Benchmark JuMP Results						
Model	Discretization	Iterations	Total Time	Ipopt Time	Objective Value	Flag
cart_pendulum	100	16	1.53902	1.511	1.88011e-11	LOCALLY_INFEASIBLE
$\operatorname{cart_pendulum}$	500	34	279.847	279.706	4.42608e-8	LOCALLY_INFEASIBLE
robot	100	18	2.94482	2.918	9.14269	LOCALLY_SOLVED
robot	500	21	0.836607	0.735	9.14099	LOCALLY_SOLVED
electrical_vehicle	100	5	0.33121	0.013	1.24629e8	LOCALLY_SOLVED
electrical_vehicle	500	5	0.175182	0.0549998	6.16023e8	LOCALLY_SOLVED
$double_oscillator$	100	4	0.0074676	0.00600004	0.014816	LOCALLY_SOLVED
$double_oscillator$	500	4	0.0299059	0.026	0.0728525	LOCALLY_SOLVED
$ducted_fan$	100	59	2.60905	2.335	1911.53	LOCALLY_SOLVED
$ducted_fan$	500	67	45.8637	45.846	1909.53	LOCALLY_SOLVED
steering	100	11	1.24426	1.236	0.554595	LOCALLY_SOLVED
steering	500	17	0.293975	0.277	0.554572	LOCALLY_SOLVED
glider	100	223	7.00009	6.967	1254.61	LOCALLY_SOLVED
glider	500	734	30.3694	30.185	1247.98	LOCALLY_SOLVED
rocket	100	19	0.0794601	0.072	1.01283	LOCALLY_SOLVED
rocket	500	59	0.93553	0.905	1.01284	LOCALLY_SOLVED
chain	100	7	0.026384	0.023	5.06978	LOCALLY_SOLVED
chain	500	8	0.122378	0.0979998	5.06858	LOCALLY_SOLVED
$dielectrophoretic_particle$	100	39	0.0762178	0.0740001	-9.97699e-9	LOCALLY_INFEASIBLE
${\it dielectrophoretic_particle}$	500	39	6.56932	6.565	-9.99545e-9	LOCALLY_INFEASIBLE