Inspiron

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Last reply by curtis_m30 10-07-2021   **SOLVED**

Solved!   Go to Solution.

curtis_m30
2 Bronze

10-01-2021 04:27 PM

Thunderbolt Port not recognized in Linux Ubuntu Inspiron 16 7610

Hello,

I recently purchased a Dell Inspiron 16 Plus (7610) and set up a dual boot system with Windows 10 and Ubuntu 20.04. I have a Dell WD15 docking station that connects to a second monitor. In Windows, everything works fine. The docking station plugs into the thunderbolt port and everything works as expected. In Ubuntu, it says:

"No Thunderbolt support. Thunderbolt security level could not be determined."

I tried it in Ubuntu 18.04 as well and it still could not recognize the thunderbolt port. I have "bolt" installed and "allow" set to every Thunderbolt bios security setting I could find. I tried following this thunderbolt guide here to see if my thunderbolt port was in sleep mode:

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https://www.kernel.org/doc/html/v4.15/admin-guide/thunderbolt.html?highlight=thunderbolt

But the thunderbolt device ID does not appear anywhere in sys/bus, so I cannot "force" it to turn on. Has anyone else experienced this issue and could help me out? Thank you so much!

Kudos (0)

Reply

Solution (1)

curtis_m30
2 Bronze

10-07-2021 10:24 AM

After much troubleshooting, I finally found the solution. It turns out that it wasn't only the Thunderbolt port that was not working, the HDMI port was not working either. I immediately thought there was a graphics driver issue because of this, and there was.

I ran the following command to view the drivers I had. I was initially confused because I was certain that I installed the Nvidia drivers correctly.

```
sudo lshw -c display
```

Turns out that the VGA compatible controller was "UNCLAIMED." There are two "graphics cards" on the system: the discrete Nvidia GTX 3050 and the integrated Intel Iris graphics. In Windows, it switches between the two, using the Nvidia card for graphically intense processes and the weaker Iris one to save battery life for normal operation. This unfortunately confuses the Linux Operating System.

Solution: you need to install TWO graphics card drivers for the Inspiron 16 Plus 7610 Laptop: the Nvidia driver AND one that supports the Intel integrated graphics. Normally, the integrated graphics drivers are installed automatically by Linux. However, the graphics adapter in this computer is not supported natively by the 5.0 Linux Kernel, it needs an additional install. Use the following command to install it and then reboot the system:

```
sudo apt install linux-generic-hwe-20.04-edge
```

Source for this solution: https://askubuntu.com/questions/1199944/dell-inspiron-3593-shows-display-unclaimed-for-intel-device-...

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Hope Dell sees this, they should really push something out about this as it is probably relevant to anyone who tries to run Ubuntu on this device. Only guidance I saw from Dell when researching this issue was that most drivers for Linux are installed "natively" when installing the OS. This is clearly not the case with this system, as an additional install is needed for the graphics adapter.

View solution in original post

Community *Accepted Solution*

Kudo (1)

Reply

Replies (3)

AdrianG001
4 Ruthenium

You might find a temporary solution here: https://www.dell.com/community/Linux-General/Dell-XPS-13-9380-Thunderbolt-3-USB-Type-C-stopped-worki... Shutdown the system, unplug everything and wait for 5 minutes and the boot again. Good luck

Kudo (1)

Reply

curtis_m30
2 Bronze

Thank you for the response. That didn't seem to work, but I am making some progress. When I plug the docking station in, Ubuntu recognizes the input in /dev as "hidraw5." However, it cannot read the monitor from this hidraw input and still does not think that the

hidraw input is actually the Thunderbolt port. Maybe I need to change the hidraw input to a serial input, such as a tty value? I believe I can do this through changing udev rules; however, I am not too familiar with creating custom udev rules like this.

Kudos (0)

Reply

curtis_m30
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Top Contributor

ejn63

Kudos (2344)

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