



Clock Tuner for Ryzen™ 2.0 – INTRO

- **I want to remind you that early access is a premium opportunity to try the product much earlier than others without limitation. It also means that the product may contain bugs.**
- **CTR has two levels of protection, which will not allow the processor to perform dangerous actions.**
- **Beta 1 is not the final version, which will be available at the time of release. Patches and significant refinements are planned.**
- **Please read the instructions.**



Clock Tuner for Ryzen™ 2.0 – INTRO

System requirements:

- .NET Framework 4.7.2
- BIOS for Zen 3 with AGESA 1.1.0.0 path B or never
- BIOS for Zen 2 with AGESA (any)
- BIOS for APU with AGESA 1.1.8.0 or 1.1.9.0
- Windows 10 x64 (with all updates)
- BIOS settings without manual OC for CPU (not DRAM)

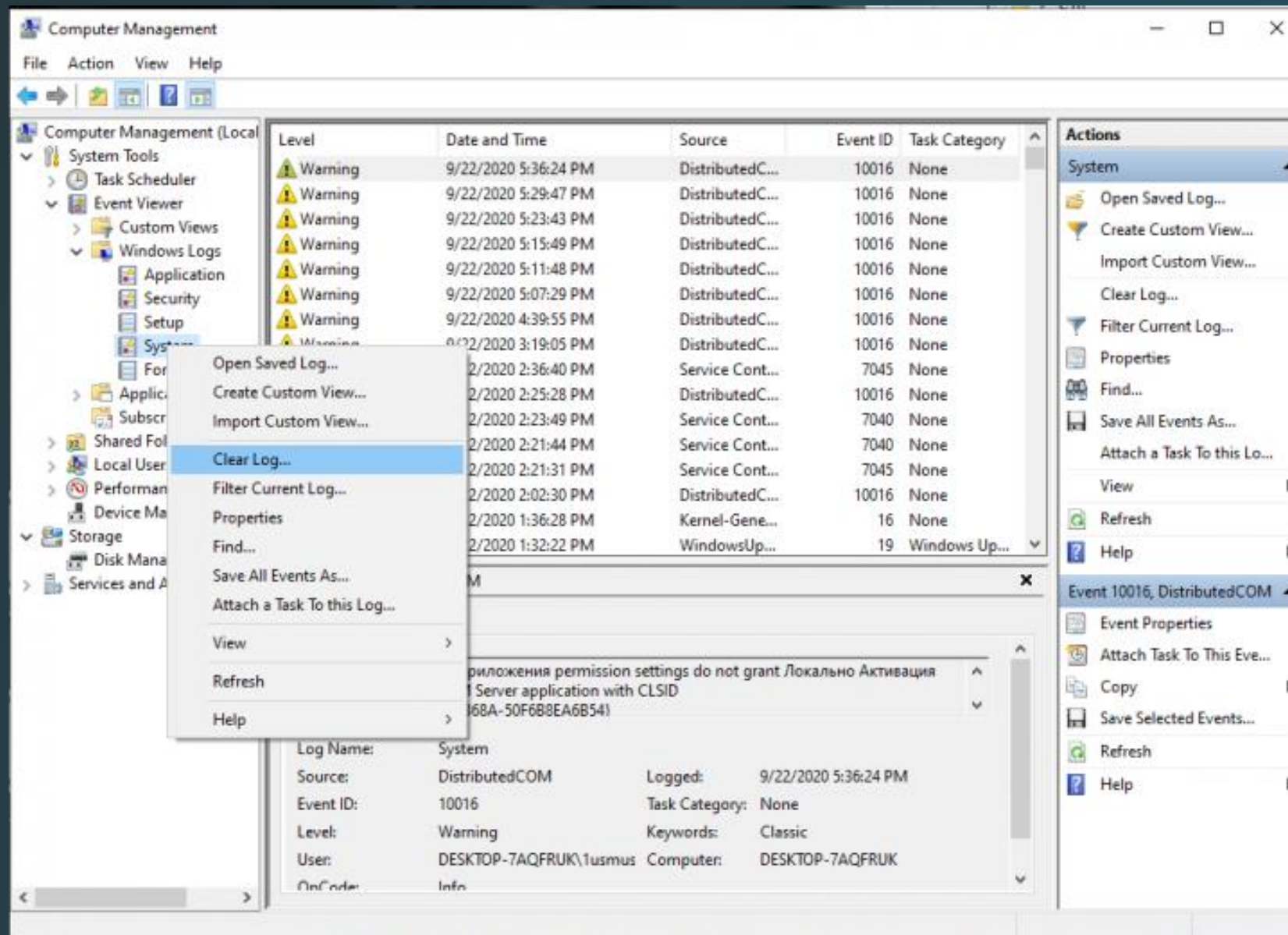
Supported CPU:

- Zen 3: Ryzen 9 5950X, Ryzen 9 5900X, Ryzen 7 5800X, Ryzen 5 5600X
- Zen 2: Threadripper 3970X, Threadripper 3960X, Ryzen 9 3950X, Ryzen 9 3900X, Ryzen 9 3900XT, Ryzen 9 3900, Ryzen 7 3800XT, Ryzen 7 3800X, Ryzen 7 3700X, Ryzen 5 3600XT, Ryzen 5 3600X, Ryzen 5 3600, Ryzen 5 3500X, Ryzen 5 3500, Ryzen 3 3300X, Ryzen 3 3100
- APU: Ryzen 7 PRO 4750G, Ryzen 7 PRO 4650G, Ryzen 3 PRO 4350G



Clock Tuner for Ryzen™ 2.0 – FIRST STEPS

1. Download **Cinebench R20** and put the archive contents into the "**CB20**" folder. "**CB20**" is in the "**CTR Early Access**" folder.
2. Go to the "**CB20**" folder and run **Cinebench.exe**. Accept the license agreement and close **Cinebench R20**.
3. Clear **System logs** and **reboot** the computer.





Clock Tuner for Ryzen™ 2.0 – DIAGNOSTIC

1. Run **CTR 2.0.exe** and go to the **TUNER** tab.
2. Press "**DIAGNOSTIC**" button. The diagnosis will begin. Be patient, CTR will automatically test the different parameters, this may take some time. And the better your processor is, the longer it will take. If a BSOD occurs or if the computer reboots, CTR will automatically restore itself. Timeout is 90 seconds after Windows starts.

CTR 2.0 beta 1
Optimization for ZEN2+ CPUs

HOME HOMEPAGE
TUNER
BENCHMARK
ABOUT & HELP
SCREENSHOT
DONATE
MINIMIZE
EXIT

CCX	Temp	CCX	Temp	CCX	Temp	CCX	Temp	CCX	Temp	CCX	Temp	CCX	Temp	CCX	Temp	CCX	Temp
CCX1	42.3°	CCX2	42.1°	CCX3	42.4°	CCX4	42.3°	CCX5	46.7°	CCX6	46.8°	CCX7	43.4°	CCX8	43.6°		
C01	4050	145	C04	4050	134	C07	4050	123	C10	4050	120	C13	4050	120	C16	4050	171
C02	4050	142	C05	4050	131	C08	4050	120	C11	4050	120	C14	4050	120	C17	4050	174
C03	4050	138	C06	4050	127	C09	4050	120	C12	4050	120	C15	4050	120	C18	4050	174
	-	-		-	-		-	-		-	-		-	-		-	-

CPU usage (%) 100 CPU TEL (V) 1.138 CPU VID (V) 1.163 CPU TEL (A) 89.4 CPU TDC (A) 91.3 CPU TEL (W) 101.7 CPU PPT (W) 179.9 CPU EDC (A) 238.7

Settings mode Advanced

Testing mode: AVX Light Reference voltage (mV): 1225 Max PPT (W): 340 CPU usage trigger (%): 70
Cycle time (s): 360 Reference frequency (MHz): 4075 Max EDC (A): 360 CCX usage max (%): 70
CCX delta (MHz): 75 Max frequency (MHz): 4675 Max TDC (A): 250 CCX usage min (%): 30
Polling period (ms): 500 Diagnostic voltage (mV): 1181 Max temperature (°C): 88 Holding time (ms): 4000

IFSO 1.0 / IFSO 2.0 Enhance accuracy CB20 testing CTR HYBRID OC
Autoload profile with OS To tray Autoshare stats

DIAGNOSTIC TUNE STOP CHECK STABILITY PROFILE MANAGEMENT

Log & System Information

AMD Ryzen Threadripper 3960X 24-Core Processor
ASUS ROG ZENITH II EXTREME

Coefficient
CCX# 1 1
CCX# 2 1
CCX# 3 0
CCX# 4 0
CCX# 5 6
CCX# 6 5
CCX# 7 3
CCX# 8 2

AVX light mode
Cycle time: 60000 ms
Reference frequency: 4050MHz
Reference voltage: 1181 mV
Voltage step: 6 mV

Manual overclocking mode enabled
18:43:32: CCX1 (138): 4050 MHz, 1181 mV
18:43:32: CCX2 (127): 4050 MHz, 1181 mV
18:43:32: CCX3 (120): 4050 MHz, 1181 mV
18:43:32: CCX4 (120): 4050 MHz, 1181 mV

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Clock Tuner for Ryzen™ 2.0 – DIAGNOSTIC

3. Make a screenshot or write down the results of the diagnostics. You will need them to create profiles (**P1** and **P2**).

CTR 2.0 beta 1
Optimization for ZEN2+ CPUs

CCX	Temp	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24
CCX1	31°	557	145	-	110	134	-	683	123	-	1256	120	-	895	120	-	572	171	-	521	167	-	592	156	
CCX2	31°	534	142	-	503	131	-	1156	120	-	1035	120	-	966	120	-	1665	174	-	97	163	-	101	152	
CCX3	32.3°	106	138	-	482	127	-	1023	120	-	947	120	-	876	120	-	694	174	-	602	160	-	106	149	
CCX4	32.7°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCX5	36.9°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCX6	37.3°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCX7	32.6°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCX8	32.3°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Parameter	Value	Parameter	Value	Parameter	Value	Parameter	Value
CPU usage (%)	2.3	CPU TEL (V)	1.36	CPU VID (V)	1.363	CPU TEL (A)	19.9
CPU TDC (A)	17.2	CPU TEL (W)	27.9	CPU PPT (W)	84.4	CPU EDC (A)	260.6

Settings mode Advanced

Testing mode: AVX Light
Cycle time (s): 360
CCX delta (MHz): 75
Polling period (ms): 500

Reference voltage (mV): 1225
Reference frequency (MHz): 4200
Max frequency (MHz): 4675
Diagnostic voltage (mV): 1181

Max PPT (W): 340
Max EDC (A): 360
Max TDC (A): 250
Max temperature (°C): 88

CPU usage trigger (%): 70
CCX usage max (%): 70
CCX usage min (%): 30
Holding time (ms): 4000

IFSO 1.0 / IFSO 2.0: Enhance accuracy: CB20 testing: CTR HYBRID OC:

Autoload profile with OS: To tray: Autoshare stats:

DIAGNOSTIC **TUNE** **STOP** **CHECK STABILITY** **PROFILE MANAGEMENT**

Log & System Information

AMD Ryzen Threadripper 3960X 24-Core Processor
ASUS ROG ZENITH II EXTREME

18:54:40: Step# 10. Diagnostic VID: 1127 mV
18:54:40: Stress test 1 started...
18:55:16: Stress test stopped.
18:55:17: Stress test 2 started...
Thread# 49 fall down, usage 93.9%
18:55:30: Stress test stopped.
18:55:31: Step# 11. Diagnostic VID: 1133 mV

Diagnostic results
Max temperature: 47.5°
Energy efficient: 3.57
AMD Ryzen Threadripper 3960X 24-Core Processor
Your CPU is SILVER SAMPLE
Recommended values for Overclocking (P1 profile):
Reference frequency: 4200 MHz
Reference voltage: 1225 mV
Recommended values for Overclocking (P2 profile):
Reference frequency: 4325 MHz
Reference voltage: 1325 mV
Recommended values for Undervolt:
Reference frequency: 4050 MHz
Reference voltage: 1150 mV

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Clock Tuner for Ryzen™ 2.0 – TUNE

1. After completing the diagnostics, CTR itself will offer you the recommended settings, some fields will be changed automatically. Press the **"TUNE"** button and wait until the work is finished. If a BSOD occurs or the computer reboots, CTR will automatically recover and continue to perform the required operations. The recovery time is 90 seconds after starting Windows.

CTR 2.0 beta 1
Optimization for ZEN2+ CPUs

HOMEPAGE

TUNER

BENCHMARK

ABOUT & HELP

SCREENSHOT

DONATE

MINIMIZE

EXIT

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CCX1 31.2°			CCX2 31°			CCX3 32.1°			CCX4 32.9°			CCX5 36.9°			CCX6 36.9°			CCX7 32.5°			CCX8 32.6°		
C01	636	145	C04	780	134	C07	775	123	C10	1599	120	C13	1291	120	C16	760	171	C19	710	167	C22	789	156
C02	646	142	C05	664	131	C08	1222	120	C11	1332	120	C14	1255	120	C17	1766	174	C20	700	163	C23	604	152
C03	677	138	C06	641	127	C09	1237	120	C12	1268	120	C15	1335	120	C18	1270	174	C21	783	160	C24	572	149
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CPU usage (%)	2	CPU TEL (V)	1.375	CPU VID (V)	1.38	CPU TEL (A)	24.8	CPU TDC (A)	22	CPU TEL (W)	34.7	CPU PPT (W)	91.4	CPU EDC (A)	270.4
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Settings mode Advanced RESET SETTINGS

Testing mode	AVX Light	Reference voltage (mV)	1225	Max PPT (W)	340	CPU usage trigger (%)	70
Cycle time (s)	360	Reference frequency (MHz)	4200	Max EDC (A)	360	CCX usage max (%)	70
CCX delta (MHz)	75	Max frequency (MHz)	4675	Max TDC (A)	250	CCX usage min (%)	30
Polling period (ms)	500	Diagnostic voltage (mV)	1181	Max temperature (°C)	88	Holding time (ms)	4000

IFSO 1.0 / IFSO 2.0	<input type="checkbox"/>	Enhance accuracy	<input type="checkbox"/>	CB20 testing	<input type="checkbox"/>	CTR HYBRID OC	<input type="checkbox"/>
Autoload profile with OS	<input type="checkbox"/>	To tray	<input type="checkbox"/>	Autoshare stats	<input type="checkbox"/>		

Log & System Information

AMD Ryzen Threadripper 3960X 24-Core Processor
ASUS ROG ZENITH II EXTREME

```

19:51:02: Stress test stopped.
19:51:03: Stress test #2 started...
19:51:08: CPU Vdroop: 2.2 % temperature: 46.9°
19:52:41: Stress test stopped.
19:52:42: Stress test #3 started...
19:52:47: CPU Vdroop: 2.2 % temperature: 47.3°
19:54:20: Stress test stopped.
19:54:20: Stress test #4 started...
19:54:25: CPU Vdroop: 2.2 % temperature: 47.4°
19:55:59: Stress test stopped.
Calculation of penalties for the final profile:
19:55:59: CCX1 (138): 4200 MHz, 1225 mV OC+
19:55:59: CCX2 (127): 4200 MHz, 1225 mV OC+
19:55:59: CCX3 (120): 4150 MHz, 1225 mV OC=
19:55:59: CCX4 (120): 4150 MHz, 1225 mV OC=
19:55:59: CCX5 (120): 4225 MHz, 1225 mV OC+
19:55:59: CCX6 (171): 4225 MHz, 1225 mV OC+
19:55:59: CCX7 (160): 4175 MHz, 1225 mV OC=
19:55:59: CCX8 (149): 4150 MHz, 1225 mV OC=
Cinebench 20 started
Cinebench 20 finished with result: 13730
Voltage: 1.225 V PPT: 255.2 W Temperature: 60.2°

```


DIAGNOSTIC
TUNE
STOP
CHECK STABILITY
PROFILE MANAGEMENT



Clock Tuner for Ryzen™ 2.0 – SAVE PROFILE

1. After finishing the tuning, the user will have to save the profile. In order to transfer the data to the profile press "**FILL P1 PROFILE**" (this and other profiles management buttons are in "**PROFILE MANAGEMENT**"). Then you can save the profile or activate (apply) it without saving. Be careful, if you close the program without saving your profile, you will lose it. I also want to point out that all the basic CTR settings will be saved when you click the "**EXIT**" button.

The screenshot displays the software interface for 'CTR 2.0 beta 1' (Optimization for ZEN2+ CPUs). A sidebar on the left contains navigation icons for: HOMEPAGE, TUNER, BENCHMARK, ABOUT & HELP, SCREENSHOT, DONATE, MINIMIZE, and EXIT. The main area shows two profile management sections. The top section, labeled 'P1', has a table of settings: VID (1225), CCX1 (4200), CCX2 (4200), CCX3 (4150), CCX4 (4150), CCX5 (4225), CCX6 (4225), CCX7 (4175), and CCX8 (4150). Below this table are buttons for 'FILL P1 PROFILE' (highlighted with a red box), 'APPLY P1 PROFILE', 'SAVE P1 PROFILE', and 'CLEAR P1 PROFILE'. A status bar to the right of these buttons reads 'Status: profile P1 filled!'. The bottom section, labeled 'P2', has a table of settings: VID (0), CCX1 (0), CCX2 (0), CCX3 (0), CCX4 (0), CCX5 (0), CCX6 (0), CCX7 (0), and CCX8 (0). Below this table are buttons for 'FILL P2 PROFILE', 'APPLY P2 PROFILE', 'SAVE P2 PROFILE', and 'CLEAR P2 PROFILE'. A status bar to the right of these buttons reads 'Status : Ready'. The bottom left corner of the interface shows the copyright notice: 'Copyright 1usmus© 2019-2021'.



Clock Tuner for Ryzen™ 2.0 – HYBRID OC

1. "**HYBRID OC**" mode requires only 1 (minimum) profile **P1** or **P2**. To activate HYBRID OC mode you must have a saved profile (**P1** or **P2**), activate "**Autoload profile with OS**" and "**CTR HYBRID OC**".
2. Go to the "**PROFILE MANAGEMENT**" tab and activate one of the saved profiles. If you have both profiles (**P1** and **P2**) filled (and saved) "**HYBRID OC**" will automatically use 2 profiles and default boost.

The screenshot displays the CTR 2.0 beta 1 interface. The top left shows the version and purpose: "CTR 2.0 beta 1 Optimization for ZEN2+ CPUs". A sidebar on the left contains navigation icons for Home, Tuner, Benchmark, About & Help, Screenshot, Donate, Minimize, and Exit. The main area is divided into several sections:

- CCX Data Table:** A grid showing core temperatures and voltage/frequency settings for CCX1 through CCX8. Each CCX has three columns of data (C01-C03 for CCX1, etc.).
- System Metrics:** A row of CPU usage (1.3%), CPU TEL (V) (1.366), CPU VID (V) (1.371), CPU TEL (A) (23.9), CPU TDC (A) (20.2), CPU TEL (W) (33.4), CPU PPT (W) (88.4), and CPU EDC (A) (265.9).
- Settings mode:** A dropdown menu set to "Advanced" with a "RESET SETTINGS" button.
- Testing Parameters:** A grid of settings including Testing mode (AVX Light), Cycle time (360s), CCX delta (75MHz), Polling period (500ms), Reference voltage (1225mV), Reference frequency (4200MHz), Max frequency (4675MHz), Diagnostic voltage (1181mV), Max PPT (340W), Max EDC (360A), Max TDC (250A), Max temperature (88°C), CPU usage trigger (70%), CCX usage max (70%), CCX usage min (30%), and Holding time (4000ms).
- Toggle Switches:** A row of switches for "IFSO 1.0 / IFSO 2.0", "Enhance accuracy", "CB20 testing", "CTR HYBRID OC", "Autoload profile with OS", "To tray", and "Autoshare stats".
- Buttons:** A row of buttons for "DIAGNOSTIC", "TUNE", "STOP", "CHECK STABILITY", "PROFILE MANAGEMENT", and a refresh icon.
- Log & System Information:** A scrollable log showing system details (AMD Ryzen Threadripper 3960X 24-Core Processor, ASUS ROG ZENITH II EXTREME) and a detailed log of stress tests and profile management actions. The log includes messages like "Profile P1 successfully filled!", "Profile P1 successfully applied!", and "Hybrid boost enabled".



Clock Tuner for Ryzen™ 2.0 – HYBRID OC

- If **CPU usage** exceeds **70%**, **P1** profile will be activated. If the load is less than 70% - profile **P2** will be active (in case it was saved beforehand). If only **P1** profile is present in CTR, below 70% the standard boost will be activated.
- **P2** profile is controlled by the range "**CCX usage max (%) - CCX usage min (%)**".
- The user can use individual settings.

The screenshot displays the Clock Tuner for Ryzen 2.0 software interface. The top section shows a grid of CCX (Core Complex) settings for 8 cores (CCX1 to CCX8), including core IDs (C01-C24), frequencies, and voltages. Below this is a summary row with various CPU metrics like usage, TEL, VID, TDC, and PPT. The main settings area is divided into 'Settings mode' (Advanced) and 'Log & System Information'. The 'Settings mode' section includes fields for Testing mode (AVX Light), Cycle time (360s), CCX delta (75MHz), and Polling period (500ms), along with various voltage, frequency, and temperature limits. A red box highlights the 'CPU usage trigger (%)' set to 70, 'CCX usage max (%)' set to 70, and 'CCX usage min (%)' set to 30. The 'Log & System Information' section shows system details like 'AMD Ryzen Threadripper 3960X 24-Core Processor' and a log of stress test events and Cinebench 20 results. The bottom of the interface features a navigation bar with buttons for 'DIAGNOSTIC', 'TUNE', 'STOP', 'CHECK STABILITY', 'PROFILE MANAGEMENT', and a refresh icon.

CCX	Temp	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24
CCX1	28.8°	763	145	-	660	134	-	938	123	-	1351	120	-	1283	120	-	884	171	-	762	167	-	1037	156	
CCX2	28.6°	679	142	-	684	131	-	1736	120	-	1322	120	-	1429	120	-	1744	174	-	728	163	-	733	152	
CCX3	30.4°	690	138	-	684	127	-	1396	120	-	1355	120	-	1344	120	-	1215	174	-	995	160	-	745	149	

Metric	Value
CPU usage (%)	1.2
CPU TEL (V)	1.387
CPU VID (V)	1.393
CPU TEL (A)	25.7
CPU TDC (A)	21.9
CPU TEL (W)	36.2
CPU PPT (W)	90.8
CPU EDC (A)	276.1

Settings mode: Advanced

Setting	Value
Testing mode	AVX Light
Cycle time (s)	360
CCX delta (MHz)	75
Polling period (ms)	500
Reference voltage (mV)	1225
Reference frequency (MHz)	4200
Max frequency (MHz)	4675
Diagnostic voltage (mV)	1181
Max PPT (W)	340
Max EDC (A)	360
Max TDC (A)	250
Max temperature (°C)	88
Holding time (ms)	4000

Log & System Information

AMD Ryzen Threadripper 3960X 24-Core Processor
ASUS ROG ZENITH II EXTREME

19:52:41: Stress test stopped.
19:52:42: Stress test #3 started...
19:52:47: CPU Vdroop: 2.2 % temperature: 47.3°
19:54:20: Stress test stopped.
19:54:20: Stress test #4 started...
19:54:25: CPU Vdroop: 2.2 % temperature: 47.4°
19:55:59: Stress test stopped.
Calculation of penalties for the final profile:
19:55:59: CCX1 (138): 4200 MHz, 1225 mV OC+
19:55:59: CCX2 (127): 4200 MHz, 1225 mV OC+
19:55:59: CCX3 (120): 4150 MHz, 1225 mV OC=
19:55:59: CCX4 (120): 4150 MHz, 1225 mV OC=
19:55:59: CCX5 (120): 4225 MHz, 1225 mV OC+
19:55:59: CCX6 (171): 4225 MHz, 1225 mV OC+
19:55:59: CCX7 (160): 4175 MHz, 1225 mV OC=
19:55:59: CCX8 (149): 4150 MHz, 1225 mV OC=
Cinebench 20 started
Cinebench 20 finished with result: 13730
Voltage: 1.225 V PPT: 255.2 W Temperature: 60.2°
Profile P1 successfully filled!
Profile P1 successfully applied!
Hybrid boost enabled



Clock Tuner for Ryzen™ 2.0 – HYBRID OC

- "**Holding time (ms)**" - is the time for keeping one of the profiles active. If CPU usage is less than 70% for 4 seconds (4000 ms) - profile **P1** will be deactivated.
- Profile **P1** always has priority, it is able to interrupt the "hold" caused by profile **P2**.
- If the processor temperature exceeds the "**Max temperature**" value, both profiles will be deactivated.

The screenshot displays the Clock Tuner for Ryzen 2.0 software interface. The top section shows a grid of CCX (Core Complex) data for 8 cores (CCX1 to CCX8), including core IDs (C01-C24) and their respective frequencies and voltages. Below this, a row of system metrics is shown, such as CPU usage (1.9%), CPU TEL (V) (1.376), CPU VID (V) (1.381), CPU TEL (A) (25.3), CPU TDC (A) (21.6), CPU TEL (W) (35.4), CPU PPT (W) (90.7), and CPU EDC (A) (270.6).

The main settings area is titled "Settings mode" and is set to "Advanced". It includes a "RESET SETTINGS" button and various configuration options:

- Testing mode: AVX Light
- Cycle time (s): 360
- CCX delta (MHz): 75
- Polling period (ms): 500
- Reference voltage (mV): 1225
- Reference frequency (MHz): 4200
- Max frequency (MHz): 4675
- Diagnostic voltage (mV): 1181
- Max PPT (W): 340
- Max EDC (A): 360
- Max TDC (A): 250
- Max temperature (°C): 88
- CPU usage trigger (%): 70
- CCX usage max (%): 70
- CCX usage min (%): 30
- Holding time (ms): 4000

At the bottom, there are several toggle switches for features like "IFSO 1.0 / IFSO 2.0", "Enhance accuracy", "CB20 testing", "CTR HYBRID OC", "Autoload profile with OS", "To tray", and "Autoshare stats". Below these are buttons for "DIAGNOSTIC", "TUNE", "STOP", "CHECK STABILITY", "PROFILE MANAGEMENT", and a refresh icon.

The "Log & System Information" panel on the right shows system details: AMD Ryzen Threadripper 3960X 24-Core Processor, ASUS ROG ZENITH II EXTREME. The log contains several entries, including stress test results and a Cinebench 20 benchmark result of 13730. The log also indicates that Profile P1 was successfully applied and Hybrid boost was enabled.

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Clock Tuner for Ryzen™ 2.0 – P2 PROFILE

1. To create a **P2** profile, you will need to manually fill in the "**Reference voltage**" and "**Reference frequency**" data that can be found after diagnostics.
2. Run "**TUNE**" again. When the tuning process is finished, save the new profile in slot **P2**.

CTR 2.0 beta 1
Optimization for ZEN2+ CPUs

CCX1	31.9°	CCX2	30.8°	CCX3	31.7°	CCX4	31.5°	CCX5	36.3°	CCX6	36.3°	CCX7	32.3°	CCX8	32.3°								
C01	1594	145	C04	640	134	C07	875	123	C10	1123	120	C13	1155	120	C16	833	171	C19	731	167	C22	905	156
C02	678	142	C05	653	131	C08	1541	120	C11	1315	120	C14	1416	120	C17	1825	174	C20	725	163	C23	711	152
C03	683	138	C06	648	127	C09	1150	120	C12	1194	120	C15	1266	120	C18	1209	174	C21	905	160	C24	711	149
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CPU usage (%) 2 CPU TEL (V) 1.386 CPU VID (V) 1.392 CPU TEL (A) 26.3 CPU TDC (A) 22.3 CPU TEL (W) 36.9 CPU PPT (W) 91.5 CPU EDC (A) 273.8

Settings mode Advanced

Testing mode	AVX Light	Reference voltage (mV)	1225	Max PPT (W)	340	CPU usage trigger (%)	70
Cycle time (s)	360	Reference frequency (MHz)	4200	Max EDC (A)	360	CCX usage max (%)	70
CCX delta (MHz)	75	Max frequency (MHz)	4675	Max TDC (A)	250	CCX usage min (%)	30
Polling period (ms)	500	Diagnostic voltage (mV)	1144	Max temperature (°C)	88	Holding time (ms)	4000

IFSO 1.0 / IFSO 2.0 Enhance accuracy CB20 testing CTR HYBRID OC
Autoload profile with OS To tray Autoshare stats

DIAGNOSTIC **TUNE** **STOP** **CHECK STABILITY** **PROFILE MANAGEMENT**

Log & System Information

AMD Ryzen Threadripper 3960X 24-Core Processor
ASUS ROG ZENITH II EXTREME

21:40:24: Stress test 2 started...
21:41:00: Stress test stopped.
21:41:01: Step# 4. Diagnostic VID: 1126 mV
21:41:01: Stress test 1 started...
Thread# 49 fall down, usage 85.7%
21:41:25: Stress test stopped.
21:41:26: Step# 5. Diagnostic VID: 1132 mV

Diagnostic results
Max temperature: 45.5°
Energy efficient 3.58
AMD Ryzen Threadripper 3960X 24-Core Processor
Your CPU is SILVER SAMPLE
Recommended values for Overclocking (P1 profile):
Reference frequency: 4200 MHz
Reference voltage: 1225 mV
Recommended values for Overclocking (P2 profile):
Reference frequency: 4325 MHz
Reference voltage: 1325 mV
Recommended values for Undervolt:
Reference frequency: 4050 MHz
Reference voltage: 1150 mV

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Clock Tuner for Ryzen™ 2.0 – CONFIG FILE

- If you **can't start** the application or some functions don't work, delete the configuration file.

The screenshot shows a Windows File Explorer window with the address bar path: This PC > Local Disk (C:) > Users > 1usmus > AppData > Local. The main pane displays a list of folders. The folder 'Nemesis_Ulv2' is selected and highlighted in blue. A red box highlights the address bar path, and another red box highlights the 'Nemesis_Ulv2' folder. A red 'DELETE' button is visible in the bottom right corner of the window.

Name	Date modified	Type	Size
.IdentityService	10/17/2020 6:27 PM	File folder	
1usmus	8/30/2020 9:50 PM	File folder	
A	10/17/2020 12:49 AM	File folder	
AcSdkInsLog	9/21/2020 12:31 PM	File folder	
Adobe	8/21/2020 1:38 PM	File folder	
AMD	8/17/2020 11:18 AM	File folder	
ArmouryLiveUpdate	9/21/2020 12:32 PM	File folder	
Ashampoo	8/17/2020 11:42 AM	File folder	
ASUS	8/17/2020 11:04 AM	File folder	
BitTorrentHelper	8/20/2020 11:06 PM	File folder	
cache	8/17/2020 11:02 AM	File folder	
Capture_One	8/17/2020 11:28 AM	File folder	
CaptureOne	10/10/2020 6:28 PM	File folder	
CEF	8/21/2020 1:35 PM	File folder	
Comms	8/17/2020 11:00 AM	File folder	
ConnectedDevicesPlatform	8/17/2020 10:48 AM	File folder	
D3DSCache	8/21/2020 1:36 PM	File folder	
Discord	10/2/2020 9:18 AM	File folder	
Downloaded Installations	8/17/2020 12:08 PM	File folder	
DxO	8/23/2020 1:56 PM	File folder	
GitHubVisualStudio	10/5/2020 5:14 PM	File folder	
Google	9/4/2020 5:14 PM	File folder	
HQTswskRka2416pPaC	10/15/2020 6:33 PM	File folder	
IsolatedStorage	8/17/2020 11:46 AM	File folder	
JetBrains	10/15/2020 6:30 PM	File folder	
Just Color Picker	8/24/2020 12:04 AM	File folder	
Microsoft	8/27/2020 8:47 AM	File folder	
MicrosoftEdge	9/2/2020 8:18 PM	File folder	
Nemesis_Ulv2	10/17/2020 12:27 AM	File folder	
NuGet	10/10/2020 4:02 PM	File folder	



Clock Tuner for Ryzen™ 2.0 – AUTORUN

- Some versions of operating systems Windows 10 have incompatible or corrupted autorun functions. If the application doesn't start - it means that Windows for some reason can't or doesn't want to run CTR.
- You can check the status of the autorun in the "**Task Scheduler**".

Task Scheduler (Local)

Name	Status	Triggers	Next Run Time	Last Run Time	Last Run Result
AAact	Ready	At 8:00 PM every 10 days - After triggered, repeat every 10.00:00:00 indefinitely.	1/1/2021 8:00:22 PM	12/22/2020 8:00:22 PM	The operation completed successfully. (0x0)
AMDAutoUp...	Disabled	At 12:00 AM every 15 days	1/9/2021 12:00:00 AM	12/10/2020 12:14:35 PM	The operator or administrator has refused the request. (0x80070005)
AMDInstallLa...	Ready			11/30/1999 12:00:00 AM	The task has not yet run. (0x41303)
AMDLinkUp...	Ready			11/30/1999 12:00:00 AM	The task has not yet run. (0x41303)
CTR 2.0 beta 1	Ready	At log on of any user		11/30/1999 12:00:00 AM	The task has not yet run. (0x41303)
DisplayCAL P...	Ready	Multiple triggers defined		12/28/2020 10:07:20 PM	The operation completed successfully. (0x0)
DisplayCAL P...	Ready	At 4:00 AM every day	12/29/2020 4:00:00 AM	12/28/2020 8:12:44 AM	The operator or administrator has refused the request. (0x80070005)
GoogleUpda...	Disabled	Multiple triggers defined	12/29/2020 3:43:34 PM	12/21/2020 6:10:04 PM	The operation completed successfully. (0x0)
GoogleUpda...	Disabled	At 3:43 PM every day - After triggered, repeat every 1 hour for a duration of 1 day.	12/28/2020 10:43:34 PM	12/21/2020 5:43:35 PM	The operation completed successfully. (0x0)
MicrosoftEd...	Ready	Multiple triggers defined	12/28/2020 11:13:49 PM	12/28/2020 10:07:28 PM	The operation completed successfully. (0x0)
MicrosoftEd...	Ready	At 11:43 PM every day - After triggered, repeat every 1 hour for a duration of 1 day.	12/28/2020 10:43:49 PM	12/28/2020 9:43:50 PM	The operation completed successfully. (0x0)
ModifyLinkU...	Ready	At log on of any user		12/28/2020 10:07:28 PM	The operation completed successfully. (0x0)
NahimicSvc3...	Ready			11/30/1999 12:00:00 AM	The task has not yet run. (0x41303)
NahimicSvc6...	Ready			11/30/1999 12:00:00 AM	The task has not yet run. (0x41303)
NahimicTask...	Running			12/28/2020 10:07:28 PM	The task is currently running. (0x41301)

When you create a task, you can specify the conditions that will trigger the task. To change these triggers, open the task property pages using the Properties command.

Trigger	Details	Status
At log on	At log on of any user	Enabled