The Intel x86 Microarchitectures Map

Version 3.4

8086 (1978, 3 µm)
Series:
- 16-bit data bus: 8086 (iAPX 86)
- 8-bit data bus: 8088 (iAPX 88)

80186 (1982, 3 µm)
Series :
- 16-bit data bus: 80186 (iAPX 186)
- 8-bit data bus: 80188 (iAPX 188)

80286 (1982, 1.5 µm)
Alternative Names: iAPX 286, 286, i286
Series: 80286

80386 (1985, 1.5 to 1 µm)
Alternative Names: iAPX 386, 386, i386
Series:
- Desktop/Server: i386DX
- Desktop lower-performance: i386SX
- Mobile: i386SL, 80376, i386EX, i386CXSA, i386SXSA, i386CXSB

80486 (1989, 1 to 0.6 µm)
Alternative Names: 486, i486
Series:
- Desktop/Server: i486DX
- Desktop/Server higher-performance: i486DX2, i486DX2-S, i486SX2, IntelDX4, i486DX2WB, IntelDX4WB
- Desktop lower-performance: i486SX, i486SX-S, i487SX
- Mobile: i386SL, i486DX-S, i486GX
- Compatibility: RapidCAD

P5 (1993, 0.80 to 0.35 µm)
Alternative Names: Pentium, 80586, 586, i586
Series:
- Desktop/Server: P5, P54C
- Desktop/Server higher-performance: P54CQS, P54CS
- Mobile: P54C, P54LM
- Compatibility: Pentium OverDrive

Variant: **P55C** (1997, 0.28 to 0.25 µm)
Alternative Names: Pentium MMX
Series:
- Desktop/Server: P55C
- Mobile: P55LM (Mobile Pentium MMX), Tillamook (Mobile Pentium MMX)
- Compatibility: P54CTB

Quark (2013, 32 nm)
Series:
- Mobile SoC: Quark X1000 (Clanton)
- Microcontrollers: Quark D1000 (Silver Butte), Quark D2000 (Mint Valley), Quark SE C1000 (Atlas Peak)

Knights Ferry (Prototype, 45 nm)
Alternative Names: KNF
Series: None

Variant: **Knights Corner** (2011, 22 nm)
Alternative Names: KNC
Series: Xeon Phi 3100, Xeon Phi 5100, Xeon Phi 7100

Knights Landing (2016, 14 nm)
Alternative Names: KNL
Series: Xeon Phi x200

?: **Knights Hill** (Cancelled, 10 nm)
Alternative Names: KNH
Series: None

Variant of KNL: **Knights Mill** (2017, 14 nm)
Alternative Names: KNM
Series: Xeon Phi 72x5

32-bit Bonnell (2008, 45 nm) and **32-bit Saltwell** (2011, 32 nm)
Alternative Names: BNL
Series (all names are prefixed with Atom):
- Mobile: Z500 (Silverthorne, 45 nm), Z600 (Lincroft, 45 nm), N270 (Diamondville, 45 nm), N280 (Diamondville, 45 nm)
- Mobile SoC: Z2x00 (x = 4 use the Penwell core and others use the Cloverview core, 32 nm)
- Industrial: E600 (Tunnel Creek, 45 nm), E600C (Stellarton, 45 nm)
- Consumer electronics SoC: CE4100 (Sodaville, 45 nm), CE4200 (Groveland, 45 nm), CE5300 (Berryville, 32 nm)

Variant: **64-bit Bonnell** (2008, 45 nm) and **64-bit Saltwell** (2011, 32 nm)
Alternative Names: BNL
Series (all names are prefixed with Atom):
- Desktop: 230 (Diamondville, 45 nm), 330 (Diamondville, 45 nm), D400 (Pineview 45 nm), D500 (Pineview 45 nm), D2000 (Cedarview 32 nm)
- Mobile: N400 (Pineview, 45 nm), N500 (Pineview, 45 nm), N2000 (Cedarview, 32 nm)
- Server SoC: S12x0 (Centerton, 32 nm), S12x9 (Briarwood, 32 nm)

Silvermont (2013, 28 nm to 22 nm) and **Airmont** (2015, 28 nm to 14 nm)
Alternative Names: SLM
Series:
- Desktop SoC: Celeron J1750 (Bay Trail-D, 22 nm), Celeron J1800 (Bay Trail-D, 22 nm), Celeron J1900 (Bay Trail-D, 22 nm), Celeron J3000 (Braswell, 14 nm)
- Desktop higher-performance SoC: Pentium J2850 (Bay Trail-D, 22 nm), Pentium J2900 (Bay Trail-D, 22 nm), Pentium J3000 (Braswell, 14 nm)
- Mobile SoC: Celeron N2800 (Bay Trail-M, 22 nm), Celeron N2900 (Bay Trail-M, 22 nm), Pentium A1020 (Bay Trail-M, 22 nm), Atom Z3600 (Bay Trail-T, 22 nm), Atom Z3400 (Merrifield, 22 nm), Celeron N3100 (Braswell, 14 nm), Celeron N3000 (Braswell, 14 nm), Atom x3-C3130 (Atom X, SoFIA, Silvermont 28 nm)
- Mobile high-performance SoC: Pentium 3500 (Bay Trail-M, 22 nm), Atom Z3700 (Bay Trail-T, 22 nm), Atom Z3500 (Moorefield, 22 nm), Pentium N3700 (Braswell, 14 nm), Atom x3-C3200 (Atom X, SoFIA, Silvermont 28 nm), Atom x3-C3400 (Atom X, SoFIA, Airmont 28 nm), Atom x5-E8000 (Atom X, Braswell, 14 nm), Atom x5-Z8000 (Atom X, Cherry Trail-T, 14 nm) , Atom x7-Z8000 (Atom X, Cherry Trail-T, 14 nm)
- Server SoC: Atom C2000 (Avoton, 22 nm)
- Network infrastructure SoC: Atom C2xx8 (Rangeley, 22 nm)
- Industrial SoC: Atom E3800 (Bay Trail-I, 22 nm)

Goldmont (2016, 14 nm)
Alternative Names: GLM
Series:
- Desktop SoC: Celeron J3455 (Apollo Lake), Celeron J3455 (Apollo Lake)
- Desktop higher-performance SoC: Pentium J4205 (Apollo Lake)
- Mobile SoC: Celeron N3450 (Apollo Lake), Celeron N3350 (Apollo Lake)
- Mobile high-performance SoC: Pentium N4200 (Apollo Lake), Atom T5000 (Broxton-M)
- Server SoC: Atom C3000 (Denverton)
- Industrial SoC: Atom x5-E3900, Atom x7-E3900, Atom x5-A3900, Atom x7-A3900 (Atom X, all are based on the Apollo Lake platform)

Goldmont Plus (2017, 14 nm)
Alternative Names: GLP
Series:
- Desktop SoC: Celeron J4105 (Gemini Lake), Celeron J4105 (Gemini Lake)
- Desktop higher-performance SoC: Pentium Silver J5005 (Gemini Lake)
- Mobile SoC: Celeron N4100 (Gemini Lake), Celeron N4000 (Gemini Lake)
- Mobile high-performance SoC: Pentium Silver N5000 (Gemini Lake)

Tremont (2020, 10 nm+ to 10 nm++)
Alternative Names: TNT
Series:
- Server SoC: Atom P5900 (Snow Ridge, SNR, 10 nm+)
- IoT MCP: Pentium J6425, Celeron J6413, Pentium N6415, Celeron N6211, Atom x6000E, Atom x6000RE , Atom x6000FE (Atom X, all are part of the Elkhart Lake platform series, EHL, 10 nm++)

Lakefield (2020, 10 nm+ compute layer and 14 nm+++ PCH base layer)
Alternative Names: LKF (Hybrid TNT cores and ICL cores)
Series:
- Mobile SoC: i3-L13G4, i5-L15G7, i5-L16G7

Alder Lake (2021, 10 nm+++ compute layer and ? base layer)
Alternative Names: ADL (Hybrid Gracemont cores and Golden Cove cores)
Series:
- Desktop: TBA

P6 (1995, 0.50 to 0.35 µm)
Alternative Names: i686
Series: Pentium Pro (used in desktops and servers)

Variant: **Klamath** (1997, 0.35 µm)
Alternative Names: Pentium II, PII
Series: Pentium II 233/266/300 steppings C0 and C1 (Klamath, used in desktops)

New instructions: **Deschutes** (1998, 0.25 to 0.18 µm)
Alternative Names: Pentium II, PII
Series:
- Desktop: Pentium II 266/300/333/350/400/450 (Deschutes), Pentium II Overdrive (for compatibility)
- Desktop lower-performance: Celeron 266/300 (Covington), Celeron 300A/333/366/400/433/466/500/533 (Mendocino)
- Mobile: Mobile Pentium II 233/266/300 (Tonga), Mobile Pentium II 266PE/300PE/333/366/400 (Dixon)
- Mobile lower-performance: Mobile Celeron 266/300/333/366/400/433/466 (Mendocino), Mobile Celeron LV 266 (Mendocino)
- Server: Pentium II Xeon 400 (Drake)

Variant: **Pentium III** (1999, 0.25 to 0.13 µm)
Alternative Names: PIII
Series:
- Desktop: Pentium III 450/500/533B/550/600/600B (Katmai)
- Desktop higher-performance: Pentium III 500E to 1133 (Coppermine), Pentium III 800 to 1133 SL5QK/SL5HG/SL5QE/SL5HH/SL5QF/SL5QJ/SL5QK (Coppermine T), Pentium III 1000 to 1400S (Tualatin)
- Desktop lower-performance: Celeron 533A/566 to 950/1.00/1.10 (Coppermine-128), Celeron 900A/1000A/1100A/1200 to 1500 (Tualatin-256), Pentium III KC 733 (Coppermine-128 for Xbox)
- Mobile: Mobile Pentium III (Coppermine), Mobile Pentium III-M (Tualatin)
- Mobile lower-performance: Mobile Celeron (Coppermine-128), Mobile Celeron 733/800A/866/866/933 (Coppermine T), Mobile Celeron 1000+/LV 650+/ULV 650+ (Tualatin-256)
- Server: Pentium III Xeon 500 (Tanner), Pentium III Xeon 600 to 933/1.00 (Cascades)

Pentium M (2003, 130 to 90 nm)
Series:
- Mobile: Pentium M 1.x, Pentium M 705, Pentium M LV 1.x, Pentium M LV 718, Pentium M ULV 900, Pentium M ULV 1.0, Pentium M ULV 1.0 (all use the Banias core)
- Mobile higher-performance: Pentium M 7x5 (except 705, Dothan), Pentium M 710 (Dothan), Pentium M 7x0 (except 710, Dothan 533), Pentium M LV 7x8 (Dothan), Pentium M ULV 7x3 (Dothan)
- Mobile lower-performance: Celeron M 310/320/330/340 (Banias-512), Celeron M ULV 600/800/333 (Banias-512), Celeron 1.0B (Shelton), Celeron M 350/360/370/380/390 (Dothan-1024), Celeron M ULV 383 (Dothan-1024), Celeron 205 (Dothan-512), Celeron M ULV 353/373 (Dothan-512), A1x0 (Stealey)
- Mobile SoC: Media Processor CE 3100 (Canmore), EP80579 (Tolapai)

Variant: **Enhanced Pentium M** (2006, 65 nm)
Alternative Names: Yonah
Series:
- Mobile: Core Solo T1000, Core Solo U1000
- Mobile higher-performance: Core Duo T2000, Core Duo LV L2000, Core Duo ULV U2000
- Mobile lower-performance: Celeron 215 (Yonah-512), Celeron M 400 (Yonah-1024), Celeron 1.66 (Sossaman), Celeron 1.83 (Sossaman), Pentium Dual-Core T2000 (except T23x0, including T2350)
- Server: Xeon LV 1.66/2.0/2.16 (Sossaman), Xeon ULV 1.66 (Sossaman), Merom MP (Xeon, Cancelled)

Core (2006, 65 nm)
Alternative Names: Core 2, Core2
Series:
- Desktop: Core 2 Duo E6000 (except E6305 and E6405, Conroe)
- Desktop higher-performance: Core 2 Extreme X6000 (Conroe-XE), Core 2 Quad Q6000 (Kentsfield), Core 2 Extreme QX6000 (Kentsfield XE)
- Desktop lower-performance: Core 2 Duo E4000 (Allendale), Pentium Dual-Core E2000 (except E2210, Allendale and Conroe), Celeron 220 (Conroe-L), Celeron 400 (Conroe-L), Celeron 445 (Conroe-CL), Celeron E1000 (Allendale)
- Mobile: Core 2 Solo ULV U2000 (Merom-L), Core 2 Duo SL7100 (Merom), Core 2 Duo L7000 (Merom), Core 2 Duo SP7000 (Merom), Core 2 Duo U7000 (Merom-2M), Core 2 Duo T5000 (Merom and Merom-2M), Core 2 Duo T7000 (Merom and Merom-2M)
- Mobile higher-performance: Core 2 Extreme X7000 (Merom XE)
- Mobile lower-performance: Celeron 500 (Merom, Merom-L, and Merom-2M), Celeron M 500 (Merom and Merom-L), Pentium Dual-Core T23x0 (except T2350, Merom-2M), Pentium Dual-Core T3000 (Merom-2M), Celeron T1x00 (Merom-2M)
- Server: Core 2 Duo E6305 (Conroe-CL), Core 2 Duo E6405 (Conroe-CL), Xeon 3000 (Conroe), Xeon 5100 (Woodcrest)
- Server higher-performance: Xeon 7200 (Tigerton), Xeon 3200 (Kentsfield), Xeon 5300 (Clovertown), Xeon 7300 (Tigerton)

Variant: **Penryn** (2007, 45 nm)
Alternative Names: Core 2, Core2
Series:
- Desktop: Core 2 Duo E8000 (Wolfdale), Core 2 Duo E7000 (Wolfdale-3M)
- Desktop higher-performance: Core 2 Extreme QX9000 (Yorkfield XE), Core 2 Quad Q8000 (Yorkfield-6M), Core 2 Quad Q9000 (Yorkfield-6M and Yorkfield)
- Desktop lower-performance: Pentium Dual-Core E2210, Pentium Dual-Core E5000, Pentium E5000, Pentium E6000, Celeron E3000 (all are based on the Wolfdale-3M core)
- Mobile: Core 2 Solo SU3000 (Penryn-L), Core 2 Duo E8000 (Penryn), Core 2 Duo T6000 (Penryn-3M), Core 2 Duo T8000 (Penryn and Penryn-3M), Core 2 Duo T9000 (Penryn and Penryn-3M), Core 2 Duo P7000 (Penryn and Penryn-3M), Core 2 Duo P8000 (Penryn and Penryn-3M), Core 2 Duo P9000 (Penryn), Core 2 Duo SP9000 (Penryn), Core 2 Duo SL9000 (Penryn), Core 2 Duo SU7300 (Penryn-3M), Core 2 Duo SU9000 (Penryn-3M)
- Mobile higher-performance: Core 2 Extreme X9000 (Penryn XE), Core 2 Quad Q9000 (Penryn QC), Core 2 Quad QX9300 (Penryn QC XE)
- Mobile lower-performance: Celeron 900 (Penryn-3M), Celeron M ULV 700 (Penryn-3M), Celeron ULV 763 (Penryn-3M), Celeron T3000 (Penryn-3M), Celeron SU2300 (Penryn-3M), Pentium T4000 (Penryn-3M), Pentium SU2700 (Penryn-3M), Pentium SU4100 (Penryn-3M)
- Server: Xeon E3113 (Wolfdale-CL), Xeon L3014 (Wolfdale-CL), Xeon 3100 (Wolfdale), Xeon 5200 (Wolfdale-DP)
- Server higher-performance: Xeon 3300 (Yorkfield and Yorkfield-CL), Xeon 5400 (Harpertown), Xeon 7400 (Dunnington)

Sandy Bridge (2011, 32 nm)
Alternative Names: SNB, SnB
Series:
- Desktop: Desktop 2nd Generation Core i5 (i5-2xxx)
- Desktop higher-performance: Desktop 2nd Generation Core i7 (i7-2xxx), Desktop 3rd Generation Core i7 X (i7-3xxxX, i7-3xxxK, E)
- Desktop lower-performance: Desktop 2nd Generation Core i3 (i3-2xxx), Pentium G600, Pentium G800, Celeron G400, Celeron G500
- Mobile: Mobile 2nd Generation Core i5 (i5-2xxx suffixes: M, E)
- Mobile higher-performance: Mobile 2nd Generation Core i7 (i7-2xxx suffixes: QM, QE, M, LE, UE), Mobile 2nd Generation Core i7 Extreme (i7-2xxxXM)
- Mobile lower-performance: Mobile 2nd Generation Core i3 (i3-2xxx suffixes: M, E, UE), Pentium 900, Celeron 700, Celeron 800
- Server: Xeon E5-1400 (EN), Xeon E5-2400 (EN), Xeon E5-1600 (EP), Xeon E5-2600 (EP, Jaketown, JKT, JkT), Xeon E5-4600 (EP)
- Server lower-performance: Xeon E3-1200, Pentium 350, Pentium 1400 (EN)
- Network infrastructure: Xeon E3-1100, Pentium B915C, Celeron 725C, Core i3-2115C (all are based on the Gladden core)

Variant: **Ivy Bridge** (2012, 22 nm)
Alternative Names: IVB, IvB
Series:
- Desktop: Desktop 3rd Generation Core i5 (i5-3xxx)
- Desktop higher-performance: Desktop 3rd Generation Core i7 (i7-3xxx), Desktop 4th Generation Core i7 X (i7-4xxxX, i7-4xxxK, E)
- Desktop lower-performance: Desktop 3rd Generation Core i3 (i3-3xxx), Pentium G2000, Celeron G1600
- Mobile: Mobile 3rd Generation Core i5 (i5-3xxx suffixes: ME, M, U, Y)
- Mobile higher-performance: Mobile 3rd Generation Core i7 (i7-3xxx suffixes: QM, M, U, Y, UE, LE), Mobile 3rd Generation Core i7 X (i7-3xxxXM)
- Mobile lower-performance: Mobile 3rd Generation Core i3 (i3-3xxx suffixes: ME, M, U, Y, UE, C), Pentium A1018, Pentium 2xxx, Celeron 927UE, Celeron 10xx
- Server: Xeon E5-1400 v2 (EN), Xeon E5-2400 v2 (EN), Xeon E5-1600 v2 (EP), Xeon E5-2600 v2 (EP), Xeon E5-4600 v2 (EP)
- Server higher-performance: Xeon E7-8800 v2 (EX, Ivytown, IVT), Xeon E7-4800 v2 (EX, Ivytown, IVT), Xeon E7-2800 v2 (EX, Ivytown, IVT)
- Server lower-performance: Xeon E3-1200 v2, Pentium 1400 v2 (EN)
- Network infrastructure: Xeon E3-1100 v2, Pentium B925C, Celeron 725C, Core i3-3115C (all are based on the Gladden core)

Willamette (2000, 180 nm)
Alternative Names: NetBurst, Pentium 4, Pentium IV, P4, , Pentium 4 180 nm
Series:
- Desktop: Pentium 4 1.x (except those with a suffix), Pentium 4 2.0
- Desktop lower-performance: Celeron 1.x (where x is a single digit between 5-9, except Celeron 1.6 SL7EZ, Willamette-128), Celeron 2.0 SL68F
- Server: Foster (Xeon), Foster-MP (Xeon)

Variant: **Northwood** (2002, 130 nm)
Alternative Names: NetBurst, Pentium 4, Pentium IV, P4, Pentium 4 130 nm
Series:
- Desktop higher-performance: Pentium 4 1.xA, Pentium 4 2.x (except 2.0, 2.40A, 2.66A, and 2.80A), Pentium 4 HT 2.xC, Pentium 4 HT 3.x (except those with a suffix), Pentium 4 Extreme Edition 3.x (except 3.73 , Gallatin)
- Desktop lower-performance: Celeron 1.6 SL7EZ, Celeron 1.8A, Celeron 2.x (except Celeron 2.0 SL68F, Northwood-128)
- Mobile: Mobile Pentium 4-M, Mobile Pentium 4, Mobile Pentium 4 HT (except the 500 series)
- Mobile lower-performance: Mobile Celeron 1.x (Northwood-256), Mobile Celeron 2.x (Northwood-256)
- Server: Prestonia (Xeon)
- Server higher-performance: Gallatin (Xeon), Gallatin-MP (Xeon)

Variant: **32-bit Prescott** (2004, 90 nm)
Alternative Names: NetBurst, Pentium 4, Pentium IV, P4, Pentium 4 90 nm
Series:
- Desktop: Pentium 4 2.40A, Pentium 4 2.66A, Pentium 4 2.80A, Pentium 4 515, Pentium 4 516, Pentium 4 519j
- Desktop higher-performance: Pentium 4 HT 2.8E, Pentium 4 HT 3.0E, Pentium 4 HT 3.2E (except SL7QB), Pentium 4 HT 3.4E (except SL7Q8), Pentium 4 HT 5x0
- Desktop lower-performance: Celeron D 3x0 (except 360, Prescott-256), Celeron D 3x5 (except 355 and 365, Prescott-256)
- Mobile: Mobile Pentium 4 HT 518, Mobile Pentium 4 HT 532, Mobile Pentium 4 HT 538, Mobile Pentium 4 HT 548, Mobile Pentium 4 HT 552

Variant: **64-bit Prescott** (2004, 90 to 65 nm)
Alternative Names: NetBurst, Pentium 4, Pentium IV, P4, Pentium 4 90 nm
Series:
- Desktop: Pentium 4 505, Pentium 4 511, Pentium 4 5x6, Pentium 4 519K, Pentium 4 HT 3.2E SL7QB, Pentium 4 HT 3.4E SL7Q8, Pentium 4 HT 3.xF, Pentium 4 HT 5x1, Pentium 4 HT 517, Pentium 4 HT 524 (all are based on the Prescott core, 90 nm)
- Desktop higher-performance: Pentium 4 HT 6xx (Prescott 2M, 90 nm), Pentium 4 HT 4.00 (Prescott 2M, 90 nm, Cancelled), Pentium 4 Extreme Edition 3.73 (Prescott 2M, 90 nm), Pentium D 800 (Smithfield, 90 nm), Pentium D 900 (Presler, 65 nm), Pentium Extreme Edition 800 (Smithfield, 90 nm), Pentium Extreme Edition 900 (Presler, 65 nm), Pentium 4 HT 6x1 (Cedar Mill, 65 nm)
- Desktop lower-performance: Celeron D 326, Celeron D 331 , Celeron D 336, Celeron D 341, Celeron D 346, Celeron D 351, Celeron D 355 (all are based on the Prescott-256 core, 90 nm), Celeron D 347, Celeron D 352, Celeron D 356, Celeron D 360, Celeron D 365 (all are based on the Cedar Mill-512 core, 65 nm)
- Server: Nocona (Xeon, 90 nm), Irwindale (Xeon, 90 nm), Cranford (Xeon, 90 nm)
- Server higher-performance: Potomac (Xeon, 90 nm), Paxville DP (Xeon, 90 nm), Paxville MP (Xeon 7000, 90 nm), Dempsey (Xeon 5000, 65 nm), Tulsa (Xeon 7100, 65 nm)

Variant: **Tejas** (Cancelled, 90 to 65 nm)
Alternative Names: Pentium V
Series: Cedarmill, Jayhawk

Nehalem (2008, 45 nm)
Alternative Names: NHM
Series:
- Desktop: Core: i5-700 (Lynnfield)
- Desktop higher-performance: Core i7-800 (Lynnfield), Core i7-900 (Bloomfield), Core i7-900 Extreme (Bloomfield)
- Mobile: Core i7-700 (Clarksfield), Core i7-800 M (Clarksfield)
- Mobile higher-performance: Core i7-900 Mobile Extreme (Clarksfield)
- Server: Xeon 3400 (except Xeon L3406 and Xeon L3403, Lynnfield), Xeon 3500 (Bloomfield), Xeon C3500 (Jasper Forest)
- Server higher-performance: Xeon 5500 (Gulftown), Xeon C5500 (Jasper Forest), Xeon 6500 (Beckton, Nehalem-EX), Xeon 7500 (Beckton, Nehalem-EX)
- Server lower-performance: Celeron P1053 (Jasper Forest)

Variant: **Westmere** (2010, 32 nm)
Alternative Names: WSM
Series:
- Desktop: Core i5-600 (Clarkdale)
- Desktop higher-performance: Core i7-970, Core i7-980, Core i7-980X, Core i7-990X, Core i7-995X (all are based on the Gulftown core)
- Desktop lower-performance: Core i3-500 (Clarkdale), Pentium G6000 (Clarkdale), Celeron G1101 (Clarkdale)
- Mobile: Core i5-400 (Arrandale), Core i5-500 (Arrandale)
- Mobile higher-performance: Core i7-600 (Arrandale)
- Mobile lower-performance: Core i3-300, Pentium P6000, Pentium U5000, Celeron P4000, Celeron U3000 (all are based on the Arrandale core)
- Server: Xeon L3406 (Clarkdale), Xeon L3403 (Clarkdale), Xeon 3600 (Gulftown, Westmere-EP)
- Server higher-performance: Xeon 5600 (Gulftown, Westmere-EP), Xeon E7-8800 (Westmere-EX), Xeon E7-4800 (Westmere-EX), Xeon E7-2800 (Westmere-EX)

Haswell (2013, 22 nm)
Alternative Names: HSW (Desktop and Mobile), HSX (Server) (Note: all U and Y processors are MCPs)
Series:
- Desktop: Desktop 4th Generation Core i5 (i5-4xxx, DT)
- Desktop higher-performance: Desktop 4th Generation Core i7 (i7-4xxx, DT), Desktop 5th Generation Core i7 X (i7-5xxxX, i7-5xxxK, E)
- Desktop lower-performance: Desktop 4th Generation Core i3 (i3-4xxx, DT), Pentium G3200 (DT), Pentium G3300 (DT), Pentium G3400 (DT), Celeron G1800 (DT)
- Mobile: Mobile 4th Generation Core i5 (i5-4xxx, H-M-U-Y, suffixes: H, M, U, Y, E, EC)
- Mobile higher-performance: Mobile 4th Generation Core i7 (i7-4xxx, H-M-U-Y, suffixes: HQ, MQ, EQ, EC, M, U, Y), Mobile 4th Generation Core i7 X (i7-4xxxMX)
- Mobile lower-performance: Mobile 4th Generation Core i3 (i3-4xxx, M-U-Y, suffixes: M, U, Y, E), Pentium 3500M (M), Pentium 3500U (U), Pentium 3500Y (Y), Celeron 2900M (M), Celeron 2900U (U), Celeron 2900Y (Y), Celeron 2000E (H)
- Server: Xeon E5-1600 v3 (EN), Xeon E5-2600 v3 (EP)
- Server higher-performance: Xeon E7-4800 v3 (EX), Xeon E7-8800 v3 (EX)
- Server lower-performance: Xeon E3-1200 v3 (WS)

Variant: **Broadwell** (2014, 14 nm)
Alternative Names: BDW (Desktop and Mobile), BDX (Server) (Note: all U and Y processors are MCPs)
Series:
- Desktop: Desktop 5th Generation Core i5 (i5-5xxx, H)
- Desktop higher-performance: Desktop 5th Generation Core i7 (i5-5xxx, H), Desktop 6th Generation Core i7 X (i7-6xxxX, i7-6xxxK, E)
- Mobile: Mobile 5th Generation Core i5 (i5-5xxx, H-U, suffixes: H, U), Mobile 5th Generation Core M (M-5Yxx, Y)
- Mobile higher-performance: Mobile 5th Generation Core i7 (i7-5xxx, H-U, suffixes: HQ, U)
- Mobile lower-performance: Mobile 5th Generation Core i3 (i7-5xxxU, U), Pentium 3800U (U), Celeron 3200U (U), Celeron 3700U (U)
- Server: Xeon E5-1600 v4 (EP), Xeon E5-2600 v4 (EP), Xeon E5-4600 v4 (EP)
- Server higher-performance: Xeon E7-4800 v4 (EX), Xeon E7-8800 v4 (EX)
- Server lower-performance: Xeon E3-1200 v4 (WS)
- Server SoC: Xeon D-1500 (DE), Pentium D-1500 (DE) , Xeon D-1600 (Hewitt Lake)

Tiger Lake (2020, 10 nm++)
Alternative Names: TGL (Willow Cove or WLC core microarchitecture) (Note: all UP3 and UP4 processors are MCPs)
Series:
- Mobile: Mobile 11th Generation Core i5 (i5-11xxGx, i5-1145G7E, UP3-UP4)
- Mobile higher-performance: Mobile 11th Generation Core i7 (i7-11xxGx, i7-1185G7E, UP3-UP4)
- Mobile lower-performance: Mobile 11th Generation Core i3 (i3-11xxGx, i3-1115G4E, UP3-UP4)
- Industrial: i7-1185GRE (UP3), i7-1185GRE (UP3), i3-1115GRE (UP3)

Server version of TGL: **Sapphire Rapids** (2022, 10 nm+++)
Alternative Names: SPR
Series: TBA

Skylake (2015, 14 nm to 14 nm++)
Alternative Names: SKL (Desktop and Mobile), SKX (Server) (Note : all U and Y processors are MCPs)
Series:
- Desktop: Desktop 6th Generation Core i5 (i5-6xxx, S-H, 14 nm)
- Desktop higher-performance: Desktop 6th Generation Core i7 (i7-6xxx, S-H , 14 nm), Desktop 7th Generation Core i7 X (i7-7xxxX, X, 14 nm+), Desktop 7th Generation Core i9 X (i9-7xxxXE, i9-7xxxX, X, 14 nm+), Desktop 9th Generation Core i7 X (i7-9xxxX, X, 14 nm++), Desktop 9th Generation Core i9 X (i9-9xxxXE, i9-9xxxX, X, 14 nm++), Xeon W-3175X (W, 14 nm++)
- Desktop lower-performance: Desktop 6th Generation Core i3 (i3-6xxx, S-H, 14 nm), Pentium G4400 (S, 14 nm), Pentium G4500 (S, 14 nm), Pentium G4520 (S), Celeron G3900 (S, 14 nm), Celeron G3902 (S, 14 nm), Celeron G3920 (S, 14 nm)
- Mobile: Mobile 6th Generation Core i5 (i5-6xxx, U-H, 14 nm, suffixes: U, HQ), Mobile 6th Generation Core M (mx-6Yxx, Y, 14 nm)
- Mobile higher-performance: Mobile 6th Generation Core i7 (i7-6xxx, U-H, 14 nm, suffixes: U, HQ)
- Mobile lower-performance: Mobile 6th Generation Core i3 (i3-6xxx, U-H, 14 nm, suffixes: U, H), Pentium 4405U (U, 14 nm), Pentium 4405Y (Y, 14 nm), Celeron G390xE (H, 14 nm), Celeron 3x55U (U, 14 nm)
- Server: Xeon W-2100 (W, 14 nm+), Xeon Silver 4100 (1st Generation Xeon Silver, SP, 14 nm+)
- Server higher-performance: Xeon Gold 5100 (1st Generation Xeon Gold, SP, 14 nm+), Xeon Gold 6100 (1st Generation Xeon Gold, SP, 14 nm+), Xeon Platinum 8100 (1st Generation Xeon Platinum, SP, 14 nm+), Xeon Platinum P-8100 (1st Generation Xeon Platinum, SP, 14 nm+)
- Server lower-performance: Xeon E3-1200 v5 (DT, 14 nm), Xeon E3-1500 v5 (H, 14 nm), Xeon D-2100 (DE, 14 nm+), Xeon Bronze 3100 (1st Generation Xeon Bronze, SP, 14 nm+)

Identical: **7th Generation Kaby Lake** (2016, 14 nm+)
Alternative Names: KBL (Note: all U and Y processors are MCPs)
Series:
- Desktop: Desktop 7th Generation Core i5 (i5-7xxx, S), Desktop 7th Generation Core i5 X (i5-7640X, X)
- Desktop higher-performance: Desktop 7th Generation Core i7 (i7-7xxx, S), Desktop 7th Generation Core i7 X (i7-7740X, X)
- Desktop lower-performance: Desktop 7th Generation Core i3 (i3-7xxx, S), Pentium G4560 (S), Pentium G4600 (S), Celeron G3930 (S), Celeron G3950 (S)
- Mobile: Mobile 7th Generation Core i5 (i5-7xxx, U-H, suffixes: U, HQ), Mobile 7th Generation Core i5 (i5-7Yxx, Y)
- Mobile higher-performance: Mobile 7th Generation Core i7 (i7-7xxx, U-H, suffixes: U, HQ, HK), Mobile 7th Generation Core i7 (i7-7Y75, Y)
- Mobile lower-performance: Mobile 7th Generation Core i3 (i3-7xxx, U-H, suffixes: U, H), Mobile 7th Generation Core M (m3-7Yxx, Y), Pentium Gold 4410 (Y), Pentium Gold 4415 (U-Y)
- Server lower-performance: Xeon E3-1200 v6 (H), Xeon E3-1500 v6 (H)

Identical: **8th Generation Kaby Lake** (2017, 14 nm+)
Alternative Names: KBL (Note: all processors are MCPs)
Series:
- Mobile: Mobile 8th Generation Core i5 (i5-8250U, i5-8350U, i5-8305G, U Refresh and G)
- Mobile higher-performance: Mobile 8th Generation Core i7 (i7-8550U, i7-8650U, i7-8000G, U Refresh, G)
- Mobile lower-performance: Mobile 8th Generation Core i3 (i3-8130U, U Refresh), Pentium Gold 4417U (U Refresh), Celeron 3867U (U Refresh)

Identical: **8th Generation Coffee Lake** (2017, 14 nm++)
Alternative Names: CFL
Series:
- Desktop: Desktop 8th Generation Core i5 (i5-8xxx, S)
- Desktop higher-performance: Desktop 8th Generation Core i7 (i7-8xxx, S)
- Desktop lower-performance: Desktop 8th Generation Core i3 (i3-8xxx, S), Pentium Gold G5400T (S), Pentium Gold G5400 (S), Pentium Gold G5500T (S), Pentium Gold G5500 (S), Pentium Gold G5600 (S), Celeron G4900T (S), Celeron G4900 (S), Celeron G4920 (S)
- Mobile: Mobile 8th Generation Core i5 (i5-8xxx; except: 8th Gen KBL, 8th Gen AML, and WHL; U-H; suffixes: U, H, B)
- Mobile higher-performance: Mobile 8th Generation Core i7 (i7-8xxx; except: 8th Gen KBL, 8th Gen AML, and WHL; U-H; suffixes: U, H, B), Mobile 8th Generation Core i9 (Core i9-8950HK, H), Xeon E-2100 M (H)
- Mobile lower-performance: Mobile 8th Generation Core i3 (i3-8xxx; except: 8th Gen KBL, WHL, and CNL; U-H; suffixes: U, H, B)
- Server: Xeon E-2100 (E)

Identical: **8th Generation Amber Lake** (2018, 14 nm++)
Alternative Names: AML (Note: all processors are MCPs)
Series:
- Mobile lower-performance: Mobile 8th Generation Core M (m3-8100Y, Y), Mobile 8th Generation Core i5 (i5-8xx0Y, Y), Mobile 8th Generation Core i7 (i7-85x0Y, Y), Pentium Gold 4425Y (Y)

Security Fixes: **9th Generation Coffee Lake and Whiskey Lake** (2018, 14 nm+++)
Alternative Names: CFL, WHL (CFL stepping 13 and WHL steppings 12 and 13 have more security fixes than other steppings)
Series:
- Desktop: Desktop 9th Generation Core i5 (i5-9xxx, Coffee Lake-S Refresh)
- Desktop higher-performance: Desktop 9th Generation Core i7 (i7-9xxx, Coffee Lake-S Refresh), Desktop 9th Generation Core i9 (i9-9xxx, Coffee Lake-S Refresh)
- Desktop lower-performance: Desktop 9th Generation Core i3 (i3-9xxx), Pentium Gold G5420T, Pentium Gold G5420, Pentium Gold G5620, Pentium Gold G5600T, Celeron G4930T, Celeron G4930, Celeron G4950 (all are part of the Coffee Lake-S Refresh line)
- Mobile: Mobile 8th Generation Core i5 (Core i5-8x65U, Whiskey Lake-U), Mobile 8th Generation Core i7 (i7-8x65U, Whiskey Lake-U), Mobile 9th Generation Core i5 (i5-9xxx, Coffee Lake-H Refresh, suffixes: H, HF)
- Mobile higher-performance: Mobile 9th Generation Core i7 (i7-9xxx, Coffee Lake-H Refresh, suffixes: H, HF), Mobile 9th Generation Core i9 (i9-9xxx, Coffee Lake-H Refresh, suffixes: H, HK), Xeon E-2200 M (Coffee Lake-H Refresh)
- Mobile lower-performance: Mobile 8th Generation Core i3 (i3-8145U, Whiskey Lake-U), Pentium Gold 8145U (Whiskey Lake-U), Pentium G5600E (Coffee Lake-H Refresh), Celeron 5405U (Whiskey Lake-U), Celeron G493xE (Coffee Lake-H Refresh)
- Server: Xeon E-2200 (Coffee Lake-E Refresh)

Variant of KBL: **Cannon Lake** (2018, 10 nm)
Alternative Names: CNL, Skymont (the core microarchitecture is called Palm Cove)
Series: Mobile 8th Generation Core i3 (i3-8121U, U)

Identical to CFL 13: **10th Generation Comet Lake** (2019, 14 nm+++)
Alternative Names: CML (Note: all U processors are MCPs)
Series:
- Desktop: Desktop 10th Generation Core i5 (i5-10xxx, S)
- Desktop higher-performance: Desktop 10th Generation Core i7 (i7-10xxx, S), Desktop 10th Generation Core i9 (i9-10xxx, S)
- Desktop lower-performance: Desktop 10th Generation Core i3 (i3-10xxx, S), Pentium Gold G6x00 (S), Celeron G5900 (S) , Celeron G5905 (S) , Celeron G5920 (S) , Celeron G5925 (S)
- Mobile: Mobile 10th Generation Core i5 (i5-10xxx, U-H, suffixes: U, H)
- Mobile higher-performance: Mobile 10th Generation Core i7 (i7-10xxx, U-H, suffixes: U, H), Mobile 10th Generation Core i9 (i9-10xxx, H, suffixes: H, HK), Xeon W-10000 (H)
- Mobile lower-performance: Mobile 10th Generation Core i3 (i3-10110U, U), Pentium Gold 6405U (U), Celeron 5205U (U), Celeron 5305U (U)
- Server: Xeon W-1200 (S)

Identical to CFL 13: **10th Generation Amber Lake** (2019, 14 nm+++)
Alternative Names: AML, CML-Y (Note: all processors are MCPs)
Series:
- Mobile: Mobile 10th Generation Core i5 (i5-10x10Y, Y)
- Mobile higher-performance: Mobile 10th Generation Core i7 (i7-10510Y, Y)
- Mobile lower-performance: Mobile 10th Generation Core i3 (i3-10110Y, Y)

Combination of CFL 13 and SKX with new instructions: **Cascade Lake** (2019, 14 nm+++)
Alternative Names: CSL, CSX
Series:
- Desktop higher-performance: Desktop 10th Generation Core i9 X (i9-10xxxX, i9-10980XE, X)
- Server: Xeon W-2200 (W), Xeon Silver 4200 (2nd Generation Xeon Silver, SP)
- Server higher-performance: Xeon W-3200 (W), Xeon Gold 5200 (2nd Generation Xeon Gold, SP), Xeon Gold 6200 (2nd Generation Xeon Gold, SP), Xeon Platinum 9200 (2nd Generation Xeon Platinum, AP)
- Server lower-performance: Xeon Bronze 3200 (2nd Generation Xeon Bronze, SP)

New instructions over CSL: **Cooper Lake** (2020, 14 nm+++)
Alternative Names: CPL
Series:
- Server higher-performance: Xeon Gold 5300 (3rd Generation Xeon Gold, SP), Xeon Gold 6300 (3rd Generation Xeon Gold, SP), Xeon Platinum 8300 (3rd Generation Xeon Platinum, AP)

?: **11th Generation Comet Lake** (2021, 14 nm++++)
Alternative Names: CML
Series:
- Desktop lower-performance: Desktop 11th Generation Core i3 (i3-11xxx, S), Pentium G6xx0 (except G6000), Celeron G5930, Celeron G5950

Ice Lake (2019, 10 nm+ to 10 nm++)
Alternative Names: ICL (Mobile), ICX (Server) (The core microarchitecture is called Sunny Cove or SNC) (Note: all U and Y processors are MCPs)
Series:
- Mobile: Mobile 10th Generation Core i5 (i5-10xxGx, i5-1038NG7, Y-U, 10 nm+)
- Mobile higher-performance: Mobile 10th Generation Core i7 (i7-10xxGx, i7-1068NG7, Y-U, 10 nm+)
- Mobile lower-performance: Mobile 10th Generation Core i3 (i3-10xxGx Y-U, 10 nm+)
- Server: TBA
- Server lower-performance: TBA

Identical: **Rocket Lake** (2021, 14 nm++++)
Alternative Names: RKL (The Cypress Cove architecture includes ICL cores and X^e integrated graphics)
Series:
- Desktop: Desktop 11th Generation Core i5 (i5-11xxx, S)
- Desktop higher-performance: Desktop 11th Generation Core i7 (i7-11xxx, S), Desktop 11th Generation Core i9 (i9-11xxx, S)

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