History of the Processor

JAJA APOSTOL AND JAHRI HARRIS
The 1990s

- First superscalar processors using static scheduling and no speculation
- Important research at a number of universities focused on techniques for exploiting additional Instruction-level parallelism through multiple issue with and without speculation
- These research insights were used to build dynamically scheduled, speculative processors, including the Motorola 88110, MIPS R10000, DEC Alpha 21264, PowerPC 603, and the Intel Pentium Pro, Pentium III, and Pentium 4
1993 - Intel releases the Pentium processor on March 22, 1993. The processor is a 60 MHz processor and incorporates 3.1 million transistors.

1996 - AMD introduces the K5 processor with speeds of 75 MHz to 133 MHz and bus speeds of 50 MHz, 60 MHz, or 66 MHz. The K5 was the first processor developed completely in-house by AMD.

1999 - Intel Pentium 600 MHz is released

1999 - AMD introduced the Athlon processor series. The Athlon would be produced for the next 6 years in speeds ranging from 500 MHz up to 2.33 GHz.
In 2001, Intel introduced the IA-64 architecture and its first implementation, Itanium. Itanium represented a return to a more compiler-intensive approach that they called explicitly parallel instruction computing (EPIC).

EPIC represented a considerable enhancement over the early VLIW architectures, removing many of their drawbacks.
2000 - Intel's new single core processor family in the market was the Pentium IV processor that achieved a clock speed between 1.3 GHz to 3.08 GHz. It was the first modern desktop processor to implement simultaneous multithreading (SMT).

2003 - AMD releases the first Athlon 64 processors, the 3200+ (2.0 GHz, 1024 KB L2 cache), and the first Athlon 64 FX processor, the FX-51 (2.2 GHz, 1024 KB L2 cache). It was the first 64-bit consumer CPU.

2005 - AMD releases their first dual-core processor, the Athlon 64 X2 3800+ (2.0 GHz, 512 KB L2 cache per core)

2008 - Intel releases the first Core i7 Desktop processors the i7-920 (8M Cache, 2.67 GHz, 1066 MHz FSB), the i7-940 (8M Cache, 2.93 GHz, 1066 MHz FSB), and the i7-965 Extreme Edition (8M Cache, 3.2 GHz, 1066 MHz FSB)
2010-Current

- 2011 - Sandy Bridge and Ivy Bridge introduced. These brought notable improvements to the Core i3, i5 and i7 line. Sandy Bridge uses the 32nm manufacturing process while Ivy Bridge uses an even better 22nm process. Improved on Westmere integrated graphics.

- 2011 - AMD FX, built off of the 32nm processor which AMD calls the first native 8-core desktop processor

- 2017 - Intel introduces 18 Core i9 Processor with speeds from 2.60 GHz to 4.40 GHz with Turbo Boost Max Technology
Sources

- https://www.pcmec.com/article/a-cpu-history/11/
- https://www.computerhope.com/history/processor.htm