

Graphics Card Question

Posted by FathomStory - 23 May 2019 01:44

I have maxed out my motherboard CPU and have a decent (gaming) graphics card and plenty of RAM for my desktop, which I mostly use for editing and graphics stuff. However, I would like to upgrade my graphics card to a workstation type pro card or better gaming card (not to game, but have a more powerful editing machine), which ever is a better investment. I have seen videos where some graphics cards are so powerful, that the user can bypass the CPU for rendering/exporting videos and let the card handle it all. More than that, some GPU's can smoke CPU's that can render in a minute what would take CPU's at least 15 minutes for the same task. If instead of investing in a motherboard ,CPU and RAM, I funnelled that money into, say, a workstation graphics card that would cost as much as those three combined 1) would that not be a better investment 2) Can Lightworks leverage that power? As in, can I direct Lightworks to do rendering/exporting on a pro workstation card/gaming card?

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Re: Graphics Card Question

Posted by David Raspberry - 26 May 2019 05:59

The biggest advantage to an Nvidia Quadro GPU is getting 10 bit color output to a monitor if the monitor is 10 bit capable. The GTX series will output 10bit color, but typically only in games,not in pro graphics applications. Difference in drivers.

Performance wise, the CPU is typically more of a bottleneck because NLE's do all compressed video decoding in the CPU. The GPU is only used for output rendering to the screen.

On export GPU renders output to a temp file, CPU encodes it to final format.

A CPU and motherboard with more cores, more PCIE lanes and 4GB of ram per core will improve timeline performance more than just adding a high end GPU to a quad core system.

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Re: Graphics Card Question

Posted by FathomStory - 26 May 2019 13:36

@David Raspberry, Thanks, it is frustrating to have to think about upgrading my mobo et al when (for me) I already spent a lot on it.

Here is something interesting: I recently was able to get Windows 10 on one of my desktop hard drives and boot off it. I then installed Lightworks (I am allowed to install on two machines, I believe) and did a GPU test. Here are the results:

GPU on Ubuntu 18.04 with RX 560 GPU AMD GPU Pro (version 19.10):

41.88 fps

testing shader performance: 29541.16 fps

Testing Playback Performance:320.3fps

Testing render performance: 125.02 fps

On Windows 10:

614.72 fps

testing shader performance: 7650.92 fps

Testing Playback Performance: 380.05fps

Testing render performance: 200.02 fps

That said, I don't like Windows as an OS and trust it as far as I can throw it. But the Linux drivers do seem to need some catching up.

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Re: Graphics Card Question

Posted by schrauber - 26 May 2019 14:08

FathomStory wrote:

.. it is frustrating to have to think about upgrading my mobo et al when (for me) I already spent a lot on it.. If the Lightworks-created proxies are an option for your workflow, just leave the hardware untouched.

FathomStory wrote:

... But the Linux drivers do seem to need some catching up. Details can be found in this linked [this very long thread](#)

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Re: Graphics Card Question

Posted by FathomStory - 26 May 2019 14:39

@schrauber Thanks! What a thread! Bwhahahahaha!

I am half way through it.

I could have told them that the problem is probably the drivers. If you look at the graphics development teams for Windows and Linux, it is night and day. Since the marketshare for Windows is far larger, so are the dev teams. It is a handful of devs on Linux vs an army for Windows. Simply look at the frequency of drivers released on Windows. Almost weekly if not more versus once every couple of months on Linux. For the comparatively small resources allocated to Linux, I think it does pretty darn good. Linux is a far more stable OS vs the casino experience (will it work today?) of Windows.

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