Mythbusting

AMD Ryzen™ PRO processors

Discover the AMD Ryzen™ PRO processors and how they enable the modern business notebook.

MYTH:
System runs hot

FACT:
AMD systems are cool

PERFORMANCE IMPROVEMENT
Up to 320% Performance/Watt improvement.

(AMD Ryzen PRO vs. A-Series processors)

KEYBOARD TEMPERATURES
Up to 26ºF lower keyboard temperature or
up to 14.5ºC lower temperature during 3DMark® 11.[2]

(Notebook keyboard temperature on AMD Ryzen PRO vs. AMD A-Series notebooks)

SURFACE TEMPERATURE
Similar skin temperature to the competition
during 3D Mark 11 workload.[3]

Lenovo™

MYTH:
Limited battery life

FACT:
AMD-based systems have an all-workday battery life

Lenovo

Up to 39% longer battery life on 2nd Gen Ryzen PRO mobile notebooks.[4]

(Lenovo ThinkPad™ T495 with Ryzen 7 PRO 3700U, 50Wh battery vs. Lenovo ThinkPad A485 with Ryzen 7 PRO 2700U, 48 Wh battery)

Up to 14.9 hrs battery life on a Lenovo ThinkPad T495 notebook.[5]

(AMD Ryzen™ 7 PRO 3700U Processor, 50 Wh battery)

Up to 16.4 hrs battery life on a Lenovo ThinkPad T495s notebook.[5]

(AMD Ryzen™ 7 PRO 3700U Processor, 57 Wh battery)

MYTH:
System is noisy

FACT:
AMD systems are quiet

Quieter than a library

UL conducted a test under active load,
and a Ryzen processor-based notebook
was quieter than a public library.*

*Based on AMD-commissioned research from UL Benchmarks, September 2018.
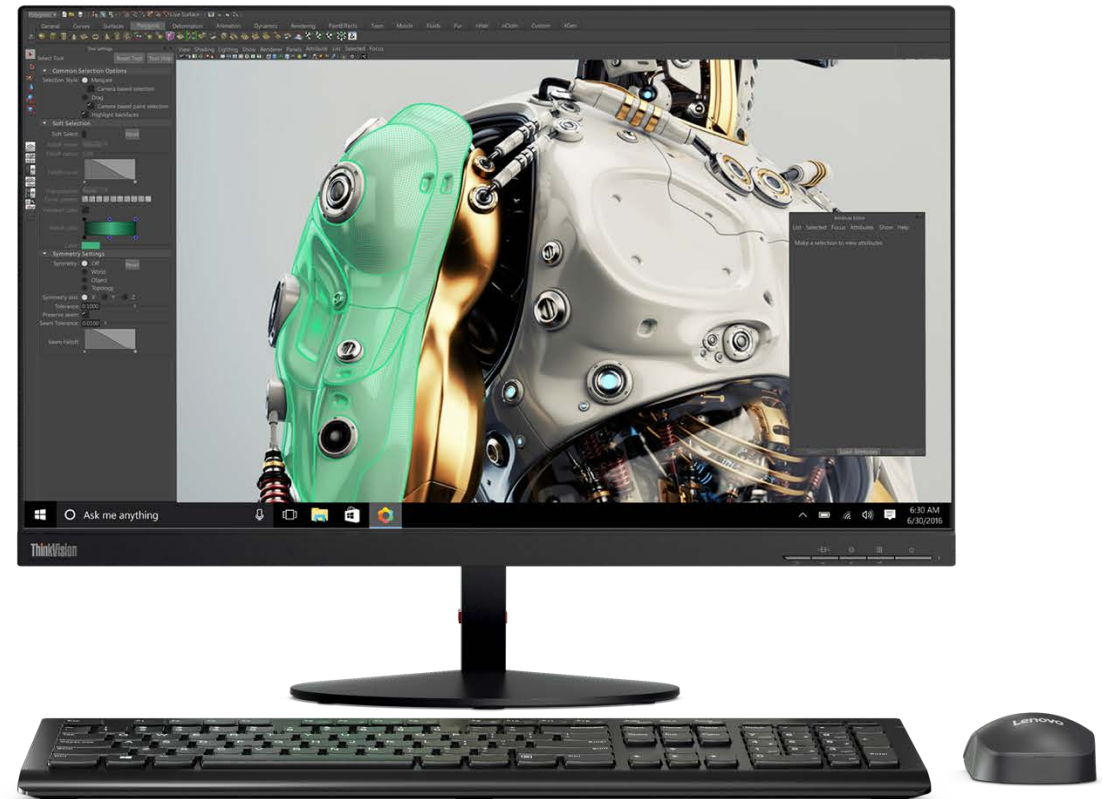For the full report, see https://benchmarks.ul.com/services/technical-marketing-services.

MYTH:
Supplies are low

FACT:
AMD systems are readily available

Ready when you are

Notebooks and desktop business systems powered by AMD Ryzen™ PRO processors are readily available from multiple OEMs around the world.

MYTH:
Reduced manageability and security features without vPro

FACT:
AMD PRO supports manageability and security features

Commercial-grade support on all AMD PRO processors

AMD Ryzen™ 7/5/3 PRO processors provide the same manageability and security features, whereas Intel vPro is supported only on select i7 and i5 processors and is not supported on i3 or lower.

Source: ark.intel.com as of July 2019. Support for new features may be added only by exception process.

	AMD PRO	Intel vPro (i7 and i5 only)
Asset Inventory	✓	✓
KVM	✓	✓
Dedicated Security Co-Processor	✓ (on-chip)	✓ (off-chip)
Memory Guard	✓	No equivalent offering

MYTH:
System is vulnerable to security threats

FACT:
AMD PRO is built with security features in mind

Security features built in

AMD Ryzen™ PRO processors feature a built-in security co-processor running AMD GuardMI Technology.

Recent threats

AMD takes security vulnerabilities very seriously. As is the case with Meltdown, AMD believes that AMD processors are not susceptible to the recent exploits of Foreshadow due to our hardware paging architecture protections.

AMD Memory Guard

Help defend against attacks on your RAM (cold-boot attacks) with real-time encryption and decryption of all your system's RAM with AMD Memory Guard.
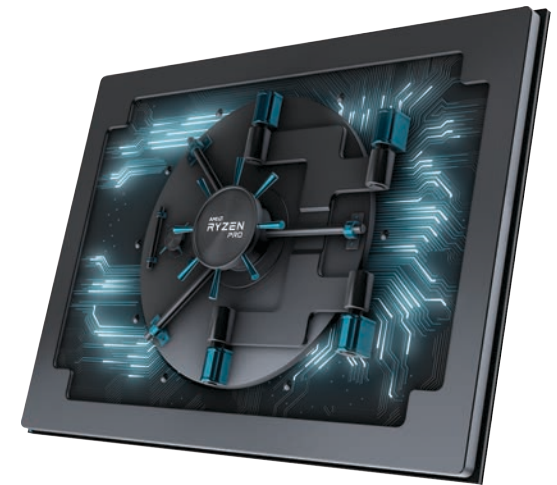
MYTH:
Deployment takes too long

FACT:
Really? AMD takes about the same time as Intel
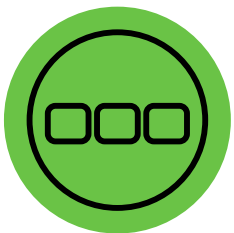
FOLLOW THE SAME STEPS.
Follow 35 steps on both AMD and Intel notebooks for deployment.*

(Lenovo ThinkPad A275 vs. Lenovo ThinkPad X270)
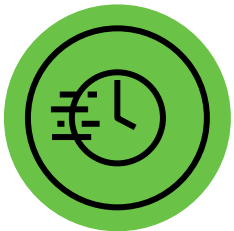
DEPLOY IN ROUGHLY THE SAME TIME.
40 seconds total deployment time on AMD versus 43 seconds on Intel.*

(Lenovo ThinkPad A275 vs. Lenovo ThinkPad X270)

*Study Commissioned by AMD. https://www.principledtechnologies.com/AMD/PRO_processors_image_deployment_competitive_0518.pdf

Lenovo

MYTH: SYSmark performance score is relevant and unbiased	FACT: SYSmark performance score is biased

Lenovo

Evaluate the benchmarks for your needs

Is the test relevant?

40% not relevant

40% of the SYSmark Score is built from PowerDirector and Lightroom application testing. How often does your workplace use these applications?

Source:
http://bapco.com/wp-content/uploads/2018/08/SYSmark_2018_White_Paper_1.0.pdf - Page 26

Is the test unbiased?

From US Federal Trade Commission, December 2009:

Paragraph 66: "In truth and in fact, the benchmarks Intel publicized were not accurate or realistic measures of typical computer usage or performance, because they did not simulate 'real world' conditions, and/or overestimated the performance of Intel's product vis-à-vis non-Intel products. Therefore, the representations and omissions of material facts made by Intel…"

Source:
http://bapco.com/wp-content/uploads/2018/08/SYSmark_2018_White_Paper_1.0.pdf - Page 26

VISIT AMD.COM/PARTNER

Smarter technology for all

Lenovo

Your source for tools, training, news, reviews, and much more!
To find out more about AMD Ryzen™ PRO Mobile Processors, please visit www.AMD.com/ryzenpro

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