 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] intu 20.04 7700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74537061343 2000 82565569736 FLOP Count n FLOP Count n FLOP Count 100 205672466 200 826664127 200 1357334533 400 330469257 200 11024511444 800 1675755096 700 20276717726927 1010 202767775797 1200 20768785797 1200 20768785797 1200 20768785797 1200 20768785797 1200 20768785797 1200 304642219	282210642780 312517900708 SCENEO Cycles J 491943580 1948179327 4378977804 7764900798 12105748254 17377664586 23653151075 30032526599 3903399485 48150663428 58462548018 69423677090	0.2644728796 0.2646106657 2007. SCENEO 0.4180814515 0.4240185262 0.426185262 0.4265293387 0.4265293387 0.4265293387 0.4265293387 0.4278936834 0.4278936834 0.427897555 0.4278978502 0.427898022 0.4278988022 0.4278988022	FLOP Count n FLOPs 100 94726331 200 3810635662 100 94726331 200 310535662 300 836864467 400 15298624790 600 34327978607 700 46791607620 800 61006567400 800 7730562277 1000 95457123163 1100 11507476840 1200 137530712605	42991775309 0 9009530048 ANDELBUILD Cycles Perf, MANDEL 648458867 1 4.40778845 2509078745 1 4.7500418 10394 12259 1 4.7500418 22389780464 1 4.75603 3172670847 4.74833309 41421927870 1 4.74898917 5259977809 1 4.74898917 64819319006 1 4.7266409 7.75269653050 1 4.75164287 33375496935 1 4.72677977 303575496935 1 4.7279777	2000 3128251375a3 312382258446 3123074869 3123467068 3125179007 SCENED: MIPORT: CSV PRODUCED BY BENCHMARRING In Run 0 Run 1 Run 2 Run 3 AVG 100 4865346306 4860073182 4822417854 486836800 4811843580 200 1958241736 186566566 1864625706 1846658106 184719327 300 4416156644 4350073574 47375 153446 4546458012 4378917904 400 7796474624 7795640685 7748711000 779631 164627764800796 501 214142277 51102678918 2121653347 102369369 1210574625 500 1221442245 3026275350 236641224 53718000 2365315107 500 30264562316 30697897074 3091391282 23096396153 3093226668 500 39217372645 3052475350 3094066853 309539604 2365315107 500 39265787606 693532 10056 696268510 6843532220 4815066342 100 6806287070 4816711772 48004168 413322220 4815066342 120 6807877006 693532 10056 696286910 694359356 694259770 300 81856821658 81400779178 1815558487 144547476 5846254601 120 68078770056 693532 10056 696286910 694359356 69425770	1900 382:33747373805009444 384 1955908 3825469596 1 3823617 190 2000 424001 6089 4239094379 4239723250 4240837293 4239917753 MANDELBULB: IMPORT CSV PRODUCED BY BENICHMARKING In Run 0 Run 1 Run 2 Run 3 AVG 100 667775984 644065300 641422477 641165274 649456867 200 20169715085 28525586 6826855576 683056931 6 6829706392 562970593 200 1619841207 1621934511 161738501 2 616838744 161876761 201 20169772698 223812901 1072733321 20193752277 (039187295 200 1619841207 1621934511 161738501 2 616838744 161876761 200 20220727688 2238129082 232823131 1230275947 232997046 200 317505902 1317240409351 541093691 444783255 44192273 200 34526731 2472549085381 5247322625 5250085318 5258971788 201 201 201 201 201 201 201 201 201 201	Peak 4 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] untu 20.04 7700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	### FLOP Count	282210642780 312517900708 30ENE0 Cycles 8 4919435380 1948179327 4378977804 4378977804 17105748254 171377664588 171377664588 171377664588 190839999485 48150663428 59462567090 81449515733 94484707934	0.2644728796 0.2646106657 Perf. SCENE0 0.4180814515 0.425024666 0.4260813337 0.4256224666 0.4256233367 0.4252901353 0.4282901353 0.4282901555 0.428793683 0.42904173731 0.427979555 0.428793683	PLOP Count n FLOPs 100 94725831 200 3810635562 300 859864467 400 1529862479 500 34327978907 770 4787160720 800 61095667409 100 9547723183 1100 115504726540 1100 9547723183 1100 115504708540 1100 5457723183 1100 115504708540 1100 115504708540 1100 115505748540 1100 115505748540 1100 115505748540 1100 115505748540	22999175309 0 9009530046 ANDELSULE Cycles Pert. MANDEL. 644456867 1 4.60788496 2590907465 1 4.707021455 8529706389 1 4.75060159 10394192256 1 4.75060159 112270744 1.47630159 11227074 1.474859171 52589171880 1 4.74695171 52589171880 1 4.74695171 64481911900 1 4.72694969 72629655402 1 4.7506199 1 4.72694969 1 4.72694969 1 4.72694969 1 4.72694969 1 4.72694969 1 4.72694969 1 4.726949694 1 4.72694969	2000 312825137533 312392256460 3125074899 3123467068 3125179007 SCENEG: MPORT CSV PRODUCED BY BENCHMARKENG In Run 0 Run 1 Run 2 Run 3 AVG 100 4965346306 490073182 4920417854 4888596980 491943590 200 1965241735 1946965666 1940825809 194695910 1948179327 400 7796474924 7755640685 7748171090 7769316462 7769400798 500 1241442778 1940879678 1748171090 7769316462 7769400798 500 1241442778 1940267896 174781940 7769316462 7769400798 500 1241442778 1940267896 174781940 7769316462 7769400798 500 124144278 194026785 1748171090 7769316462 7769400798 500 124144293 175826892 17373890292 1737420194 1737786458 500 124144293 194087859794 3001391242 390939615 59093225659 500 39213775246 39024755350 3904406965 3905342053 3908390948 100 48096270770 48167111772 4823404198 491532296246 4150966942 1100 58422694796 58381240790 3871917690 5832417447 5846254601 1300 815892291538 81409779178 8135554897 6144344368 8144061573 1300 9446987500 49320867550 81355569859 6144334368 8144061573 1300 9446987500 49320867568 81355568897 61443434368 8144061573	1900 382:537437.3530009444 384 1955908 3825469969 13253617160 2000 4240016089 4230094379 4239723250 4249837293 4239917753 MANDELBULB: IMPORT COV PRODUCED BY BENCHMARKING In Run O Run 1 Run 2 Run 3 AVG 100 667175081 4640530 644 422470 464056867 200 2616971608 2582039 166 4422470 464156214 644656867 200 2616971608 2582039 166 2582074624 258 1907443 2596097485 300 6160407426 558203545 5682655575 65800660116 58206706392 400 1045607452 10307460901 1037233321 10337975227 103981 10225 500 1618941237 1621934511 1617380012 1616835744 1616767916 000 258207276986 23561 125622 236223 131 1258275491 723597696 700 3175058021 3172040949 3171204921 3172379696 3175670947 001 4162221194 1518050754 4101805191 4474780254 142102273 100 528583374 72426905381 5247322655 525006531 65265971768 1010 64775425459 646998051 646978051 646912 1086 6481931 930 1100 782063754 167225541 109678 109678 782241015 106846931 930 1100 782063754 1672725439 12269124691 109678 782241091 5728695531 1000 1073727454 1097623541 109623941426 1006021555 106856935 1300 1100 782063754 1097623541 10962391426 1096021555 106856935 1300 1100 782063754 1097623541 10962341426 1096021555 106856935 1300 1100 782063754 1097623541 1096234426 1096021555 106856935 1300 1100 7820635754 1097623541 1096234426 1096021555 106856935 1300 1100 7820635754 1097623541 1096234426 1096021555 106856935 1300 1100 7820635754 1097623541 1096234426 1096021555 106856935 1300 1100 7820635754 1097623541 1096234426 1096021555 106856935 1300 1100 7820635754 1097623541 10962404364 1096021555 106856935 1300	Peak 4 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] untu 20.04 7700 CPU, 3.60GHz (4.2 w. TB) ERF: 4 cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74537061343 2000 22565569736	282210642780 312517900708 SCENEO Cycles I 4919435500 1948179327 4378977804 7764900798 12105748254 12105748254 12105748254 12105634228 131057533 300332526599 3003399485 141051653423 1410	0.2644728796 0.2646106667	FLOP Count n FLOPs 100 94725831 200 3810535562 100 947258331 200 1529862479 400 1529862479 400 1529862479 400 34327978907 700 4797160762 800 61096567409 800 7739682277 1000 95457123183 100 115936964183 100 187110589224	42991775309 0 9009530048 ANDELBULG Cycles Perf, MANDEL 648458867 1 4.40728495 25090787465 1 4.70727455 8527705392 1 4.7500478 1 6187376189 1 4.74500479 3712670841 4.74500479 3712670841 1 4.745003 3712670841 4.74508510 4.7450845091 1 4.74508510 4.745084510 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.74508450 4.7450845091 1 4.7450845091 4	2000 312825137523 312382258449 3123074899 3123467069 3125179007 SCENED: MIPORT: CSV PRODUCED BY BENCHMARRING In Run 0 Run 1 Run 2 Run 3 AVG 100 496346306 490073182 462417854 488936890 491843580 200 1959241773 195969566 19408252000 194695910 105 1975927 300 4416156464 4350075374 47375 15044645495012 4375977904 400 7796474622 77956940685 7748711000 775631 646277078407909 00 1221442778 1120075918 1 211553347 102358961 211579409 00 730245623350 326256425270 2356441234 237597764459 00 30245623350 326256425270 2364642352 3095995153 3095399649 1000 49068270770 49159711772 4820441918 413322320 4915066342 1000 6906253797066 69353210656 6962569510 6943593566 694259770 1000 69075975056 84007719718 297917960 6943593566 694359770 1000 619075056 84007719718 20545696 9430177912 9446977032 1400 6190825053 10406959600 500545869 1430177912 9446977032 1400 6190825053 10406459600 60435950566 9430177912 9446977032 1400 6190825053 10464595600 60435950566 9430177912 9446977032 1400 6190825053 10464595600 60435950566 9430177912 9446977032	1900 382:537437,359.0509444 384 1955908 3825469596 13825817 190 2000 4240016089 4239094379 4239723250 4240837293 4259917753 MANDELBULB: MIPORT CSV PRODUCED BY BENICHMARKING In Run 10 Run 1 Run 2 Run 3 AVG 100 667775984 644063300 641422477 641165274 648456867 200 20169715985 464063300 641422477 641165274 648456867 200 20169715985 458255585 65826555976 5830569316 68495697465 300 5830440124 65822555854 8526355576 5830569316 6829706392 400 1045657452 (037450001 0107233321 1903755274 (03897046) 600 232927276898 223815901 1037233321 19032756947 2326970696 700 3175058021 3172040849 31712040821 3172379996 3172879046 700 414726221194 15806755 4 101089301 444783254 144782273 900 4582221194 15806755 4 101089301 444783255 41292273 900 5280833747 5242554599 783011087 78 225540195 1752855502 1100 793063754 17827254599 783011087 78 225540195 1752855502 1300 10272724510 19752514 1006291428 100501555 1006856955 1400 1274847224 1269005693 1267526286 126860015 1570005695759 1500 1699062721457405681 1466769676 1466967675759	Peak 4 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] untu 20.04 7700 CPU, 3.60GHz (4.2 w. TB) DERF: 4 I cache: 128 KIB cache: 128 KIB cache: 1 MIB	### FLOP Count ### FLOP Count	2022/10/42/780 3125/17800708 SCENEO Cycles # 491943580 491943580 491943580 4109437804 4778977804 77784007788 12105748254 4150554255 405063996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 4050653269 50603996485 405063369 50603996485 405063369 50603996485 6060396485 6060396485 6	0.2644728796 0.2646106657 Perf. SCENEO 0.4180814516 0.428014516 0.428023387 0.422801533 0.422801530 0.4228023387 0.4228017302 0.4228047704 0.4228047734 0.42280473734 0.4228043555 0.42287334238	FLOP Count n FLOPs 100 947258331 200 3810535562 300 859864467 400 1529862479 600 34327978907 700 47871607920 800 6109567409 900 77393682877 1000 94567123183 1100 115504765541 1100 115504765541 1100 115504765541 1100 115504765541 1100 115504765541 1100 115504765541 1100 115504765541 1100 115504765541 1100 1155082241 1100 214808274130	229991795309 0 9009530046 ANDELSULES Cycles Perf. MANDEL. 644458887 1-460788495 2590937485 1-470021456 8529705392 1-475008198 10394192256 1-471058996 115187078188 1-474291501 22289789046 1-47795603 2172870474 1-474958717 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 25289971890 1-474789517 2528971890 1-47489517 2528971890 1-474789517 252897180 1-474789517 252897180 1-474789517 252897180 1-474789517 252897180 1-474789517 25	2000 312825137533 312392256440 3125074899 3123467068 3125179007 SCENEO: MIPORT CSV PRODUCED BY BENCHMARKENG In Run I Run I Run 2 Run 3 AVG 100 4685346306 490073182 492617854 488536980 491943590 200 1969241736 1946969660 1946969010149699101949179327 400 7798474924 7756640858 7748171090 7759316462 7759400798 500 1214142775 19102678916 1215153347 (202535991 221574925) 500 1214142775 19102678916 121553347 (202535991 221574925) 500 39251787472 19102678916 121553347 (202535991 221574925) 500 3925178742 9102678591 5936440234 593745053 3909359044 100 490862791770 48167111772 4825404196 4913322220 491569540 101 5915253419 5915259 4910979179 3135554591 714434336 8144451573 102 68275770050 69353210956 89912699150 09433538585 5942257709 1300 18168291558 8140979179178 81355548915 714434336 8144451573 1500 105660213521109443686800 1054825690 10582347767 1512448470793 1500 105660213521109443686800 1054825690 10582347761 105868578 1500 1025869777 12232275719 112580010182737001 1058668578	1900 382:537437.3530009444 384 1955908 3825469969 13253617190 2000 4240016089 4239094379 4239723250 4249837293 4239117753 MANDELBULB: IMPORT COV PRODUCED BY BENCHMARKING In Run O Run 1 Run 2 Run 3 AVG 100 667175094 546405370 644422570 544155214 644455697 200 2616371638 5285236166 2582074624 2581607434 2590907465 200 2616371638 5285236166 2582074624 2581607434 2590907465 200 1045687452 10327469901 1037233321 1037375227 1039419225 200 1616941267 1621934511 1617362012 1616835744 16167676392 200 272727696 22361 123622 2302231 131 232075407 223677046 200 3175658021 3172640943 31712649611 34727579647 2356977046 201 3175658021 31726491351 1617362012 1516835744 1192273 200 1045687452 1037245991 103745927647 235697046 201 3175658021 31726491591 31726470451 341091391 341091201 3696491391 30100 201 3175658021 31726491591 31726470513 17267554947 201 3175658021 31726491591 31726470513 17267549491 317267549491 317264951 3172676559601 31727655961 31726764951 31726764951 3172676576501 31726765951 31726764951 31726764951 3172676575501 31726765951 31726764951 3172676576501 3172676576501 3172676575501 31726765951 31726765961 3172676575501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172676576501 3172	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MACHINE INFO [NIHAT] untu 20.04 7700 CPU, 3.60GHz (4.2 w. TB) DERF: 4 I cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74837061343 2000 22965569736	2022/10/42/780 312617900708 SCENED Cycles 17 4691943550 10464179327 4378677804 77764907798 12105748254 12105748255 137764905798 30033999485 44515775490798 84149515733 944847707934 100468957797 122345140943	0.2644728786 0.2646106657 Porf. SCENEG 0.4180814515 0.4180814515 0.4242016520 0.424517967 0.4252624665 0.426523387 0.4262607045 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.4262601650 0.426766000 0.426766000 0.426766000 0.426766000 0.426766000 0.42676760000 0.42676760000 0.42676760000 0.4267676000000000000000000000000000000000	FLOP Count n FLOPs 100 94725831 200 381035562 300 85866487 400 1529862479 400 1529862479 400 1529862479 400 34327978607 700 4797160720 800 31058626740 100 137530712605 1100 11550712641 1100 1150712641 1100 1150712641 1100 1250712641 1100 1250712641 1100 244434223427 1100 244434223427 1100 244434223427 1100 244434223427 1100 244434223427	42991775309 0.9009530048 ANDELBUILD Cycles Perf, MANDEL 646450867 1.400738467 2590097465 1.470027845 6592795392 1.4750845 1.4750815 1.4750815 1.4750855 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815	2000 312825137523 312392258449 3123074899 3123467069 3125179007 SCENED: MIPORT: CSV PRODUCED BY BENCHMARRING In Run D Run 1 Run 2 Run 3 AVG 406346306 480073182 462417854 488936890 4918457832 200 1980241736 11945692666 119408270800 1194085708 49184578327 300 4416156464 4350075374 47375 1504464649500 4378917904 400 7796474628 7795640685 7748711000 775631 646277078400798 001 2214442776 12100787981 2121553347 102369690 2265315107 200 20024692330 20260542727 2151553347 102369690 2265315107 200 30024692331 30097989704 3001391282 3096398153 3098399648 1000 49096270770 4916711772 480040198 413322200 491606632 100 69409672055 814009797918 2017978009 6943593586 694259770 100 69409672052 94425006596 49430079699 430177812 9448470793 100 61805205310 10445498690 1054826000 10543546 614455173 1400 94469672052 94425006596 49430079690 123496470793 100 10560521351 104454986900 1054826000 105455470 1054669678 100 10560521351 104454986900 1054826000 105455470 1054669678 100 10560521351 104454986900 1054826000 10554071 1054669678 100 10560521351 104454986900 1054826000 105540751 1054669678 100 10560521351 104454986900 1054826000 10554071 1054669678 100 10560521351 10445498600 1054826000 1055400 105605200 10560500 10560500 10560500 1054826000 1055400 10546600 105	1900 382:337437,339.000444 384 1959.00 3825469956 1 382561 7160 2000 42400 16089 4230004379 4239723230 4240837293 4239917753	Peak 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 Performance of OPT2 on Intel I7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 4 4 4
untu 20.04 -7700 CPU, 3.60GHz (4.2 w. TB) PERF: 4 1 cache: 128 KIB 1 cache: 128 KIB 2 cache: 1 MIB	### FLOP Count ### FLOP Count	2021042780 312517900708 CCENES CONTROL 1990 199417927 477697790 477697790 477697790 477697790 477697790 477697790 477697790 477697790 477697790 477697790 477697790 4776970 4776970 4776970 4776970 4776970 4776970 4776970 4776970 4776970 4776970 4776970 47769	0.26441282796 0.2646106657 Perf . SCENEO 0.440016410 0.420016502 0.4204147270 0.42462924669 0.42462924690 0.424629291333 0.422467905 0.4226291333 0.422467905 0.4226329600 0.427906903	PLOP Count n FLOPs 100 94726331 200 381053562 300 859804487 400 15298024790 500 2385633419 600 34327978907 700 47971607920 800 61095697400 800 73389362977 1000 96457123183 1100 115504708540 1100 115504708540 1100 115504718540 1100 12005724130 1100 2748540 1100 2748540 1100 2748540 1100 2748540 1100 2748540 1100 274854784784784784784784784784784784784784784	423991775309 0 9009530046 ANDELSULS G44456867 1.46078849 2590967465 1.47072445 8529706392 1.475008189 10394192256 1.471095869 110394192256 1.471095869 11257676189 1.4750619 11257676189 1.47479650 11257676189 1.47479650 11257676189 1.47479650 11257676189 1.47479650 11257676189 1.47479650 11257676189 1.47479650 11257676189 1.47479650 1.47266950 1.47266969 1.47566950 1.47266969 1.47566950 1.47266950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.47566950 1.474766950 1.474766950 1.474766950 1.474766950 1.4747696969	2000 312825137533 312392258440 3125074869 3123467068 3125179007 SCENED: MIPORTY CSV PRODUCED BY BEINCHMARKENS In Run 0 Run 1 Run 2 Run 3 AVG 100 4685346305 490073182 492417854 4888586800 491943580 200 1969241736 1945696666 1946926200 194695910 1948179327 200 1969241736 1945696666 1946926200 194695910 1948179327 200 448159664 4359057374 7375153446 49895904 247987904 200 7798474624 7795640685 7748171090 7799316462 7796400796 201 214142775 1102067861 2115533347 102365904 237959191 1977764496 200 12141427278 1102067861 2115533347 102365904 23695961 515 090325669 200 1214142758 31024075305 2996441234 2371 396002 236591 51077 200 200509830 23625654270 2369441234 2371 396002 236591 51077 200 3002456231 31 098079677 4091391242 230963961 515 0903256690 200 3021577245 31020475500 53904469253 309052002 3365151 5107 200 3002456231 31 098079677 4091391242 230963961 515 0903256690 200 3021577450 962450 30074500 5507467770 577654461 513725000 5776546400 200 3021575750 514057770 415711772 4807040710 5776546400 577657 577657 577654600 577657 57	1900 3832537437.3530009444 384 1955908 3825469969 13253617 160 2000 4240016089 4239094379 4239723250 4249837293 4239117753 MANDELBULB: IMPORT COV PRODUCED BY BENCHMARKING In Run D Run 1 Run 2 Run 3 AVG 100 667175084 5464530 641422710 641455214 644455697 200 2616971638 25625361 66 2562974624 2581907443 2596997465 200 2616971638 25625361 66 2562974624 2581907443 2596997465 200 2616971638 25625361 66 2562974624 2581907494 2596997465 200 2616971638 25625361 66 2562974624 2581907494 2596997465 200 2616971638 25625361 66 2562974624 2581907494 2596997465 200 105569717686 25351 1617649761 1617569081 161877877618 200 215627272968 23351 120928 2329231 131 1230079604 723269776046 700 3175068021 37172640948 3171262961 3172379669 3172570947 200 41452221164 1250672634 4101683914 4174763254 414272273 200 2569363747 25626976501 52472722675 525006531 6556971768 2100 6757262569 259691 2596977604678 25969776046 2100 6757262569 2596978691 2596978691 2596977606 2100 6757262569 2596978691 2596978691 2596977606 2100 6757362569 2596978691 2596978691 2596977606 2100 6757362569 2596978691 2596978691 2596969969 2100 6757362569 2596978691 25969786901 2596969969 2100 6757372545 1077625691 2596978691 259690001 51700025105 2100 1696962764 11457646861 1456764961 445667667 147676575694 210 16960274661 14571460749 1370026461 145764667576 147676575694 2100 16960274661 14571460749 13700264661 145761667556964 2100 16960274661 14571460749 13700264661 145761667556964 2100 16960274661 14571460749 13700264661 145761667556964 2100 16960274661 14571460749 13700264661 145761667556964 2100 16960274661 14571460749 13700264661 376766556964 2100 16960274661 14571460749 13700264661 376766556964 2100 16960274661 14571460749 13700264661 3767665756964	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz 4 4 4 9 Pert MANDEL Pert SCENEO Peak 4 4 4 4 9 0 500 1000 1500
MACHINE INFO [NIHAT] untu 20.04 -7700 CPU, 3.60GHz (4.2 w. TB) PERF: 4 d cache: 128 KIB cache: 128 KIB cache: 1 MIB	1900 74837061343 2000 22965569736	2021042780 312517900708 CCENES CONTROL 1990 199417927 407697790 199417927 407697790 199417927 407697790 199417927 407697790 199417927 407697790 1994190 1994	0.2644728786 0.2646106657 Porf. SCENEG 0.4180416155 0.4180416155 0.4294105202 0.4294105202 0.4294105202 0.4294105202 0.4294105202 0.4294105202 0.4294105202 0.4294105202 0.4294105202 0.4294107045 0.4295093039 0.4294107045 0.4295093039 0.4294107045 0.4295093039 0.4294107045 0.4295093039 0.4294107055 0.429507055 0.429507055 0.429507055 0.4295070523 0.4295090509 0.4295090509 0.429509509609 0.429509509609 0.429509509609	FLOP Count n FLOPs 100 94725831 200 381035562 300 85866487 400 1529862479 400 1529862479 400 1529862479 400 34327978607 700 4797160720 800 31058626740 100 137530712605 1100 11550712641 1100 1150712641 1100 1150712641 1100 1250712641 1100 1250712641 1100 244434223427 1100 244434223427 1100 244434223427 1100 244434223427 1100 244434223427	42991775309 0.9009530048 ANDELBUILD Cycles Perf, MANDEL 646450867 1.400738467 2590097465 1.470027845 6592795392 1.4750845 1.4750815 1.4750815 1.4750855 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815 1.4750815	2000 312825137523 312392258449 3123074899 3123467069 3125179007 SCENED: MIPORT: CSV PRODUCED BY BENCHMARRING In Run D Run 1 Run 2 Run 3 AVG 406346306 480073182 462417854 488936890 4918457832 200 1980241736 11945692666 119408270800 1194085708 49184578327 300 4416156464 4350075374 47375 1504464649500 4378917904 400 7796474628 7795640685 7748711000 775631 646277078400798 001 2214442776 12100787981 2121553347 102369690 2265315107 200 20024692330 20260542727 2151553347 102369690 2265315107 200 30024692331 30097989704 3001391282 3096398153 3098399648 1000 49096270770 4916711772 480040198 413322200 491606632 100 69409672055 814009797918 2017978009 6943593586 694259770 100 69409672052 94425006596 49430079699 430177812 9448470793 100 61805205310 10445498690 1054826000 10543546 614455173 1400 94469672052 94425006596 49430079690 123496470793 100 10560521351 104454986900 1054826000 105455470 1054669678 100 10560521351 104454986900 1054826000 105455470 1054669678 100 10560521351 104454986900 1054826000 10554071 1054669678 100 10560521351 104454986900 1054826000 105540751 1054669678 100 10560521351 104454986900 1054826000 10554071 1054669678 100 10560521351 10445498600 1054826000 1055400 105605200 10560500 10560500 10560500 1054826000 1055400 10546600 105	1900 382:337437,339.000444 384 1959.00 3825469956 1 382561 7160 2000 42400 16089 4230004379 4239723230 4240837293 4239917753	Peak 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz 4 4 4 Performance of OPT2 on Intel i7-7700 CPU, 3.60GHz 4 4 4 4 4 4 4 4 4 4 6 6 7 6 7 7 7 7 7 7