

GPU Metal Bench/ PCIe /VRAM Speed Test

Beitrag von „mitchde“ vom 3. Februar 2024, 16:59

Yep. great values ... 15,4 TFlops.

@[khe91](#), Ok i didnt know you use the RX 6800Xt in the **MacPro 2019 with limited PCIe Speed**.

Nbody Metal doesnt use much VRAM so the Gigaplops arent lower.

Can you try the Neat Videobench (also great for GPU only bench)?

perhaps we see here also some gpu bottleneck (PCI/VRAM) or not?

1. DL <https://www.neatvideo.com/download/neatbench>

2. unzip the bench somewhere - i did that on the desktop

3. run neatbench5 with any argument **gpu** (Terminal app)

4 run neatbench5 with arguments **4000x3000 gpu**

compare Faktor gpu only fps of default and 4000x3000 setting - 4000x3000 used much much more VRAM up to 3 GB.

Here my two runs on the RX 5600XT:

```
andreas$ /Users/andreas/Downloads/NeatBench5_OSX_UB/NeatBench5 gpu
```

```
Neat Bench (Neat Image 9.1.0, Neat Video 5.5.5) MacOS x64
```

```
...
```

```
Metal initialized successfully.
```

```
Checking Metal GPU 1:
```

```
GPU device name is: AMD Radeon RX 5600 XT
```

```
6128 MB total
```

```
Check passed - will attempt to use the device
```

Neat Video benchmark:

Frame Size: 1920x1080 progressive

Bitdepth: 32 bits per channel

....

CPU Model: 12th Gen Intel(R) Core(TM) i5-12400F

GPU 1: AMD Radeon RX 5600 XT (Metal): 6128 MB total, using up to 100%

GPU only (AMD Radeon RX 5600 XT): 25.9 frames/sec

...Press Enter to exit

Second run with **4000x3000 gpu** (uses much more VRAM - 3 GB+ - then default)

andreas\$ /Users/andreas/Downloads/NeatBench5_OSX_UB/**NeatBench5 4000x3000 gpu**

Neat Bench (Neat Image 9.1.0, Neat Video 5.5.5) MacOS x64

...

Metal initialized successfully.

Checking Metal GPU 1:

GPU device name is: AMD Radeon RX 5600 XT

6128 MB total

Check passed - will attempt to use the device

Neat Video benchmark:

Frame Size: **4000x3000** progressive

Bitdepth: 32 bits per channel

....

CPU Model: 12th Gen Intel(R) Core(TM) i5-12400F

GPU 1: AMD Radeon RX 5600 XT (Metal): 6128 MB total, using up to 100%

GPU only (AMD Radeon RX 5600 XT): 5.25 frames/sec

...Press Enter to exit

My factor default / 4000x3000= 26fps/5.3 fps = **4,9** times slower using 4000x3000 than default 1920*1080

Because Size Faktor ist (4000x3000(/ (1920*1080 default) = **5,8**. Lower factor 4,9 seems to be efficient - fast GPUs can have even lower slowdown factor = less slowdown than 5.8 times bigger GPU task = faster gpu system

Would be also interesting to see some Apple Mx faktors, FPS vaules here 😊 The neatvideo bench is UB (Intel/Apple)

Apples CPU/GPU system has much better VRAM & PCie Transferspeeds than our PCie 4 Intel systems .. other Slowness Faktor?