

Erledigt

ASRock X299 OC Formula - i9-7920X immer nur bei 1,20 Ghz.

Beitrag von „Mork vom Ork“ vom 16. März 2020, 22:20

Hallo zusammen,

ich habe mir nun zu meinem ASRock X299 OC Formula eine Intel i9-7920X CPU geleast und diese auch schon eingebaut.

Leider scheint diese aber immer nur konstant bei 1,20 Ghz. zu laufen und unter macOS Mojave 10.14.6 liegt der CPU Package Multiplier immer nur bei 12x

Die CPU sollte jedoch ohne OverClocking bis 2,90 Ghz. laufen. Daher habe ich mal via Hackintool folgenden AppleIntelInfo Test laufen lassen und daurch die nachfolgend gelisteten Werte erhalten:

Code

1. AppleIntelInfo.kext v3.0 Copyright © 2012-2017 Pike R. Alpha. All rights reserved.
- 2.
3. Settings:
4. -----
5. enableHWP..... : 1
6. logMSRs..... : 1
7. logIGPU..... : 0
8. logIntelRegs..... : 0
9. logCStates..... : 1
10. logIPGStyle..... : 1
11. InitialTSC..... : 0xb941ba178b9 (438 MHz)
12. MWAIT C-States..... : 8224
- 13.
14. Processor Brandstring..... : Intel(R) Core(TM) i9-7920X CPU @ 2.90GHz
- 15.
16. Processor Signature..... : 0x50654
17. -----
18. - Family..... : 6
19. - Stepping..... : 4
20. - Model..... : 0x55 (85)

21.
22. Model Specific Registers (MSRs)
23. -----
24.
25. MSR_IA32_PLATFORM_ID.....(0x17) : 0x8000000000000
26. -----
27. - Processor Flags..... : 2
28.
29. MSR_CORE_THREAD_COUNT.....(0x35) : 0xC0018
30. -----
31. - Core Count..... : 12
32. - Thread Count..... : 24
33.
34. MSR_PLATFORM_INFO.....(0xCE) : 0x70C2CF3011D00
35. -----
36. - Maximum Non-Turbo Ratio..... : 0x1D (2900 MHz)
37. - Ratio Limit for Turbo Mode..... : 1 (programmable)
38. - TDP Limit for Turbo Mode..... : 1 (programmable)
39. - Low Power Mode Support..... : 0 (LMP not supported)
40. - Number of ConfigTDP Levels..... : 2 (additional TDP level(s) available)
41. - Maximum Efficiency Ratio..... : 12
42. - Minimum Operating Ratio..... : 7
43.
44. MSR_PMG_CST_CONFIG_CONTROL.....(0xE2) : 0x7E000003
45. -----
46. - I/O MWAIT Redirection Enable..... : 0 (not enabled)
47. - CFG Lock..... : 0 (MSR not locked)
48. - C3 State Auto Demotion..... : 1 (enabled)
49. - C1 State Auto Demotion..... : 1 (enabled)
50. - C3 State Undemotion..... : 1 (enabled)
51. - C1 State Undemotion..... : 1 (enabled)
52. - Package C-State Auto Demotion..... : 1 (enabled)
53. - Package C-State Undemotion..... : 1 (enabled)
54.
55. MSR_PMG_IO_CAPTURE_BASE.....(0xE4) : 0x0
56. - C-state Range..... : 0 (C-States not included, I/O MWAIT redirection not enabled)
57.
58. IA32_MPERF.....(0xE7) : 0x11606198A9
59. IA32_APERF.....(0xE8) : 0x7132C5DA5
60.
61. MSR_FLEX_RATIO.....(0x194) : 0xE0000
62.
63. MSR_IA32_PERF_STATUS.....(0x198) : 0x176800000C00

64. -----

65. - Current Performance State Value..... : 0xC00 (1200 MHz)

66.

67. MSR_IA32_PERF_CONTROL.....(0x199) : 0x1D00

68. -----

69. - Target performance State Value..... : 0x1D00 (2900 MHz)

70. - Intel Dynamic Acceleration..... : 0 (IDA engaged)

71.

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

73.

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

75.

76. IA32_THERM_STATUS.....(0x19C) : 0x8853000C

77. -----

78. - Thermal Status..... : 0

79. - Thermal Log..... : 0

80. - PROCHOT # or FORCEPR# event..... : 1

81. - PROCHOT # or FORCEPR# log..... : 1

82. - Critical Temperature Status..... : 0

83. - Critical Temperature log..... : 0

84. - Thermal Threshold #1 Status..... : 0

85. - Thermal Threshold #1 log..... : 0

86. - Thermal Threshold #2 Status..... : 0

87. - Thermal Threshold #2 log..... : 0

88. - Power Limitation Status..... : 0

89. - Power Limitation log..... : 0

90. - Current Limit Status..... : 0

91. - Current Limit log..... : 0

92. - Cross Domain Limit Status..... : 0

93. - Cross Domain Limit log..... : 0

94. - Digital Readout..... : 83

95. - Resolution in Degrees Celsius..... : 1

96. - Reading Valid..... : 1 (valid)

97.

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

99.

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

101. -----

102. - Fast-Strings..... : 1 (enabled)

103. - FOPCODE compatibility mode Enable.... : 0

104. - Automatic Thermal Control Circuit.... : 1 (enabled)

105. - Split-lock Disable..... : 0

106. - Performance Monitoring..... : 1 (available)

- 107. - Bus Lock On Cache Line Splits Disable : 0
- 108. - Hardware prefetch Disable..... : 0
- 109. - Processor Event Based Sampling..... : 0 (PEBS supported)
- 110. - GV1/2 legacy Enable..... : 0
- 111. - Enhanced Intel SpeedStep Technology.. : 1 (enabled)
- 112. - MONITOR FSM..... : 1 (MONITOR/MWAIT supported)
- 113. - Adjacent sector prefetch Disable..... : 0
- 114. - CFG Lock..... : 0 (MSR not locked)
- 115. - xTPR Message Disable..... : 1 (disabled)
- 116.
- 117. MSR_TEMPERATURE_TARGET.....(0x1A2) : 0x6E0A00
- 118. -----
- 119. - Turbo Attenuation Units..... : 0
- 120. - Temperature Target..... : 110
- 121. - TCC Activation Offset..... : 0
- 122.
- 123. MSR_MISC_PWR_MGMT.....(0x1AA) : 0x400041
- 124. -----
- 125. - EIST Hardware Coordination..... : 1 (hardware coordination disabled)
- 126. - Energy/Performance Bias support..... : 1
- 127. - Energy/Performance Bias..... : 0 (disabled/MSR not visible to software)
- 128. - Thermal Interrupt Coordination Enable : 1 (thermal interrupt routed to all cores)
- 129. - SpeedShift Technology Enable..... : 1 (enabled)
- 130. - SpeedShift Interrupt Coordination.... : 0 (disabled)
- 131. - SpeedShift Energy Efficient Perf..... : 0 (disabled)
- 132. - SpeedShift Technology Setup for HWP.. : Yes (setup for HWP)
- 133.
- 134. MSR_TURBO_RATIO_LIMIT.....(0x1AD) : 0x262626262628292C
- 135. -----
- 136. - Maximum Ratio Limit for C01..... : 2C (4400 MHz)
- 137. - Maximum Ratio Limit for C02..... : 29 (4100 MHz)
- 138. - Maximum Ratio Limit for C03..... : 28 (4000 MHz)
- 139. - Maximum Ratio Limit for C04..... : 26 (3800 MHz)
- 140. - Maximum Ratio Limit for C05..... : 26 (3800 MHz)
- 141. - Maximum Ratio Limit for C06..... : 26 (3800 MHz)
- 142. - Maximum Ratio Limit for C07..... : 26 (3800 MHz)
- 143. - Maximum Ratio Limit for C08..... : 26 (3800 MHz)
- 144.
- 145. MSR_TURBO_RATIO_LIMIT1.....(0x1AE) : 0x1C1814100C080402
- 146. -----
- 147. - Maximum Ratio Limit for C09..... : 2 (200 MHz)
- 148. - Maximum Ratio Limit for C10..... : 4 (400 MHz)
- 149. - Maximum Ratio Limit for C11..... : 8 (800 MHz)

- 150. - Maximum Ratio Limit for C12..... : C (1200 MHz)
- 151.
- 152. IA32_ENERGY_PERF_BIAS.....(0x1B0) : 0x1
- 153. -----
- 154. - Power Policy Preference..... : 1 (highest performance)
- 155.
- 156. MSR_POWER_CTL.....(0x1FC) : 0x210C005B
- 157. -----
- 158. - Bi-Directional Processor Hot..... : 1 (enabled)
- 159. - C1E Enable..... : 1 (enabled)
- 160.
- 161. MSR_RAPL_POWER_UNIT.....(0x606) : 0xA0E03
- 162. -----
- 163. - Power Units..... : 3 (1/8 Watt)
- 164. - Energy Status Units..... : 14 (61 micro-Joules)
- 165. - Time Units : 10 (976.6 micro-Seconds)
- 166.
- 167. MSR_PKG_POWER_LIMIT.....(0x610) : 0x15FFF80014FFF8
- 168. -----
- 169. - Package Power Limit #1..... : 4095 Watt
- 170. - Enable Power Limit #1..... : 1 (enabled)
- 171. - Package Clamping Limitation #1..... : 0 (disabled)
- 172. - Time Window for Power Limit #1..... : 10 (2560 milli-Seconds)
- 173. - Package Power Limit #2..... : 4095 Watt
- 174. - Enable Power Limit #2..... : 1 (enabled)
- 175. - Package Clamping Limitation #2..... : 1 (allow going below OS-requested P/T state setting Time Window for Power Limit #2)
- 176. - Time Window for Power Limit #2..... : 10 (2560 milli-Seconds)
- 177. - Lock..... : 0 (MSR not locked)
- 178.
- 179. MSR_PKG_ENERGY_STATUS.....(0x611) : 0x30A755B
- 180. -----
- 181. - Total Energy Consumed..... : 3113 Joules (Watt = Joules / seconds)
- 182.
- 183. MSR_CONFIG_TDP_NOMINAL.....(0x648) : 0x1D
- 184. MSR_CONFIG_TDP_LEVEL1.....(0x649) : 0xEC000000160460
- 185. MSR_CONFIG_TDP_LEVEL2.....(0x64a) : 0xEC000000160460
- 186. MSR_CONFIG_TDP_CONTROL.....(0x64b) : 0x80000000
- 187. MSR_TURBO_ACTIVATION_RATIO.....(0x64c) : 0x0
- 188. MSR_PKG_C3_IRTL.....(0x60a) : 0x0
- 189. MSR_PKG_C6_IRTL.....(0x60b) : 0x0
- 190. MSR_PKG_C2_RESIDENCY.....(0x60d) : 0x10FABB7B5
- 191. MSR_PKG_C3_RESIDENCY.....(0x3f8) : 0x0

192. MSR_PKG_C2_RESIDENCY.....(0x60d) : 0x10FABB7B5
193. MSR_PKG_C3_RESIDENCY.....(0x3f8) : 0x0
194. MSR_PKG_C6_RESIDENCY.....(0x3f9) : 0x4177724BE
195.
196. IA32_TSC_DEADLINE.....(0x6E0) : 0xB94204AFD21
197.
198. IA32_PM_ENABLE.....(0x770) : 0x1 (HWP Supported and Enabled)
199.
200. IA32_HWP_CAPABILITIES.....(0x771) : 0x2B
201. -----
202. - Highest Performance..... : 43
203. - Guaranteed Performance..... : 0
204. - Most Efficient Performance..... : 0
205. - Lowest Performance..... : 0
206.
207. IA32_HWP_REQUEST_PKG.....(0x772) : 0x2C2C07
208. -----
209. - Minimum Performance..... : 7
210. - Maximum Performance..... : 44
211. - Desired Performance..... : 44
212. - Energy Efficient Performance..... : 0
213. - Activity Window..... : 0, 0
214.
215. IA32_HWP_REQUEST.....(0x774) : 0x4000FFFF07
216. -----
217. - Minimum Performance..... : 7
218. - Maximum Performance..... : 255
219. - Desired Performance..... : 255
220. - Energy Efficient Performance..... : 0
221. - Activity Window..... : 0, 0
222. - Package Control..... : 1 (control inputs to be derived from
IA32_HWP_REQUEST_PKG)
223.
224. IA32_HWP_STATUS.....(0x777) : 0x0
225. -----
226. - Guaranteed Performance Change..... : 0 (has not occurred)
227. - Excursion To Minimum..... : 0 (has not occurred)
228.
229. CPU Ratio Info:
230. -----
231. Base Clock Frequency (BLCK)..... : 100 MHz
232. Maximum Efficiency Ratio/Frequency..... : 12 (1200 MHz)
233. Maximum non-Turbo Ratio/Frequency..... : 29 (2900 MHz)

- 234. Maximum Turbo Ratio/Frequency..... : 44 (4400 MHz)
- 235. P-State ratio * 100 = Frequency in MHz
- 236. -----
- 237. CPU P-States [(12)]
- 238. CPU C6-Cores [0 3 5 6 10 12 14 16 18 20 23]
- 239. CPU P-States [12]
- 240. CPU C6-Cores [0 1 2 3 4 5 6 8 10 12 14 16 18 20 22 23]
- 241. CPU P-States [(12)]
- 242. CPU C6-Cores [0 1 2 3 4 5 6 8 10 11 12 14 15 16 18 20 22 23]
- 243. CPU C6-Cores [0 1 2 3 4 5 6 8 10 11 12 14 15 16 17 18 20 22 23]
- 244. CPU C6-Cores [0 1 2 3 4 5 6 8 10 11 12 14 15 16 17 18 19 20 22 23]
- 245. CPU C6-Cores [0 1 2 3 4 5 6 7 8 10 11 12 14 15 16 17 18 19 20 22 23]
- 246. CPU C6-Cores [0 1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 20 22 23]
- 247. CPU C6-Cores [0 1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23]
- 248. CPU C6-Cores [0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23]

Alles anzeigen

Scheinbar scheinen die P-States nur ein "x12" zuzulassen. Im BIOS selber habe ich KEINE Einstellungen an den CPU-Settings verstellt, sondern die standardmässig gesetzten (DEFAULT) Werte übernommen.

In meiner config.plist für CLOVER steht unter ACPI - SSDT - Generate "PluginType = NO", "CStates = NO" und "PStates = NO".

Was muss ich bitte ggf. noch wo einstellen, damit er das Powermanagement korrekt macht und die CPU auch wirklich mit dem im BIOS gesetzten max Speed fährt (in meinem Fall also mit 2,90 Ghz.) ?

PS: stelle gerade fest, dass die CPU auch unter WIN10 mit max 1,20 Ghz. läuft !?!

PPS: anbei auch mal mein [EFI.zip](#) Ordner

EDIT: Problem fixed - der "Slow Mode" Dipschalter auf dem Mainboard stand auf "ON". Switched to "OFF" - und alles passt wieder. **Thread kann also wieder geschlossen werden**