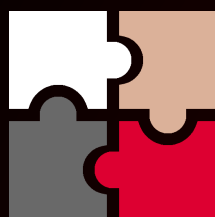


PROJECT HYDRA

OC-SANDBOX FOR ZEN3+ PROCESSORS

HYDRA 0.9D PRO IS ALREADY AVAILABLE FOR PATREON SUBSCRIBERS

1USMUS 2021



PROJECT HYDRA – NEW PLATFORM, NEW FEATURES

- Exclusive APP for ZEN 3 and ZEN 3+ processors
- New platform, new UI, compact size
- Powerful customization for each profile
- 4 voltage curves (presets) for all profiles (undervolt, normal, OC and XOC)
- Save up to 9 profiles
- Individual profiles for Gaming and AVX2
- New Diagnostics (all values are filled in automatically)
- All profiles can work in dynamic mode (unlocked CO in PRO version)

HYDRA 0.9D PRO

OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 15:33:34

CCD1 35.3°

C01	<input type="text" value="0"/>	162	C04	<input type="text" value="0"/>	166
C02	<input type="text" value="890"/>	158	C05	<input type="text" value="0"/>	174
C03	<input type="text" value="0"/>	170	C06	<input type="text" value="0"/>	174
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----

CCD2 31.4°

C07	<input type="text" value="0"/>	141	C10	<input type="text" value="65"/>	133
C08	<input type="text" value="0"/>	145	C11	<input type="text" value="0"/>	150
C09	<input type="text" value="0"/>	154	C12	<input type="text" value="0"/>	137
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----

CCD3 ----

----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----

CCD4 ----

----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----
----	<input type="text" value="---"/>	----	----	<input type="text" value="---"/>	----

CPU (%)

Vdroop (%)

CPU TEL (V)

CPU VID (V)

CPU TDC (A)

CPU EDC (A)

CPU PPT (W)

LOAD TYPE

THREADS	ENABLED	VID	CCD1	CCD2	CCD3	CCD4	DYNAMIC	STATS
1T-2T	<input checked="" type="checkbox"/>	1475	4725	4650	-	-	<input checked="" type="checkbox"/>	17
3T-4T	<input checked="" type="checkbox"/>	1375	4725	4650	-	-	<input checked="" type="checkbox"/>	2
5T-6T	<input checked="" type="checkbox"/>	1325	4650	4575	-	-	<input checked="" type="checkbox"/>	1
7T-9T	<input checked="" type="checkbox"/>	1325	4650	4575	-	-	<input checked="" type="checkbox"/>	0
10T-12T	<input checked="" type="checkbox"/>	1275	4600	4525	-	-	<input checked="" type="checkbox"/>	0
ALL (AVX1)	<input checked="" type="checkbox"/>	1150	4250	4175	-	-	<input checked="" type="checkbox"/>	379
ALL (AVX2)	<input checked="" type="checkbox"/>	1050	3850	3800	-	-	<input checked="" type="checkbox"/>	377
ALL (GAME)	<input checked="" type="checkbox"/>	1300	4650	4525	-	-	<input checked="" type="checkbox"/>	0

DEACTIVATE PROFILES

SAVE PROFILES

CO VALUES

CREATE BACKUP

LOAD BACKUP

UNDervOLT

NORMAL

OC

XOC

STATUS : READY !

HYBRID OC

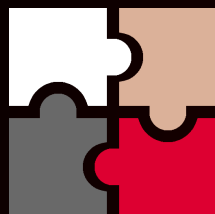
SETTINGS

LOGGING

DIAGNOSTIC

ANALYSE CO

COMPARE



PROJECT HYDRA – NEW PLATFORM, NEW FEATURES

- 2 CO tables for different types of tasks allows for maximum performance (created automatically during diagnostics)
- Complete independence from CPPC
- Real-time CO control, allowing you to change V/F on the fly, without rebooting
- Each CCD has its own differentiated frequency control
- Curve Optimizer search tool for each core
- Real-time CO bottle-neck information
- Profile backup management system

HYDRA 0.9D PRO

OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 15:33:34

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CCD1 70.8°

C01	38	162	C04	1	166
C02	902	158	C05	86	174
C03	28	170	C06	5000	174
---	---	---	---	---	---

CCD2 35°

C07	3	141	C10	372	133
C08	0	145	C11	92	150
C09	4	154	C12	17	137
---	---	---	---	---	---

CCD3 ----

---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

CCD4 ----

---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

CPU (%) Vdroop (%)

CPU TEL (V) CPU VID (V)

CPU TDC (A) CPU EDC (A)

CPU PPT (W) LOAD TYPE

⊖ CO FOR LOW-THREAD LOAD ⊕
⊖ CO FOR MULTI-THREAD LOAD ⊕

CORE#	CO	CORE#	CO	CORE#	CO	CORE#	CO
C01	219	C07	152	C01	71	C07	73
C02	223	C08	198	C02	107	C08	79
C03	228	C09	157	C03	77	C09	69
C04	206	C10	176	C04	77	C10	98
C05	110	C11	174	C05	49	C11	62
C06	56	C12	213	C06	59	C12	83

DEACTIVATE PROFILES

SAVE PROFILES

TO PROFILES

CREATE BACKUP

LOAD BACKUP

STATUS : READY !

HYBRID OC

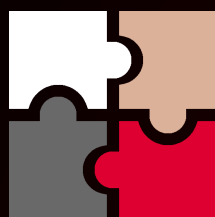
⚙️ SETTINGS

📄 LOGGING

🔬 DIAGNOSTIC

🔗 ANALYSE CO

📊 COMPARE



PROJECT HYDRA – NEW PLATFORM, NEW FEATURES

- Modular setup storage system (protection against configuration file corruption)
- Ability to adjust the response speed and CAC-tolerances of the dynamic mode
- Event notification system
- Built-in fail-safes against system and user errors
- 24/7 monitoring of processor parameters and automatic shutdown of profiles during critical situations

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

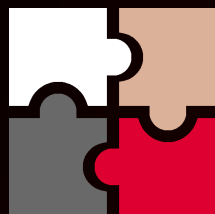
AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 15:33:34

CCD	Temp	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12
CCD1	35.1°	0	2045	269	0	162	158	170	0	166	174	174	---
CCD2	31.1°	246	0	143	0	141	145	154	410	133	150	137	---
CCD3	----	---	---	---	---	---	---	---	---	---	---	---	---
CCD4	----	---	---	---	---	---	---	---	---	---	---	---	---

CPU (%) 0 Vdroop (%) 0.2 CPU TEL (V) 1.098 CPU VID (V) 1.1 CPU TDC (A) 3.8 CPU EDC (A) 124.5 CPU PPT (W) 39.7 LOAD TYPE SSE

MAIN SETTINGS		DIAGNOSTIC SETTINGS				DIAGNOSTIC SETTINGS	
Auto-load APP with OS	<input type="checkbox"/>	CORE#	ON/OFF	CORE#	ON/OFF	CORE CO testing	<input checked="" type="checkbox"/>
Event notifications	<input checked="" type="checkbox"/>	C01	<input checked="" type="checkbox"/>	C07	<input checked="" type="checkbox"/>	CCD CO testing	<input checked="" type="checkbox"/>
Auto-check update	<input type="checkbox"/>	C02	<input checked="" type="checkbox"/>	C08	<input checked="" type="checkbox"/>	Profile creation	<input checked="" type="checkbox"/>
Pop-up tips	<input checked="" type="checkbox"/>	C03	<input checked="" type="checkbox"/>	C09	<input checked="" type="checkbox"/>	Enhance accuracy	<input type="checkbox"/>
Clear standby cache	<input type="checkbox"/>	C04	<input checked="" type="checkbox"/>	C10	<input checked="" type="checkbox"/>	Find best voltages	<input type="checkbox"/>
Clear standby cache (min)	3	C05	<input checked="" type="checkbox"/>	C11	<input checked="" type="checkbox"/>	Safe CO range	<input checked="" type="checkbox"/>
GUI refresh (ms)	1000	C06	<input checked="" type="checkbox"/>	C12	<input checked="" type="checkbox"/>	Turn Off PC after diagnostic	<input type="checkbox"/>
						CO diagnostic mode	SSE

Navigation: HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – NEW PLATFORM, NEW FEATURES

- Automatic loading of profiles upon Windows startup
- Clear standby cache - maximum smoothness in games (higher FPS for 0.1% and 1% events)
- Many configurations that allows the user to control all HYDRA processes more accurately (including advanced trigger settings for the GAME profile)
- Frequency limiting mechanisms in ultralight loads (overboost protection)
- Auto updates (PRO version)

HYDRA 0.9D PRO

OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

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CCD1 44.8°

C01	0	162	C04	0	166
C02	2837	158	C05	12	174
C03	227	170	C06	127	174
---	---	---	---	---	---

CCD2 40.2°

C07	95	141	C10	462	133
C08	170	145	C11	51	150
C09	31	154	C12	54	137
---	---	---	---	---	---

CCD3 ----

---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

CCD4 ----

---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

CPU (%)

Vdroop (%)

CPU TEL (V)

CPU VID (V)

CPU TDC (A)

CPU EDC (A)

CPU PPT (W)

LOAD TYPE

HYBRID OC SETTINGS

OC response speed (ms)

Core activation trigger (%)

AVX1 CO offset

AVX1 CAC threshold (%)

AVX2 CAC threshold (%)

Holding time (MT)

Holding time (LT)

HYBRID OC SETTINGS

Overboost

CO table #2 for GAME

Frequency limit

GPU CORE trigger (%)

GPU MEMORY trigger (%)

GAME CO offset

SAFETY SYSTEM SETTINGS

Max PPT (W)

Max EDC (A)

Max TDC (A)

Max temperature (°C)

⏪

HYBRID OC

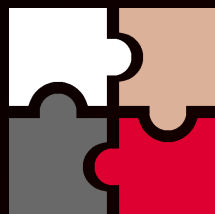
SETTINGS

LOGGING

DIAGNOSTIC

ANALYSE CO

COMPARE



PROJECT HYDRA – NEW PLATFORM, NEW FEATURES

- Updated logging system
- Simplified and more intuitive interface
- A new way to evaluate processor quality
- Real-time monitoring
- Real-time Vdroop and LOAD TYPE information
- CO correction prompt upon failure

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:07:45

CCD1	36.3°	CCD2	31.7°	CCD3	----	CCD4	----
C01: 0 162		C07: 0 141		C10: 421 133		----	
C02: 1621 158		C08: 396 145		C11: 223 150		----	
C03: 0 170		C09: 0 154		C12: 0 137		----	
----		----		----		----	

CPU (%) 0.8 Vdroop (%) 0.1 CPU TEL (V) 1.097 CPU VID (V) 1.1 CPU TDC (A) 2.8 CPU EDC (A) 124.6 CPU PPT (W) 37.2 LOAD TYPE IDLE

MSI MEG B550 UNIFY-X (MS-7D13)
BIOS ver. A.41 SMU ver. 56.52.00
TABLE ver. 3672069
DRAM speed 3800 MHz

Information about the last failure
Unstable frequency, APIC ID: 3

If the failure occurred in a game:
Decrease by 30 the values for (GAME CO offset, SETTINGS tab).

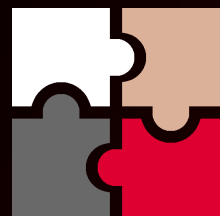
If the failure occurred in a multi-threaded load (CPU usage > 70%):
In the CO table #2 reduce the CO for CORE#2 by 10.

If the failure occurred in a low-threaded load (CPU usage < 70%):
In the CO table #1 reduce the CO for CORE#2 by 20.

0%

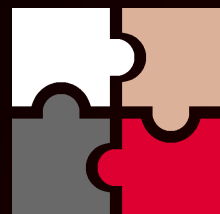
STOP THE PROCESS

HYBRID OC SETTINGS **LOGGING** DIAGNOSTIC ANALYSE CO COMPARE



PROJECT HYDRA – QUICK START, REQUIREMENTS

- Zen 3 CPU : Ryzen 9 5950X, Ryzen 9 5900X, Ryzen 7 5800X, Ryzen 7 5700G, Ryzen 5 5600X and Ryzen 5 5600G.
- Stable, overclocked (or XMP) DRAM.
- Disabled Curve Optimizer (in BIOS). PBO – no exceptions.
- Recommended values for Manual CPU LLC (Load Line Calibration). ASUS - 3, MSI - 4, ASRock - 2, GIGABYTE - High.
- CPU Voltage - Auto (in BIOS). Offset is forbidden.
- Windows 10 build 2004 or newer. Windows 11 fully supported.
- Chipset drivers or Ryzen Master – Not required.
- Actual GPU drivers (GeForce 471.68 / AMD Radeon Adrenalin 21.6.1 or newer).
- Power plan – Balanced (recommended).



PROJECT HYDRA – QUICK START, DIAGNOSTIC

STEP 1:

Click on "HYBRID OC" and select the voltage preset (UNDervolt, NORMAL, OC or XOC) you want to use. You may also enter custom voltages.

For AIO and air cooling system I do not recommend using the OC and XOC presets due to the risk of overheating.

If indecisive, skip this step - the base voltages HYDRA offers are safe for any cooling system and weak VRM.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:11:49

CCD1			CCD2			CCD3			CCD4					
C01	25	162	C04	36	166	C07	0	141	C10	395	133	---	---	---
C02	64	158	C05	82	174	C08	233	145	C11	56	150	---	---	---
C03	2	170	C06	148	174	C09	23	154	C12	45	137	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

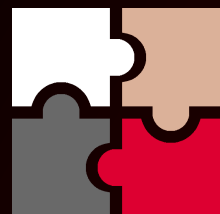
CPU (%) 0 Vdroop (%) -0.1 CPU TEL (V) 1.101 CPU VID (V) 1.1 CPU TDC (A) 5.5 CPU EDC (A) 87.4 CPU PPT (W) 40.9 LOAD TYPE IDLE

THREADS	ENABLED	VID	CCD1	CCD2	CCD3	CCD4	DYNAMIC	STATS
1T-2T	<input checked="" type="checkbox"/>	1375	3700	3700	-	-	<input checked="" type="checkbox"/>	0
3T-4T	<input checked="" type="checkbox"/>	1375	3700	3700	-	-	<input checked="" type="checkbox"/>	0
5T-6T	<input checked="" type="checkbox"/>	1325	3700	3700	-	-	<input checked="" type="checkbox"/>	0
7T-9T	<input checked="" type="checkbox"/>	1325	3700	3700	-	-	<input checked="" type="checkbox"/>	0
10T-12T	<input checked="" type="checkbox"/>	1275	3700	3700	-	-	<input checked="" type="checkbox"/>	0
ALL (AVX1)	<input checked="" type="checkbox"/>	1150	3700	3700	-	-	<input checked="" type="checkbox"/>	0
ALL (AVX2)	<input checked="" type="checkbox"/>	1050	3700	3700	-	-	<input checked="" type="checkbox"/>	0
ALL (GAME)	<input checked="" type="checkbox"/>	1300	3700	3700	-	-	<input checked="" type="checkbox"/>	0

UNDervolt NORMAL OC XOC STATUS : READY !

HYBRID OC SETTINGS LOGGING DIAGNOSTIC ANALYSE CO COMPARE

ACTIVATE PROFILES
SAVE PROFILES
CO VALUES
CREATE BACKUP
LOAD BACKUP



PROJECT HYDRA – QUICK START, DIAGNOSTIC

STEP 2:

If you have selected **NORMAL**, **OC** or **XOC** presets, you must carefully review the rest of HYDRA's settings in order to protect the system from overheating or excessive power consumption.

For example, do not forget to increase the **Max EDC**, **Max TDC** and **Max PPT** limits in the **SETTINGS** tab. In most cases, it is sufficient to increase these values by 30-40.

If one of the limits is reached during HYDRA operation, the profiles will automatically throttle mode or HYBRID OC will be disabled (AMD standard boost will be enabled). These safeguards also work under Diagnostics.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

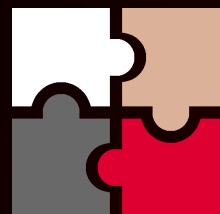
AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

CCD1	44.8°	CCD2	40.2°	CCD3	----	CCD4	----
C01	0	162	C04	0	166	---	---
C02	2837	158	C05	12	174	---	---
C03	227	170	C06	127	174	---	---
---	---	---	---	---	---	---	---

CPU (%) 2.7 Vdroop (%) 1.4 CPU TEL (V) 1.454 CPU VID (V) 1.475 CPU TDC (A) 25 CPU EDC (A) 140 CPU PPT (W) 70.9 LOAD TYPE SSE

HYBRID OC SETTINGS		HYBRID OC SETTINGS		SAFETY SYSTEM SETTINGS	
OC response speed (ms)	10	Overboost	<input type="checkbox"/>	Max PPT (W)	170
Core activation trigger (%)	70	CO table #2 for GAME	<input checked="" type="checkbox"/>	Max EDC (A)	170
AVX1 CO offset	10	Frequency limit	5300	Max TDC (A)	140
AVX1 CAC threshold (%)	8	GPU CORE trigger (%)	50	Max temperature (°C)	95
AVX2 CAC threshold (%)	19	GPU MEMORY trigger (%)	25		
Holding time (MT)	100	GAME CO offset	120		
Holding time (LT)	250				

Navigation: HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, DIAGNOSTIC

STEP 3:

You can choose which tests to perform (**CORE CO testing**, **CCD CO testing** and **Profile creation**) under the **DIAGNOSTIC** tab. The order of testing does not matter.

CORE CO testing - defines the limits at which HYBRID OC will stop frequency ramping (GAME and low-thread load).

CCD CO testing - defines the limits at which HYBRID OC will stop frequency ramping (AVX1 and AVX2 profiles).

Profile creation - searches for stable base frequencies for all profiles.

CO diagnostic mode – SSE. In most cases it is highly accurate and is recommended for use.

AVX mode runs hotter.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

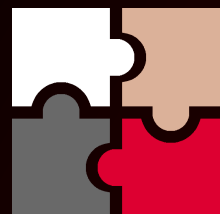
AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:11:49

CCD1	35.3°	CCD2	34.5°	CCD3	----	CCD4	----
C01 120 162		C07 30 141		C10 798 133			
C02 128 158		C08 141 145		C11 60 150			
C03 25 170		C09 32 154		C12 65 137			

CPU (%) 0.7 Vdroop (%) 0.6 CPU TEL (V) 1.145 CPU VID (V) 1.152 CPU TDC (A) 9.6 CPU EDC (A) 128.7 CPU PPT (W) 46.2 LOAD TYPE IDLE

MAIN SETTINGS		DIAGNOSTIC SETTINGS				DIAGNOSTIC SETTINGS	
Auto-load APP with OS	<input type="checkbox"/>	CORE#	ON/OFF	CORE#	ON/OFF	CORE CO testing	<input checked="" type="checkbox"/>
Event notifications	<input type="checkbox"/>	C01	<input checked="" type="checkbox"/>	C07	<input checked="" type="checkbox"/>	CCD CO testing	<input checked="" type="checkbox"/>
Auto-check update	<input type="checkbox"/>	C02	<input checked="" type="checkbox"/>	C08	<input checked="" type="checkbox"/>	Profile creation	<input checked="" type="checkbox"/>
Pop-up tips	<input checked="" type="checkbox"/>	C03	<input checked="" type="checkbox"/>	C09	<input checked="" type="checkbox"/>	Enhance accuracy	<input type="checkbox"/>
Clear standby cache	<input type="checkbox"/>	C04	<input checked="" type="checkbox"/>	C10	<input checked="" type="checkbox"/>	Find best voltages	<input type="checkbox"/>
Clear standby cache (min)	3	C05	<input checked="" type="checkbox"/>	C11	<input checked="" type="checkbox"/>	Safe CO range	<input checked="" type="checkbox"/>
GUI refresh (ms)	1000	C06	<input checked="" type="checkbox"/>	C12	<input checked="" type="checkbox"/>	Turn Off PC after diagnostic	<input type="checkbox"/>
						CO diagnostic mode	SSE

Navigation: HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, DIAGNOSTIC

STEP 4:

Once you have decided on the settings and preset voltages, run the diagnostics by pressing the **DIAGNOSTIC** button.

This process can take from **2-5 hours**, depending on the quality of the sample (higher the quality, the longer it takes).

The system may periodically reboot during diagnostics – this is completely normal.

Once the diagnostics are completed, the corresponding tables under **HYBRID OC** will be automatically entered and saved.

NOTE: re-diagnostics is recommended only if you have changed the CPU VRM or DRAM OC settings.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:11:49

CCD1	71.1°	CCD2	38.9°	CCD3	----	CCD4	----
C01 4800 162	C04 92 166	C07 68 141	C10 1528 133	---	---	---	---
C02 392 158	C05 182 174	C08 394 145	C11 142 150	---	---	---	---
C03 48 170	C06 472 174	C09 31 154	C12 113 137	---	---	---	---
---	---	---	---	---	---	---	---

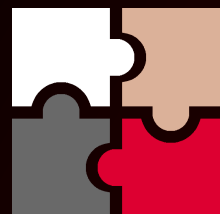
CPU (%) 8.9 Vdroop (%) 1.9 CPU TEL (V) 1.343 CPU VID (V) 1.369 CPU TDC (A) 33.2 CPU EDC (A) 140 CPU PPT (W) 79.7 LOAD TYPE FMA3

```
17:23:11: Step: 1  
CORE#1 BASE FREQ: 4775MHz REAL FREQ: 4775MHz  
17:23:11: Saving intermediate values...  
17:23:19: Test#1  
CORE#1 CO: -3 DELTA: 4 TEMPERATURE: 71°C  
17:24:01: Saving intermediate values...  
17:24:11: Test#2  
17:24:52: Saving intermediate values...  
17:25:02: Test#3  
  
17:25:47: Step: 2  
CORE#1 BASE FREQ: 4775MHz REAL FREQ: 4800MHz  
17:25:47: Saving intermediate values...  
17:25:56: Test#1  
CORE#1 CO: 24 DELTA: 27 TEMPERATURE: 71°C  
17:26:37: Saving intermediate values...  
17:26:47: Test#2
```

36%

STOP THE PROCESS

HYBRID OC SETTINGS LOGGING **DIAGNOSTIC** ANALYSE CO COMPARE



PROJECT HYDRA – QUICK START, DIAGNOSTIC

OPTIONAL STEP:

You may want to re-test specific cores – in order to do this, go to the **SETTINGS** tab and select the cores that you want to test.

Enhance accuracy - intended for more accurate diagnosis of cores or CCDs. Doubles the testing time. Not recommended by default.

Safe CO range - frequency vs. voltage curves for cores are not always smooth (according to SMU info). To avoid abnormal CO results, it is recommended to activate this option. Otherwise, it may cause malfunctions during the operation of the HYBRID OC.

Find best voltages - under development.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

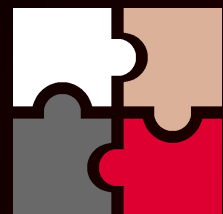
AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:11:49

CCD1	35.5°	CCD2	34.6°	CCD3	----	CCD4	----
C01 71 162		C07 50 141		C10 414 133			
C02 71 158		C08 115 145		C11 71 150			
C03 51 170		C09 40 154		C12 55 137			
---		---		---		---	

CPU (%) 0.7 Vdroop (%) 0.2 CPU TEL (V) 1.081 CPU VID (V) 1.083 CPU TDC (A) 4.6 CPU EDC (A) 75.3 CPU PPT (W) 39.9 LOAD TYPE IDLE

MAIN SETTINGS		DIAGNOSTIC SETTINGS		DIAGNOSTIC SETTINGS	
Auto-load APP with OS	<input type="checkbox"/>	CORE#	ON/OFF	CORE#	ON/OFF
Event notifications	<input type="checkbox"/>	C01	<input type="checkbox"/>	C07	<input checked="" type="checkbox"/>
Auto-check update	<input type="checkbox"/>	C02	<input type="checkbox"/>	C08	<input checked="" type="checkbox"/>
Pop-up tips	<input checked="" type="checkbox"/>	C03	<input type="checkbox"/>	C09	<input checked="" type="checkbox"/>
Clear standby cache	<input type="checkbox"/>	C04	<input type="checkbox"/>	C10	<input checked="" type="checkbox"/>
Clear standby cache (min)	3	C05	<input type="checkbox"/>	C11	<input checked="" type="checkbox"/>
GUI refresh (ms)	1000	C06	<input type="checkbox"/>	C12	<input checked="" type="checkbox"/>
				CORE CO testing	<input checked="" type="checkbox"/>
				CCD CO testing	<input type="checkbox"/>
				Profile creation	<input type="checkbox"/>
				Enhance accuracy	<input type="checkbox"/>
				Find best voltages	<input type="checkbox"/>
				Safe CO range	<input checked="" type="checkbox"/>
				Turn Off PC after diagnostic	<input type="checkbox"/>
				CO diagnostic mode	SSE

Navigation: HYBRID OC | **SETTINGS** | LOGGING | **DIAGNOSTIC** | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

STEP 1:

Under the **HYBRID OC** tab, press the **ACTIVATE PROFILES** button to activate the enabled profiles. This button acts as a switch and will also serve to **DEACTIVATE PROFILES**. The state of the button is saved automatically.

The active profile is **highlighted red** in the profile table. The **STATS** column shows the statistics of the number profile activations.

Changing any of the parameters in this table requires that you first disable the profiles using the **DEACTIVATE PROFILES** button.

You can see and edit the CO tables for the profiles by pressing the **CO VALUES** button.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:53:21

CCD1	48°	CCD2	44°	CCD3	----	CCD4	----
C01 4625 162	C04 4625 166	C07 4499 141	C10 4499 133	---	---	---	---
C02 4625 158	C05 4624 174	C08 4499 145	C11 4500 150	---	---	---	---
C03 4625 170	C06 4624 174	C09 4499 154	C12 4499 137	---	---	---	---
---	---	---	---	---	---	---	---

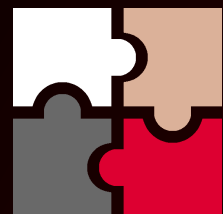
CPU (%) 100 Vdroop (%) 3 CPU TEL (V) 1.115 CPU VID (V) 1.15 CPU TDC (A) 45 CPU EDC (A) 140 CPU PPT (W) 84.9 LOAD TYPE SSE

THREADS	ENABLED	VID	CCD1	CCD2	CCD3	CCD4	DYNAMIC	STATS
1T-2T	<input checked="" type="checkbox"/>	1475	4725	4650	-	-	<input checked="" type="checkbox"/>	8
3T-4T	<input checked="" type="checkbox"/>	1375	4725	4650	-	-	<input checked="" type="checkbox"/>	2
5T-6T	<input checked="" type="checkbox"/>	1325	4650	4575	-	-	<input checked="" type="checkbox"/>	0
7T-9T	<input checked="" type="checkbox"/>	1325	4650	4575	-	-	<input checked="" type="checkbox"/>	0
10T-12T	<input checked="" type="checkbox"/>	1275	4600	4525	-	-	<input checked="" type="checkbox"/>	0
ALL (AVX1)	<input checked="" type="checkbox"/>	1150	4250	4175	-	-	<input checked="" type="checkbox"/>	4
ALL (AVX2)	<input checked="" type="checkbox"/>	1050	3850	3800	-	-	<input checked="" type="checkbox"/>	3
ALL (GAME)	<input checked="" type="checkbox"/>	1300	4650	4525	-	-	<input checked="" type="checkbox"/>	0

UNDERVOLT NORMAL OC XOC STATUS : READY !

HYBRID OC SETTINGS LOGGING DIAGNOSTIC ANALYSE CO COMPARE

DEACTIVATE PROFILES
SAVE PROFILES
CO VALUES
CREATE BACKUP
LOAD BACKUP



PROJECT HYDRA – QUICK START, HYBRID OC

STEP 2:

As previously mentioned, the CO tables are designed to change the resulting frequency (frequency curve relative to voltage). The unit of measure is millivolts (mV).

You can change the resulting frequency for both CCDs in real-time without deactivating the profiles by pressing the "+" and "-" buttons. You can also change the CO value for each core individually in real-time. Once satisfied with the results press the **SAVE PROFILES** button.

A key feature of HYDRA is the real-time analysis of the **bottle-neck CO**. The cores that are highlighted in red prevent frequency growth for the entire CCD or CORE, i.e. these are the worst cores. This mechanism will easily help you calibrate the CO table to achieve a higher frequency. The step for the left table (#1) is 15, for the right (#2) - 10.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:53:21

CCD1 47.7° CCD2 44.7° CCD3 ---- CCD4 ----

CPU (%) 100 Vdroop (%) 3 CPU TEL (V) 1.116 CPU VID (V) 1.15 CPU TDC (A) 44.8 CPU EDC (A) 140 CPU PPT (W) 84.9 LOAD TYPE SSE

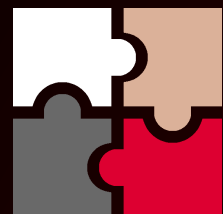
CO FOR LOW-THREAD LOAD CO FOR MULTI-THREAD LOAD

CORE#	CO	CORE#	CO	CORE#	CO	CORE#	CO
C01	219	C07	152	C01	71	C07	73
C02	223	C08	198	C02	107	C08	79
C03	228	C09	157	C03	77	C09	69
C04	206	C10	176	C04	77	C10	98
C05	110	C11	174	C05	49	C11	62
C06	56	C12	213	C06	59	C12	83

DEACTIVATE PROFILES
SAVE PROFILES
TO PROFILES
CREATE BACKUP
LOAD BACKUP

STATUS : READY !

HYBRID OC SETTINGS LOGGING DIAGNOSTIC ANALYSE CO COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

STEP 2:

If you encounter instability, the "-" button is your best friend.

You may also find information on what core caused a crash under the **LOGGING** tab. Here you will find information on which cores crashed, and recommended actions.

For your convenience, you can save and load intermediate profiles with the **CREATE BACKUP** and **LOAD BACKUP** buttons. The files that are generated are compatible between all versions of HYDRA.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:53:21

CCD1 47.7°				CCD2 44.7°				CCD3 ----				CCD4 ----			
C01	4613	162	C04	4642	166	C07	4500	141	C10	4499	133	---	---	---	---
C02	4613	158	C05	4642	174	C08	4499	145	C11	4500	150	---	---	---	---
C03	4613	170	C06	4642	174	C09	4500	154	C12	4499	137	---	---	---	---
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

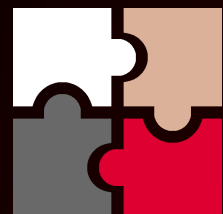
CPU (%) 100 Vdroop (%) 3 CPU TEL (V) 1.116 CPU VID (V) 1.15 CPU TDC (A) 44.8 CPU EDC (A) 140 CPU PPT (W) 84.9 LOAD TYPE SSE

CO FOR LOW-THREAD LOAD				CO FOR MULTI-THREAD LOAD			
CORE#	CO	CORE#	CO	CORE#	CO	CORE#	CO
C01	219	C07	152	C01	71	C07	73
C02	223	C08	198	C02	107	C08	79
C03	228	C09	157	C03	77	C09	69
C04	206	C10	176	C04	77	C10	98
C05	110	C11	174	C05	49	C11	62
C06	56	C12	213	C06	59	C12	83

DEACTIVATE PROFILES
SAVE PROFILES
TO PROFILES
CREATE BACKUP
LOAD BACKUP

STATUS : READY !

HYBRID OC SETTINGS LOGGING DIAGNOSTIC ANALYSE CO COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

STEP 3:

If you are satisfied with your profiles, you may want to enable HYDRA upon Windows startup. Go to the **SETTINGS** page and enable **Auto-load APP with OS**.

NOTE: Do not enable this option for while running Diagnostics - “Phoenix” will automatically recover upon a crash. Doing so will break the continuation of diagnostics.

All settings changed here are saved automatically.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 17:53:21

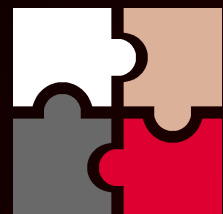
CCD1	35.7°	CCD2	31°	CCD3	----	CCD4	----
C01: 0 162		C07: 0 141		C10: 291 133			
C02: 1951 158		C08: 121 145		C11: 113 150			
C03: 0 170		C09: 0 154		C12: 0 137			
---		---		---		---	

CPU (%) 0 Vdroop (%) 0.1 CPU TEL (V) 1.099 CPU VID (V) 1.1 CPU TDC (A) 3.1 CPU EDC (A) 124.4 CPU PPT (W) 37.6 LOAD TYPE SSE

MAIN SETTINGS		DIAGNOSTIC SETTINGS		DIAGNOSTIC SETTINGS	
		CORE#	ON/OFF	CORE#	ON/OFF
Auto-load APP with OS	<input checked="" type="checkbox"/>	C01	<input checked="" type="checkbox"/>	C07	<input checked="" type="checkbox"/>
Event notifications	<input checked="" type="checkbox"/>	C02	<input checked="" type="checkbox"/>	C08	<input checked="" type="checkbox"/>
Auto-check update	<input type="checkbox"/>	C03	<input checked="" type="checkbox"/>	C09	<input checked="" type="checkbox"/>
Pop-up tips	<input checked="" type="checkbox"/>	C04	<input checked="" type="checkbox"/>	C10	<input checked="" type="checkbox"/>
Clear standby cache	<input type="checkbox"/>	C05	<input checked="" type="checkbox"/>	C11	<input checked="" type="checkbox"/>
Clear standby cache (min)	3	C06	<input checked="" type="checkbox"/>	C12	<input checked="" type="checkbox"/>
GUI refresh (ms)	1000				

CORE CO testing
 CCD CO testing
 Profile creation
 Enhance accuracy
 Find best voltages
 Safe CO range
 Turn Off PC after diagnostic
 CO diagnostic mode SSE

HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

OC response speed - this parameter determines the response time at which the profile/frequency is activated. The optimal value is 8-15ms. The minimum value is 6 ms. A lower value allows you to more accurately evaluate the current state of the cores in order to adjust the frequency. Lower values will also cause HYDRA to use more CPU.

Core activation trigger – C0 core state. The utilization condition under which the core should receive maximum frequency. The recommended value is >70%. With lower values, cores that process background tasks or are idle will be considered active and will activate. This has a negative effect on low-thread performance.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

CCD1	44.8°	CCD2	40.2°	CCD3	----	CCD4	----
C01: 0 (162)	C04: 0 (166)	C07: 95 (141)	C10: 462 (133)	---	---	---	---
C02: 2837 (158)	C05: 12 (174)	C08: 170 (145)	C11: 51 (150)	---	---	---	---
C03: 227 (170)	C06: 127 (174)	C09: 31 (154)	C12: 54 (137)	---	---	---	---
---	---	---	---	---	---	---	---

CPU (%) 2.7 Vdroop (%) 1.4 CPU TEL (V) 1.454 CPU VID (V) 1.475 CPU TDC (A) 25 CPU EDC (A) 140 CPU PPT (W) 70.9 LOAD TYPE SSE

HYBRID OC SETTINGS

- OC response speed (ms): 10
- Core activation trigger (%): 70
- AVX1 CO offset: 10
- AVX1 CAC threshold (%): 8
- AVX2 CAC threshold (%): 19
- Holding time (MT): 100
- Holding time (LT): 250

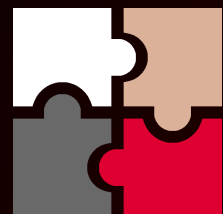
HYBRID OC SETTINGS

- Overboost:
- CO table #2 for GAME:
- Frequency limit: 5300
- GPU CORE trigger (%): 50
- GPU MEMORY trigger (%): 25
- GAME CO offset: 120

SAFETY SYSTEM SETTINGS

- Max PPT (W): 170
- Max EDC (A): 170
- Max TDC (A): 140
- Max temperature (°C): 95

Navigation: HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

AVX1 CAC threshold and **AVX2 CAC threshold** – Ryzen processors evaluate the load type using EDC throttling info, conventionally referred to as the “CAC” trigger. HYDRA allows to automatically adjust the frequency depending on the type of load. Light (SSE), medium (AVX1) and heavy (AVX2/FMA3). By default, the optimal thresholds are already defined, but the user has the ability to adjust this.

Be careful, as too low **AVX1 CAC thresholds** can increase the aggressiveness of the boost in ultra-light tasks (idle state too). You may end up crashing the system (reboot). The optimal value is between 7 and 10.

AVX1 CO offset - determines the size of the positive CO offset relative to CO table #2 for AVX1 tasks. That is, for tasks of “medium difficulty” you can increase the boost. The optimal value is between 0 and 30. If you experience issues with stability, use 0.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

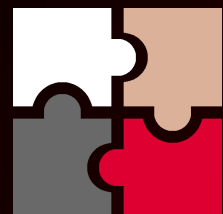
AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

CCD1	44.8°	CCD2	40.2°	CCD3	----	CCD4	----
C01: 0 (162)	C04: 0 (166)	C07: 95 (141)	C10: 462 (133)	---	---	---	---
C02: 2837 (158)	C05: 12 (174)	C08: 170 (145)	C11: 51 (150)	---	---	---	---
C03: 227 (170)	C06: 127 (174)	C09: 31 (154)	C12: 54 (137)	---	---	---	---

CPU (%): 2.7 Vdroop (%): 1.4 CPU TEL (V): 1.454 CPU VID (V): 1.475 CPU TDC (A): 25 CPU EDC (A): 140 CPU PPT (W): 70.9 LOAD TYPE: SSE

HYBRID OC SETTINGS		HYBRID OC SETTINGS		SAFETY SYSTEM SETTINGS	
OC response speed (ms)	10	Overboost	<input type="checkbox"/>	Max PPT (W)	170
Core activation trigger (%)	70	CO table #2 for GAME	<input checked="" type="checkbox"/>	Max EDC (A)	170
AVX1 CO offset	10	Frequency limit	5300	Max TDC (A)	140
AVX1 CAC threshold (%)	8	GPU CORE trigger (%)	50	Max temperature (°C)	95
AVX2 CAC threshold (%)	19	GPU MEMORY trigger (%)	25		
Holding time (MT)	100	GAME CO offset	120		
Holding time (LT)	250				

Navigation: HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

Holding time (MT) – the duration (ms) of which the profile (AVX1 or AVX2) remains active after the load has partially or completely disappeared. Allows you to reduce the number of false profile reactivations due to impulse load.

Holding time (LT) – the duration (ms) of which the profile (low-thread load) remains active after the load has partially or completely disappeared. Allows you to reduce the number of false profile reactivations due to impulse load.

NOTE: larger values will have a negative effect on the speed of activation of the optimal profile (delayed profile switching).

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

CCD1	44.8°	CCD2	40.2°	CCD3	----	CCD4	----
C01: 0 (162)	C04: 0 (166)	C07: 95 (141)	C10: 462 (133)	---	---	---	---
C02: 2837 (158)	C05: 12 (174)	C08: 170 (145)	C11: 51 (150)	---	---	---	---
C03: 227 (170)	C06: 127 (174)	C09: 31 (154)	C12: 54 (137)	---	---	---	---
---	---	---	---	---	---	---	---

CPU (%) 2.7 Vdroop (%) 1.4 CPU TEL (V) 1.454 CPU VID (V) 1.475 CPU TDC (A) 25 CPU EDC (A) 140 CPU PPT (W) 70.9 LOAD TYPE SSE

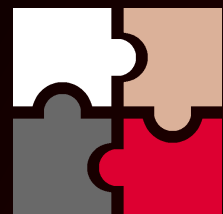
HYBRID OC SETTINGS		HYBRID OC SETTINGS		SAFETY SYSTEM SETTINGS	
OC response speed (ms)	10	Overboost	<input type="checkbox"/>	Max PPT (W)	170
Core activation trigger (%)	70	CO table #2 for GAME	<input checked="" type="checkbox"/>	Max EDC (A)	170
AVX1 CO offset	10	Frequency limit	5300	Max TDC (A)	140
AVX1 CAC threshold (%)	8	GPU CORE trigger (%)	50	Max temperature (°C)	95
AVX2 CAC threshold (%)	19	GPU MEMORY trigger (%)	25		
Holding time (MT)	100	GAME CO offset	120		
Holding time (LT)	250				

HYBRID OC SETTINGS: OC response speed (ms) 10, Core activation trigger (%) 70, AVX1 CO offset 10, AVX1 CAC threshold (%) 8, AVX2 CAC threshold (%) 19, Holding time (MT) 100, Holding time (LT) 250.

HYBRID OC SETTINGS: Overboost , CO table #2 for GAME , Frequency limit 5300, GPU CORE trigger (%) 50, GPU MEMORY trigger (%) 25, GAME CO offset 120.

SAFETY SYSTEM SETTINGS: Max PPT (W) 170, Max EDC (A) 170, Max TDC (A) 140, Max temperature (°C) 95.

Navigation: HYBRID OC, **SETTINGS**, LOGGING, DIAGNOSTIC, ANALYSE CO, COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

GPU CORE trigger - GPU core usage threshold at which the GAME profile will be activated.

GPU MEMORY trigger - GPU memory usage threshold at which the GAME profile will be activated.

NOTE: Thresholds that are too low may trigger may cause unwanted GAME profile activations during usage of browsers or other hardware-accelerated applications.

CO table #2 for GAME - CO table #2 is used by default, but you can also try to use the first table for better performance. Using the first table increases system instability.

GAME CO offset - determines the size of the positive CO offset relative to CO table #2 or #1 for the GAME profile. You can increase the frequency or improve stability.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

CCD1	44.8°	CCD2	40.2°	CCD3	----	CCD4	----
C01: 0 (162)	C04: 0 (166)	C07: 95 (141)	C10: 462 (133)	---	---	---	---
C02: 2837 (158)	C05: 12 (174)	C08: 170 (145)	C11: 51 (150)	---	---	---	---
C03: 227 (170)	C06: 127 (174)	C09: 31 (154)	C12: 54 (137)	---	---	---	---

CPU (%) 2.7 Vdroop (%) 1.4 CPU TEL (V) 1.454 CPU VID (V) 1.475 CPU TDC (A) 25 CPU EDC (A) 140 CPU PPT (W) 70.9 LOAD TYPE SSE

HYBRID OC SETTINGS

- OC response speed (ms): 10
- Core activation trigger (%): 70
- AVX1 CO offset: 10
- AVX1 CAC threshold (%): 8
- AVX2 CAC threshold (%): 19
- Holding time (MT): 100
- Holding time (LT): 250

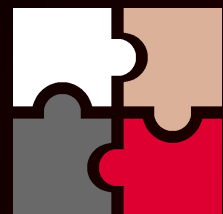
HYBRID OC SETTINGS

- Overboost:
- CO table #2 for GAME:
- Frequency limit: 5300
- GPU CORE trigger (%): 50
- GPU MEMORY trigger (%): 25
- GAME CO offset: 120

SAFETY SYSTEM SETTINGS

- Max PPT (W): 170
- Max EDC (A): 170
- Max TDC (A): 140
- Max temperature (°C): 95

Navigation: HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

Overboost - state of the cores at which an abnormally high frequency in light tasks is achieved. This may increase system instability.

Frequency limit - this mechanism allows you to limit the maximum boost frequency. The need for limiting occurs when the system reboots during a very light load or idle. You may also control this with CO table #1.

HYDRA 0.9D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 9 5900X 12-Core Processor
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.41 SMU ver. 56.52.00
Microsoft Windows NT 6.2.9200.0 08/20/2021 20:57:40

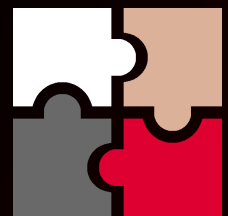
CCD1	44.8°	CCD2	40.2°	CCD3	----	CCD4	----
C01	0	162	C04	0	166	---	---
C02	2837	158	C05	12	174	---	---
C03	227	170	C06	127	174	---	---
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CPU (%) 2.7 Vdroop (%) 1.4 CPU TEL (V) 1.454 CPU VID (V) 1.475 CPU TDC (A) 25 CPU EDC (A) 140 CPU PPT (W) 70.9 LOAD TYPE SSE

HYBRID OC SETTINGS		HYBRID OC SETTINGS		SAFETY SYSTEM SETTINGS	
OC response speed (ms)	10	Overboost	<input type="checkbox"/>	Max PPT (W)	170
Core activation trigger (%)	70	CO table #2 for GAME	<input type="checkbox"/>	Max EDC (A)	170
AVX1 CO offset	10	Frequency limit	5300	Max TDC (A)	140
AVX1 CAC threshold (%)	8	GPU CORE trigger (%)	50	Max temperature (°C)	95
AVX2 CAC threshold (%)	19	GPU MEMORY trigger (%)	25		
Holding time (MT)	100	GAME CO offset	120		
Holding time (LT)	250				

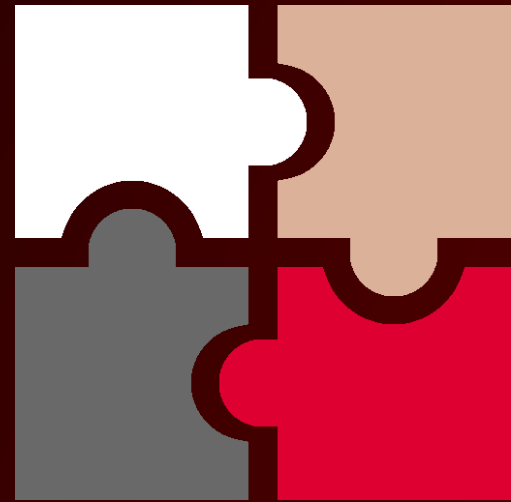
HYBRID OC SETTINGS | SAFETY SYSTEM SETTINGS

HYBRID OC | **SETTINGS** | LOGGING | DIAGNOSTIC | ANALYSE CO | COMPARE



PROJECT HYDRA – WHAT WILL WORK NEXT MONTH?

- Automatically find the ideal voltages for your system. For AVX1 and AVX2 profiles.
- Boost tester.
- Improved performance in low threaded workloads.
- Analyse CO.
- Compare mode.
- Update notification.
- And other features that I will tell you about shortly ;)



PROJECT HYDRA

OC-SANDBOX FOR ZEN3+ PROCESSORS

NEW FEATURES EVERY MONTH

1USMUS 2021