Heracles

Hardware

Original purchase 06.2025, assembled 08.2025, serving as Hua Hin Desktop on Windows 11 Professional.

- CPU: AMD Ryzen 9 9950X3D (16 cores - 32 threads)
- Cooler: Thermalright Peerless Assassin 120 Digital ARGB Black
- System Memory: 128GB (2x64GB) Crucial Pro DDR5 5600MHz (CP2K64G56C46U5) System Memory
- System Drive: Corsair Force MP510, 960GB NVMe M.2 Gen3 x4
- Data Drive 1: Crucial T700, 4TB NVMe M.2 Gen5 x4
- Data Drive 2: Crucial T500, 4TB NVMe M.2 Gen4 x4
- Motherboard: MSI MPG X870E Carbon Wifi[1]
- Graphics: Powercolor Radeon RX 9070 XT OC Red Devil
- Optical drive 1: Samsung 16x Blue-Ray / DVD Writer (BH16NS40) (taken from Hercules)
- Optical drive 2: Pioneer BDXL UltraHD Blue-Ray Reader (BH16NS40) (taken from Hercules)
- Case: Thermaltake Suppressor F51 with custom USB-C front header (taken from Olympus)
- Power: Be Quiet! Power Zone 2 1000W

2018/02/27 00:36 · Bernard Condrau

[1]ASRock X870E Taichi Lite
Data Drive 2: Transcend 220S, 2TB NVMe M.2 Gen3 x4
Data Drive 3: Transcend 110S, 256GB NVMe M.2 Gen3 x4

I made this description to document my install attempts with a broken ASRock X870E Taichi Lite motherboard

BIOS Settings

1. Upgrade to BIOS 3.25 or higher (BIOS 3.40 as of 1/09/2025)
2. *Advanced –> PCI Configuration:* Re-Size BAR Support
3. *Advanced –> PCI Configuration:* SR-IOV Support
4. *Advanced –> ACPI Configuration:* PCIE Devices Power On
5. *Advanced –> AMD CBS –> NBIO Common Options –> GFX Configuration:* **dGPU Only Mode**
6. *Advanced –> AMD CBS –> NBIO Common Options –> Audio Configuration:* NB Azalia

7. *Advanced –> AMD PBS –> AMD Common Platform Module:* PCIe/GFX Lanes Configuration
8. *Advanced –> AMD PBS –> AMD Common Platform Module:* PCIe x16 Link Speed
9. *H/W Monitor:* **CPU Fan 2 Setting**
10. *Security:* **Secure Boot**
11. *Boot:* **Setup Prompt Timeout**

These are the BIOS settings of interest for me, **orange** color indicates settings modified from default

Setup (Windows 11 fresh install)

If you are transferring a Windows 10 or 11 license from another computer I suggest to go through the Windows 11 install procedure twice. The following guide explains how and why. AMD graphic cards sometimes face issues with driver version when installed on an AMD motherboard.

First install

1. If moving a license from an old pc: make sure your license shows as *Windows is activated with a digital license linked to your Microsoft account* on your old pc. If it's not you need to login to your Microsoft account to register your device.
2. Download Windows 11 by downloading the latest Windows version as ISO file (do not create the media from the download page). Starting with Windows 11 v24H2 the default installation media of Windows 11 automatically activates BitLocker and encrypts your drives. To prevent this, do the following:
   - Create the USB drive with Rufus Standard or Portable version
   - Customize the install media after clicking the [Start] button

   - If you have not followed these steps and have your drives already encrypted, enter the following commands in *PowerShell* run as administrator

     ```
     $BLV = Get-BitLockerVolume
     Disable-BitLocker -MountPoint $BLV
     ```

   - After having decrypted all drives run *Services* and set the BitLocker Drive Encryption Startup Type to *disabled*
   - You must make sure BitLocker is off on all drives before updating the BIOS!
3. Restart your computer and install Windows 11 from USB stick
4. On the *Continue to Signin* screen enter your email address and sign in to your Microsoft account
5. After the boot is complete verify that your license shows as *Windows is activated with a digital license linked to your Microsoft account*
6. For a **Powercolor RX 9070 XT** graphic card install Powercolor Keystone. Start Keystone and enable "Sync RGB with motherboard". The card keeps the setting, so you can uninstall the Keystone software after having made the settings change or if you follow with *Second install* below, you don't need to install Keystone again.

Second install

1. Make sure you have followed the steps as set out in *First install* above
2. Restart your computer and install Windows 11 from USB stick

3. [1]Disconnect your network card from the internet
4. On the *Connect to the internet* or *Continue to Signin* screen do the following to create a local user without Microsoft account:
    1. Hit Shift-F10 to open a command prompt
    2. Enter `start ms-cxh:localonly` in the command prompt, then add the user credentials for a local administrator
    3. After that the installation process will automatically continue (see [How to Install and Log In to Windows 11 Without a Microsoft Account](#))
5. [1][Windows 11 Pro or Enterprise:](#) open the *Group Policy Editor* and navigate to *Computer Configuration –> Administrative Templates –> Windows Components –> Windows Update –> Manage updates offered from Windows Update*. Enable *Do not include drivers with Windows Update*.
6. [1][Windows 11 Home:](#) Right-click the Start Menu, select *System*, select *Advanced system settings* below Device specifications and Frequently asked questions, choose *Hardware* tab, then select *Device Installation Settings*. Say *No* to *Do you want to automatically download manufacturers' apps for your devices?*
7. Verify BitLocker is disabled as explained in [First install](#) above
8. Install AMD Chipset Drivers 7.06.24.2226 from [ASRock](#) or from [AMD](#)
9. Install AMD Software: Adrenalin Edition 25.8.1 from [AMD](#) or from [ASRock](#)
10. Restart your computer and [1]connect network
11. If you have enabled the *Auto Driver Installer* in BIOS the installer will automatically start on first logon. All of the following drivers need to be installed, download missing drivers after *Auto Driver Installer* from [ASRock Download](#) or from [AMD](#).
    1. MediaTek Bluetooth 1.1043.0.550
    2. MediaTek WLAN 5.6.0.4261
    3. Realtek USB Audio 6.4.0.2395 (optional)
    4. Realtek LAN 10.074.0205.2025 (optional, Windows installs an earlier version)
12. Install ASRock [Restart to UEFI 1.0.15](#) 1.0.15
13. Auto logon: modify the following key in the registry to a value of 0, then run netplwiz and disable *Users must enter a user name and password to use this computer*

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows
NT\CurrentVersion\PasswordLess\Device\DevicePasswordLessBuildVersion
```

14. Change the power plan in *Control Panel –> Power Options*. First select *Show additional plans*, then select *High performance*, go to *Edit Plan Settings –> Change advanced power settings* and set *USB selective suspend setting* to *Disabled*.
15. Change work group in Network Adapter Settings. To do this, type "Workgroup" into the search field at the top left of the Settings app and then click on "Change workgroup name"
16. Right-click on desktop, then select *View –> Medium icons*
17. Right-click on the taskbar, choose *Taskbar behaviors –> Taskbar alignment*
18. Go to *Settings –> Personalisation –> Themes* and select *Desktop icon settings*
19. Go to *Settings –> Personalisation –> Lock screen –> Screen timeout* and select *Screen, sleep & hibernate time-outs*
20. Change to full context menu with this
Registry Key
update file
21. Rearrange the drive letters (right-click on *Start –> Disk Managment*)
22. Install [USBDLM](#) 5.7.3 to [Manage USB Drives](#) and bco specific [Manage USB Drives](#)
23. Set *Open each folder in its own window* in File Explorer –> 3 dots at the center top –> Options
24. Show file name extensions in File Explorer –> *View –> Show –> File name extensions*

25. Show hidden files in File Explorer –> View –> *Show* –> *Hidden items*
26. Set `Switzerland` in *Settings* –> *Time & language* –> *Language & region* –> *Country or region* and `English (Switzerland)` in *Settings* –> *Time & language* –> *Language & region* –> *Regional format*
27. Map network drives in File Explorer –> 3 dots at the center top –> Map network drive
28. Right-click on image and *Set as desktop background*, then right-click on desktop and select *Span* in *Personalise* –> *Background* –> *Choose a fit for your desktop image*
29. Import *Unmount* and *Mount* tasks in Task Scheduler
30. Move *Documents*, *Pictures*, *Music*, and *Videos* to new location by selecting the folder and modifying the *Location* within *Properties*
31. Enable *Windows Subsystem for Linux* in *Control Panel* –> *Programs and Features* –> *Turn Windows features on or off*
32. Setup access for BackupPC
33. Install Crucial Storage Executive

[1]Follow these steps to avoid trouble installing display drivers

Ressources

- AMD Driver Timeout Error
- How To Disable Driver Install Automatically From The Windows Update
- How to Restore a Missing "Users Must Enter a User Name and Password" Option in Windows 11
- How to Remove ANY Virus from Windows in ONE STEP …
- GetMyDrivers

Installation Permanent

1. Install PassMark PerformanceTest 11.1
2. Install Snagit 2018. Update to version 2018.2.6 within app.
3. Install TRCC 2.0.4 LED screen control software
4. Install Google Chrome. Set "Developer mode" in Extensions. Add-ons: Adobe Acrobat, Group Speed Dial, DevTools z-index, ScriptSafe, IP Domain Country Flag, Search and Replace, User-Agent Switcher for Chrome, GoFullPage
5. When prompted download and install Logitech Options+
6. Install VeraCrypt 1.26.24 (x64)
7. Install Notepad++ 8.8.5
8. Install Libreoffice 25.8.1.1
9. Install TrayStatus Pro 5.0 and enable "Show Hard Drive Activity" in "Status Indicators"
10. Install EaseUS Partition Master 18.2
11. Install EaseUS Todo Backup Home 2024

Installation Portable

1. Download GPU-Z 2.68.0
2. Install Revo Uninstaller. Select *Download* and install the Free Portable or Pro Portable version.

HW Transfer

Hercules -> Olympus2

1. Check Hercules hardware with Debian 9 live system
2. Run PassMark benchmark
3. Register machine in Microsoft account
4. Remove hardware from Hercules
   - BD Drive
   - UHD Drive
   - Power Supply
   - Graphic Card
   - All drives
5. Transfer hardware from Olympus
   - Power Supply
   - Data drives
   - Graphic Card
6. New hardware
   - System drives
7. Boot Olympus2 on new hardware and check
8. Remove hardware from Olympus to bring to Flims
   - Motherboard
   - DRAM
   - CPU + Cooler
9. Copy/move F: drive from HDD to SSD (particularly F:\games)

Olympus -> Hestia2

1. Check Olympus hardware with Debian 11 live system
2. Remove hardware from Hestia

Setup (Windows 10 to 11 upgrade)

1. Disable *Fast Boot* in BIOS
2. Make sure your license shows as *Windows is activated with a digital license linked to your Microsoft account*
3. Go to **Windows Update** and download and install Windows 11
4. Remove old graphics drivers in case you changed your graphics card:
   1. Download [Display Driver Uninstaller (DDU)](#) v18.1.3.0 and save it to a local hard drive
   2. Hold SHIFT and select restart Windows
   3. Keep holding SHIFT until the Recovery Partition Menu shows up
   4. Go to *Troubleshoot –> Advanced options –> Startup Settings* and click **Restart**
   5. Once in the *Startup Settings* select *4) Enable Safe Mode* with network disabled
   6. Once Windows has started in Safe Mode run DDU
   7. Reboot into Windows after DDU has completed
5. Remove unused apps like *CorsairLink*, *Hardwipe*, etc.
6. Auto logon: modify or create the following key in the registry to a value of 0, then run netplwiz

and disable *Users must enter a user name and password to use this computer*

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows
NT\CurrentVersion\PasswordLess\Device\DevicePasswordLessBuildVersion
```

7. Create local user with the same username (*bco*), assign *Administrator* permissions and log in
8. Change work group in Network Adapter Settings. To do this, type "Workgroup" into the search field at the top left of the Settings app and then click on "Change workgroup name"
9. Right-click on desktop, then select *View –> Medium icons*
10. Right-click on the taskbar, choose *Taskbar behaviors –> Taskbar alignment*
11. Uninstall *Corsair Link 4*, *Parallels Access* and other apps with Revo Uninstaller. Select *Download* and install the Free Portable or Pro Portable version.
12. Change to full context menu with this
Registry Key
update file
13. Set *Open each folder in its own window* in File Explorer –> 3 dots at the center top –> Options
14. Show file name extensions in File Explorer –> *View –> Show –> File name extensions*
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- How to Restore a Missing "Users Must Enter a User Name and Password" Option in Windows 11
- How to Remove ANY Virus from Windows in ONE STEP ...