Lab Course: Efficient Programming of Multicore Processors and Supercomputers

Group 1: Jonas Mayer, Paul Preißner, Konrad Pröll

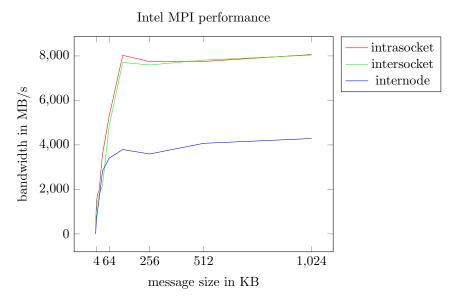
June 28, 2017

4.1 Ping Pong

4.1.1 Latency for zero size (4B) message

intrasocket: 0.383035 usec
intersocket: 0.792160 usec
internode: 1.616740 usec

4.1.2 Bandwidth between two resources for increasing message length



	intrasocket	intersocket	internode
1B	0.92	0.67	0.42
2B	2.28	1.77	0.90
4B	4.49	3.55	1.83
8B	8.77	7.06	3.56
16B	18.50	14.00	7.46
32B	31.30	26.20	11.16
64B	65.98	49.85	23.46
128B	129.94	99.70	47.50
256B	246.75	180.28	88.12
512B	426.66	320.25	168.42
1KB	757.12	542.52	290.19
2KB	1020.17	827.47	457.91
4KB	1457.65	1094.09	699.42
8KB	1759.83	1407.86	988.33
16KB	1951.93	1761.72	1548.52
32KB	3567.56	2172.40	2820.27
64KB	5301.19	4863.98	3406.02
128KB	8028.30	7706.72	3791.91
256KB	7746.00	7594.25	3590.95
512KB	7751.87	7811.03	4071.35
1MB	8062.56	8037.99	4286.77