

TABLE 1 – Comparison Solver LSQ for problem with $n = 2^t$ and $m = 2^{t-1}$

Size- $n - m$	Iter	Cost	KKTresidual	Time	Niter-lsmr
2-4	6	1.0e-06	1.6e-07	0.25	84
4-8	6	3.0e-06	1.6e-07	0.27	96
8-16	6	6.8e-06	1.5e-07	0.29	96
16-32	6	1.5e-05	1.5e-07	0.31	96
32-64	6	3.0e-05	1.5e-07	0.38	96
64-128	6	6.1e-05	1.5e-07	0.51	96
128-256	6	1.2e-04	1.5e-07	0.76	95
256-512	6	2.5e-04	1.5e-07	1.37	103
512-1024	6	4.9e-04	1.5e-07	2.16	93
1024-2048	6	9.9e-04	1.5e-07	4.60	109
2048-4096	6	2.0e-03	2.1e-07	8.83	103
4096-8192	6	4.0e-03	2.1e-07	16.60	97
8192-16384	6	7.9e-03	2.2e-07	38.07	96