

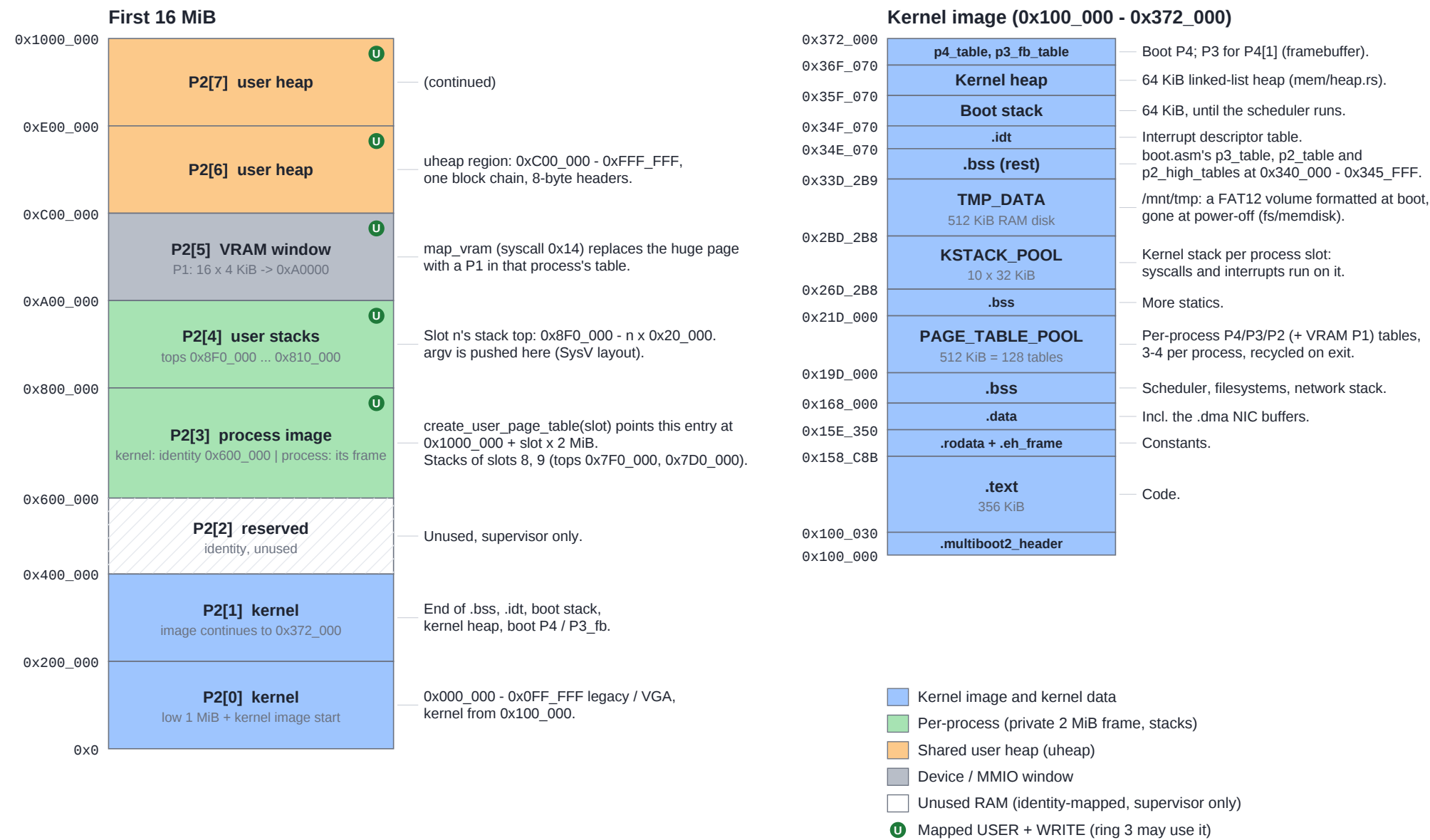
r2 kernel memory map: physical = virtual, lower 4 GiB

boot.asm identity-maps 0 - 4 GiB with 2 MiB pages (P4[0] -> P3[0..3] -> P2). Everything is supervisor-only unless marked U. Heights are condensed; addresses are exact.



Close-ups: the first 16 MiB (one P2 entry = 2 MiB) and the kernel image

Left: what each 2 MiB page is, in the kernel's table and in a process's copy. Right: the kernel image's sections from the kernel_graphics release ELF (kernel_text is within 1 KiB).



Kernel image and kernel data

Per-process (private 2 MiB frame, stacks)

Shared user heap (uheap)

Device / MMIO window

Unused RAM (identity-mapped, supervisor only)

Mapped USER + WRITE (ring 3 may use it)