

Bootloader

Loads the initramfs archive to RAM (if separate)
Loads DTB + kernel to RAM, starts the kernel



Kernel

Initializes hardware devices and kernel subsystems
Extracts the initramfs archive to the file cache
Starts the /init executable if found
(otherwise falls back to mounting the device specified by root=)



/init

Starts early user space commands
(show splashscreen, start time critical application...)
Loads drivers needed to access the final root filesystem
Mounts the root filesystem and switches to it (switch_root)

Intermediate root filesystem (initramfs)



/sbin/init

Regular system startup

Root filesystem