

# PROJECT HYDRA – NEW PLATFORM, NEW FEATURES

- Exclusive APP for ZEN 3 and ZEN 3+ processors
- New platform, new core, 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 1.0D PRO

OC-SANDBOX FOR ZEN3

AMD Ryzen 7 5800X 8-Core Processor  
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.43 SMU ver. 56.58.00  
Microsoft Windows NT 6.2.9200.0 11/25/2021 12:32:09

CCD1		44.5°		CCD2		----		CCD3		----		CCD4		----	
C01	120	135	C05	84	143	---	---	---	---	---	---	---	---	---	---
C02	76	146	C06	246	139	---	---	---	---	---	---	---	---	---	---
C03	1370	127	C07	286	131	---	---	---	---	---	---	---	---	---	---
C04	88	150	C08	1778	150	---	---	---	---	---	---	---	---	---	---

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"/>	1375	4750	-	-	-	<input checked="" type="checkbox"/>	0
3T-4T	<input checked="" type="checkbox"/>	1375	4725	-	-	-	<input checked="" type="checkbox"/>	0
5T-8T	<input checked="" type="checkbox"/>	1300	4575	-	-	-	<input checked="" type="checkbox"/>	0
ALL (AVX2)	<input checked="" type="checkbox"/>	1250	4525	-	-	-	<input checked="" type="checkbox"/>	0
ALL (FMA3)	<input checked="" type="checkbox"/>	1100	4150	-	-	-	<input checked="" type="checkbox"/>	0
ALL (GAME)	<input checked="" type="checkbox"/>	1300	4625	-	-	-	<input checked="" type="checkbox"/>	0

ACTIVATE PROFILES

SAVE PROFILES

CO VALUES

CREATE BACKUP

LOAD BACKUP

UNDervOLT

NORMAL

OC

XOC

STATUS : READY !

HYBRID OC

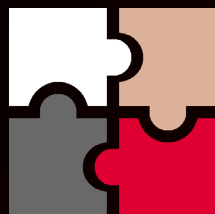
SETTINGS

LOGGING

DIAGNOSTIC

BOOST TEST

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 1.0D PRO

OC-SANDBOX FOR ZEN3

AMD Ryzen 7 5800X 8-Core Processor  
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.43 SMU ver. 56.58.00  
Microsoft Windows NT 6.2.9200.0 11/25/2021 12:32:09

**CCD1** 41.6°

C01	259	135	C05	0	143
C02	880	146	C06	117	139
C03	2930	127	C07	77	131
C04	100	150	C08	931	150

**CCD2** ----

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**CCD3** ----

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**CCD4** ----

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CPU (%)

Vdroop (%)

CPU TEL (V)

CPU VID (V)

CPU TDC (A)

CPU EDC (A)

CPU PPT (W)

LOAD TYPE

CO FOR LOW-THREAD LOAD

CORE#	CO	CORE#	CO
C01	87	-	-
C02	92	-	-
C03	16	-	-
C04	60	-	-
C05	121	-	-
C06	136	-	-
C07	132	-	-
C08	50	-	-

CO FOR MULTI-THREAD LOAD

CORE#	CO	CORE#	CO
C01	37	-	-
C02	33	-	-
C03	69	-	-
C04	29	-	-
C05	39	-	-
C06	41	-	-
C07	51	-	-
C08	37	-	-

ACTIVATE PROFILES

SAVE PROFILES

TO PROFILES

CREATE BACKUP

LOAD BACKUP

STATUS : READY !

HYBRID OC

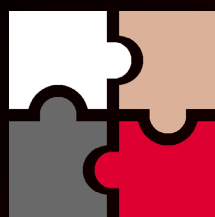
SETTINGS

LOGGING

DIAGNOSTIC

BOOST TEST

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
- Special mode for high-intensity workloads

**HYDRA 1.0D PRO**  
OC-SANDBOX FOR ZEN3

AMD Ryzen 7 5800X 8-Core Processor  
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.43 SMU ver. 56.58.00  
Microsoft Windows NT 6.2.9200.0 11/25/2021 12:32:09

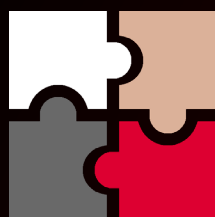
CCD1	28.8°	CCD2	----	CCD3	----	CCD4	----
C01 112 135	C05 0 143	---	---	---	---	---	---
C02 592 146	C06 84 139	---	---	---	---	---	---
C03 723 127	C07 94 131	---	---	---	---	---	---
C04 0 150	C08 0 150	---	---	---	---	---	---

CPU (%) 0 Vdroop (%) -3.6 CPU TEL (V) 1.122 CPU VID (V) 1.166 CPU TDC (A) 1.3 CPU EDC (A) 51.3 CPU PPT (W) 29.3 LOAD TYPE IDLE

**MAIN SETTINGS**

HYBRID OC SETTINGS		HYBRID OC SETTINGS		HYBRID OC SETTINGS	
HEAVY mode	<input type="checkbox"/>	C0 trigger for MT (%)	50	AVX1 threshold for MT (%)	13
CO table #2 for GAME	<input type="checkbox"/>	C0 trigger for LT (%)	75	AVX1 threshold for LT (%)	9
Frequency limit	5100	AVX1 CO offset for MT	20	AVX2 threshold for MT (%)	18
GPU CORE trigger (%)	25	AVX1 CO offset for LT	40	AVX2 threshold for LT (%)	14
GPU MEMORY trigger (%)	8	Holding time MT (cycles)	3	FMA3 threshold for MT (%)	24
GAME CO offset	0	Holding time LT (cycles)	4		
OC response speed (ms)	10				

HYBRID OC **SETTINGS** LOGGING DIAGNOSTIC BOOST TEST 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)
- Automatic search individual voltages for AVX1 and AVX2 loads

**HYDRA 1.0D PRO**  
OC-SANDBOX FOR ZEN3

AMD Ryzen 7 5800X 8-Core Processor  
MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.43 SMU ver. 56.58.00  
Microsoft Windows NT 6.2.9200.0 11/25/2021 12:53:47

CCD	Temp	C01	C02	C03	C04	C05	C06	C07	C08
CCD1	42.8°	75	143	1818	2924	123	44	39	1406
CCD2	----	---	---	---	---	---	---	---	---
CCD3	----	---	---	---	---	---	---	---	---
CCD4	----	---	---	---	---	---	---	---	---

CPU (%) 2.1 Vdroop (%) 0.8 CPU TEL (V) 1.455 CPU VID (V) 1.467 CPU TDC (A) 15.8 CPU EDC (A) 139 CPU PPT (W) 50.7 LOAD TYPE SSE

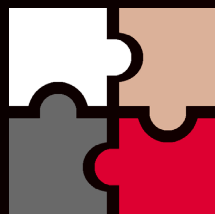
CORE#	ON/OFF	CORE#	ON/OFF
C01	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C02	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C03	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C04	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C05	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C06	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C07	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>
C08	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>

Turn Off PC after diagnostic   
Profile creation   
Preheating phase   
Target AVX1 PPT (W) 145  
Target AVX1 temp. (°C) 85  
Target AVX2 PPT (W) 145  
Target AVX2 temp. (°C) 85  
Find best voltages Disabled

CORE CO testing   
CORE CO testing VID (mV) 1375  
CORE CO FFT (K) 84  
CCD CO testing   
CCD CO testing VID (mV) 1175  
CCD CO FFT (K) 1344  
Enhance accuracy

MAIN SETTINGS

HYBRID OC SETTINGS LOGGING DIAGNOSTIC BOOST TEST 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 1.0D PRO

OC-SANDBOX FOR ZEN3

AMD Ryzen 7 5800X 8-Core Processor  
 MSI MEG B550 UNIFY-X (MS-7D13) BIOS ver. A.43 SMU ver. 56.58.00  
 Microsoft Windows NT 6.2.9200.0 11/25/2021 13:10:05

**CCD1** 33.8°

C01	3	135	C05	7	143
C02	22	146	C06	15	139
C03	156	127	C07	354	131
C04	6	150	C08	256	150

**CCD2** ----

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**CCD3** ----

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**CCD4** ----

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CPU (%)

Vdroop (%)

CPU TEL (V)

CPU VID (V)

CPU TDC (A)

CPU EDC (A)

CPU PPT (W)

LOAD TYPE

Information about the last failure  
Unstable frequency, APIC ID: 9

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 > 75%):  
In the CO table #2 reduce the CO for CORE#5 by 10.  
Do not forget that too high a value of "AVX1 CO offset for MT" in "SETTINGS" tab can also cause a system crash.

If the failure occurred in a low-threaded load (CPU usage < 75%):  
In the CO table #1 reduce the CO for CORE#5 by 20.  
Do not forget that too high a value of "AVX1 CO offset for LT" in "SETTINGS" tab can also cause a system crash.

0%

STOP THE PROCESS

Peak/avg response speed (ms)

HYBRID OC

SETTINGS

LOGGING

DIAGNOSTIC

BOOST TEST

COMPARE