

# What do IA-32 and Intel® 64 Architecture mean?

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Intel® compilers and libraries support three platforms: general combinations of processor architecture and operating system type. This section explains the terms that Intel uses to describe the platforms in its documentation, installation procedures and support site.

**IA-32 Architecture** refers to systems based on 32-bit processors generally compatible with the Intel Pentium® II processor, (for example, Intel® Pentium® 4 processor or Intel® Xeon® processor), or processors from other manufacturers supporting the same instruction set, running a 32-bit operating system.

**Intel® 64 Architecture** refers to systems based on IA-32 architecture processors which have 64-bit architectural extensions, for example, Intel® Core™ 2 processor family), running a 64-bit operating system such as Microsoft Windows XP\* Professional x64 Edition or Microsoft Windows Vista\* x64. If the system is running a 32-bit version of the Windows operating system, then IA-32 architecture applies instead. Systems based on AMD\* processors running a 64-bit version of Windows are also supported by Intel compilers for Intel® 64 architecture applications.

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## Product and Performance Information

<sup>1</sup> 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

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