



Intel Corporation (Intel) commissioned Principled Technologies (PT) to compare the performance in common business scenarios that utilize advanced user interface features in Microsoft Windows Vista of an Intel vPro technology based PC with that of three other platforms. We tested a scenario that took advantage of a new feature of Windows Vista - the ability to play HD video as well while completing other tasks. We made a combination of hard performance measurements and subjective quality assessments on the following systems:

- Intel vPro technology with Intel Core 2 Duo processor E6700 on an Intel 965 (DQ965GF) motherboard
- Intel Pentium D processor 930 on an Intel D945GTP motherboard
- Intel Pentium 4 processor 630 on an Intel D945GTP motherboard
- Intel Pentium 4 processor on an Intel D865GBF motherboard

motherboard

Scenario: opening a PDF file to thumbnail view while an HD video plays

Charles Tanaka is a sales director at the Melcore Robotics Company. He is preparing for an upcoming teaching engagement in which he will be instructing his team on how to effectively deliver a presentation on the company's latest product lines. In this presentation, Charles wants to illustrate the type of visuals that are crucial to selling a product. The presentation includes a Microsoft demo HD video that Charles feels illustrates how much benefit HD can bring to his company's product presentations, a PDF file, and several supporting documents. He opens the video file that his co-worker Andy sent him, and he lets it play as he waits for a particular segment to appear. In the meantime, he opens the PDF file to study its contents. Adobe Reader opens the PDF file in its thumbnail view. Charles double-clicks the thumbnail of the last Adobe page, which jumps him to that page.

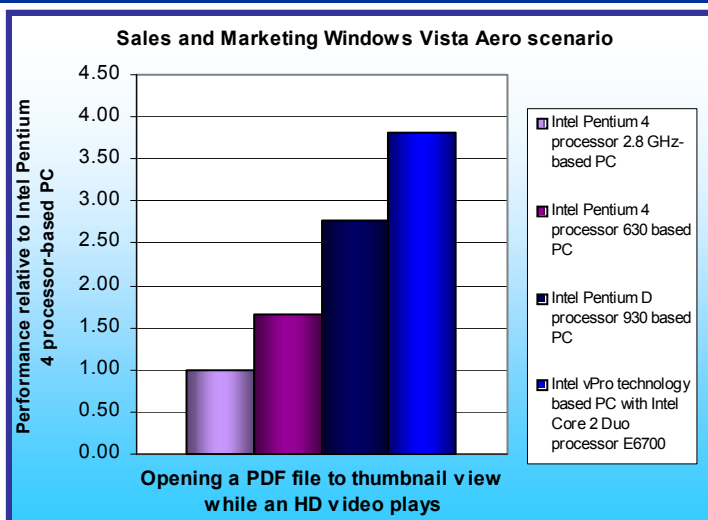
The Intel vPro technology-based PC with the Intel Core 2 Duo processor E6700 outperformed the older systems on opening a PDF file to a thumbnail view while an HD video plays largely due to the faster processor and chipset. The vPro chipset also includes hardware HD motion compensation, which freed up more of the processor for opening the PDF file.

For more information on these tests and to see the full test report, visit:

www.principledtechnologies.com/clients/reports/Intel/vPro/oVistaAero.pdf

KEY FINDINGS

- The Intel® vPro™ technology based PC featuring the Intel® Core™2 Duo processor E6700 yielded a significant performance advantage for users in our sales and marketing scenario as well as an improved user experience while playing HD video.
- For example, the Intel vPro technology based PC finished opening a PDF file 3.82 times faster than the Intel® Pentium® 4 processor-based PC.
- This performance improvement translates into multi-second time savings that would be noticeable to users.
- The older system with the Intel® Pentium® 4 processor 2.8GHz on the Intel D865GBF motherboard did not have the capabilities necessary to play HD video.



PERFORMANCE RESULTS (seconds)				TASKS	COMPARATIVE RATING			
Intel Pentium 4 on Intel D865GBF	Intel Pentium 4 630 on Intel D945GTP	Intel Pentium D 930 on Intel D945GTP	Intel vPro with Core 2 Duo E6700 on Intel DQ965GF		Intel Pentium 4 on Intel D865GBF	Intel Pentium 4 630 on Intel D945GTP	Intel Pentium D 930 on Intel D945GTP	Intel vPro with Core 2 Duo E6700 on Intel DQ965GF
12.75	7.75	4.58	3.34	Opening a PDF file while an HD video is playing	1.00	1.65	2.78	3.82
NA*	no issues	no issues	no issues	Playing an HD video	NA*	no issues	no issues	no issues

*Windows Media Player would not play the HD video on the Intel Pentium 4 processor 2.8GHz on the Intel D865GBF motherboard. Instead, during the test it played a non-HD video.