Benchmark models with JuMP and OptimalControl
max iter = 1000, tol = 1.0e-8, constr viol tol = 1.0e-6, solver = ma57

Model	Discretization	Total Time JuMP	Total Time OC	Iterations JuMP	Iterations OC	Allocations JuMP(1e6)	Allocations OC(1e6)
cart_pendulum	100	0.09	4.3	16	226	18.0	631.1
cart_pendulum	400	4.09	16.66	322	651	92.9	6603.0
cart_pendulum	500	153.85	17.08	34	440	92.2	5695.3
cart_pendulum	1000	54.87	59.91	751	507	300.7	13432.9
steering	100	0.02	0.61	11	11	4.3	37.6
steering	400	0.08	0.36	17	17	18.0	174.9
steering	500	0.11	0.34	17	17	22.1	237.6
steering	1000	0.25	0.94	18	18	44.4	676.2
rocket	100	0.06	0.21	19	22	9.9	41.7
rocket	400	0.52	2.6	40	30	39.3	271.9
rocket	500	0.92	14.81	59	62	50.3	534.2
rocket	1000	0.79	149.22	24	123	97.2	2167.6
chain	100	2.34	1.51	7	7	3.4	27.7
chain	400	0.18	0.28	7	8	13.4	89.6
chain	500	0.14	0.45	8	14	16.9	151.6
chain	1000	0.19	0.83	6	6	34.0	341.5
electrical_vehicle	100	0.01	1.1	5	21	2.7	54.9
electrical_vehicle	400	0.03	1.6	5	17	10.6	206.4
electrical_vehicle	500	0.05	28.99	5	1000	13.3	4709.1
electrical_vehicle	1000	0.08	57.46	5	1000	27.3	8653.1