



## Performance comparison of three notebook PCs with Intel and VIA processors

Intel Corporation (Intel) commissioned Principled Technologies (PT) to run a set of performance tests on the following notebook systems in their out-of-the-box (OOB) configurations:

- an HP 2133 Mini-Note PC with a VIA C7-M 1.20GHz processor-based system (which we refer to as System A)
- an HP 530 Notebook PC with an Intel Celeron M 520 1.60GHz processor-based system (which we refer to as System B)
- an HP Compaq 6720s Notebook PC with an Intel Celeron 550 2.00GHz processor-based system (which we refer to as System C)

Intel specified the test systems and provided the tests, test procedures, and test settings. PT purchased the systems from [www.HP.com](http://www.HP.com), set up the systems, and executed all tests. See Appendixes A and B in the full report for greater detail on the systems.

We ran the following five custom consumer application tests that simulate tasks a typical user would perform:

- **Microsoft Office 2007 multitasking**—one test that uses PowerPoint 2007 to print to an XPS file while at the same time using Word 2007 to combine two documents.
- **Music ripping**—one test that uses Apple iTunes 7.6 to rip a .wav music file to mp3 format
- **Photo editing**—one test that automatically “smart fixes” a group of 50 digital photos using Adobe Photoshop Elements 6.0
- **Spreadsheet recalculation**—one test that uses Microsoft Office Excel 2007 to recalculate a spreadsheet
- **Video converting**—one test that uses Videora iPod Converter to convert an .avi video file to a MPEG-4, H.264 file

As the Key findings state, the two Intel Celeron and Celeron M processor-based systems performed better on every test than the VIA C7-M processor-based system, while costing \$30 and \$80 less.

### Key findings

- The two Intel Celeron and Celeron M processor-based systems performed better on every test than the VIA C7-M processor-based system, while costing \$30 and \$80 less.
- The Intel Celeron M 520 processor-based system performed 204 percent to 471 percent better than the VIA C7-M processor-based system in custom consumer applications tests, while costing \$80 less.
- The Intel Celeron 550 processor-based system performed 303 percent to 621 percent better than the VIA C7-M processor-based system in custom consumer applications tests, while costing \$30 less.

Test	Performance Results			Comparative ratings		
	System A VIA C7-M 1.20 GHz	System B Intel Celeron M 520 1.60 GHz	System C Intel Celeron 550 2.00 GHz	System A VIA C7-M 1.20 GHz	System B Intel Celeron M 520 1.60 GHz	System C Intel Celeron 550 2.00 GHz
<b>Custom consumer application tests (seconds – lower is better for performance results; higher is better for comparative ratings)</b>						
Microsoft Office 2007 multitasking—PowerPoint with Word	789	231	178	1.00	3.42	4.43
Music ripping—Apple iTunes 7.6	1,262	221	175	1.00	5.71	7.21
Photo editing—Adobe Photoshop Elements 6.0	1,462	297	216	1.00	4.92	6.77
Spreadsheet recalculation—Microsoft Office 2007 Excel	274	90	68	1.00	3.04	4.03
Video converting—Videora iPod Converter	337	95	75	1.00	3.55	4.49

**Figure 1: Performance results and comparative performance ratings for the test systems. For performance results, lower numbers are better. For comparative ratings, higher numbers are better.**

For more information on these tests and to see the full test report, visit: [www.principledtechnologies.com/clients/reports/intel/mininote0508.pdf](http://www.principledtechnologies.com/clients/reports/intel/mininote0508.pdf).