

Table 1: General matrix multiplication elapsed time

Comm Size \ Matrix Order	128	256	512	1024	2048
1	0.020905	0.138029	1.132524	28.505833	403.162180
2	0.020905	0.138029	1.132524	28.505833	403.162180
4	0.020905	0.138029	1.132524	28.505833	403.162180
8	0.020905	0.138029	1.132524	28.505833	403.162180
16	0.020905	0.138029	1.132524	28.505833	403.162180

Table 2: My optimized matrix multiplication elapsed time

Comm Size \ Matrix Order	128	256	512	1024	2048
1	0.011226	0.039191	0.198281	2.693320	43.000741
2	0.011226	0.039191	0.198281	2.693320	43.000741
4	0.011226	0.039191	0.198281	2.693320	43.000741
8	0.011226	0.039191	0.198281	2.693320	43.000741
16	0.011226	0.039191	0.198281	2.693320	43.000741

Table 3: P2P MPI matrix multiplication elapsed time

Comm Size \ Matrix Order	128	256	512	1024	2048
1	0.013805	0.132869	1.136721	27.440135	405.727127
2	0.008255	0.067919	0.643046	17.992966	216.574897
4	0.006454	0.051333	0.521087	11.130705	126.646435
8	0.005213	0.037429	0.453798	8.402441	91.816284
16	0.124014	0.208111	0.888161	8.640943	89.016351

Table 4: Collective MPI matrix multiplication elapsed time

Comm Size \ Matrix Order	128	256	512	1024	2048
1	0.014632	0.137869	1.148502	28.705399	411.752261
2	0.016707	0.073242	0.610015	15.051788	213.683344
4	0.007334	0.064321	0.553858	9.156726	125.055034
8	0.011986	0.036423	0.465381	6.575210	92.940979
16	0.067960	0.260153	0.908136	7.515069	110.062592