

Athlon XP FSB, Multiplier and Voltage Settings/ Characteristics by core revision

Core specifics:

Palamino:

Cache L1: 128kb

Cache L2: 256kb

Production Technology: 0.18micron

Characteristics:

- Due to aged fabrication and higher core voltages they run hot average idle temps range from 55°C~60°C
- Locked multiplier therefore limited overclockability prior to modding.

Thoroughbred A/B:

Cache L1: 128kb

Cache L2: 256kb

Production Technology: 0.13micron

Characteristics:

- Due to low voltage and 0.13 fab, these guys run cool average idle temps can range from 38°C~42°C
- Thoroughbred B's are mostly awesome overclockers and have factory unlocked multipliers (depends on board as to whether it will apply them correctly)
- Top end Thoroughbreds have higher clock speeds compared to equivalent bartons, due to the small 256kb Level2 cache

Barton:

Cache L1: 128kb

Cache L2: 512kb

Production Technology: 0.13micron

Characteristics:

- Due to low voltage and 0.13 fab, these guys fairly run cool average idle temps can range from 42°C~47°C
- As the barton core has double the Level 2 cache reserve of the equivalent rated Tbred, it doesn't require as high clock speed, eg. the barton with 512kb L2 cache is pretty much the equivalent to a tbred chip with 256kb Level 2 clocked 200MHz faster, ie barton at 2GHz = Tbred at 2.2GHz
- Although its pot luck most low end (2500+) chips are simply immense overclockers and can more than likely hit 2.2GHz on stock cooling and occasionally upto 2.5GHz on water!!!
- Bartons as of late (from production week 40 on) have a locked multiplier which limits overclocking scalability, all pre week 40 bartons however are fully factory unlocked.

Note the colour coding is Palamino (Red), Tbred A and B (Blue), Barton (green).

If you don't already know the core revision of your chip refer to the processor's OPN (Ordering Part Number) and the Processor datasheet on the AMD website.

Athlon XP Cpu settings 1500+ to 3200+

(please note, the core version is paramount when setting your cpu manually)

XP 1500+ (Palamino)

FSB: 133 MHz

Multiplier: 10x

Vcore voltage: 1.75v

XP 1600+ (Palamino)

Clock speed: 1396 MHz

FSB: 133 MHz

Multiplier: 10.5x

Vcore voltage: 1.75v

XP 1700+ (Palamino)

Clock speed: 1463 MHz

FSB: 133 MHz

Multiplier: 11x
Vcore voltage: 1.75v

XP 1700+ (Thoroughbred A)

Clock speed: 1463 MHz
FSB: 133 MHz
Multiplier: 11x
Vcore voltage: 1.65v

XP 1700+ (Thoroughbred B)

Clock speed: 1463 MHz
FSB: 133 MHz
Multiplier: 11x
Vcore voltage: 1.60v (stepping code with DLT3C in it run at 1.5v)

XP 1800+ (Palamino)

Clock speed: 1529 MHz
FSB: 133 MHz
Multiplier: 11.5x
Vcore voltage: 1.75v

XP 1800+ (Thoroughbred A)

Clock speed: 1529 MHz
FSB: 133 MHz
Multiplier: 11.5x
Vcore voltage: 1.65v

XP 1800+ (Thoroughbred B)

Clock speed: 1529 MHz
FSB: 133 MHz
Multiplier: 11.5x
Vcore voltage: 1.60v (stepping code with DLT3C in it run at 1.5v)

XP 1900+ (Palamino)

Clock speed: 1596 MHz
FSB: 133 MHz
Multiplier: 12x
Vcore voltage: 1.75v

XP 2000+ (Palamino)

Clock speed: 1662 MHz
FSB: 133 MHz
Multiplier: 12.5x
Vcore voltage: 1.75v

XP 2000+ (Thoroughbred A)

Clock speed: 1662 MHz
FSB: 133 MHz
Multiplier: 12.5x
Vcore voltage: 1.65v

XP 2000+ (Thoroughbred B)

Clock speed: 1662 MHz
FSB: 133 MHz
Multiplier: 12.5x
Vcore voltage: 1.60v

XP 2100+ (Palamino)

Clock speed: 1729 MHz
FSB: 133 MHz
Multiplier: 13x

Vcore voltage: 1.75v

XP 2100+ (Thoroughbred A)

Clock speed: 1729 MHz
FSB: 133 MHz
Multiplier: 13x
Vcore voltage: 1.65v

XP 2100+ (Thoroughbred B)

Clock speed: 1729 MHz
FSB: 133 MHz
Multiplier: 13x
Vcore voltage: 1.60v

XP 2200+ (Thoroughbred A)

Clock speed: 1795 MHz
FSB: 133 MHz
Multiplier: 13.5x
Vcore voltage: 1.65v

XP 2200+ (Thoroughbred B)

Clock speed: 1795 MHz
FSB: 133 MHz
Multiplier: 13.5x
Vcore voltage: 1.60v

XP 2400+ (Thoroughbred A)

Clock speed: 1995 MHz
FSB: 133 MHz
Multiplier: 15x
Vcore voltage: 1.65v

XP 2400+ (Thoroughbred B)

Clock speed: 1995 MHz
FSB: 133 MHz
Multiplier: 15x
Vcore voltage: 1.60v

XP 2500+ (Barton)

Clock speed: 1826MHz
FSB: 166 MHz
Multiplier: 11x
Vcore voltage: 1.65v

XP 2600+ (Thoroughbred B) - 266FSB version

Clock speed: 2128 MHz
FSB: 133 MHz
Multiplier: 16x
Vcore voltage: 1.60v

XP 2600+ (Thoroughbred B) - 333FSB version

Clock speed: 2075 MHz
FSB: 166 MHz
Multiplier: 12.5x
Vcore voltage: 1.60v

XP 2600+ (Barton)

Clock speed: 1909 MHz
FSB: 166 MHz
Multiplier: 11.5x
Vcore voltage: 1.65v

XP 2700+ (Thoroughbred B)

Clock speed: 2158 MHz
FSB: 166 MHz
Multiplier: 13x
Vcore voltage: 1.60v

XP 2800+ (Thoroughbred B)

Clock speed: 2241 MHz
FSB: 166 MHz
Multiplier: 13.5x
Vcore voltage: 1.60v

XP 2800+ (Barton)

Clock speed: 2075 MHz
FSB: 166 MHz
Multiplier: 12.5x
Vcore voltage: 1.65v

XP 3000+ (Barton) 333FSB version

Clock speed: 2158 MHz
FSB: 166 MHz
Multiplier: 13x
Vcore voltage: 1.65v

XP 3000+ (Barton) 400FSB version

Clock speed: 2100 MHz
FSB: 200 MHz
Multiplier: 10.5x
Vcore voltage: 1.65v

XP 3200+ (Barton)

Clock speed: 2200 MHz
FSB: 200 MHz
Multiplier: 11x
Vcore voltage: 1.65v