

Bootloaders

The following section contains notes regarding compatible bootloaders with the PinePhone Pro.

rk2aw

The rk2aw loader program is designed for modern Rockchip SoCs. It modifies the boot ROM bootloader load order from the original and rigid “SPI NOR flash → eMMC → SD card” to a more flexible “SD card → eMMC → SPI NOR flash”. Additionally, it enables robust A/B bootloader updates in SPI NOR flash, allowing users to choose fallback options via a pre-boot menu. For details see the [rk2aw page](#).

U-Boot

U-Boot is an open-source bootloader commonly used in embedded operating systems and is often pre-installed on device images.

Tow-Boot

Tow-Boot is an opinionated distribution of *U-Boot* and brings numerous advantages over stock *U-Boot*, such as the possibility to choose from booting the eMMC or microSD card using the volume buttons during boot, as well as a *USB Mass Storage mode*, where the device can be written to by connecting the device to a computer via USB.

The user can flash Tow-Boot to the PinePhone Pro using the [instructions on the Tow-Boot website](#).

levinboot

The levinboot bootloader is another option for the PinePhone Pro. The project repository can be

found [here](#). (Pinephone Pro supporting fork is [here](#).)