

PROJECT HYDRA – QUICK START, DIAGNOSTIC

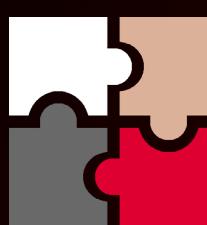
OPTIONAL STEP:

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.

The screenshot shows the HYDRA 1.0D PRO software interface. At the top, it displays system information: 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, and the date/time 11/25/2021 13:10:05. The interface includes tabs for HYBRID OC, SETTINGS, LOGGING, DIAGNOSTIC (highlighted with a green border), BOOST TEST, and COMPARE. Below the tabs, there are sections for CCD1, CCD2, CCD3, and CCD4, each showing core temperatures and various diagnostic parameters. The **DIAGNOSTIC SETTINGS** section is expanded, showing settings for cores C01 and C02, including checkboxes for 'ON/OFF' and 'CORE#'. The 'CORE CO testing' checkbox for C01 is highlighted with a green border. Other settings include 'Turn Off PC after diagnostic', 'Profile creation', 'Preheating phase', 'Target AVX1 PPT (W)', 'Target AVX1 temp. (°C)', 'Target AVX2 PPT (W)', 'Target AVX2 temp. (°C)', and 'Find best voltages' (set to 'Disabled'). The right side of the interface shows additional diagnostic parameters like CPU TEL (V), CPU VID (V), CPU TDC (A), CPU EDC (A), CPU PPT (W), and LOAD TYPE (set to IDLE).



PROJECT HYDRA – QUICK START, HYBRID OC

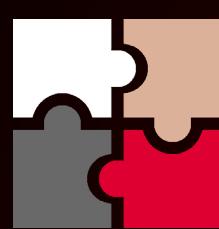
STEP 1:

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.



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). The values in both tables are basic values for all load types. That is, the first task of these tables is to provide the correct frequency increase for AVX2/FMA3 load.

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.

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 60.6° **CCD2** **CCD3** **CCD4**

CORE#	CO	CORE#	CO		
C01	4650	135	C05	4650	143
C02	4650	146	C06	4650	139
C03	4650	127	C07	4627	131
C04	4650	150	C08	4627	150

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

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

CPU (%) [100] Vdroop (%) [4.4] CPU TEL (V) [1.199] CPU VID (V) [1.25] CPU TDC (A) [67.6] CPU EDC (A) [140] CPU PPT (W) [109.5] LOAD TYPE [AVX2]

DEACTIVATE PROFILES

SAVE PROFILES (highlighted)

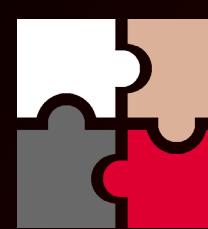
TO PROFILES

CREATE BACKUP

LOAD BACKUP

STATUS : profiles are successfully activated!

HYBRID OC **SETTINGS** **LOGGING** **DIAGNOSTIC** **BOOST TEST** **COMPARE**



PROJECT HYDRA – QUICK START, HYBRID OC

STEP 2:

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.

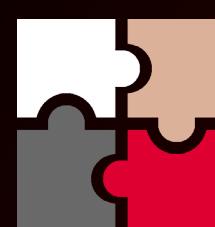
You can also change the CO value for each core individually in real-time. If you want more stability, decrease the highlighted value. The step for the left table (#1) is 15, for the right (#2) - 10.

A crash happened? After the system starts up again, you can find information about which core caused the failure and recommended actions in the **LOGGING** tab.

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

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



PROJECT HYDRA – QUICK START, HYBRID OC

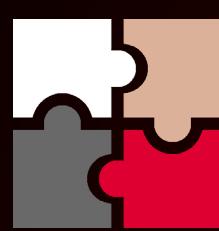
STEP 2:

For frequency control in a lighter load (only AVX1 - AVX2 range) there is **AVX1 CO offset for MT** and **AVX1 CO offset for ST**. Principle of operation is simple - each value in the corresponding table is shifted by a value determined by the user. That is, an offset value is added to each table value. The unit of measurement is similar to the tables, mV. Values are applied “on the fly”.

In most cases **AVX1 CO offset for ST** has a large margin and values can range from 20 - 80, **AVX1 CO offset for MT** – 0 - 40. The user is free to experiment with these values.

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Setting	Value
CPU (%)	0
Vdroop (%)	0.1
CPU TEL (V)	0.9
CPU VID (V)	0.9
CPU TDC (A)	0.4
CPU EDC (A)	69.1
CPU PPT (W)	28.1
Load Type	SSE
HEAVY mode	OFF
CO table #2 for GAME	ON
Frequency limit	5100
GPU CORE trigger (%)	25
GPU MEMORY trigger (%)	8
GAME CO offset	0
OC response speed (ms)	10
CO trigger for MT (%)	50
CO trigger for LT (%)	75
AVX1 CO offset for MT	20
AVX1 CO offset for LT	40
Holding time MT (cycles)	3
Holding time LT (cycles)	4
AVX1 threshold for MT (%)	13
AVX1 threshold for LT (%)	9
AVX2 threshold for MT (%)	18
AVX2 threshold for LT (%)	14
FMA3 threshold for MT (%)	24



PROJECT HYDRA – QUICK START, HYBRID OC

STEP 2:

Once satisfied with the results press the **SAVE PROFILES** button.

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.

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

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

HYDRA 1.0D PRO
OC-SANDBOX FOR ZEN3

AMD Ryzen 7 5800X 8-Core Processor
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Microsoft Windows NT 6.2.9200.0 11/25/2021 13:10:05

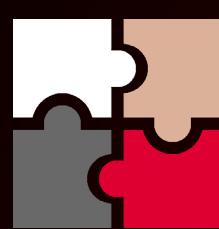
CPU (%) 100 Vdroop (%) 4.4 CPU TEL (V) 1.199 CPU VID (V) 1.25 CPU TDC (A) 67.6 CPU EDC (A) 140 CPU PPT (W) 109.5 LOAD TYPE AVX2

(-) CO FOR LOW-THREAD LOAD (+) CO FOR MULTI-THREAD LOAD

DEACTIVATE PROFILES
SAVE PROFILES
TO PROFILES
CREATE BACKUP
LOAD BACKUP

STATUS : profiles are successfully activated!

HYBRID OC SETTINGS LOGGING DIAGNOSTIC BOOST TEST 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.

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Diagnostic Settings (Left Side):

- CCD1: 27.5°
- CCD2: ---
- CCD3: ---
- CCD4: ---

C01	94	135	C05	58	143
C02	487	146	C06	158	139
C03	415	127	C07	36	131
C04	94	150	C08	202	150

Metrics: CPU (%), Vdroop (%), CPU TEL (V), CPU VID (V), CPU TDC (A), CPU EDC (A), CPU PPT (W), LOAD TYPE (SSE).

MAIN SETTINGS (Center):

- Auto-load APP with OS:
- Event notifications:
- Auto-check update:
- Pop-up tips:
- Clear standby cache:
- Clear standby cache (min): 4
- GUI refresh (ms): 1000
- HYDRA priority: Real-time

SAFETY SYSTEM SETTINGS (Right Side):

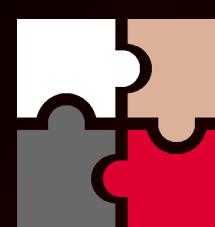
- Max PPT (W): 160
- Max EDC (A): 160
- Max TDC (A): 130
- Max temperature (°C): 95
- Timeout of throttling (cycles): 100

Hybrid OC Settings (Bottom Right):

- << (Left Arrow)
- >> (Right Arrow)

Bottom Navigation Bar:

- HYBRID OC
- SETTINGS
- LOGGING
- DIAGNOSTIC
- BOOST TEST
- COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

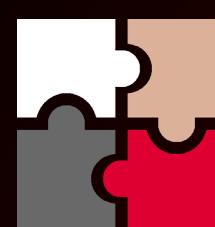
TIPS AND TRICKS:

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 trigger for MT and **Core trigger for ST** – C0 core state. The condition under which the core is considered active. For multi-threaded load value always less than for low-threaded load because HYDRA has to react and turn on the proper profile beforehand, i.e. during waking up of cores.

It is not recommended that inexperienced users tamper with these settings as this can have a significant effect on system stability and performance.

The screenshot shows the HYDRA 1.0D PRO software interface. At the top, it displays system information: 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, and the date/time 11/25/2021 13:10:05. The interface includes a toolbar with icons for refresh, info, dollar sign, camera, minus, and close. Below the toolbar, there are four sections labeled CCD1, CCD2, CCD3, and CCD4, each showing core monitoring data for cores C01 to C08. The main area contains two tabs: 'MAIN SETTINGS' and 'HYBRID OC SETTINGS'. The 'HYBRID OC SETTINGS' tab is active, showing various parameters: HEAVY mode (disabled), CO table #2 for GAME (disabled), Frequency limit (5100), GPU CORE trigger (%) (25), GPU MEMORY trigger (%) (8), GAME CO offset (0), OC response speed (ms) (10, highlighted with a green box), C0 trigger for MT (%) (50), C0 trigger for LT (%) (75, highlighted with a green box), AVX1 CO offset for MT (20), AVX1 CO offset for LT (40), Holding time MT (cycles) (3), and Holding time LT (cycles) (4). At the bottom, there are tabs for HYBRID OC, SETTINGS, LOGGING, DIAGNOSTIC, BOOST TEST, and COMPARE.



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

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.

These thresholds also determine the range where AVX1 CO offset for MT and AVX1 CO offset for ST will operate.

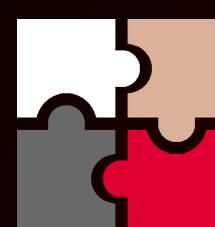
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The main area features four sections labeled CCD1, CCD2, CCD3, and CCD4, each showing various monitoring parameters like temperatures and voltages. Below these are global control sliders for CPU (%), Vdroop (%), CPU TEL (V), CPU VID (V), CPU TDC (A), CPU EDC (A), CPU PPT (W), and Load Type (set to IDLE).

The central part of the screen contains three panels of "HYBRID OC SETTINGS". The left panel (MAIN SETTINGS) includes options for HEAVY mode, CO table #2 for GAME (disabled), Frequency limit (5100), GPU CORE trigger (%), GPU MEMORY trigger (%), GAME CO offset (0), and OC response speed (ms). The middle and right panels show detailed thresholds for MT (Maximum Throttle) and LT (Light Throttle) for different instruction types: AVX1, AVX2, and FMA3. The rightmost panel's table is highlighted with a green border.

Setting	Value
AVX1 threshold for MT (%)	13
AVX1 threshold for LT (%)	9
AVX2 threshold for MT (%)	18
AVX2 threshold for LT (%)	14
FMA3 threshold for MT (%)	24



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

Holding time MT – the duration (cycles) of which the multi-threaded profile's 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 (cycles) of which the low-threaded profile's remains active after the load has partially or completely disappeared. Allows you to reduce the number of false profile reactivations due to impulse load.

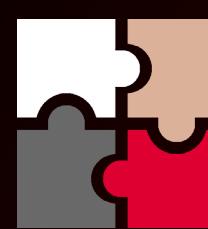
NOTE: larger values will have a negative effect on the speed of activation of the optimal profile (delayed profile switching).

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The main window features four columns labeled CCD1, CCD2, CCD3, and CCD4, each showing various performance metrics for different cores. Below these columns are summary statistics: CPU (%), Vdroop (%), CPU TEL (V), CPU VID (V), CPU TDC (A), CPU EDC (A), CPU PPT (W), and Load Type (SSE).

A large central area contains two sets of "HYBRID OC SETTINGS". The left set is for "MAIN SETTINGS" and includes options like HEAVY mode, CO table #2 for GAME, Frequency limit (5100), GPU CORE trigger (%), GPU MEMORY trigger (%), GAME CO offset (0), and OC response speed (ms). The right set includes CO trigger for MT (%), AVX1 CO offset for MT, AVX2 CO offset for MT, AVX1 CO offset for LT, AVX2 threshold for LT (%), and FMA3 threshold for MT (%). The "Holding time MT (cycles)" and "Holding time LT (cycles)" fields in the right set are highlighted with a green border.

At the bottom, there are tabs for HYBRID OC, SETTINGS, LOGGING, DIAGNOSTIC, BOOST TEST, and 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 (using positive offsets) or improve stability (using negative offsets).

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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

MAIN SETTINGS

HYBRID OC SETTINGS

HYBRID OC SETTINGS

HYBRID OC SETTINGS

CPU (%) 4.2 Vdroop (%) 0 CPU TEL (V) 0.9 CPU VID (V) 0.9 CPU TDC (A) 0.3 CPU EDC (A) 69.2 CPU PPT (W) 27.4 LOAD TYPE SSE

HEAVY mode

CO table #2 for GAME (switched on)

Frequency limit 5100

GPU CORE trigger (%) 25

GPU MEMORY trigger (%) 8

GAME CO offset 0 OC response speed (ms) 10

C0 trigger for MT (%) 50

C0 trigger for LT (%) 75

AVX1 CO offset for MT 20

AVX1 CO offset for LT 40

Holding time MT (cycles) 3

Holding time LT (cycles) 4

AVX1 threshold for MT (%) 13

AVX1 threshold for LT (%) 9

AVX2 threshold for MT (%) 18

AVX2 threshold for LT (%) 14

FMA3 threshold for MT (%) 24

HYBRID OC

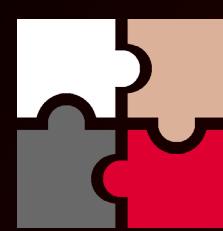
SETTINGS

LOGGING

DIAGNOSTIC

BOOST TEST

COMPARE



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

HEAVY mode - this mode is specially designed for workstations that need extra stability, in particular, if AVX2 and FMA3 are used.

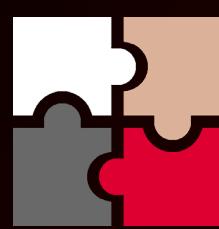
Frequency limit - this mechanism allows you to limit the maximum boost frequency. The need for limiting occurs when the system reboots during a very light load or idle. You may also control this with CO table #1.

The screenshot shows the HYDRA 1.0D PRO software interface. At the top, it displays system information: 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, and the date/time 11/25/2021 13:10:05. The interface includes a navigation bar with icons for back, forward, info, dollar sign, camera, minus, and close, along with a search bar and a maximize/minimize button.

The main area features four sections labeled CCD1, CCD2, CCD3, and CCD4, each with a central temperature reading (28.2°, ---, ---, --- respectively) and a grid of eight parameters (C01-C08). Below these are performance metrics: CPU (%), Vdroop (%), CPU TEL (V), CPU VID (V), CPU TDC (A), CPU EDC (A), CPU PPT (W), and Load Type (IDLE).

A central panel titled "HYBRID OC SETTINGS" contains several configuration options. The "HEAVY mode" switch is turned off. The "CO table #2 for GAME" switch is turned on. The "Frequency limit" slider is set to 5100. Other settings include GPU CORE trigger (%), GPU MEMORY trigger (%), GAME CO offset, and OC response speed (ms). To the right of this panel are three columns of "HYBRID OC SETTINGS" with various numerical values for different thresholds and offsets.

At the bottom, there are tabs for HYBRID OC, SETTINGS, LOGGING, DIAGNOSTIC, BOOST TEST, and COMPARE. On the left side, there is a large double-left arrow icon labeled "MAIN SETTINGS".



PROJECT HYDRA – QUICK START, HYBRID OC

TIPS AND TRICKS:

Some benchmarks (with built-in monitoring) can negatively affect the performance of HYDRA and the system as a whole. To solve this problem, the user only needs to add the application to the list of programs which will provoke HYDRA to increase its priority in the system. As a result, the user will get extra performance while changing the priority of HYDRA has no negative impact on the system.

The user can add any application to the configurator file himself. An example can be clearly seen in the picture.

File Explorer (Debug folder):

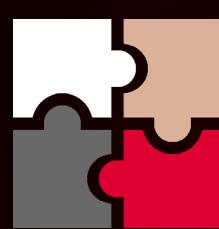
Name	Date modified	Type	Size
Bunifu.UI.WinForms.BunifuDataGridView.dll	23/04/2021 09:10	Application extens...	51 KB
Bunifu.UI.WinForms.BunifuDropdown.dll	23/04/2021 09:10	Application extens...	103 KB
Bunifu.UI.WinForms.BunifuGradientPanel.dll	23/04/2021 09:10	Application extens...	61 KB
Bunifu.UI.WinForms.BunifuImageButton.dll	23/04/2021 09:10	Application extens...	156 KB
Bunifu.UI.WinForms.BunifuPages.dll	23/04/2021 09:10	Application extens...	96 KB
Bunifu.UI.WinForms.BunifuProgressBar.dll	23/04/2021 09:10	Application extens...	77 KB
Bunifu.UI.WinForms.BunifuSeparator.dll	23/04/2021 09:10	Application extens...	38 KB
Bunifu.UI.WinForms.BunifuShapes.dll	23/04/2021 09:10	Application extens...	42 KB
RealTimePriorityList.ini - Notepad	—	extens...	113 KB
Bunifu	—	extens...	46 KB
HYDRA	—	extens...	522 KB
libcry	—	extens...	1,214 KB
libcu	—	extens...	2,721 KB
libqn	—	extens...	1,078 KB
libhw	—	extens...	1,044 KB
Libre	—	extens...	1,966 KB
libssl	—	extens...	632 KB
Microsoft.Win32.TaskScheduler.dll	28/01/2021 06:12	Application extens...	519 KB
MY_BACKUP.ini	31/08/2021 14:18	Configuration setti...	326 KB
NvAPIWrapper.dll	09/12/2020 06:59	Application extens...	458 KB
prime95.exe	26/05/2021 11:14	Application	38,761 KB
Profiles.ini	06/09/2021 16:48	Configuration setti...	1 KB
Profiles_Backup.ini	06/09/2021 16:48	Configuration setti...	1 KB
RealTimePriorityList.ini	05/09/2021 20:12	Configuration setti...	1 KB
Settings.ini	06/09/2021 16:48	Configuration setti...	1 KB
Settings_Backup.ini	06/09/2021 16:48	Configuration setti...	1 KB
TEMP1.ini	06/09/2021 15:29	Configuration setti...	1 KB
TEMP2.ini	06/09/2021 15:28	Configuration setti...	1 KB
TEMP3.ini	06/09/2021 15:01	Configuration setti...	1 KB

Task Manager:

Name	PID	Status	Username	CPU	Memory (ac...)	UAC virtualisati...
svchost.exe	10332	Running	1usmus	00	4,636 K	Disabled
spoolsv.exe	3652	Running	CICTEMA	00	4,380 K	Not allowed
audiogd.exe	3996	Running	LOCAL SER...	00	4,240 K	Not allowed
svchost.exe	2404	Running	NETWORK ...	00	4,000 K	Not allowed
Prandini_Scheduler	7004	Running	1usmus	00	3,920 K	Disabled
cpuZ.exe	1840	Running	1usmus	00	3,864 K	Not allowed
svchost.exe	3680	Running	LOCAL SER...	00	3,612 K	Not allowed
OriginWebHelperServ...	4176	Running	LOCAL SER...	00	3,572 K	Not allowed
svchost.exe	9928	Running	CICTEMA	00	3,484 K	Not allowed
svchost.exe	3980	Running	NETWORK ...	00	3,424 K	Not allowed
svchost.exe	7784	Running	LOCAL SER...	00	3,276 K	Not allowed
ctfmon.exe	6260	Running	1usmus	00	2,105 K	Disabled

CPU-Z:

Processor	Name	Code Name	Max TDP
Processor	AMD Ryzen 9 5900X	Vermeer	105.0 W
Code Name	Vermeer	Socket AM4 (1331)	
Technology	7 nm	Core Voltage	1.060 V
Specification	AMD Ryzen 9 5900X 12-Core Processor		
Family	F	Model	1
Ext. Family	19	Stepping	0
Instructions	MMX(+), SSE, SSE2, SSE3, SSE4.1, SSE4.2, SSE4A, x86-64, AMD-V, AES, AVX, AVX2, FMA3, SHA	Ext. Model	21
Clocks (Core #0)	Core Speed: 3674.14 MHz	Multplier: x 36.75	Bus Speed: 99.98 MHz
	Rated FSB: 1.060 V	Cache: L1 Data: 12 x 32 KBytes, 8-way	L1 Inst: 12 x 32 KBytes, 8-way
		Level 2: 12 x 512 KBytes, 8-way	Level 3: 2 x 32 MBBytes, 16-way
		Cores: 12	Threads: 24



PROJECT HYDRA – QUICK START, HYBRID OC

The screenshot shows the HYDRA 1.0D PRO software interface. At the top, it displays system information: 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, and the date/time 11/25/2021 13:10:05. The interface includes a toolbar with icons for refresh, info, dollar sign, camera, minus, and close.

The main area features four sections labeled CCD1, CCD2, CCD3, and CCD4, each showing temperature (27.4°) and various monitoring parameters for cores C01 through C08. Below these are global monitoring values: CPU (%), Vdroop (%), CPU TEL (V), CPU VID (V), CPU TDC (A), CPU EDC (A), CPU PPT (W), and Load Type (IDLE).

The central part of the screen contains two main settings panels: "MAIN SETTINGS" and "SAFETY SYSTEM SETTINGS". The "MAIN SETTINGS" panel includes options like Auto-load APP with OS, Event notifications, Auto-check update, Pop-up tips, Clear standby cache, Clear standby cache (min), and GUI refresh (ms). The "SAFETY SYSTEM SETTINGS" panel includes Max PPT (W), Max EDC (A), Max TDC (A), Max temperature (°C), and Timeout of throttling (cycles). A "HYDRA priority" dropdown menu at the bottom of the central panel is set to "Real-time".

At the bottom, there are tabs for HYBRID OC, SETTINGS, LOGGING, DIAGNOSTIC, BOOST TEST, and COMPARE. Navigation arrows on the left and right sides allow switching between different sections of the software.

TIPS AND TRICKS:

Also the user can configure the basic priority of HYDRA in the settings section. The default value is optimal (Real-time).