CPU Smart Transition

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Desktop CPU Overview 2020-2022

	2020			2021			2021			2022		
Year	2020			2021						2022		
Codename, Generation, Architecture	CometLake (CML) 10th Gen / 14nm			CometLake (CML) and CometLake-Refresh (CML-R) 10th Gen / 14nm			RocketLake 11th Gen / 14nm			AlderLake 12th Gen / Intel 7		
Power	125W	65W	35W	125W	65W	35W	125W	65W	35W	125W	65W	35W
Systems	7080MT	xx80	xx80MFF	7090MT	xx90	xx90MFF	7090MT	xx90	xx90MFF	7000MT	xx00	xx00MFF
					3080	3080MFF					XE4	5400AIO
					7780AIO	3280AIO					5400AIO	
					5490AIO	5490AIO					7400AIO	
System EOML	Q3 FY22			Q3 FY23			Q3 FY23			Q3 FY24		

XEON

		125W	65W	35W	125W	65W	35W	125W	65W	35W	125W	65W	35W
Core i9	vPro	10900K	10900	10900T	10900K	10900	10900T	11900K	11900	11900T	12900K	12900	12900T
Core i7	vPro	10700K	10700	10700T	10700K	10700	10700T	11700K	11700	11700T	12700K	12700	12700T
Core i5	vPro		10600	10600T		10600	10600T		11600	11600T	12600K	12600	12600T
	vPro		10500	10500T		10505	10500T		11500	11500T		12500	12500T
	Non Vpro		~~10400~~	~~10400T~~		-	-		~~11400~~	~~11400T~~		~~12400~~	~~12400T~~
Core i3	Non Vpro		10300	10300T		10305	10305T		-	-		12300	12300T
	Non Vpro		10100	10100T		10105	10105T		-	-		12100	12100T
Pentium	Non Vpro		G6500	G6500T		G6505	G6505T		-	-		-	-
	Non Vpro		G6400	G6400T		G6405	G6405T		-	-		G7400*	G7400T*
Celeron	Non Vpro		G5900	G5900T		G5905	G5905T		-	-		G6900**	G6900T**

* 3000; 5000; 5400AIO; XE4;
** 5000; 3000

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OptiPlex xx00 / D12: Core i5/i7/i9 65W Processor Transition 10th → 12th CPU gen.

Transition from	Transition to	Cores / max. frequency	Performance Gain	Price Delta		

Intel® Core™ i9 10900	Intel® Core™ i9 12900	16C / 5.1 GHz	28%	+$	Upgrade: Significantly better perf. at slightly higher price
10C / 5.2 GHz	Intel® Core™ i7 12700	12C / 4.9 GHz	24%	-$$$	Bargain: Much better perf. at much lower price
	Intel® Core™ i5 12500	6C / 4.6 GHz	18%	-$$$$$	Bargain: Much better perf. at significantly lower price point

| Intel® Core™ i7 10700 | Intel® Core™ i7 12700 | 12C / 4.9 GHz | 25% | +$ | Upgrade: Significantly better perf. at slightly higher price |
| 8C / 4.8 GHz | Intel® Core™ i5 12500 | 6C / 4.6 GHz | 19% | -$$$ | Bargain: Much better perf. at much lower price |

| Intel® Core™ i5 10505 | Intel® Core™ i5 12500 | 6C / 4.6 GHz | 33% | = | Upgrade: Significantly better perf. at the same price |
| 6C / 4.6 GHz | Intel® Core™ i3 12100 | 4C / 4.3 GHz | 13% | -$$ | Bargain: Better perf. at lower price point * |

* w/o vPro capability

Lab benchmarks

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OptiPlex xx00 / D12: Core i5/i7/i9 65W Processor Transition 11th → 12th CPU gen.

Transition from	Transition to	Cores / max. frequency	Performance Gain	Price Delta	
Intel® Core™ i9 11900 8C / 5.2GHz	Intel® Core™ i9 12900	16C / 5.1 GHz	16%	+$	Upgrade: Much better perf. at slightly higher price
	Intel® Core™ i7 12700	12C / 4.9 GHz	12%	-$$$	Bargain: Better perf. at much lower price
	Intel® Core™ i5 12500	6C / 4.6 GHz	7%	-$$$$$	Bargain: Slightly better perf. at significantly lower price point
Intel® Core™ i7 11700 8C / 4.9GHz	Intel® Core™ i7 12700	12C / 4.9 GHz	20%	+$	Upgrade: Much better perf. at slightly higher price
	Intel® Core™ i5 12600	6C / 4.8 GHz	19%	-$$	Bargain: Much better perf. at much lower price
	Intel® Core™ i5 12500	6C / 4.6 GHz	14%	-$$$	Bargain: Better perf. at much lower price point
Intel® Core™ i5 11500 6C / 4.8GHz	Intel® Core™ i5 12500	6C / 4.6 GHz	20%	=	Upgrade: Much better perf. at the same price
	Intel® Core™ i3 12100	4C / 4.3 GHz	2%	-$$	Bargain: Slightly better perf. at slightly lower price *

* w/o vPro capability

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OptiPlex xx00 / D12: Core i5/i7/i9 35W T-Processor Transition 10th → 12th CPU gen.

Transition from	Transition to	Cores / max. frequency	Performance Gain	Price Delta	
Intel® Core™ i9 10900T 10C / 4.6 GHz	Intel® Core™ i9 12900T	16C / 4.9 GHz	40%	+$	Upgrade: Unprecedented perf. gain at slightly higher price
	Intel® Core™ i7 12700T	12C / 4.7 GHz	35%	-$$$	Bargain: Significantly better perf. at much lower price
	Intel® Core™ i5 12500T	6C / 4.4 GHz	33%	-$$$$$	Bargain: Significantly better perf. at significantly lower price
Intel® Core™ i7 10700T 8C / 4.5 GHz	Intel® Core™ i7 12700T	12C / 4.7 GHz	40%	+$	Upgrade: Unprecedented perf. gain at slightly higher price
	Intel® Core™ i5 12500T	6C / 4.4 GHz	38%	-$$$	Bargain: Significantly better perf. at much lower price
Intel® Core™ i5 10500T 6C / 3.8 GHz	Intel® Core™ i5 12500T	6C / 4.4 GHz	51%	=	Upgrade: Unprecedented perf. gain at the same price
	Intel® Core™ i3 12100T	4C / 4.1 GHz	30%	-$$	Bargain: Significantly better perf. at lower price *

* w/o vPro capability

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OptiPlex xx00 / D12: Core i5/i7/i9 35W T-Processor Transition 11th → 12th CPU gen.

Transition from	Transition to	Cores / max. frequency	Performance Gain	Price Delta	
Intel® Core™ i9 11900T 8C / 4.9 GHz	Intel® Core™ i9 12900T	16C / 4.9 GHz	34%	+$	Upgrade: Significantly better perf. at slightly higher price
	Intel® Core™ i7 12700T	12C / 4.7 GHz	29%	-$$$	Bargain: Significantly better perf. at much lower price
	Intel® Core™ i5 12500T	6C / 4.4 GHz	27%	-$$$$$	Bargain: Significantly better perf. at significantly lower price
Intel® Core™ i7 11700T 8C / 4.6 GHz	Intel® Core™ i7 12700T	12C / 4.7 GHz	33%	+$	Upgrade: Significantly better perf. at slightly higher price
	Intel® Core™ i5 12500T	6C / 4.4 GHz	31%	-$$$	Bargain: Significantly better perf. at much lower price
Intel® Core™ i5 11500T 6C / 3.9 GHz	Intel® Core™ i5 12500T	6C / 4.4 GHz	39%	=	Upgrade: Significantly better perf. at the same price
	Intel® Core™ i3 12100T	4C / 4.1 GHz	20%	-$$	Bargain: Much better perf. at lower price point *

* w/o vPro capability

OptiPlex xx00 / D12: CPU overview

CPU MODEL	CPU gen	WATT	CORES	Kyoto X			Kyoto			Plymouth			Troy			Nazca	Pompeii
				TOWER												All-in-One	
				XE4 MT	XE4 SFF	7000 MFF OEM	7000 MT	7000 SFF	7000 MFF	5000 MT	5000 SFF	5000 MFF	3000 MT	3000 SFF	3000 MFF	5400 AIO	7400 AIO
Celeron G6900T	ADL Alder Lake	35W	2												V		
Pentium G7400T			2									V			V	V	
i3-12100T			4			V			V			V			V	V	
i3-12300T			4			V			V			V			V	V	
i5-12500T			6			V			V			V			V	V	
i5-12600T			6						V			V			V	V	
i7-12700T			12			V			V			V			V	V	
i9-12900T			16			V			V								
Celeron G6900		65W	2										V	V			
Pentium G7400			2	V	V					V	V		V	V		V	
i3-12100			4	V	V		V	V	V	V	V		V	V		V	V
i3-12300			4	V	V		V	V	V	V	V		V	V		V	V
i5-12500			6	V	V		V	V	V	V	V		V	V		V	V
i5-12600			6	V	V		V	V	V	V	V		V	V		V	V
i7-12700			12	V	V		V	V	V	V	V					V	V
i9-12900			16	V	V		V	V	V								V
i5-12600K		125W	10				V										
i7-12700K			12				V										
i9-12900K			16				V										

*i5-12400/T: not offered - higher price & lower performance vs. i5-12500/T

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