

# Intel « Alder Lake »

The Intel logo is displayed in a dark blue color. It features a small, bright blue square positioned above the first vertical stroke of the letter 'i'. The word 'intel' is written in a lowercase, sans-serif font. A registered trademark symbol (®) is located at the end of the word, to the right of the final vertical stroke of the letter 'l'.

intel®

## What is « Alder Lake » ?



→ 12th generation

→ Available since November 4th

## What are the new processors launched under Alder Lake ?

Intel Core I5-12600K/KF  
350€



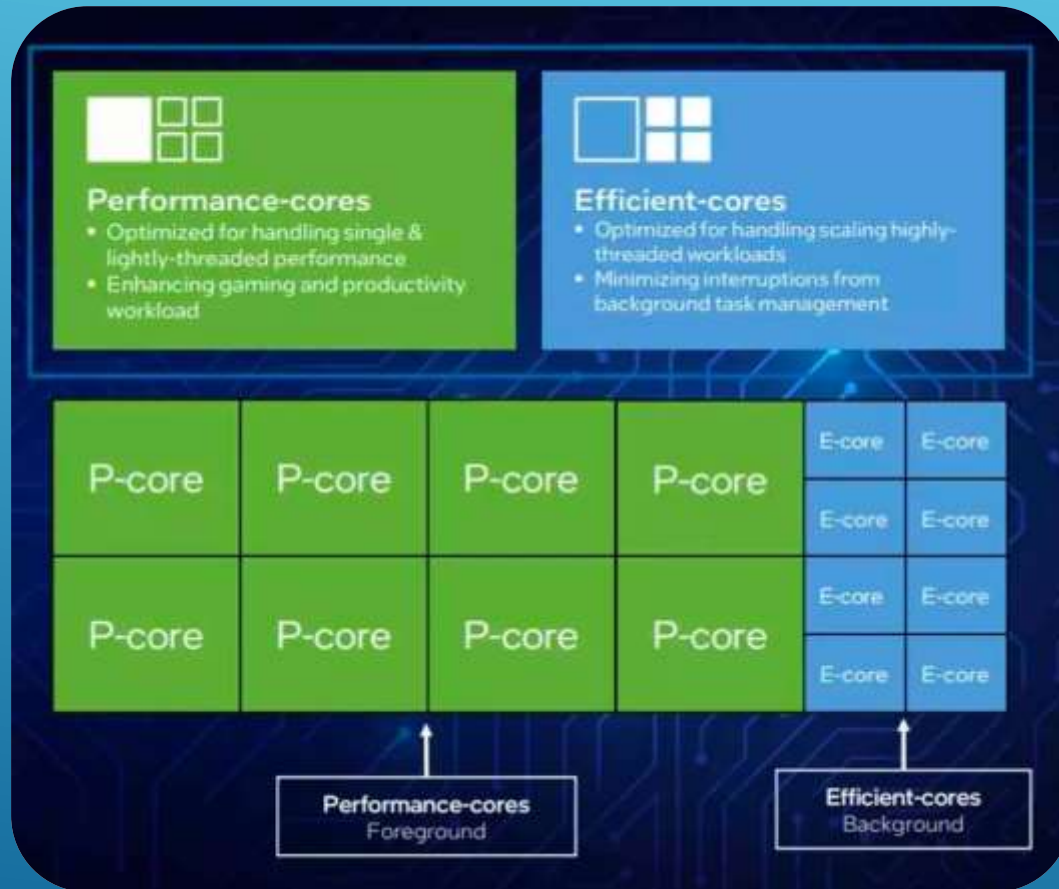
Intel Core I7-12700K/KF  
460€



Intel Core I9-12900K/KF  
680€



## Advantages of this 12th Intel generation :



→ P-Core (Golden Cove)

→ E-Core (Gracemont)

## Advantages of this 12th Intel generation :



New socket : LGA-1700

Overall speed improvement

DDR4 & newest DDR5 RAM support

12th generation and 13th are supported

## Advantages of this 12th Intel generation :

### Specs comparison with older gen from AMD & Intel

Modèle	Coeurs	Threads	Fréquence Base	Fréquence Max	TDP	Gravure
Intel Core i9-12900KF	8P + 8E	24	3,2 GHz (P) 2,4 GHz (E)	5,2 GHz (P) 3,9 GHz (E)	125 W (241 W)	Intel 7
Intel Core i7-12700K	8P + 4E	20	3,6 GHz (P) 2,7 GHz (E)	5,0 GHz (P) 3,8 GHz (E)	125 W (190 W)	Intel 7
Intel Core i5-12600K	6P + 4E	16	3,7 GHz (P) 2,8 GHz (E)	4,9 GHz (P) 3,6 GHz (E)	125 W (150 W)	Intel 7
Intel Core i9-11900K	8	16	3,5 GHz	5,3 GHz	125 W	14 nm
Intel Core i7-11700K	8	16	3,6 GHz	5,0 GHz	125 W	14 nm
Intel Core i5-11600K	6	12	3,9 GHz	4,9 GHz	125 W	14 nm
AMD Ryzen 9 5950X	16	32	3,4 GHz	4,8 GHz	105 W	TSMC 7nm FinFET
AMD Ryzen 9 5900X	12	24	3,7 GHz	4,8 GHz	105 W	TSMC 7nm FinFET
AMD Ryzen 7 5800X	8	16	3,8 GHz	4,7 GHz	105 W	TSMC 7nm FinFET
AMD Ryzen 5 5600X	6	12	3,7 GHz	4,6 GHz	65 W	TSMC 7nm FinFET

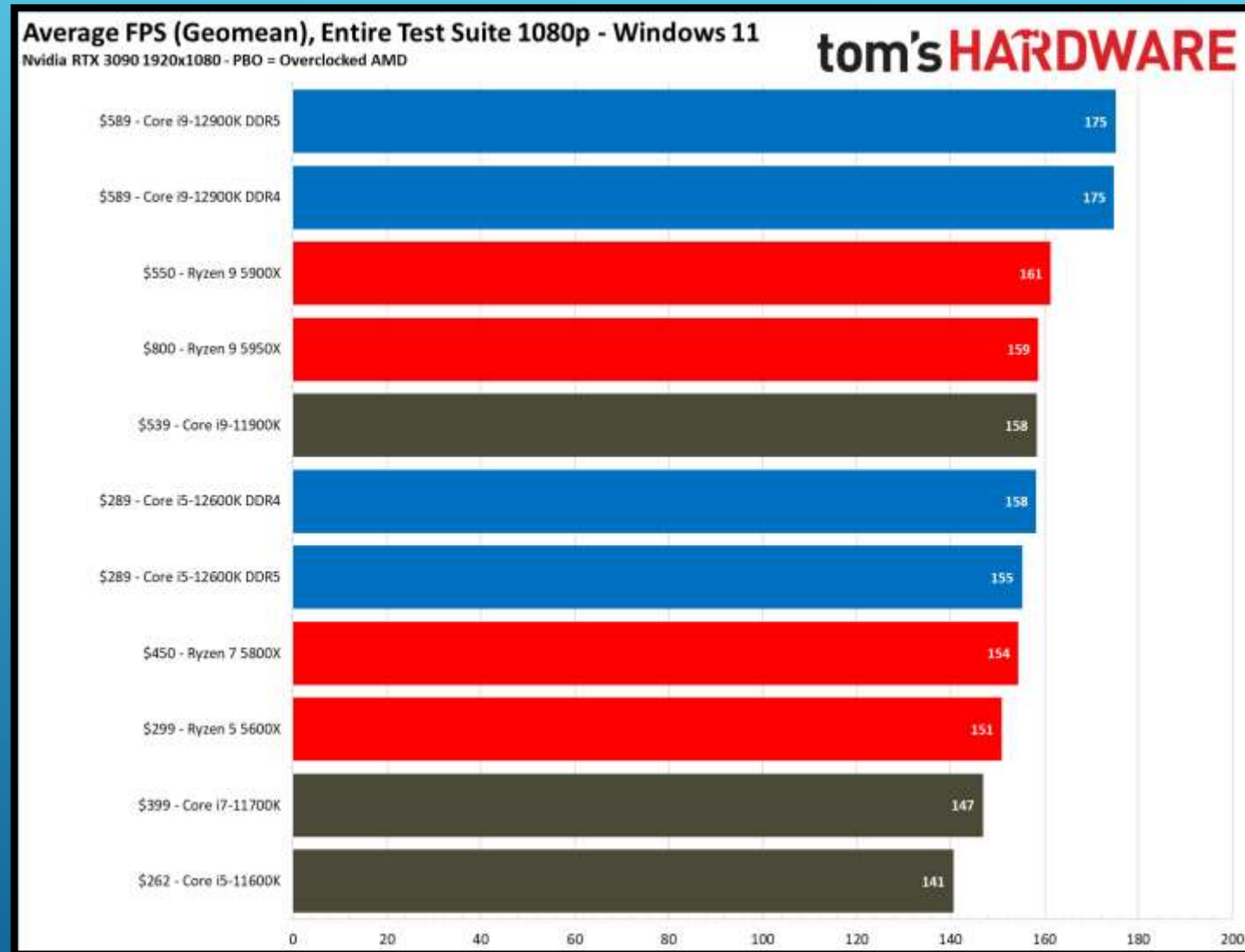
→ Engraving

→ Threads

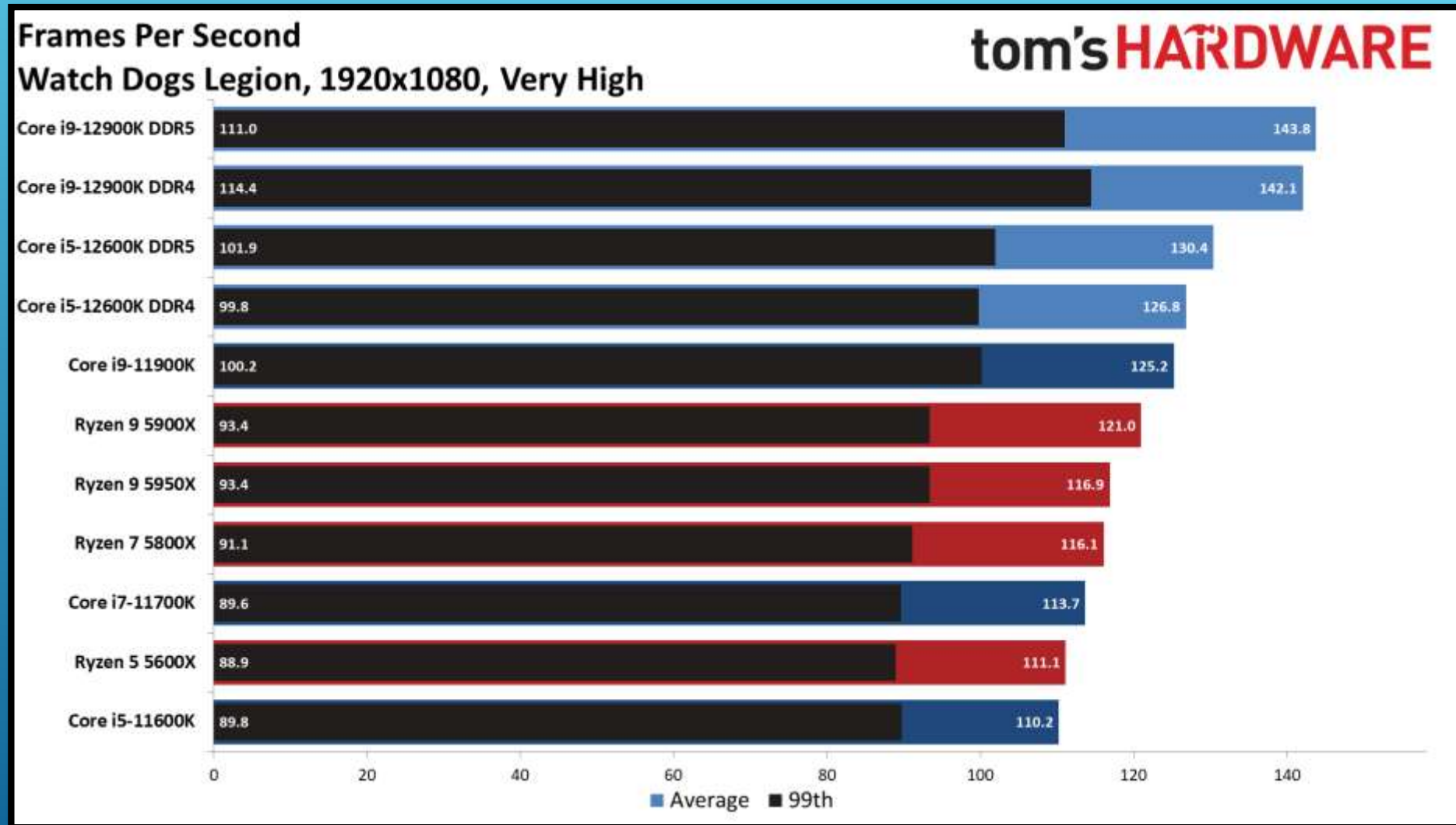
→ TDP (Thermal design power)



## How do these new processors perform compared to older ones ?



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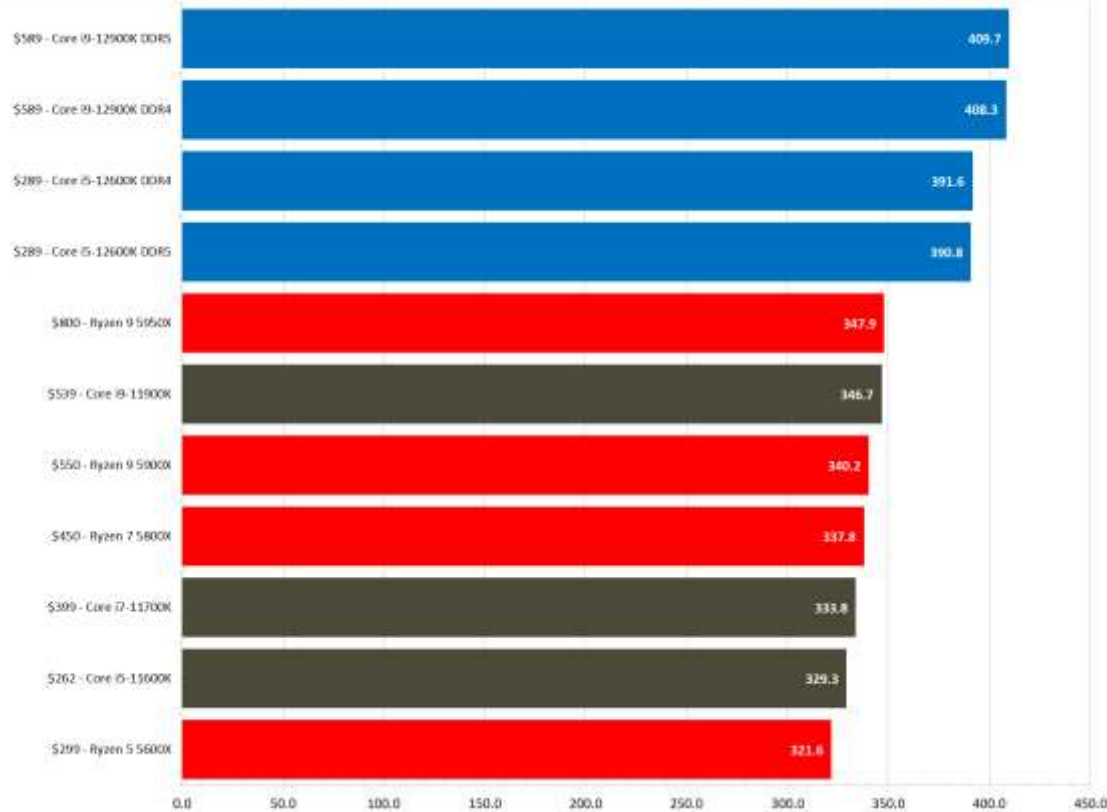


# How do these new processors perform compared to older ones ?

## Single-Threaded Performance Ranking - Windows 11

Geomean - sT LAME, Cinebench, POV-ray - Higher is Better

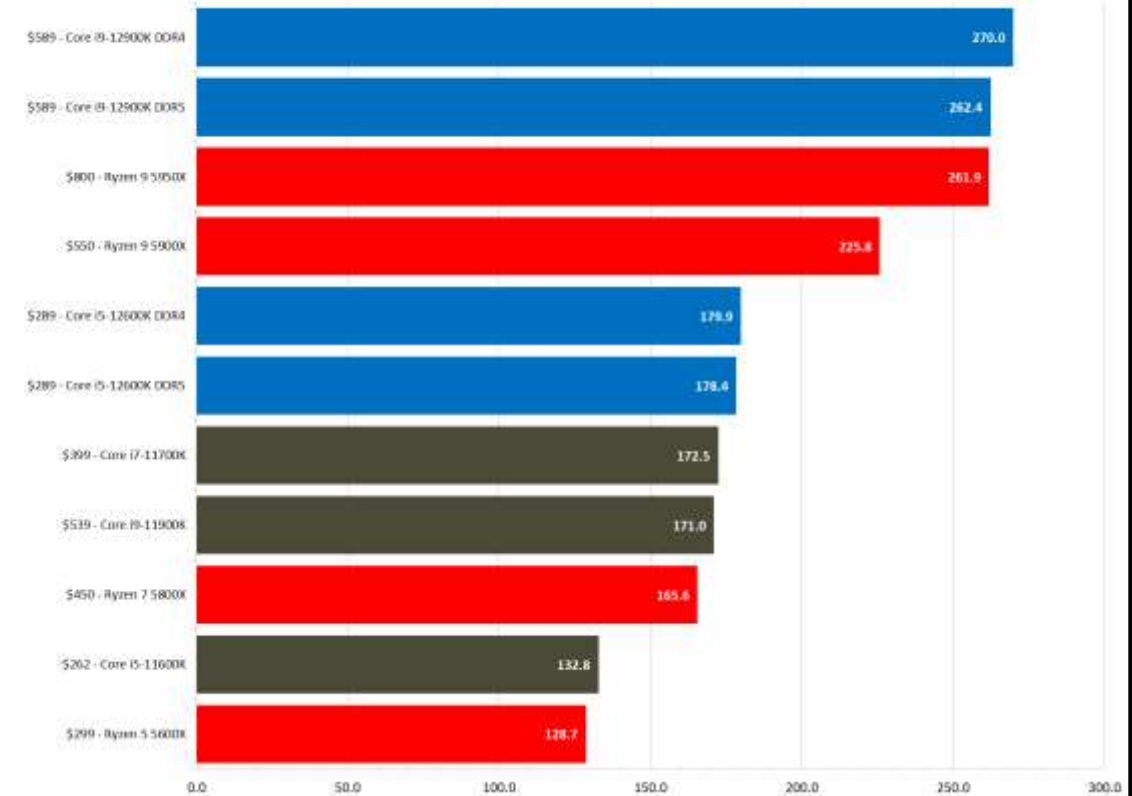
tom's **HARDWARE**



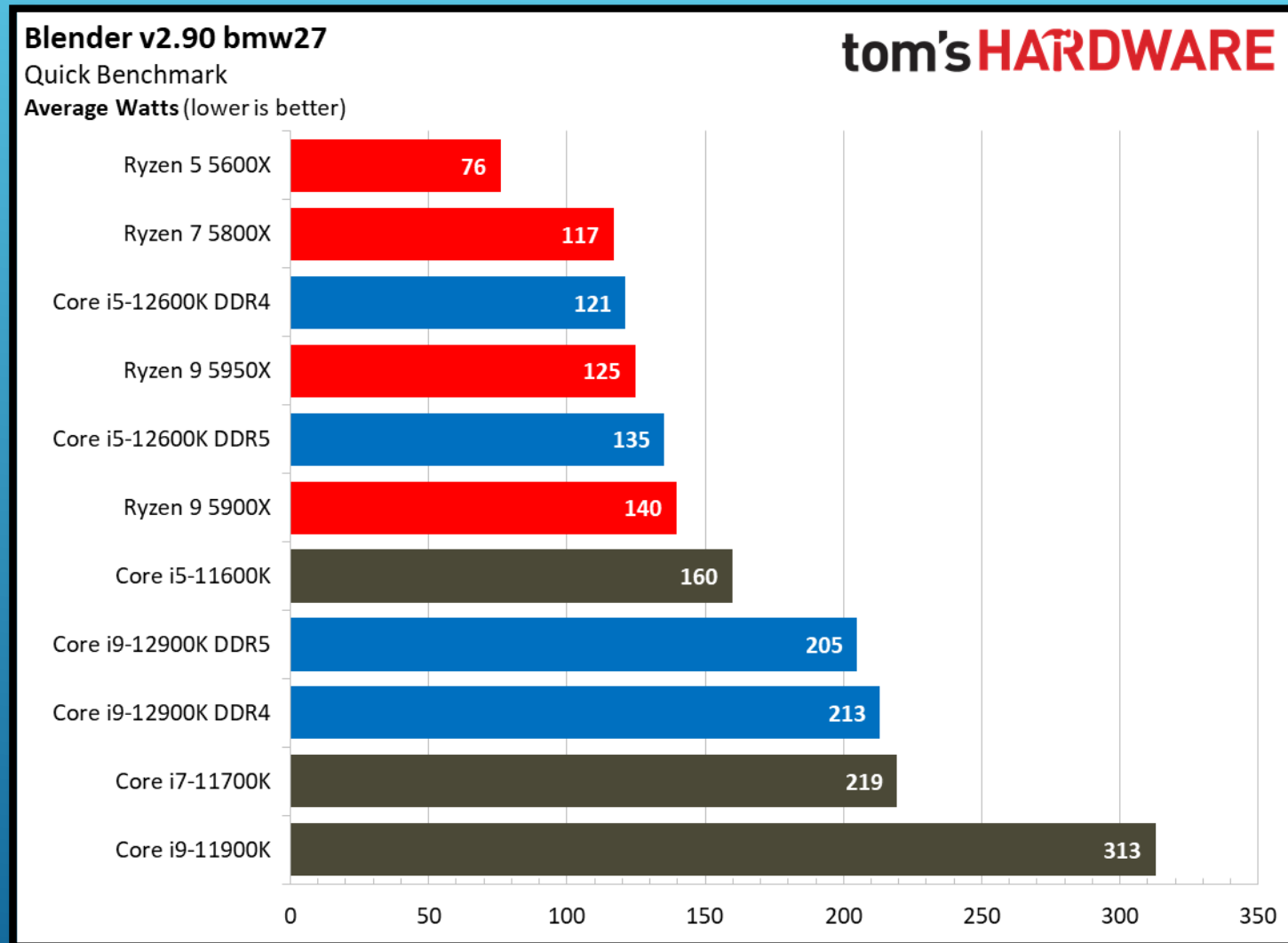
## Multi-Threaded Performance Ranking - Windows 11

Geomean - nT Cinebench, POV-ray, vray, Blender, Handbrake, y-cruncher  
Higher is Better

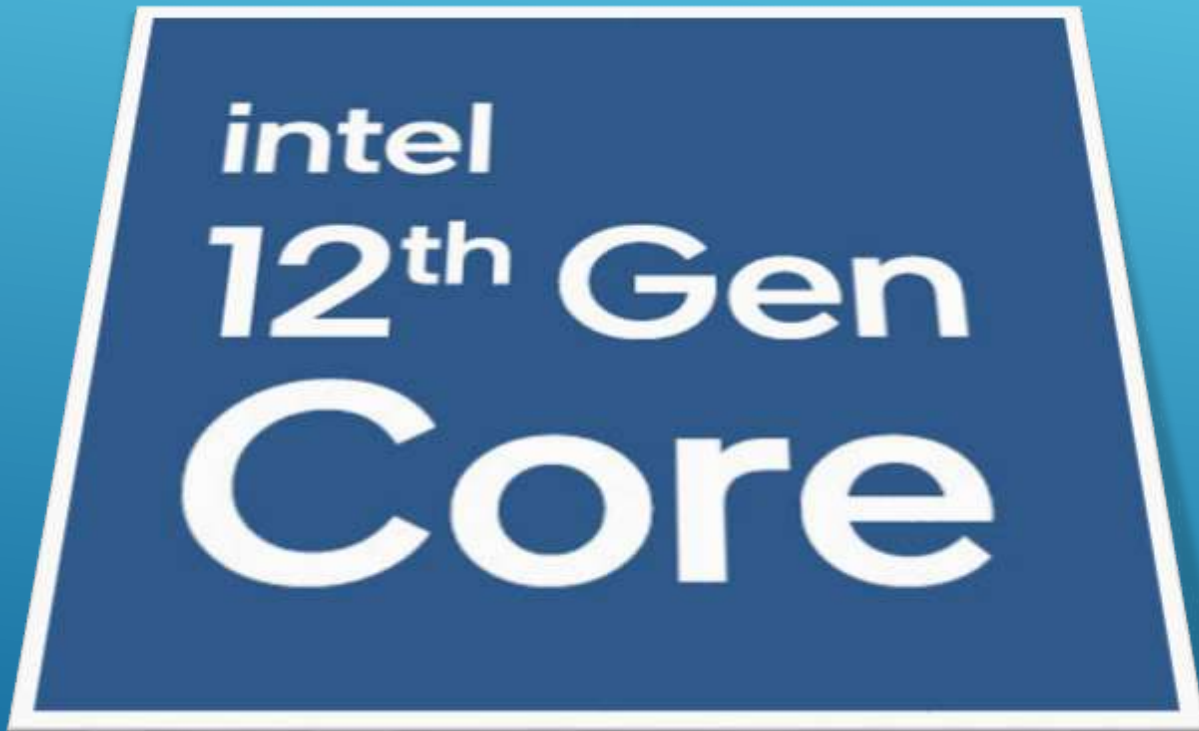
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## How does these new processors perform compared to older ones ?



## Synthesis : Alder Lake



# End of presentation

**Feel free to ask questions**

