Developer Zone

Intel® MPI Library

Making applications perform better on Intel® architecture-based clusters with multiple fabric flexibility

- Scalability verified up to 340k processes
- Supports the latest MPI-3 standard
- MPICH ABI compatibility

From $499

Buy Now (https://software.intel.com/en-us/intel-mpi-library/try-buy)

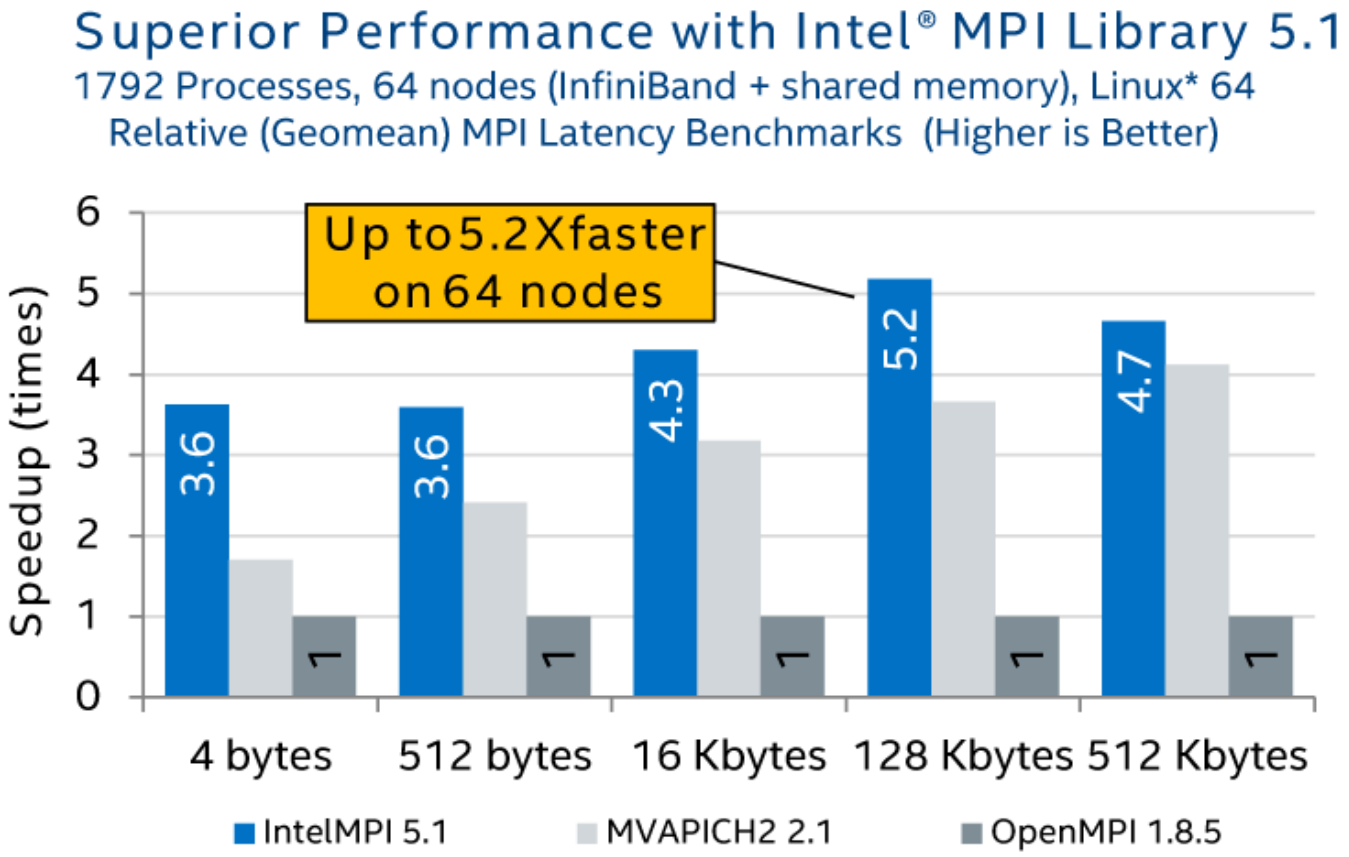
Product Support (https://software.intel.com/en-us/intel-mpi-library-support)

Intel® MPI Library

Deliver Flexible, Efficient, and Scalable Cluster Messaging

Intel® MPI Library 5.1 focuses on making applications perform better on Intel® architecture-based clusters—implementing the high performance Message Passing Interface Version 3.0 specification on multiple fabrics. It enables you to quickly deliver maximum end user performance even if you change or upgrade to new interconnects, without requiring changes to the software or operating environment.

Use this high performance MPI message library to develop applications that can run on multiple cluster interconnects chosen by the user at runtime. Benefit from a free runtime environment kit for products developed with Intel MPI Library. Get excellent performance for enterprise, divisional, departmental, workgroup, and personal high performance computing.



Configuration: Hardware: CPU: Dual Intel® Xeon E5-2697v3@2.60Ghz; 64 GB RAM. Interconnect: Mellanox Technologies* MT27500 Family [ConnectX*-3]. Software: RHEL 6.5; OFED 3.5-2; Intel® C/C++ Compiler XE 15.0.3; Intel® MPI Library 5.1; Intel® MPI Benchmarks 4.1.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. * Other brands and names are the property of their respective owners. Benchmark Source: Intel Corporation

Optimization Notice: Intel's compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel. Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice. Notice revision #20110804.

Download the Free Runtimes Now

The runtime package includes everything you need to run Intel MPI Library-based applications. It is available, free of charge, for customers who already have applications enabled with the Intel MPI Library and includes the full install and runtime scripts. Download the package for your operating system:

- Runtime for Windows* (https://registrationcenter.intel.com/RegCenter/ComForm.aspx?ProductID=1745)
- Runtime for Linux* (https://registrationcenter.intel.com/RegCenter/ComForm.aspx?ProductID=1744)

Specs at a Glance

Processors	Intel® processors, coprocessors and compatibles

Languages	Natively supports C,C++ and Fortran development
Development Environments	Microsoft Visual Studio* (Windows) Eclipse*/CDT* (Linux)
Operating Systems	Linux and Windows
Interconnect Fabric Support	Shared memory. RDMA-capable network fabrics through DAPL* (e.g., InfiniBand*, Myrinet*). Sockets (e.g., TCP/IP over Ethernet*, Gigabit Ethernet*) and others.

For complete information, refer to the release notes (/en-us/articles/intel-mpi-library-51-release-notes).

For more complete information about compiler optimizations, see our Optimization Notice (/en-us/articles/optimization-notice#opt-en).

(/en-us/intel-mpi-library-support) Product Support