

CPU Comparative Matrix - OCIPUG Hardware SIG Meeting, 01/11/2011 - Current Models ONLY - Value Desktop Segment

Brand	AMD	Intel	Intel
Model	Sempron 140	Celeron E1200 - E3500	Pentium Dual-Core E5200 - E6800, G6950
Speed (GHz)	2.7	1.6 - 2.7	2.5 - 3.33, 2.8 (G6950)
Price (\$) (1)	36	41 - 53	64 - 87
Cache, L1 (K)	128	32/core	32/core
Cache, L2 (K), L3	1MB, exclusive	512K-1MB (shared)	2MB (3MB G6950) (shared)
System Bus (MHz)	4000 (HT)	800	800-1066 (2.5GT/s for G6950)
Memory Bus (bits) (2)	128 (DC)	varies by chipset	varies by chipset (64 for G6950)
Typ Mem Type	DDR2-400-667 (?)	varies by chipset	varies by chipset (up to DDR3-1066 for G6950)
Cores/Threads	1/1	2/2	2/2
Packaging (3)	AM3	775	775, 1156 (for G6950)
Spl Features (4)	32/64, HTT, CnQ, EVP, SSE3(?), integrated memory controller	SSE3, XD, 32/64	up to SSE4.1, XD, 32/64; integrated 2ch memory & graphics controllers (G6950)
NOTES:	(1) Price per manufacturer's latest published price list as of 1/1, 2011, 1K lots, tray (2) SC = single channel, DC = dual channel (3) Socket ID only (4) All features may not apply to all models in the group. "32/64" - 64-bit OS support "CnQ - Cool'nQuiet "DMI" - Direct Media Interface "HT" - HyperThreading "HTT" - HyperTransport technology "EVP" - Enhanced Virus Protection "QPI" - QuickPath Interconnect "SSEx" - Streaming SIMD Extensions Version X "XD" - Execute Disable Bit "VT" - Virtualization Technology		

CPU Comparative Matrix - OCIPUG Hardware SIG Meeting, 01/11/2011 - Current Models ONLY - Mainstream Desktop Segment

Brand	AMD	AMD	Intel	Intel
Model	Athlon II (excl EE) X2 250 - 265 (4 models) X3 445 - 455 (3 models) X4 640, 645	Phenom II (excl EE) X2 BE 555 - 565 (3 models) X4 BE 955 - 975 (4 models)	Core 2 Duo, Core i3 C2D E7400 - E8600 Ci3 530 - 560, 2100, 2120	Core 2 Quad, Core i5 C2Q Q8200 - Q9650 Ci5 650 - 680, 750 - 760, 2300 - 2500K
Speed (GHz)	3.0 - 3.3	3.2 - 3.6	2.8 - 3.33, 2.93 - 3.33 (Ci3)	2.33 - 3.0, 3.2 - 3.6, 2.66 - 2.8, 2.8 - 3.3
Price (\$) (1)	66 - 112	90 - 195	113 - 266, 113 - 138 (Ci3)	163 - 316, 176 - 294, 196 - 205, 177 - 216
Cache, L1 (K)	128/core	128/core	32/core	32/core
Cache, L2 (K), L3	512 or 1024/core L2	512/core L2 + 6MB L3	3MB - 6MB, 3MB - 4MB (Ci3) (shared)	4MB - 12MB, 4MB, 1MB L2/6MB - 8MB L3 (shared)
System Bus (MHz)	4000 (HT)	4000	1066, 1333, 2.5GT/s (Ci3)	1066, 1333, 2.5GT/s (Ci5)
Memory Bus (bits) (2)	128 (DC)	128 (DC)	varies by chipset (128/DC for Ci3)	varies by chipset (128/DC for Ci5)
Typ Mem Type	up to DDR2-1066, DDR3-1066	up to DDR2-1066, DDR3-1333	varies by chipset (up to DDR3-1333 for Ci3)	varies by chipset (up to DDR3-1333 for Ci5)
Cores/Threads	2/2	2/2, 4/4	2/2, 2/4 (Ci3)	4/4, 2/4, 4/4
Packaging (3)	AM3	AM3	775, 1155 & 1156 (Ci3)	775, 1155 & 1156 (Ci3)
Spl Features (4)	32/64, HTT, CnQ, EVP, SSE4a, integrated memory controller	32/64, HTT, CnQ, EVP, SSE4a, integrated memory controller	up to SSE4.2/AVX, XD, 32/64, VT, integrated 2ch memory and graphics controllers (Ci3)	up to SSE4.2/AVX, XD, 32/64, VT, integrated 2ch memory controller (Ci5 7xx), integrated 2ch memory & graphics controllers, HyperThreading (Ci5 6xx, 2xxx), Turbo mode (Ci5), unlocked (Ci5-2xxxK)

CPU Comparative Matrix - OCIPUG Hardware SIG Meeting, 01/11/2011 - Current Models ONLY - Performance Desktop Segment

Brand	AMD	Intel	Intel
Model	Phenom II X6 1055T - 1075T (3 models)	Core 2 Quad Q8200 - Q9650	Core i7 860 - 880, 920 - 970, 2600, 2600K
Speed (GHz)	2.8 - 3.0	2.33 - 3.0	2.8 - 3.06, 2.66 - 3.2, 3.4
Price (\$) (1)	199 (1065T unknown)	163 - 316	284 - 583, 284 - 885, 294 - 317
Cache, L1 (K)	128/core	32/core	64/core
Cache, L2 (K), L3	512/core L2 + 6MB L3	4MB - 12MB (shared)	1MB L2, 8MB L3 (8xx) (shared) 1MB L2, 8MB - 12MB L3 (9xx, 2xxx/K) (shared)
System Bus (MHz)	4000	1333	2.5GT/s DMI (8xx), 4.8GT/s QPI (9xx)
Memory Bus (bits) (2)	128 (DC)	varies by chipset	128 (8xx, 2ch), 192 (9xx, 3ch)
Typ Mem Type	up to DDR2-1066, DDR3-1333	varies by chipset	up to DDR3-1066
Cores/Threads	6/6	4/4	4/8, 6/12 (970)
Packaging (3)	AM3	775	1156 (8xx), 1366 (9xx)
Spl Features (4)	32/64, HTT, CnQ, EVP, SSE4a, integrated memory controller	SSE4, XD, 32/64, VT	up to SSE4.2/AVX, XD, 32/64, VT, HyperThreading, integrated memory controller - 2 ch (8xx), 3 ch (9xx); integrated graphics controller (2xxx/K); Turbo mode; unlocked (2xxxK)

CPU Comparative Matrix - OCIPUG Hardware SIG Meeting, 01/11/2011 - Current Models ONLY - Enthusiast Desktop Segment

Brand		AMD	Intel
Model		Phenom II X6 BE 1090T, 1100T	Core i7 Extreme Edition 965 - 980X (3 model)
Speed (GHz)		3.2 - 3.3	3.2 - 3.33
Price (\$) (1)		235 - 265	999
Cache, L1 (K)		128/core	64/core
Cache, L2 (K), L3		512/core L2 + 6MB L3	1MB - 1.5MB L2, 8MB - 12MB L3 (shared)
System Bus (MHz)		4000	6.4GT/s QPI
Memory Bus (bits) (2)		128 (DC)	192 (3ch)
Typ Mem Type		up to DDR2-1066, DDR3-1333	up to DDR3-1066
Cores/Threads		6/6	4/8, 6/12 (980)
Packaging (3)		AM3	1366
Spl Features (4)		32/64, HTT, CnQ, EVP, SSE4a, integrated memory controller	up to SSE4.2, XD, 32/64, VT, HyperThreading, integrated 3 ch memory controller, Turbo mode