

Zero Page

The additional fields in struct boot_params as a part of 32-bit boot protocol of kernel. These should be filled by bootloader or 16-bit real-mode setup code of the kernel. References/settings to it mainly are in:

arch/x86/include/uapi/asm/bootparam.h

Offset/Size	Proto	Name	Meaning
000/040	ALL	screen_info	Text mode or frame buffer information (struct screen_info)
040/014	ALL	apm_bios_info	APM BIOS information (struct apm_bios_info)
058/008	ALL	tboot_addr	Physical address of tboot shared page
060/010	ALL	ist_info	Intel SpeedStep (IST) BIOS support information (struct ist_info)
080/010	ALL	hd0_info	hd0 disk parameter, OBSOLETE!!
090/010	ALL	hd1_info	hd1 disk parameter, OBSOLETE!!
0A0/010	ALL	sys_desc_table	System description table (struct sys_desc_table), OBSOLETE!!
0B0/010	ALL	olpc_ofw_header	OLPC's OpenFirmware CIF and friends
0C0/004	ALL	ext_ramdisk_image	ramdisk_image high 32bits
0C4/004	ALL	ext_ramdisk_size	ramdisk_size high 32bits
0C8/004	ALL	ext_cmd_line_ptr	cmd_line_ptr high 32bits
140/080	ALL	edid_info	Video mode setup (struct edid_info)
1C0/020	ALL	efi_info	EFI 32 information (struct efi_info)
1E0/004	ALL	alt_mem_k	Alternative mem check, in KB
1E4/004	ALL	scratch	Scratch field for the kernel setup code
1E8/001	ALL	e820_entries	Number of entries in e820_table (below)
1E9/001	ALL	eddbuf_entries	Number of entries in eddbuf (below)
1EA/001	ALL	edd_mbr_sig_buf_entries	Number of entries in edd_mbr_sig_buffer (below)
1EB/001	ALL	kbd_status	Numlock is enabled
1EC/001	ALL	secure_boot	Secure boot is enabled in the firmware
1EF/001	ALL	sentinel	Used to detect broken bootloaders
290/040	ALL	edd_mbr_sig_buffer	EDD MBR signatures
2D0/A00	ALL	e820_table	E820 memory map table (array of struct e820_entry)
D00/1EC	ALL	eddbuf	EDD data (array of struct edd_info)