# 1 Experiment 0 of set Separable Convolutions (32 filters)

### 1.1 Device and Version Information

#### 1.1.1 CPU Information

cpuinfo_version 5, 0, 0  arch X86_64  bits 64  count 32  raw_arch_string x86_64  vendor_id GemuineIntel  brand Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz  hz_advertised 2.4000 GHz  hz_actual 2.3999 GHz  hz_actual_raw 2400000000, 0  hz_actual_raw 2399906000, 0  stepping 2  model 63  family 6  flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpelgb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  13_cache_size 20480 KB  12_cache_size 256 KB  11_data_cache_size 32 KB  12_cache_size 32 KB  12_cache_size 525 KB  12_cache_size 525 CAC	python_version	3.7.4.final.0 (64 bit)
bits 64  count 32  raw_arch_string x86_64  vendor_id GenuineIntel  brand Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz  hz_advertised 2.4000 GHz  hz_actual 2.3999 GHz  hz_actual_raw 2400000000, 0  stepping 2  model 63  family 6  flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popent, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, sse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  l3_cache_size 20480 KB  l1_data_cache_size 32 KB  l1_instruction_cache_size 32 KB  l1_cache_line_size 6	cpuinfo_version	5, 0, 0
count 32 raw_arch_string x86_64 vendor_id GenuineIntel brand Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz hz_advertised 2.4000 GHz hz_actual 2.3999 GHz hz_actual_raw 2400000000, 0 hz_actual_raw 2399906000, 0 stepping 2 model 63 family 6 flags flags  abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmil, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpelgb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdrscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  13_cache_size 20480 KB  11_data_cache_size 32 KB  11_instruction_cache_size 32 KB  11_instruction_cache_size 32 KB  11_cache_line_size 6	arch	X86_64
raw_arch_string	bits	64
vendor_id	count	32
brand	raw_arch_string	<del></del>
hz_advertised 2.4000 GHz hz_actual 2.3999 GHz hz_advertised_raw 2400000000, 0 hz_actual_raw 2399906000, 0 stepping 2 model 63 family 6 abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmil, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, lt, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, sse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  13_cache_size 20480 KB 12_cache_line_size 32 KB 11_instruction_cache_size 32 KB 12_cache_line_size 6	vendor_id	
hz_actual 2.3999 GHz hz_advertised_raw 2400000000, 0 hz_actual_raw 2399906000, 0  stepping 2  model 63 family 6 flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  l3_cache_size 20480 KB  l1_data_cache_size 32 KB  l1_instruction_cache_size 32 KB  l1_cache_line_size 6	brand	
hz_advertised_raw 2400000000, 0 hz_actual_raw 2399906000, 0  stepping 2 model 63 family 6 flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popent, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, sse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  l3_cache_size 20480 KB  l2_cache_size 256 KB  l1_data_cache_size 32 KB  l1_instruction_cache_size 32 KB  l2_cache_line_size 6	hz_advertised	$2.4000~\mathrm{GHz}$
hz_actual_raw 2399906000, 0  stepping 2  model 63  family 6  flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, sse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  l3_cache_size 20480 KB  l1_data_cache_size 32 KB  l1_instruction_cache_size 32 KB  l1_cache_line_size 6	hz_actual	2.3999 GHz
stepping 2 model 63 family 6 flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, sse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  13_cache_size 20480 KB  12_cache_size 32 KB  11_instruction_cache_size 32 KB  12_cache_line_size 6	hz_advertised_raw	,
model 63 family 6 flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, sse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  l3_cache_size 20480 KB  l2_cache_size 256 KB  l1_data_cache_size 32 KB  l1_instruction_cache_size 32 KB  l2_cache_line_size 6		,
family flags abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  l3_cache_size 20480 KB  l2_cache_size 256 KB  l1_data_cache_size 32 KB  l1_instruction_cache_size 32 KB  l2_cache_line_size 6		
flags  abm, acpi, aperfmperf, apic, arat, arch_perfmon, avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  13_cache_size 20480 KB  12_cache_size 256 KB  11_data_cache_size 32 KB  11_instruction_cache_size 32 KB  12_cache_line_size 6		
avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi, vpid, x2apic, xsave, xsaveopt, xtopology, xtpr  13_cache_size 20480 KB  12_cache_size 32 KB  11_data_cache_size 32 KB  11_instruction_cache_size 32 KB  12_cache_line_size 6	- v	
13_cache_size   20480 KB   12_cache_size   256 KB   11_data_cache_size   32 KB   11_instruction_cache_size   32 KB   12_cache_line_size   6	flags	avx, avx2, bmi1, bmi2, bts, clflush, cmov, constant_tsc, cqm, cqm_llc, cqm_occup_llc, cx16, cx8, dca, de, ds_cpl, dtes64, dtherm, dts, eagerfpu, epb, ept, erms, est, f16c, flexpriority, fma, fpu, fsgsbase, fxsr, ht, ibpb, ibrs, ida, invpcid, invpcid_single, kaiser, lahf_lm, lm, mca, mce, mmx, monitor, movbe, msr, mtrr, nonstop_tsc, nopl, nx, osxsave, pae, pat, pbe, pcid, pclmulqdq, pdcm, pdpe1gb, pebs, pge, pln, pni, popcnt, pqm, pse, pse36, pts, rdrand, rdrnd, rdtscp, rep_good, sdbg, sep, smep, smx, ss, sse, sse2, sse4_1, sse4_2, ssse3, stibp, syscall, tm, tm2, tpr_shadow, tsc, tsc_adjust, tsc_deadline_timer, tscdeadline, vme, vmx, vnmi,
12_cache_size   256 KB     11_data_cache_size   32 KB     11_instruction_cache_size   32 KB     12_cache_line_size   6	l3 cache size	
l1_data_cache_size 32 KB l1_instruction_cache_size 32 KB l2_cache_line_size 6		
11_instruction_cache_size 32 KB 12_cache_line_size 6		
l2_cache_line_size 6		
12 Cacife abbeetaurvity   OATOO	l2 cache associativity	0x100
extended model 3		

#### 1.1.2 GPU Information

Num GPUs: 1

Num Gr Us. 1	
name	Tesla K40m
total_memory	11441 MiB
driver_version	410.78
cuda_version	10.0

#### 1.1.3 Carbon Estimation Information

Experiment Impact Tracker Version	0.1	
Compute Region	US-CA	
average gCO2eq/kWh	317.3883665988068	
Carbon Data Source	Live Data Fromhttp://www.caiso.com/outlook/SP/H	story/ <date>/c</date>
Assumed PUE	1.58	

## 1.2 Experiment Info

Experiment Start Time	1570683408.788417
Experiment Length (hours)	0.09019474969969855
Intel (CPU+DRAM, RAPL) Power Usage (kWh)	0.0008138079526579631
NVIDIA (GPU) Power Usage (kWh)	0.00725539910721126
Total (Including PUE Mult.) Power (kWh)	0.012749347154593374
Estimated Carbon Impact (kgCO2eq)	0.004045407530921086
Final CPU-Hours (psutil estimate)	0.1000444444444445
Final GPU-Hours (climate-impact-tracker estimate)	0.049734724436932144