

Abstract

The use of the Task Parallel Library in .NET Framework 4 within the IMSL C# Numerical Library is an effective means of achieving scalable parallelism. Some classes show very good, nearly linear, scaling up to 8 processors, which is quite good considering the algorithms were not re-written, but rather just had codes using the TPL added in strategic places. Finally, Visual Numerics has performed these benchmarks on standard systems using the publicly available version of the software, and while we expect you should get similar results, it is always best to evaluate the algorithms you use on your deployment hardware for truly accurate results.