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Intel® Extended Memory 64 Technology[1]

Enabling 64-Bit Desktop Computing

Benefits of 64-bit Desktop Computing

The primary value to customers lies in potential performance improvements, achieved by the ability to address more than 4GB of both virtual and physical memory.

FOR DIGITAL MEDIA APPLICATIONS:

CAPABILITY	RESULT	BENEFIT
Can process more in RAM	Less data caching to and from hard drive	Enabling faster performance
	Helps applications do more in real-time	Critical for complex audio/video filter algorithms and large data sets
For high end audio	Enables a deep sonic palette and more lifelike and interesting compositions	More tracks, more plug-ins, more synths = more creative potential
For multi-media	Fewer multiple passes and longer sequences	Layering 3D film & video for special effects creation
	Headroom for processing high definition video	Enabling improvements in both speed and quality of workflow

FOR ENGINEERING CAD/CAM/CAE APPLICATIONS:

CAPABILITY	RESULT	BENEFIT
Processing more in RAM	Less data caching to and from hard drive for faster performance	Important for complex simulations/analysis
	Entire complex models within one machine when doing 3D modeling, design or prototyping	Improving both real-time quality and workflow; possible to load up and manipulate larger models at one time
	Complex design reviews	Allowing internet real-time collaboration

Platform Specifications for 64-bit Desktop Computing

For 64-bit computing you need a 64-bit enabled platform that meets the following specifications:

PLATFORM LAYER	DESCRIPTION
Apps	Applications ported to 64-bits and optimized for Intel® EM64T
OS	Microsoft Windows XP Pro x64*, or RedHat* and Novell* desktop OS's that support 64-bit computing
Drivers	64-bit drivers required
BIOS	64-bit readiness required
Chipset	Supports 64-bit computing
Memory	4 GB of RAM or more recommended for apps that can benefit from high system memory
CPU	Supports 64-bit computing+

+Intel® desktop processors in the LGA775 package support 64-bit computing.[2]

To learn more about enabling 64-bit computing platforms with Intel® EM64T, please contact your Intel representative or visit: www.intel.com/reseller

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