

Machine 1: Ryzen 9, 890m GPU															
SPONZA ATRIUM	sah	rrs	epo	cpu (s)	gpu (s)	gpu (ms)	rel sah	rel rrs	rel epo	rel cpu	rel gpu	cpu	gpu	rel cpu	rel gpu
full sweep	84.288	34.114	33.656	0.276	0.018	17.61	reference	reference	reference	reference	reference	0.376	0.033	reference	reference
hploc	75.904	32.205	28.596	0.213	0.019	19.35	11.05 %	5.93 %	17.70 %	29.78 %	-9.01 %	0.316	0.036	18.95	-8.04
binned[8]	80.536	30.951	30.675	0.251	0.018	17.53	4.66 %	10.22 %	9.72 %	9.98 %	0.47 %	0.369	0.036	1.93	-6.31
binned[8] optimized	73.615	28.356	27.472	0.211	0.017	16.51	14.50 %	20.31 %	22.51 %	30.63 %	6.64 %	0.307	0.031	22.17	8.66
sbvh[8]	73.734	23.362	26.034	0.208	0.015	15.20	14.31 %	46.02 %	29.27 %	32.76 %	15.88 %	0.302	0.027	24.37	24.40
sbvh[32]	73.507	23.992	27.436	0.211	0.015	14.79	14.67 %	42.19 %	22.67 %	30.92 %	19.10 %	0.301	0.028	24.62	19.28
sbvh[32] optimized	70.184	23.052	25.727	0.200	0.015	15.02	20.10 %	47.99 %	30.82 %	37.90 %	17.25 %	0.295	0.026	27.34	26.49
sbvh best bins	71.233	22.874	24.808	0.206	0.015	14.60	18.33 %	49.14 %	35.66 %	33.75 %	20.63 %	0.310	0.027	21.25	24.66
sbvh (ours)	65.022	20.824	22.495	0.193	0.015	14.72	29.63 %	63.82 %	49.62 %	42.89 %	19.65 %	0.285	0.025	31.86	34.89
CONFERENCE ROOM	sah	rrs	epo	cpu (s)	gpu (s)	gpu (ms)	rel sah	rel rrs	rel epo	rel cpu	rel gpu	cpu	gpu	rel cpu	rel gpu
full sweep	46.681	22.522	31.584	0.078	0.006	6.40	reference	reference	reference	reference	reference	0.108	0.011	reference	reference
hploc	40.348	20.371	27.485	0.071	0.007	6.65	15.70 %	10.56 %	14.91 %	10.38 %	-3.74 %	0.097	0.010	11.25	10.12
binned[8]	57.751	25.018	38.361	0.085	0.007	6.81	-19.17 %	-9.97 %	-17.67 %	-8.10 %	-5.95 %	0.118	0.013	-8.46	-14.30
binned[8] optimized	50.183	22.272	33.927	0.071	0.007	6.64	-6.98 %	1.12 %	-6.91 %	10.16 %	-3.55 %	0.100	0.011	8.27	-1.54
sbvh[8]	41.531	19.403	26.914	0.075	0.006	5.88	12.40 %	16.08 %	17.35 %	3.41 %	8.89 %	0.118	0.010	-8.38	10.51
sbvh[32]	40.016	19.403	26.802	0.075	0.006	5.99	16.66 %	16.08 %	17.84 %	3.91 %	6.84 %	0.106	0.010	2.66	8.43
sbvh[32] optimized	38.375	20.233	25.877	0.073	0.006	5.90	21.64 %	11.31 %	22.05 %	6.97 %	8.60 %	0.103	0.009	5.38	17.55
sbvh best bins	37.986	17.410	24.418	0.072	0.006	5.79	22.89 %	29.36 %	29.34 %	8.79 %	10.59 %	0.115	0.011	-5.93	2.45
sbvh (ours)	34.358	15.742	21.938	0.064	0.006	5.54	35.87 %	43.08 %	43.97 %	22.76 %	15.66 %	0.099	0.009	9.01	19.34
STANFORD DRAGON	sah	rrs	epo	cpu (s)	gpu (s)	gpu (ms)	rel sah	rel rrs	rel epo	rel cpu	rel gpu	cpu	gpu	rel cpu	rel gpu
full sweep	56.824	23.143	24.182	0.051	0.005	5.43	reference	reference	reference	reference	reference	0.083	0.011	reference	reference
hploc	63.411	26.396	29.167	0.059	0.006	6.48	-10.39 %	-12.32 %	-17.09 %	-14.39 %	-16.28 %	0.089	0.013	-6.96	-10.44
binned[8]	58.602	24.076	25.195	0.053	0.005	5.41	-3.03 %	-3.87 %	-4.02 %	-4.26 %	0.41 %	0.083	0.011	0.31	-1.41
binned[8] optimized	59.535	24.655	26.251	0.053	0.006	5.68	-4.55 %	-6.13 %	-7.88 %	-3.81 %	-4.47 %	0.077	0.012	7.13	-2.97
sbvh[8]	58.308	23.982	25.164	0.053	0.005	5.41	-2.54 %	-3.50 %	-3.90 %	-3.74 %	0.33 %	0.081	0.013	2.52	-14.43
sbvh[32]	57.129	23.127	24.399	0.051	0.005	5.24	-0.53 %	0.07 %	-0.89 %	0.70 %	3.61 %	0.082	0.013	1.59	-11.43
sbvh[32] optimized	58.139	23.578	25.538	0.052	0.005	5.37	-2.26 %	-1.85 %	-5.31 %	-1.35 %	1.02 %	0.086	0.013	-3.17	-12.25
sbvh best bins	56.710	22.784	24.154	0.051	0.005	5.19	0.20 %	1.58 %	0.12 %	-0.13 %	4.57 %	0.083	0.012	0.37	-5.27
sbvh (ours)	56.399	22.073	24.297	0.051	0.005	5.02	0.75 %	4.85 %	-0.47 %	-1.02 %	8.06 %	0.090	0.012	-7.66	-5.19
LUMBERYARD BISTRO	sah	rrs	epo	cpu (s)	gpu (s)	gpu (ms)	rel sah	rel rrs	rel epo	rel cpu	rel gpu	cpu	gpu	rel cpu	rel gpu
full sweep	92.213	42.353	55.466	0.203	0.023	22.86	reference	reference	reference	reference	reference	0.343	0.061	reference	reference
hploc	97.428	44.249	57.115	0.204	0.025	25.25	-5.35 %	-4.28 %	-2.89 %	-0.44 %	-9.44 %	0.383	0.074	-10.50	-17.50
binned[8]	112.065	47.618	65.498	0.216	0.029	29.19	-17.72 %	-11.06 %	-15.32 %	-6.13 %	-21.66 %	0.407	0.088	-15.70	-31.03
binned[8] optimized	112.239	45.651	65.001	0.216	0.026	26.15	-17.84 %	-7.22 %	-14.67 %	-6.26 %	-12.56 %	0.368	0.079	-6.90	-23.06
sbvh[8]	64.284	25.394	30.297	0.136	0.013	12.87	43.45 %	66.78 %	83.07 %	48.88 %	77.71 %	0.239	0.040	43.47	53.45
sbvh[32]	62.347	25.183	28.904	0.135	0.013	12.56	47.90 %	68.18 %	91.90 %	50.32 %	82.00 %	0.275	0.041	24.78	49.23
sbvh[32] optimized	61.203	27.054	29.414	0.129	0.014	14.09	50.67 %	56.55 %	88.57 %	56.97 %	62.25 %	0.214	0.045	60.41	34.12
sbvh best bins	61.493	23.373	28.241	0.125	0.012	12.17	49.96 %	81.21 %	96.40 %	61.66 %	87.80 %	0.238	0.036	44.24	67.96
sbvh (ours)	56.545	21.272	26.240	0.122	0.012	12.03	63.08 %	99.10 %	111.38 %	65.63 %	89.99 %	0.234	0.036	46.30	70.71
LEGO CAR	sah	rrs	epo	cpu (s)	gpu (s)	gpu (ms)	rel sah	rel rrs	rel epo	rel cpu	rel gpu	cpu	gpu	rel cpu	rel gpu
full sweep	34.345	16.953	16.333	0.019	0.002	1.90	reference	reference	reference	reference	reference	0.026	0.004	reference	reference
hploc	33.987	16.529	17.326	0.019	0.002	1.78	1.05 %	2.56 %	-5.73 %	-0.86 %	6.97 %	0.024	0.004	8.92	-1.19
binned[8]	34.645	16.348	16.123	0.018	0.002	1.75	-0.87 %	3.70 %	1.30 %	3.66 %	8.50 %	0.025	0.004	7.45	4.05
binned[8] optimized	35.573	18.531	16.952	0.019	0.002	1.90	-3.45 %	-8.52 %	-3.65 %	-1.44 %	0.16 %	0.027	0.005	-2.84	-6.98
sbvh[8]	33.884	14.817	16.944	0.017	0.002	1.55	1.36 %	14.41 %	-3.60 %	6.87 %	22.55 %	0.024	0.004	7.75	6.75
sbvh[32]	33.339	14.605	15.380	0.017	0.002	1.66	3.02 %	16.07 %	6.20 %	7.76 %	14.65 %	0.024	0.004	10.25	20.43

Machine 2: i7, Iris Xe

sbvh[32] optimized	34.757	15.298	16.583	0.017	0.002	1.63	-1.19 %	10.82 %	-1.51 %	11.26 %	16.47 %	0.023	0.004	13.88	15.13
sbvh best bins	33.276	14.025	15.139	0.016	0.002	1.60	3.21 %	20.87 %	7.89 %	17.04 %	18.88 %	0.025	0.004	5.85	19.37
sbvh (ours)	31.128	12.947	13.957	0.016	0.002	1.57	10.33 %	30.94 %	17.03 %	15.62 %	20.84 %	0.023	0.003	15.48	25.94

SAN MIGUEL	sah	rrs	epo	cpu (s)	gpu (s)	gpu (ms)	rel sah	rel rrs	rel epo	rel cpu	rel gpu	cpu	gpu	rel cpu	rel gpu
full sweep	73.514	39.495	30.038	0.539	0.042	42.34	reference	reference	reference	reference	reference	0.766	0.065	reference	reference
hploc	73.587	47.191	32.497	0.573	0.050	49.83	-0.10 %	-16.31 %	-7.57 %	-5.89 %	-15.04 %	0.814	0.078	-5.90	-17.33
binned[8]	77.051	41.427	31.104	0.565	0.048	48.31	-4.59 %	-4.66 %	-3.43 %	-4.63 %	-12.36 %	0.765	0.074	0.16	-12.19
binned[8] optimized	69.794	39.176	28.073	0.519	0.049	48.92	5.33 %	0.82 %	7.00 %	3.76 %	-13.46 %	0.709	0.070	8.09	-6.95
sbvh[8]	65.046	30.494	25.293	0.521	0.038	38.11	13.02 %	29.52 %	18.76 %	3.55 %	11.10 %	0.673	0.051	13.82	26.79
sbvh[32]	64.239	30.986	26.461	0.511	0.038	38.35	14.44 %	27.46 %	13.52 %	5.42 %	10.41 %	0.908	0.059	-15.62	9.18
sbvh[32] optimized	60.326	30.168	24.499	0.505	0.039	39.36	21.86 %	30.92 %	22.61 %	6.75 %	7.55 %	0.729	0.056	5.04	16.49
sbvh best bins	63.270	28.554	23.440	0.472	0.037	37.12	16.19 %	38.32 %	28.15 %	14.18 %	14.06 %	0.690	0.050	10.97	29.00
sbvh (ours)	57.227	26.439	21.238	0.463	0.036	35.97	28.46 %	49.38 %	41.44 %	16.52 %	17.69 %	0.628	0.048	21.98	35.88