

1 MPI Hands-On; Performance Analysis

1.1 Analysis of Parallel Summation with Point-to-Point Communications

Parallel Summation; the given [program](#) adds n numbers both in sequential and parallel.

- Take a (quick) look at the source code.
- Download the [binary](#).
- Download the Excel [file](#) to fill the table by increasing the value of n and the value of $nproc$.
- Login to the *kubuntu under VirtualBox* system.
- Make all the test runs by the following command;

```
mpirun -np XXprocXX ./code00 XXNXX  
such as: mpirun -np 2 ./code00 10000
```

- You may erase your output files (#outputfile.dat) after your tests.

```
rm -f *outputfi*
```

- Analyse your plots.