Third parties confirm AMD’s outstanding Ryzen 3000 numbers

reader comments

331 with 148 posters participating, including story author

Share this story

AMD debuted its new Ryzen 3000 desktop CPU line a few weeks ago at E3, and it looked fantastic. For the first time in 20 years, it looked like AMD could go head to head with Intel’s desktop CPU line-up across the board. The question: would independent, third-party testing back up AMD’s assertions?

When comparing two CPUs, you should generally be looking at three golden criteria: price, performance, and power consumption. It’s fairly easy to win on a single criterion—for example, even in the Piledriver era, comparing an FX-9590 to an i7-4770 could get you an anemic multi-threaded performance win. But the Piledriver part cost more than the Intel one and consumed tremendously more power. Moving forward to the Ryzen 2 era, things got much closer to even: when comparing a Ryzen 7 2700 vs an Intel i7-8700, the Intel CPU takes the performance win, and power consumption is relatively even, but the AMD part has a big price advantage. This is arguably an even heat for that particular lineup—but if you care more about performance, moving the AMD side up to a Threadripper 2950x brings you to an enormous win for Intel on both power consumption and price.

With the Ryzen 3000 series, this dynamic changes. AMD’s new 7nm process technology allows it to ramp up the performance to challenge Intel’s higher-end lineup without veering into power consumption profiles that look more like a welder than a CPU, and it’s already shipping the CPUs retail. So in addition to coverage from professional reviewers at Tom’s Hardware, PCworld, Gizmodo, and more, end-user benchmarks are showing up at aggregators like cpubenchmark.net. All of them bear out AMD’s E3 show numbers in broad strokes—if you’re looking for a Ryzen 3000 series CPU to meet or beat any given Intel CPU on performance while beating it on price and power consumption, you can find one.

https://arstechnica.com/?p=1533963