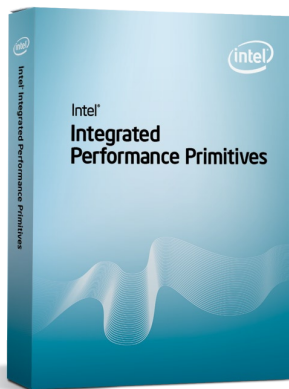




Intel® Integrated Performance Primitives 6.0

Product Brief

Intel® Integrated Performance Primitives 6.0



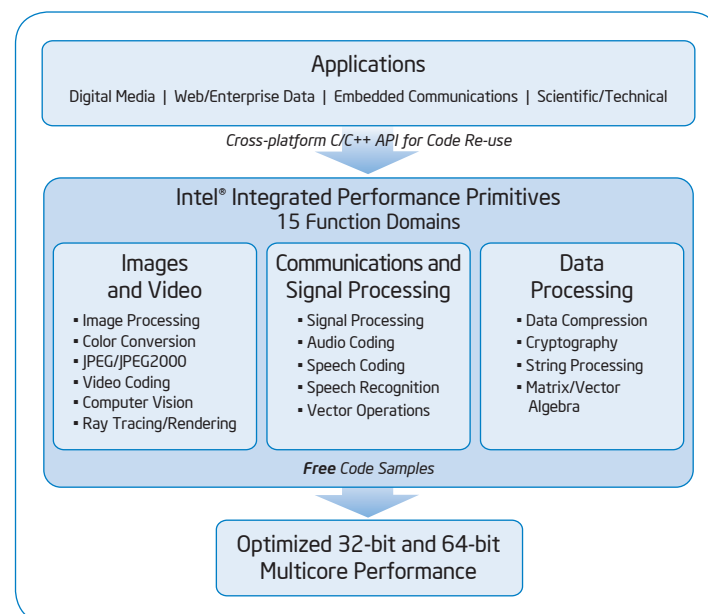
“Intel IPP provided a 300 percent improvement in the number of users who can simultaneously participate in a webcast. In addition, the migration from Intel Pentium III to Pentium 4 [processors] took only a day.”

Leo Volfson, President and Chief Technology Officer Inetcam, Inc.

Multicore Power for Multimedia and Data Processing

Intel® Integrated Performance Primitives (Intel® IPP) is an extensive library of multicore-ready, highly optimized software functions for multimedia, data processing, and communications applications. Intel IPP is available as a standalone product, or with the Intel® Compiler and Compiler Suite Professional Editions for a more complete and cost-effective solution. Intel IPP offers thousands of optimized functions covering frequently-used fundamental algorithms in:

- Video coding
- Signal processing
- Audio coding
- Image processing
- Speech coding
- JPEG coding
- Speech recognition
- Computer vision
- Data compression
- Image color conversion
- Cryptography/CAVP validated
- String processing/Regular Expressions
- Vector/Matrix mathematics
- Ray-Tracing/Rendering



Features

Support for Multicore Processors

Intel IPP functions are fully thread-safe, and many are internally threaded, to help you get the most out of today's multicore processors, including the Intel® Core™ i7 and Intel® Atom™ processors.

Multi-Platform Compatibility

Use the same API for application development on multiple operating systems: Windows*, Linux*, and Mac OS*.

Expanded Functions and Code Samples

Enhancements in Intel IPP 6.0 include:

- High-level Data Compression support for LZO high-speed algorithm, and improved performance for zlib, gzip, and bzip2 algorithms.
- Deferred Mode Image Processing (DMIP) Layer provides solutions for pipelined image operations on larger images, utilizes in memory optimization, and improves performance in multi-threading environment.
- Unified Image Codec (UIC) framework sample library to standardize plug-and-play interfaces for various image codecs.
- Threaded Static Libraries have been added to cover all functional domains.
- New functions in Signal Processing, Image Processing, Video Coding, and Cryptography domains.
- New features and enhancements in Intel IPP samples, including Microsoft RT audio support, Speech coding standard G729.1 codec support, Video AVS codec support for decoding, and ALS decoder profile support in AAC decoding.

Freely Downloadable Code Samples

Jumpstart your application development with source code samples from Intel IPP, including video/audio/speech codecs, image processing, signal processing and more.

Royalty-free Redistribution

Redistribute unlimited copies of the runtime libraries with your application.

Performance

Intel IPP functions are designed to deliver performance beyond what optimized compilers alone can deliver by matching the function algorithms to low-level optimizations based on the processor's available features such as Streaming SIMD Extensions (SSE) and other optimized instruction sets.

For more up-to-date performance data, please visit the Intel IPP product webpage at www.intel.com/software/products/ipp.

Compatibility

Intel IPP is validated for use with multiple generations of Intel and compatible AMD* processors.

Development Tools and Environments

Intel IPP is fully compatible with other development tools from Intel, such as compilers, performance and threading analyzers, and other Intel® Performance Libraries. In addition, Intel IPP is easily used and integrated with popular development tools and environments, such as Microsoft Visual Studio*, Xcode*, Eclipse*, and the GNU Compiler Collection (GCC).

System Requirements

Please refer to www.intel.com/software/products/ipp/sysreq.htm for details on hardware and software requirements.

Support

Every purchase of an Intel® Software Development Product includes a year of support services, which provides access to Intel® Premier Support and all product updates during that time. Intel Premier Support gives you online access to technical notes, application notes, and documentation.

Intel® Software Development Products

Intel Software Development Products help you create the fastest software possible by offering a full suite of tools:

- Intel® Compilers
- Intel® VTune™ Performance Analyzers
- Intel® Performance Libraries
- Intel® Threading Analysis Tools
- Intel® Cluster Tools

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