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Intel® Instruction Set Extensions Technology

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Intel® Instruction Set Extensions are additional instructions that can increase performance when the same operations are performed on multiple data objects. More information can be found on [Intel® 64 and IA-32 Architectures Software Developer's Manual Combined Volumes: 1, 2A, 2B, 2C, 2D, 3A, 3B, 3C, 3D, and 4](#) and [Intel® Architecture Instruction Set Extensions Programming Reference](#).

Instruction Set Extensions can include:

- Single Instruction Multiple Data (SIMD)
- Intel® Streaming SIMD Extensions (Intel® SSE, Intel® SSE2, Intel® SSE3, and Intel® SSE4)
- Intel® Advanced Vector Extensions (Intel® AVX, Intel® AVX2, and Intel® AVX-512)

Visit [How to Find the Supported Intel® Instruction Set Extensions for Intel® Processor](#) to find the supported Intel Instruction Set Extensions for your processor.

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Streaming SIMD Extensions (SSE)

Streaming SIMD Extensions 2 (SSE2)

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Streaming SIMD Extensions 3 (SSE3)	▼
Streaming SIMD Extensions 4 (SSE4)	▼
Intel® Advanced Vector Extensions (Intel® AVX and Intel® AVX2)	▼
Intel® Advanced Vector Extensions 512 (Intel® AVX-512)	▼

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