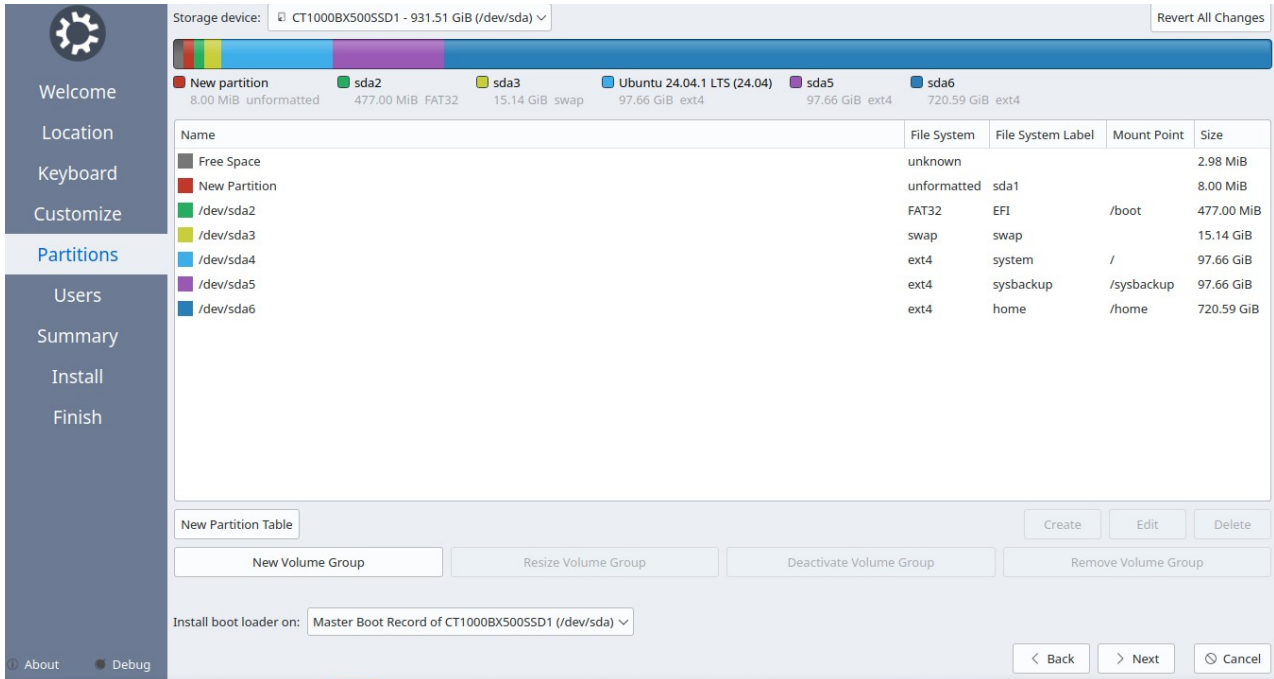


Request for advise:

from Windows 10 & bios firmware to Kubuntu 24.04 LTS & Libreboot at a HP Elitebook 2570p, along with 940 GB SSD and 16 GB RAM.

The partitions I want to have at this laptop:



Name	File System	File System Label	Mount Point	Size
Free Space	unknown			2.98 MiB
New Partition	unformatted	sda1		8.00 MiB
/dev/sda2	FAT32	EFI	/boot	477.00 MiB
/dev/sda3	swap	swap		15.14 GiB
/dev/sda4	ext4	system	/	97.66 GiB
/dev/sda5	ext4	sysbackup	/sysbackup	97.66 GiB
/dev/sda6	ext4	home	/home	720.59 GiB

For more info, check paragraph 3.1. – the configuration I tried to install.

Report from Bas Roufs in The Netherlands, 7 November 2024, for:

- «Kubuntu Help and Users Discussions», kubuntu-users@lists.ubuntu.com
- Libreboot at Reddit and directly by e-mail.

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1.) Introduction

1.1.) My questions summarised

My questions summarised:

- How can I get installed Kubuntu 24.04.1 LTS along with the latest stable version of Libreboot at the laptop I deal with in this paper?
- What to do first, what to do after?

Here below in paragraph 4, I work out those two basic questions in my «Request for Advise».

1.2.) Background info relevant to answer both questions.

Several times, I have tried to install Kubuntu 24.04 LTS at the laptop I deal with here. More info about Kubuntu: <https://kubuntu.org/>. More info about the laptop I mention here, I share here below in paragraph 2.

A few installation attempts at and before 8 October 2024 ended up in failure. An error report I share in the mail I sent to you – along with the link to this booklet.

Some more installation attempts about mid October 2024 seemingly succeeded. Each of those attempts went along the same patterns and got stuck at the same point. Seemingly, the installation did succeed a few times as I said – however, whenever rebooting, the bios did not “see” the installed OS – it kept prompting to install an OS, though I had installed one. More about this, I share here below in paragraph 3.

After a bit of tweaking, I managed to get mounted a 2nd USB stick next to the Ventoy USB from which I have been starting a live session of Kubuntu 24.04. LTS. I did so after starting a live session of Kubuntu 24.04 from the Ventoy USB. At that 2nd USB, I have put the screenshots I share here below in paragraph 3. The error report after the 8 October attempts, I got in the same way.

2.) «The laptop»: refurbished HP Elitebook 2570p, 940 GB SSD & 16 GB RAM, delivered with Windows 10.

The laptop at which I am trying to get installed Kubuntu 24.04.1. LTS, is a «refurbished» version of the «HP Elitebook 2570p». The original version of this laptop has been issued in 2012? 2013?, along with Windows 7. The refurbished version has come this year, 2024, with Windows 10. «Refurbished» means more or less: carefully checked and provided with new components and set up to date. The HDD has been

replaced by a 940 GB SSD. The original 4 GB RAM has consisted of two DDR3 memory banks of 2 GB each. They have been replaced by two similar memory banks of 8 GB each, which together deliver 16 GB RAM.

Hereafter, I refer to the device referred to here above, as «the laptop».

Bear the above info in mind when taking a look at this overview with the specs of the same laptop when it was still new:

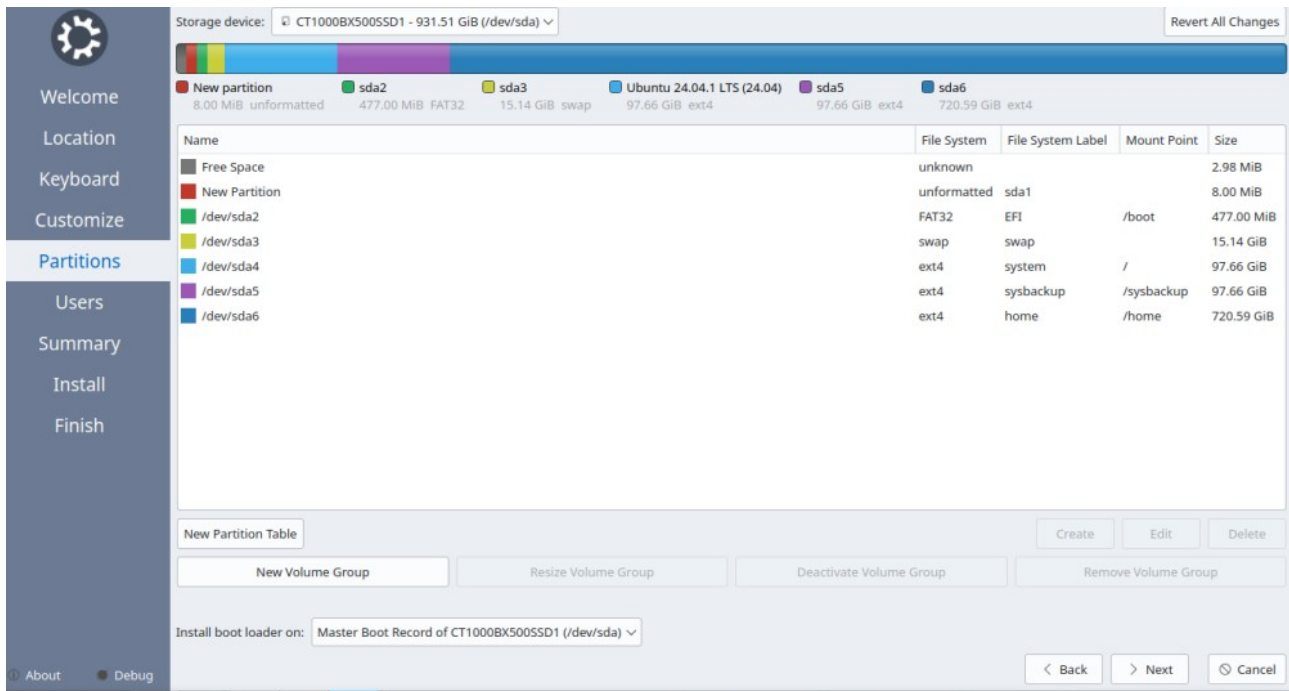
<https://www.shi.com/product/26048320/HP-EliteBook-2570p-Intel-Core-i5>

A more detailed technical booklet about this laptop, I uploaded to my domain:

<https://basroufs.eu/HP-EliteBook-2570p.pdf>

3.) Failed installation attempts: screenshots & debugging info

3.1.) The configuration I want to install manually.



This is the configuration I want to install manually. I have tried to do so several times. So far, I did not manage to get it installed. However it may be – for several reasons, I do have have a strong preference for such a configuration.

Partition table at the whole disk: GPT.

Free, empty space – size 2,98 MiB.

New partition, /dev/sda1/ – file system unformatted, flag bios-grub, no mount point, label sda1, size 8 MiB.

Second partition, /dev/sda2/ – file system fat32, flag boot, mount point /boot/efi, label efi, size 477 MiB.

Third partition, /dev/sda3/ - file system swap, no mount point, label swap, size 15.14 GiB.

Fourth partition, /dev/sda4/ - file system ext4, mount point /, label system, size 97.66 GiB (100000 MiB). The system will be installed here.

Fifth partition, dev/sda5/ - file system ext4, mount point /sysbackup, label sysbackup, size 97.66 GiB (100000 MiB). At sda5, sysbackup, backups of the whole system will be made via the system-restore utility *Timeshift*.

Sixth partition, /dev/sda6/, file system ext4, mount point /home, label home, size 720.59 GiB. This is the partition meant for all user files.

3.2.) What happened during and after the failed installation attempts.

From the beginning till the middle of October 2024, I have been trying to install Kubuntu 24.04.1 LTS – along the lines of the configuration I summarise in the previous paragraph. Before doing so, I have been using the latest version of Gparted live: gparted-live-1.6.0-10-amd64.iso. However, when doing so for a 2nd or 3rd time, the startup procedure mentioned a few lines about «missing firmware». Could that be a one of the causes of the problems I summarise in this paragraph? More about this here below in paragraph 4.

Some installation attempts done until 8 October 2024 did fail BEFORE the end of the installation process. At some moment, I managed to get the error report at a 2nd USB stick, next to the one I was using as a Ventoy installation stick. You can download the error terminal report from here:

<https://basroufs.eu/Error-report-8-October-2024.txt>

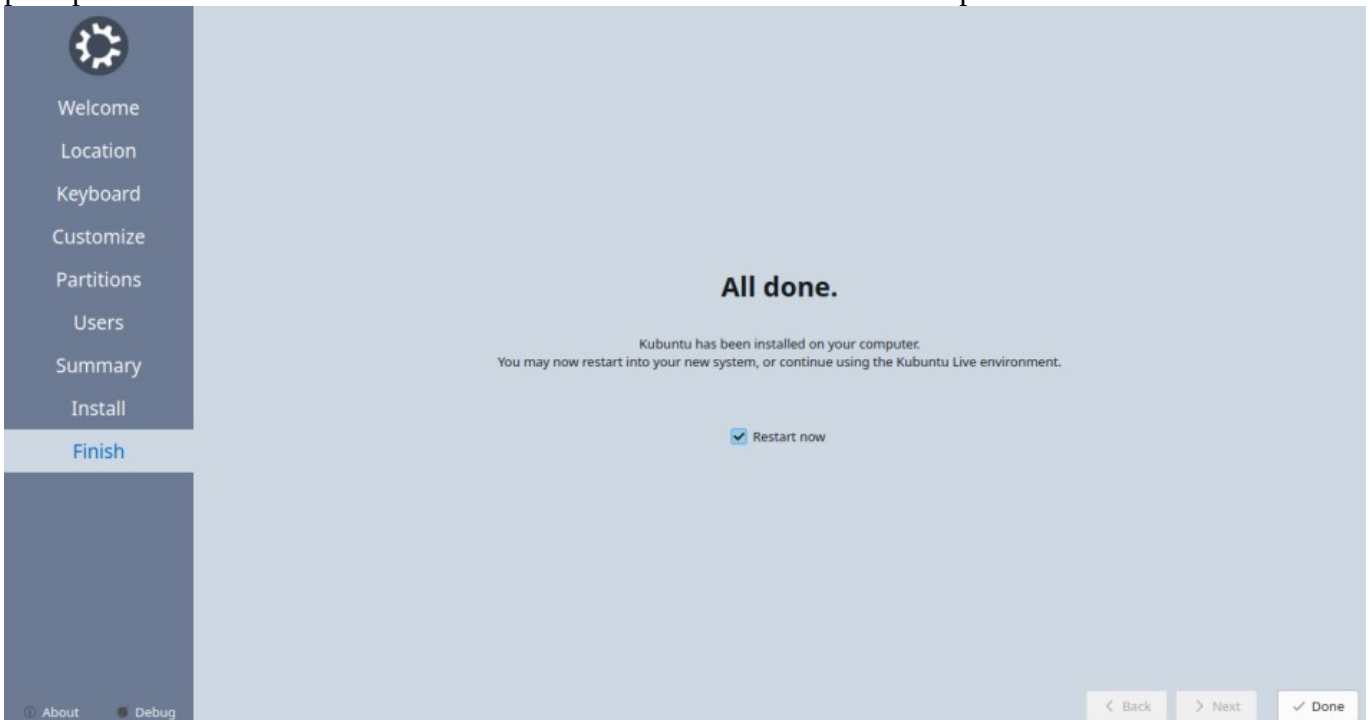
After a bit of tweaking with the bios, I discovered an option like «restore to defaults». After using that option, I did manage a few times to go through the WHOLE installation process – until and including the moment I needed to take out the «installation medium» USB stick, when prompted to do so. All this happened at and a bit before 15 October 2024. After taking out the «installation medium» USB stick, I turned off the laptop. After turning it on again, I expected a first run of Kubuntu. Instead of that first Kubuntu session, only this announcement came on the screen:

```
«(...)
Boot Device Not Found
Please install an operating system on your hard disk.
Hard Disk - (3F0)
F2 System Diagnostics
For more information, please visit: www.hp.com/go/techcenter/startup
(...)»
```

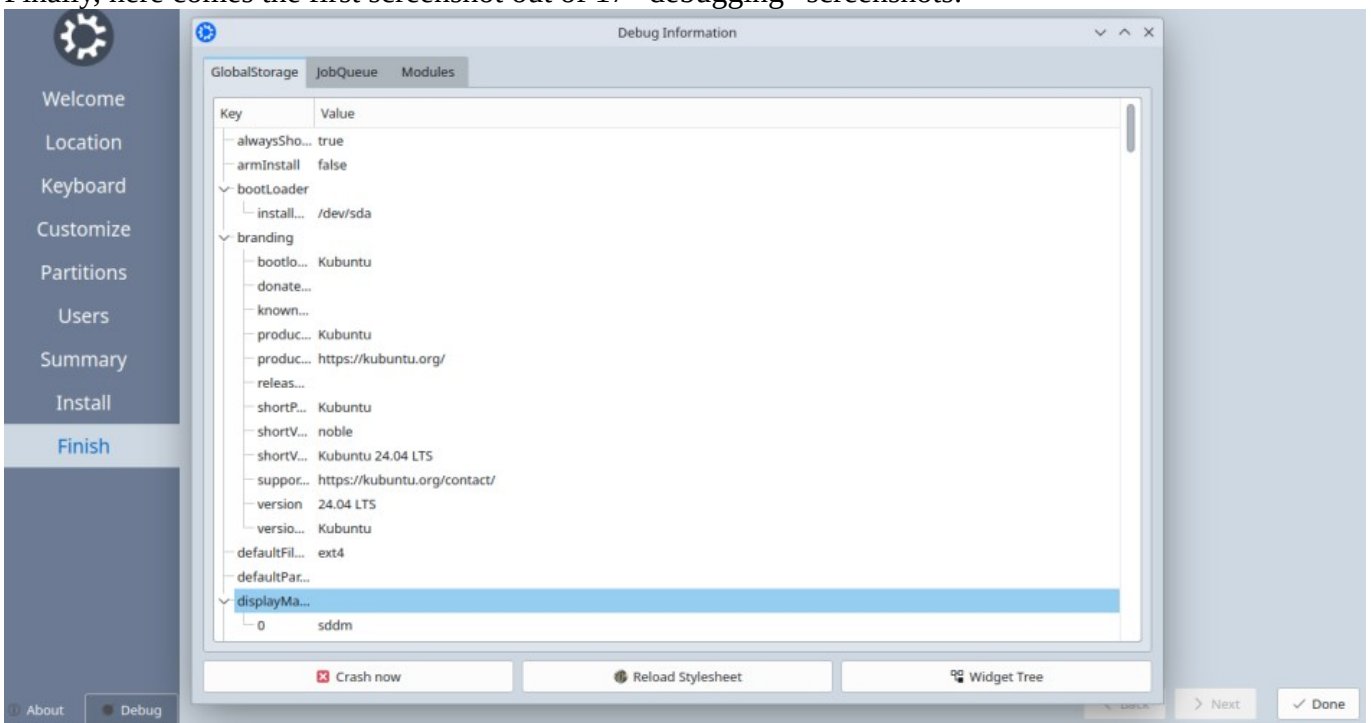
This announcement was simply bullshit. There WAS a «boot device» - the SSD with a fresh install of Kubuntu 24.04.1 LTS. Here comes a screenshot with a kind of summary just before the actual installation procedure on 15 October 2024:



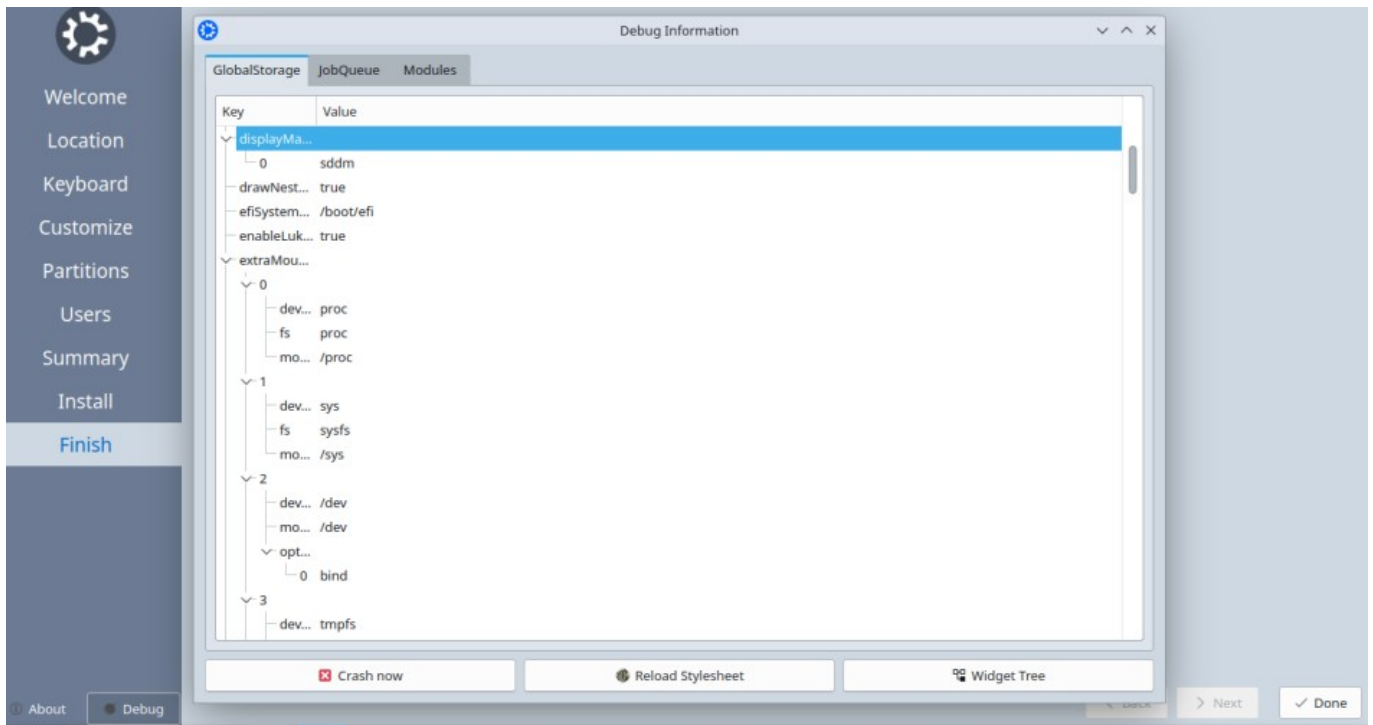
The screenshot at the previous page looks apparently OK and correct. Here comes a screenshot at the very end of the installation procedure on 15 October 2024, just before the moment at which I have been prompted to take out the «installation medium» USB stick out of the USB port where it was:



Finally, here comes the first screenshot out of 17 “debugging” screenshots:



At the next page, I show to you the 2nd debugging screenshot of the whole installation procedure of 15 October 2015.



The other 15 debugging screenshots are available at your request. They are simply too much for this paper.

A few days after 15 October 2024, the laptop stopped working altogether, while I was experimenting with the bios. It did not switch on any more. Because of the 2 years warranty, it was possible to send it to the company where I bought it. That company is good when dealing with hardware, however, it does not know much about Linux, bios software and software in general. After the repair, I got it back – however, again with Windows 10. This is the present state of the laptop. However, I do not want to work with Windows as main OS – in my opinion, this is not safe at all. I only want Windows as guest OS in a Kubuntu 24.04 LTS environment. However it may be - before the next attempt to install the latter , I want to consult you.

4.) Request for advise. Which core issues? What to do next?

What have been possible core issues related to my failed attempts to install Kubuntu 24.04 LTS on 15 October 2024? Why did the bios not “see” the Kubuntu 24.04 operating system? Were missing firmware and/or something else core ? What exactly went wrong in the interaction between the bios firmware and the installed OS?

This is the page with firmware for the laptop – the HP Elitebook 2570p notebook:

<https://support.hp.com/nl-nl/drivers/hp-elitebook-2570p-notebook-pc/5259393>

From there, I have flashed a backup of the «system bios» to an USB stick – simply in order to have a backup for when will start trying again to install Kubuntu 24.04 LTS.

However it may be – if you’ll check the above link, you will see that this firmware is terribly obsolete. It is not really being maintained. I observe security and privacy risks. That’s why, I am seriously considering to flash at some point «Libreboot» to my laptop. This open source bios software is being maintained and updated carefully, a few times per year. More about this here:

<https://libreboot.org/>

Now, I get back to my questions summarised here above in paragraph 1.1.:

- How can I get installed Kubuntu 24.04.1 LTS along with the latest stable version of Libreboot at the laptop I deal with in this paper?
- What to do first, what to do after?

Now, I work out those two basic questions.

As stated before, the laptop I refer to, is a refurbished «HP Elitebook 2570p», along with 940 GB SSD and 16 GB RAM – currently still with Windows 10 along with bios firmware – as it has come from the company who recently has sold it to me.

The latest stable release of Libreboot is that of 12 June 2024. Check:

<https://libreboot.org/news/libreboot20240612.html>

Libreboot specifically supports the laptop I refer to here:

<https://libreboot.org/docs/install/hp2570p.html>

What do I need to do first and what after? First installation of Kubuntu 24.04 LTS, then flashing Libreboot? If it is necessary to choose for such an option, how can I make «sure» that the HP Bios firmware will «see» Kubuntu?

Or is some other approach better? By example flashing Libreboot during a live session from the Kubuntu 24.01.1 ISO at a Ventoy USB? During such a session, it IS possible to mount one or more other USB sticks – this, I know by experience.

The text of this paper finishes here. Thanks for considering it.

Yours.

Bas Roufs, in the Netherlands.