

AppleIntelInfo.kext v3.0 Copyright © 2012-2017 Pike R. Alpha. All rights reserved.

Settings:

enableHWP..... : 0
logMSRs..... : 1
logIGPU..... : 0
logIntelRegs..... : 0
logCStates..... : 1
logIPGStyle..... : 1
InitialTSC..... : 0x84d3a7610b8 (228 MHz)
MWAIT C-States..... : 270624

Processor Brandstring..... : Intel(R) Core(TM) i7-4790K CPU
@ 4.00GHz

Processor Signature..... : 0x306C3

- Family..... : 6
- Stepping..... : 3
- Model..... : 0x3C (60)

Model Specific Registers (MSRs)

MSR_IA32_PLATFORM_ID.....(0x17) : 0x40000000000000

- Processor Flags..... : 1

MSR_CORE_THREAD_COUNT.....(0x35) : 0x40008

- Core Count..... : 4
- Thread Count..... : 8

MSR_PLATFORM_INFO.....(0xCE) : 0x80838F3012800

- Maximum Non-Turbo Ratio..... : 0x28 (4000 MHz)
- Ratio Limit for Turbo Mode..... : 1 (programmable)

- TDP Limit for Turbo Mode..... : 1 (programmable)
- Low Power Mode Support..... : 0 (LMP not supported)
- Number of ConfigTDP Levels..... : 0 (only base TDP level available)
- Maximum Efficiency Ratio..... : 8
- Minimum Operating Ratio..... : 8

MSR_PMG_CST_CONFIG_CONTROL.....(0xE2) : 0x1E000005

-
- I/O MWAIT Redirection Enable..... : 0 (not enabled)
 - CFG Lock..... : 0 (MSR not locked)
 - C3 State Auto Demotion..... : 1 (enabled)
 - C1 State Auto Demotion..... : 1 (enabled)
 - C3 State Undemotion..... : 1 (enabled)
 - C1 State Undemotion..... : 1 (enabled)
 - Package C-State Auto Demotion..... : 0 (disabled/unsupported)
 - Package C-State Undemotion..... : 0 (disabled/unsupported)

MSR_PMG_IO_CAPTURE_BASE.....(0xE4) : 0x21814

-
- LVL_2 Base Address..... : 0x1814
 - C-state Range..... : 2 (C-States not included, I/O MWAIT redirection not enabled)

IA32_MPERF.....(0xE7) : 0xC5D49946B1

IA32_APERF.....(0xE8) : 0x110E9F21AC6

MSR_FLEX_RATIO.....(0x194) : 0xE0000

MSR_IA32_PERF_STATUS.....(0x198) : 0x24C200002B00

- Current Performance State Value..... : 0x2B00 (4300 MHz)

MSR_IA32_PERF_CONTROL.....(0x199) : 0x2C00

- Target performance State Value..... : 0x2C00 (4400 MHz)
- Intel Dynamic Acceleration..... : 0 (IDA engaged)

IA32_CLOCK_MODULATION.....(0x19A) : 0x0

IA32_THERM_INTERRUPT.....(0x19B) : 0x0

IA32_THERM_STATUS.....(0x19C) : 0x88380000

- Thermal Status..... : 0
- Thermal Log..... : 0
- PROCHOT # or FORCEPR# event..... : 0
- PROCHOT # or FORCEPR# log..... : 0
- Critical Temperature Status..... : 0
- Critical Temperature log..... : 0
- Thermal Threshold #1 Status..... : 0
- Thermal Threshold #1 log..... : 0
- Thermal Threshold #2 Status..... : 0
- Thermal Threshold #2 log..... : 0
- Power Limitation Status..... : 0
- Power Limitation log..... : 0
- Current Limit Status..... : 0
- Current Limit log..... : 0
- Cross Domain Limit Status..... : 0
- Cross Domain Limit log..... : 0
- Digital Readout..... : 56
- Resolution in Degrees Celsius..... : 1
- Reading Valid..... : 1 (valid)

MSR_THERM2_CTL.....(0x19D) : 0x0

IA32_MISC_ENABLES.....(0x1A0) : 0x850089

- Fast-Strings..... : 1 (enabled)
- FOPCODE compatibility mode Enable.... : 0
- Automatic Thermal Control Circuit.... : 1 (enabled)
- Split-lock Disable..... : 0
- Performance Monitoring..... : 1 (available)
- Bus Lock On Cache Line Splits Disable : 0
- Hardware prefetch Disable..... : 0
- Processor Event Based Sampling..... : 0 (PEBS supported)
- GV1/2 legacy Enable..... : 0
- Enhanced Intel SpeedStep Technology.. : 1 (enabled)
- MONITOR FSM..... : 1 (MONITOR/MWAIT supported)
- Adjacent sector prefetch Disable..... : 0
- CFG Lock..... : 0 (MSR not locked)

- xTPR Message Disable..... : 1 (disabled)

MSR_TEMPERATURE_TARGET.....(0x1A2) : 0x641400

- Turbo Attenuation Units..... : 0
- Temperature Target..... : 100
- TCC Activation Offset..... : 0

MSR_MISC_PWR_MGMT.....(0x1AA) : 0x1

- EIST Hardware Coordination..... : 1 (hardware coordination disabled)
- Energy/Performance Bias support..... : 1
- Energy/Performance Bias..... : 0 (disabled/MSR not visible to software)
- Thermal Interrupt Coordination Enable : 0 (thermal interrupt not rerouted)
- SpeedShift Technology Enable..... : 0 (disabled)
- SpeedShift Interrupt Coordination.... : 0 (disabled)
- SpeedShift Energy Efficient Perf..... : 0 (disabled)
- SpeedShift Technology Setup for HWP.. : No (not setup for HWP)

MSR_TURBO_RATIO_LIMIT.....(0x1AD) : 0x2A2B2C2C

- Maximum Ratio Limit for C01..... : 2C (4400 MHz)
- Maximum Ratio Limit for C02..... : 2C (4400 MHz)
- Maximum Ratio Limit for C03..... : 2B (4300 MHz)
- Maximum Ratio Limit for C04..... : 2A (4200 MHz)

IA32_ENERGY_PERF_BIAS.....(0x1B0) : 0x1

- Power Policy Preference..... : 1 (highest performance)

MSR_POWER_CTL.....(0x1FC) : 0x4005F

- Bi-Directional Processor Hot..... : 1 (enabled)
- C1E Enable..... : 1 (enabled)

MSR_RAPL_POWER_UNIT.....(0x606) : 0xA0E03

- Power Units..... : 3 (1/8 Watt)

- Energy Status Units..... : 14 (61 micro-Joules)
- Time Units : 10 (976.6 micro-Seconds)

MSR_PKG_POWER_LIMIT.....(0x610) : 0xFFD00000EA82

-
- Package Power Limit #1..... : 3408 Watt
 - Enable Power Limit #1..... : 1 (enabled)
 - Package Clamping Limitation #1..... : 0 (disabled)
 - Time Window for Power Limit #1..... : 0 (2 milli-Seconds)
 - Package Power Limit #2..... : 4090 Watt
 - Enable Power Limit #2..... : 1 (enabled)
 - Package Clamping Limitation #2..... : 0 (disabled)
 - Time Window for Power Limit #2..... : 0 (2 milli-Seconds)
 - Lock..... : 0 (MSR not locked)

MSR_PKG_ENERGY_STATUS.....(0x611) : 0x27DC58FE

-
- Total Energy Consumed..... : 40817 Joules (Watt = Joules / seconds)

MSR_PP0_POWER_LIMIT.....(0x638) : 0xFFD0

-
- Power Limit..... : 4090 Watt
 - Enable Power Limit..... : 1 (enabled)
 - Clamping Limitation..... : 0 (disabled)
 - Time Window for Power Limit..... : 0 (10 milli-Seconds)
 - Lock..... : 0 (MSR not locked)

MSR_PP0_ENERGY_STATUS.....(0x639) : 0x138BA683

-
- Total Energy Consumed..... : 20014 Joules (Watt = Joules / seconds)

MSR_PP0_POWER_LIMIT.....(0x638) : 0xFFD0

-
- Power Limit..... : 4090 Watt
 - Enable Power Limit..... : 1 (enabled)
 - Clamping Limitation..... : 0 (disabled)
 - Time Window for Power Limit..... : 0 (10 milli-Seconds)
 - Lock..... : 0 (MSR not locked)

MSR_PP0_ENERGY_STATUS.....(0x639) : 0x138BA9AE

- Total Energy Consumed..... : 20014 Joules (Watt = Joules / seconds)

MSR_CONFIG_TDP_NOMINAL.....(0x648) : 0x28
MSR_CONFIG_TDP_LEVEL1.....(0x649) : 0x0
MSR_CONFIG_TDP_LEVEL2.....(0x64a) : 0x0
MSR_CONFIG_TDP_CONTROL.....(0x64b) : 0x80000000
MSR_TURBO_ACTIVATION_RATIO.....(0x64c) : 0x0
MSR_PKGC3_IRTL.....(0x60a) : 0x8842
MSR_PKGC6_IRTL.....(0x60b) : 0x8873
MSR_PKGC7_IRTL.....(0x60c) : 0x8891
MSR_PKG_C2_RESIDENCY.....(0x60d) : 0x616DB356C70
MSR_PKG_C3_RESIDENCY.....(0x3f8) : 0x0
MSR_PKG_C2_RESIDENCY.....(0x60d) : 0x616DB356C70
MSR_PKG_C3_RESIDENCY.....(0x3f8) : 0x0
MSR_PKG_C6_RESIDENCY.....(0x3f9) : 0x0
MSR_PKG_C7_RESIDENCY.....(0x3fa) : 0x0

IA32_TSC_DEADLINE.....(0x6E0) : 0x84D3F387AFE

CPU Ratio Info:

Base Clock Frequency (BLCK)..... : 100 MHz
Maximum Efficiency Ratio/Frequency..... : 8 (800 MHz)
Maximum non-Turbo Ratio/Frequency..... : 40 (4000 MHz)
Maximum Turbo Ratio/Frequency..... : 44 (4400 MHz)
P-State ratio * 100 = Frequency in MHz

CPU P-States [38 (42) 43]
CPU C3-Cores [1 5 6]
CPU C6-Cores [0 1 2 3 4 7]
CPU C7-Cores [0 1 2 3 5]
CPU P-States [(8) 38 41 42 43]
CPU C3-Cores [1 5 6 7]
CPU C6-Cores [0 1 2 3 4 6 7]
CPU C7-Cores [0 1 2 3 5 6 7]
CPU P-States [8 34 38 41 42 43 (44)]
CPU C3-Cores [1 4 5 6 7]
CPU C7-Cores [0 1 2 3 4 5 6 7]

CPU P-States [8 34 37 38 (40) 41 42 43 44]
CPU C3-Cores [1 3 4 5 6 7]
CPU C6-Cores [0 1 2 3 4 5 6 7]
CPU P-States [(8) 28 34 37 38 40 41 42 43 44]
CPU C3-Cores [0 1 3 4 5 6 7]
CPU P-States [(8) 25 28 34 37 38 40 41 42 43 44]
CPU P-States [8 24 25 28 34 37 38 (40) 41 42 43 44]
CPU C3-Cores [0 1 2 3 4 5 6 7]
CPU P-States [(8) 24 25 28 31 34 37 38 40 41 42 43 44]
CPU P-States [8 24 25 28 31 33 34 37 38 40 41 42 43 (44)]
CPU P-States [8 24 25 27 28 31 33 34 37 38 40 41 42 43 (44)]
CPU P-States [(8) 24 25 26 27 28 31 33 34 37 38 40 41 42 43 44]
CPU P-States [(8) 24 25 26 27 28 31 32 33 34 37 38 40 41 42 43 44]
CPU P-States [8 24 25 26 27 28 29 31 32 33 34 37 38 (40) 41 42 43 44]
CPU P-States [8 24 25 26 27 28 29 31 32 33 34 37 38 39 40 41 (42) 43 44]
CPU P-States [8 24 25 26 27 28 29 30 31 32 33 34 37 38 39 (40) 41 42 43 44]
CPU P-States [(8) 23 24 25 26 27 28 29 30 31 32 33 34 37 38 39 40 41 42 43 44]
CPU P-States [(8) 20 23 24 25 26 27 28 29 30 31 32 33 34 37 38 39 40 41 42 43 44]
CPU P-States [8 20 23 24 25 26 27 28 29 30 31 32 33 34 35 37 38 39 (40) 41 42 43 44]