

Parallel Lenstra Factorization

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Comparison

Work time on smaller number (1000000009 * 1000000009):

Technology	MPI	MPI	MPI	OpenMP	OpenMP	OpenMP
# Threads	2	4	8	2	4	8
Trial 1	6.62296	10.8542	3.97254	13.9512	5.5005	12.9871
Trial 2	2.19408	16.1257	4.2051	8.4954	2.50204	4.28554
Trial 3	16.1229	2.62551	11.4707	2.18535	7.87308	4.11179
Trial 4	10.8145	13.2863	12.1298	4.55166	7.79053	8.3502
Trial 5	22.1045	5.32989	4.09452	21.7842	16.8125	16.8565
Trial 6	22.0693	2.60712	8.26781	6.03823	5.9487	12.2969
Trial 7	2.1007	16.0732	8.21668	2.12855	18.523	8.62527
Trial 8	13.6439	5.23299	4.06939	11.0459	5.23537	4.1229
Trial 9	26.2019	7.82993	16.141	2.05249	5.33422	4.27004
Trial 10	17.8883	2.60012	3.90524	36.4437	10.3042	4.46624
Average	13.976	8.256	7.647	10.867	8.582	8.037

Work time on bigger number (11037271757 * 11037271769 * 1000000007 * 1000000009):

Technology	MPI	MPI	OpenMP	OpenMP
# Threads	4	8	4	8
Trial 1	74.8031	31.2288	36.3329	28.8969
Trial 2	53.6042	38.7387	78.2396	29.7208
Trial 3	48.5605	41.1661	58.0206	38.3326
Trial 4	36.4496	62.5144	71.6803	43.5948
Trial 5	60.2431	58.2061	26.5295	51.1983
Trial 6	65.2556	55.0178	41.0232	20.4041
Trial 7	22.3555	29.1227	52.2064	76.5381
Trial 8	27.762	22.3244	72.3774	21.3066
Trial 9	47.9535	30.2553	20.7422	62.6313
Trial 10	34.2101	30.6617	36.9472	37.5767
Average	47.119	39.923	49.40	41.02