

Factorial	Cores	Method	Real		User		Sys	
			Avg	Min	Avg	Min	Avg	Min
10!	1	MPI Standard factor separation	00:00.3	00:00.3	31:40.8	0	0.032	0.01
10!	1	MPI Optimized factor separation	00:00.3	00:00.3	38:52.8	0	0.028	0
10!	1	Multi-thread Optimized factor separation	00:00.0	00:00.0	00:00.0	0	0	0
10!	2	MPI Standard factor separation	00:00.3	00:00.3	00:28.8	0.02	0.045	0.02
10!	2	MPI Optimized factor separation	00:00.3	00:00.3	56:09.6	0.01	0.047	0.02
10!	2	Multi-thread Optimized factor separation	00:00.0	00:00.0	00:00.0	0	0	0
10!	4	MPI Standard factor separation	00:00.3	00:00.3	19:40.8	0.07	0.07	0.04
10!	4	MPI Optimized factor separation	00:00.3	00:00.3	15:21.6	0.05	0.076	0.03
10!	4	Multi-thread Optimized factor separation	00:00.0	00:00.0	01:26.4	0	0.004	0
10!	8	MPI Standard factor separation	00:00.3	00:00.3	21:07.2	0.16	0.135	0.1
10!	8	MPI Optimized factor separation	00:00.3	00:00.3	20:38.4	0.16	0.137	0.1
10!	8	Multi-thread Optimized factor separation	00:00.0	00:00.0	01:26.4	0	0.014	0
100!	1	MPI Standard factor separation	00:00.3	00:00.3	48:57.6	0.01	0.027	0.01
100!	1	MPI Optimized factor separation	00:00.3	00:00.3	57:36.0	0.02	0.028	0.01
100!	1	Multi-thread Optimized factor separation	00:00.0	00:00.0	08:38.4	0	0.003	0
100!	2	MPI Standard factor separation	00:00.3	00:00.3	14:52.8	0.03	0.051	0.03
100!	2	MPI Optimized factor separation	00:00.3	00:00.3	04:48.0	0.02	0.056	0.03
100!	2	Multi-thread Optimized factor separation	00:00.0	00:00.0	05:45.6	0	0	0
100!	4	MPI Standard factor separation	00:00.3	00:00.3	35:31.2	0.06	0.077	0.04
100!	4	MPI Optimized factor separation	00:00.3	00:00.3	15:21.6	0.06	0.072	0.04
100!	4	Multi-thread Optimized factor separation	00:00.0	00:00.0	11:31.2	0	0.001	0
100!	8	MPI Standard factor separation	00:00.3	00:00.3	21:07.2	0.15	0.15	0.09
100!	8	MPI Optimized factor separation	00:00.3	00:00.3	12:57.6	0.16	0.127	0.08
100!	8	Multi-thread Optimized factor separation	00:00.0	00:00.0	14:24.0	0	0.013	0
10000!	1	MPI Standard factor separation	00:01.2	00:01.2	11:31.2	0.92	0.023	0
10000!	1	MPI Optimized factor separation	00:01.2	00:01.1	16:19.2	0.84	0.028	0.02
10000!	1	Multi-thread Optimized factor separation	00:01.0	00:00.9	21:07.2	0.9	0.002	0
10000!	2	MPI Standard factor separation	00:00.8	00:00.8	12:28.8	1.04	0.041	0.01
10000!	2	MPI Optimized factor separation	00:00.8	00:00.8	40:19.2	1.08	0.036	0.01
10000!	2	Multi-thread Optimized factor separation	00:00.5	00:00.5	17:16.8	0.89	0.002	0
10000!	4	MPI Standard factor separation	00:00.6	00:00.6	14:52.8	1.26	0.063	0.01
10000!	4	MPI Optimized factor separation	00:00.6	00:00.6	27:21.6	1.23	0.062	0.04
10000!	4	Multi-thread Optimized factor separation	00:00.3	00:00.3	49:26.4	1.07	0.001	0
10000!	8	MPI Standard factor separation	00:00.5	00:00.5	22:04.8	1.65	0.122	0.05
10000!	8	MPI Optimized factor separation	00:00.5	00:00.5	29:45.6	1.64	0.129	0.08
10000!	8	Multi-thread Optimized factor separation	00:00.2	00:00.2	08:09.6	1.32	0.009	0
50000!	1	MPI Standard factor separation	00:06.4	00:06.0	01:55.2	5.79	0.027	0.01
50000!	1	MPI Optimized factor separation	00:04.8	00:04.6	34:04.8	4.41	0.026	0.01
50000!	1	Multi-thread Optimized factor separation	00:06.0	00:05.7	39:50.4	5.71	0	0
50000!	2	MPI Standard factor separation	00:03.4	00:03.3	25:26.4	6.1	0.048	0.02
50000!	2	MPI Optimized factor separation	00:03.2	00:03.0	42:43.2	5.46	0.038	0.01
50000!	2	Multi-thread Optimized factor separation	00:03.3	00:03.1	59:31.2	5.96	0.001	0
50000!	4	MPI Standard factor separation	00:02.3	00:02.2	09:36.0	7.82	0.072	0.03
50000!	4	MPI Optimized factor separation	00:02.2	00:02.1	39:21.6	7.37	0.061	0.03
50000!	4	Multi-thread Optimized factor separation	00:02.0	00:02.0	28:48.0	6.67	0.01	0
50000!	8	MPI Standard factor separation	00:01.8	00:01.6	53:45.6	11.06	0.139	0.09
50000!	8	MPI Optimized factor separation	00:01.6	00:01.6	36:28.8	10.53	0.133	0.08
50000!	8	Multi-thread Optimized factor separation	00:01.4	00:01.3	23:31.2	7.14	0.003	0