# Tiger Lake? The upcoming ‘Thunderbolt 4’ seems more like Kitty Puddle

**Intel’s new ‘Thunderbolt 4’ spec quickly turns into a confusing mess.**

On its third generation, Thunderbolt remains the ‘big cat’ of interfaces for creatives, allowing charging and media sharing capabilities not possible with humdrum USB.

But it seems Thunderbolt 4, a key feature of , may not be as evolutionary as the name implies.

To begin with, Intel didn’t reveal all that much about the new ‘Tiger Lake’ chip, due to ship sometime “this year” during its presentation at creative tech conference CES. The new chip will deliver “double-digit” performance gains – though over exactly what, we don’t know – as well as a “huge leap” in graphics performance. Tiger Lake is also characterised as a “10nm+” chip.

The other feature, Thunderbolt 4, was characterised as “4X the performance of USB 3” in a promotional slide. But it appears that the new I/O spec isn’t as fresh as its title would imply.

Intel’s Greg Bryant showed off the company’s Tiger Lake CPU and a prototype motherboard at CES in Las Vegas.
Part of the confusion should be assigned to the USB Implementor’s Forum, which last spring released a nearly . USB 3.0 and USB 3.1 were renamed to USB 3.2, and assigned ‘generational’ or ‘Gen’ names to try and differentiate them from one another. (Today, the USB-IF reversed course and  that’s a little clearer.)

Essentially, the use of ‘USB 3’ gives Intel some rather broad leeway into what, exactly, it’s referring to in making its performance comparison. What was originally, colloquially called ‘USB 3.0’ transfers data at 5Gbps. Subsequent generations transfer data at 10Gbps (USB 3.1) and 20Gbps (USB 3.2). Under the new branding scheme, the most up-to-date 20Gbps USB spec is currently known as USB 3.2 Gen 2×2.

Intel/YouTube

So what exactly is Thunderbolt 4? Intel's still not saying an awful lot.

Here's what Intel told Tom's Hardware when asked:

"Thunderbolt 4 continues Intel leadership in providing exceptional performance, ease of use and quality for USB-C connector-based products," "It standardises PC platform requirements and adds the latest Thunderbolt innovations. Thunderbolt 4 is based on open standards and is backwards compatible with Thunderbolt 3. We will have more details to share about Thunderbolt 4 at a later date."

Then the company further clarified that it was referring to *USB 3.1* when it was referring to 'USB 3'. USB 3.1 transfers

data at 10 Gbps.. Four times faster. Simple, right?

Not really. And when asked for clarification by *PCWorld*, Intel merely replied that “more details on Thunderbolt 4 will come at a later date.”

The bottom line? Who knows. Intel hasn’t done itself any favours here, and right now there’s not a lot to go on where either Tiger Lake or Thunderbolt 4 is concerned.

Maybe it should have left Tiger Lake’s new feature out of its presentation entirely.

*Additional reporting by Digital Arts staff.*

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