Rock Pi S Linux images not booting

boi   **Jun 6**

I am working with a Rock Pi S v1.3 and thus far the only Linux image I have been able to get to boot is **Armbian 21.05.9 Focal with Linux 4.4.247-rockpis** . I have tried the recent Armbian Bookworm, Armbian Jammy and a few other variations I have come across on various forums.

With the above working image I can communicate with it via UART and get to the terminal. With everything else I don't even get the blinking blue LED; just two solid green LEDs. I have a few of these boards and have confirmed this issue across all of them.

I am not sure what next steps to take so any pointers would be greatly appreciated.

Thank you very much in advance.

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avanst   **Jun 6**

Rock Pi S's manufactured before 2022 I believe cannot boot with Linux Kernel 5.x. There was a post on the wiki where I saw that but I can't seem to find it now. If you use Armbian, you have to use the "legacy" version. Look in the Archives link: **https://archive.armbian.com/rockpi-s/archive** . One example that should probably work is **http://xogium.performanceservers.nl/archive/rockpi-s/archive/Armbian_21.05.9_Rockpi-s_buster_legacy_4.4.247_minimal.img.xz**

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boi   **Jun 7**

Thank you very much for your feedback! I just uploaded the provided image and it successfully booted.

My intention is Kernel development, and being able to upgrade the Linux Kernel is a critical requirement.

Is there any documentation as to why only legacy 4.4.* Kernels boot on the Rock Pi S and what the required workaround is to get newer Kernels to work on this platform?

Thank you very much again in advance!

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avanst   **Jun 7**

I honestly have no idea since I'm no Kernel developer nor do I work for Radxa in anyway. I'm pretty much in the same boat as you and happen to figure out the answer to your question when I was playing around with the Rock Pi S myself and encountered the same issue.

I do know I recently bought a new Rock Pi S about a week ago that apparently was manufactured after 2022 and it seems to boot with a 5.x linux kernel, specifically the most recent Armbian "current" version. So it seems like it was a hardware issue.

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boi   **Jun 7**

Got it! Thank you so much for your help!

You have definitely pointed me in the right direction 🙂