

Package KERNEL_5_4

Version 4.0.0-trunk-x86-r60730

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1 Documentation For Package KERNEL_5_4

1.1 Kernel 5.4

This chapter documents the available drivers of the Linux kernel in version 5.4, as provided by the package kernel_5_4.

1.1.1 Network adapter drivers

This section lists all network card drivers supported by this kernel. We differentiate between LAN drivers for wired networks and WLAN drivers for wireless networks. Wireless network drivers also need the package “wlan” in addition to the base- and this kernel package.

Table 1.1: Available LAN adapter drivers in Linux 5.4

| Bus | NET_DRV_x | Adapter family |
|--------|--------------|--------------------------------------------------------------|
| isa | 3c509 | 3Com Etherlink III (3c509, 3c509B, 3c529, 3c579) ethernet |
| isa | 3c515 | 3Com 3c515 Corkscrew |
| pcmcia | 3c574_cs | 3Com 3c574 series PCMCIA ethernet |
| pcmcia | 3c589_cs | 3Com 3c589 series PCMCIA ethernet |
| pci | 3c59x | 3Com 3c59x/3c9xx ethernet |
| pci | 8139cp | RealTek RTL-8139C+ series 10/100 PCI Ethernet |
| pci | 8139too | RealTek RTL-8139 Fast Ethernet |
| pci | acenic | AceNIC/3C985/GA620 Gigabit Ethernet |
| pci | alx | Qualcomm Atheros(R) AR816x/AR817x PCI-E Ethernet Network |
| pci | amd-xgbe | AMD 10 Gigabit Ethernet |
| pci | amd8111e | AMD8111 based 10/100 Ethernet Controller |
| usb | aqc111 | Aquantia AQtion USB to 5/2.5GbE Controllers |
| usb | asix | ASIX AX8817X based USB 2.0 Ethernet Devices |
| pci | atl1 | Atheros L1 Gigabit Ethernet |
| pci | atl1c | Qualcomm Atheros 100/1000M Ethernet Network |
| pci | atl1e | Atheros 1000M Ethernet Network |
| pci | atl2 | Atheros Fast Ethernet Network |
| isa | atp | RealTek RTL8002/8012 parallel port Ethernet |
| usb | atusb | ATUSB IEEE 802.15.4 |
| usb | ax88179_178a | ASIX AX88179/178A based USB 3.0/2.0 Gigabit Ethernet Devices |
| pcmcia | axnet_cs | Asix AX88190 PCMCIA ethernet |

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Table 1.1: Available LAN adapter drivers in Linux 5.4 (continued)

| Bus | NET_DRV_x | Adapter family |
|---------|-------------|-------------------------------------------------------------------------------------------------------------------------|
| pci | b44 | Broadcom 44xx/47xx 10/100 PCI ethernet |
| pci | be2net | Emulex OneConnect NIC Driver 12.0.0.0 |
| pci | bn | QLogic BR-series 10G PCIe Ethernet |
| pci | bnx2 | QLogic BCM5706/5708/5709/5716 |
| pci | bnx2x | Broadcom NetXtreme II BCM57710/ 57711/ 57711E/ 57712/ 57712_MF/ 57800/ 57800_MF/ 57810/ 57810_MF/ 57840/ 57840_MF |
| pci | bnxt_en | Broadcom BCM573xx network |
| pci | cassini | Sun Cassini(+) ethernet |
| usb | catc | CATC EL1210A NetMate USB Ethernet |
| usb | cdc_eem | USB CDC EEM |
| usb | cdc_ether | USB CDC Ethernet devices |
| usb | cdc_mbim | USB CDC MBIM host |
| usb | cdc_ncm | USB CDC NCM host |
| usb | cdc_subset | Simple 'CDC Subset' USB networking links |
| usb | ch9200 | QinHeng CH9200 USB Network device |
| usb | cx82310_eth | Conexant CX82310-based ADSL router USB ethernet |
| pci | cxgb | Chelsio 10Gb Ethernet |
| pci | cxgb3 | Chelsio T3 Network |
| pci | cxgb4 | Chelsio T4/T5/T6 Network |
| pci | cxgb4vf | Chelsio T4/T5/T6 Virtual Function (VF) Network |
| pci | de2104x | Intel/Digital 21040/1 series PCI Ethernet |
| isa | de4x5 | Digital DE425, DE434, DE435, DE450, DE500 |
| pci | defxx | DEC FDDIcontroller TC/EISA/PCI (DEFTA/DEFEA/DEFPA) driver v1.11 2014/07/01 |
| pci | dl2k | D-Link DL2000-based Gigabit Ethernet Adapter |
| usb | dm9601 | Davicom DM96xx USB 10/100 ethernet devices |
| pci | dmfe | Davicom DM910X fast ethernet |
| virtual | dummy | Dummy Network Interface |
| pci | dwc-xlgmac | Synopsys DWC XLGMAC |
| pci | e100 | Intel(R) PRO/100 Network |
| pci | e1000 | Intel(R) PRO/1000 Network |
| pci | e1000e | Intel(R) PRO/1000 Network |
| pci | ec_bhf | |
| pci | ena | Elastic Network Adapter (ENA) |
| pci | enic | Cisco VIC Ethernet NIC |
| pci | epic100 | SMC 83c170 EPIC series Ethernet |
| pci | et131x | 10/100/1000 Base-T Ethernet Driver for the ET1310 by Agere Systems |
| pci | fealnx | Myson MTD-8xx 100/10M Ethernet PCI Adapter |
| pci | fm10k | Intel(R) Ethernet Switch Host Interface |
| pcmcia | fmvj18x_cs | fmvj18x and compatible PCMCIA ethernet |

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Table 1.1: Available LAN adapter drivers in Linux 5.4 (continued)

| Bus | NET_DRV_x | Adapter family |
|----------|----------------|------------------------------------------------------------------|
| pci | forcedeth | Reverse Engineered nForce ethernet |
| usb | gl620a | GL620-USB-A Host-to-Host Link cables |
| pci | gve | gVNIC |
| pci | hamachi | Packet Engines 'Hamachi' GNIC-II Gigabit Ethernet |
| eisa,pci | hp100 | HP CASCADE Architecture Driver for 100VG-AnyLan Network Adapters |
| usb | hso | USB High Speed Option |
| usb | huawei_cdc_ncm | USB CDC NCM host driver with encapsulated protocol support |
| pci | i40e | Intel(R) Ethernet Connection XL710 Network |
| pci | iavf | Intel(R) Ethernet Adaptive Virtual Function Network |
| pci | ice | Intel(R) Ethernet Connection E800 Series Linux |
| pci | igb | Intel(R) Gigabit Ethernet Network |
| pci | igbvf | Intel(R) Gigabit Virtual Function Network |
| pci | igc | Intel(R) 2.5G Ethernet Linux |
| usb | int51x1 | Intellon usb powerline adapter |
| usb | ipheth | Apple iPhone USB Ethernet |
| pci | ixgb | Intel(R) PRO/10GbE Network |
| pci | ixgbe | Intel(R) 10 Gigabit PCI Express Network |
| pci | ixgbev | Intel(R) 10 Gigabit Virtual Function Network |
| pci | jme | JMicron JMC2x0 PCI Express Ethernet |
| usb | kalmia | Samsung Kalmia USB network |
| usb | kaweth | KL5USB101 USB Ethernet |
| pci | ks884x | KSZ8841/2 PCI network |
| usb | lan78xx | LAN78XX USB 3.0 Gigabit Ethernet Devices |
| isa | lance | AMD LANCE and PCnet (AT1500, NE2100) |
| usb | lg-vl600 | LG-VL600 modem's ethernet link |
| usb | mcs7830 | USB to network adapter MCS7830) |
| pci | mlx4_core | Mellanox ConnectX HCA low-level |
| pci | mlx4_en | Mellanox ConnectX HCA Ethernet |
| pci | mlx5_core | Mellanox 5th generation network adapters (ConnectX series) core |
| pci | mlxsw_spectrum | Mellanox Spectrum |
| pci | mlxsw_switchib | Mellanox SwitchIB and SwitchIB-2 |
| pci | mlxsw_switchx2 | Mellanox SwitchX-2 |
| pci | myri10ge | Myricom 10G driver (10GbE) |
| pci | natsemi | National Semiconductor DP8381x series PCI Ethernet |
| isa | ne | NE1000/NE2000 ISA/PnP Ethernet |
| pci | ne2k-pci | PCI NE2000 clone |
| usb | net1080 | NetChip 1080 based USB Host-to-Host Links |
| pci | netxen_nic | QLogic/NetXen (1/10) GbE Intelligent Ethernet |
| isa | ni65 | AMD Lance Am7990 |

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Table 1.1: Available LAN adapter drivers in Linux 5.4 (continued)

| Bus | NET_DRV_x | Adapter family |
|--------|-------------|---------------------------------------------------------------------------------------------------------------------------|
| pci | niu | Sun Neptun Ethernet |
| pcmcia | nmclan_cs | New Media PCMCIA ethernet |
| pci | ns83820 | National Semiconductor DP83820 10/100/1000 |
| pci | pch_gbe | EG20T PCH Gigabit ethernet |
| pci | pcnet32 | PCnet32 and PCnetPCI based ethercards |
| pcmcia | pcnet_cs | NE2000 compatible PCMCIA ethernet |
| usb | pegasus | Pegasus/Pegasus II USB Ethernet |
| usb | plusb | Prolific PL-2301/2302/25A1/27A1 USB Host to Host Link |
| pci | qede | QLogic FastLinQ 4xxxx Ethernet |
| pci | qla3xxx | QLogic ISP3XXX Network Driver v2.03.00-k5 |
| pci | qlcnlc | QLogic 1/10 GbE Converged/Intelligent Ethernet |
| usb | qmi_wwan | Qualcomm MSM Interface (QMI) WWAN |
| pci | r6040 | RDC R6040 NAPI PCI FastEthernet |
| usb | r8152 | Realtek RTL8152/RTL8153 Based USB Ethernet Adapters |
| pci | r8169 | RealTek RTL-8169 Gigabit Ethernet |
| usb | rndis_host | USB Host side RNDIS |
| usb | rtl8150 | rtl8150 based usb-ethernet |
| pci | s2io | Neterion 10GbE Server NIC |
| isa | sb1000 | General Instruments SB1000 |
| pci | sc92031 | Silan SC92031 PCI Fast Ethernet Adapter |
| pci | sfc | Solarflare network |
| pci | sfc-falcon | Solarflare Falcon network |
| pci | sis190 | SiS sis190/191 Gigabit Ethernet |
| pci | sis900 | SiS 900 PCI Fast Ethernet |
| pci | skfp | SysKonnect FDDI PCI adapter |
| pci | skge | SysKonnect Gigabit Ethernet |
| pci | sky2 | Marvell Yukon 2 Gigabit Ethernet |
| isa | smc-ultra | SMC Ultra/EtherEZ ISA/PnP Ethernet |
| isa | smc9194 | SMC's 9000 series of Ethernet cards |
| pcmcia | smc91c92_cs | SMC 91c92 series PCMCIA ethernet |
| usb | smc75xx | SMSC75XX USB 2.0 Gigabit Ethernet Devices |
| pci | smc9420 | SMSC LAN9420 |
| usb | smc95xx | SMSC95XX USB 2.0 Ethernet Devices |
| usb | sr9700 | SR9700 one chip USB 1.1 USB to Ethernet device from http://www.corechip-sz.com/ |
| usb | sr9800 | SR9800 USB 2.0 USB2NET Dev : http://www.corechip-sz.com |
| pci | starfire | Adaptec Starfire Ethernet |
| pci | stmmac-pci | STMMAC 10/100/1000 Ethernet PCI |
| pci | sundance | Sundance Alta Ethernet |

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Table 1.1: Available LAN adapter drivers in Linux 5.4 (continued)

| Bus | NET_DRV_x | Adapter family |
|--------|--------------|------------------------------------------------------------------|
| pci | sungem | Sun GEM Gbit ethernet |
| pci | sunhme | Sun HappyMealEthernet(HME) 10/100baseT ethernet |
| pci | tehuti | Tehuti Networks(R) Network |
| pci | tg3 | Broadcom Tigon3 ethernet |
| pci | tlan | TI ThunderLAN based ethernet PCI adapters |
| pci | tulip | Digital 21*4* Tulip ethernet |
| pci | typhoon | 3Com Typhoon Family (3C990, 3CR990, and variants) |
| pci | uli526x | ULi M5261/M5263 fast ethernet |
| pci | via-rhine | VIA Rhine PCI Fast Ethernet |
| pci | via-velocity | VIA Networking Velocity Family Gigabit Ethernet Adapter |
| pci | vxge | Neterion's X3100 Series 10GbE PCIe I/OVirtualized Server Adapter |
| isa | wd | Western Digital wd8003/wd8013 ; SMC Elite, Elite16 ethernet |
| pci | winbond-840 | Winbond W89c840 Ethernet |
| pcmcia | xirc2ps_cs | Xircom PCMCIA ethernet |
| pci | xircom_cb | Xircom Cardbus ethernet |
| pci | yellowfin | Packet Engines Yellowfin G-NIC Gigabit Ethernet |
| usb | zaurus | Sharp Zaurus PDA, and compatible products |

Table 1.2: Available WLAN adapter drivers in Linux 5.4

| Bus | NET_DRV_x | Adapter family |
|---------|--------------|--------------------------------------------------------------------|
| pci | adm8211 | IEEE 802.11b wireless cards based on ADMtek ADM8211 |
| isa,pci | airo | Cisco/Aironet 802.11 wireless ethernet cards |
| pcmcia | airo_cs | Cisco/Aironet 802.11 wireless ethernet cards |
| usb | ar5523 | Atheros AR5523 based USB dongles |
| usb | at76c50x-usb | Atmel at76x USB Wireless LAN |
| pci | ath10k_pci | Driver support for Qualcomm Atheros 802.11ac WLAN PCIe/AHB devices |
| pci | ath5k | 5xxx series of Atheros 802.11 wireless LAN cards |
| usb | ath6kl_usb | Driver support for Atheros AR600x USB devices |
| pci | ath9k | Atheros 802.11n wireless LAN cards |
| usb | ath9k_htc | Atheros driver 802.11n HTC based wireless devices |
| pcmcia | atmel_cs | Atmel at76c50x 802.11 wireless ethernet cards |
| pci | atmel_pci | Atmel at76c50x 802.11 wireless ethernet cards |
| pci | b43 | Broadcom B43 wireless |
| pci | b43legacy | Broadcom B43legacy wireless |

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Table 1.2: Available WLAN adapter drivers in Linux 5.4 (continued)

| Bus | NET_DRV_x | Adapter family |
|----------|-----------------|----------------------------------------------------------------------|
| pci, usb | brcmfmac | Broadcom 802.11 wireless LAN fullmac |
| pci | brcmsmac | Broadcom 802.11n wireless LAN |
| usb | carl9170 | Atheros AR9170 802.11n USB wireless |
| pcmcia | hostap_cs | Intersil Prism2-based 802.11 wireless LAN cards (PC Card) |
| pci | hostap_pci | Intersil Prism2.5-based 802.11 wireless LAN PCI cards |
| pci | hostap_plx | Intersil Prism2-based 802.11 wireless LAN cards (PLX) |
| pci | ipw2100 | Intel(R) PRO/Wireless 2100 Network |
| pci | ipw2200 | Intel(R) PRO/Wireless 2200/2915 Network |
| pci | iwl3945 | Intel(R) PRO/Wireless 3945ABG/BG Network Connection driver for Linux |
| pci | iwl4965 | Intel(R) Wireless WiFi 4965 driver for Linux |
| pci | iwlwifi | Intel(R) Wireless WiFi driver for Linux |
| pcmcia | libertas_cs | Marvell 83xx compact flash WLAN cards |
| usb | libertas_tf_usb | 8388 USB WLAN Thinfirm |
| virtual | mac80211_hwsim | Software simulator of 802.11 radio(s) for mac80211 |
| usb | mt7601u | |
| pci | mt7603e | |
| pci | mt7615e | |
| pci | mt76x0e | |
| usb | mt76x0u | |
| pci | mt76x2e | |
| usb | mt76x2u | |
| pci | mwifiex_pcie | Marvell WiFi-Ex PCI-Express Driver version 1.0 |
| usb | mwifiex_usb | Marvell WiFi-Ex USB Driver version1.0 |
| pci | mwl8k | Marvell TOPDOG(R) 802.11 Wireless Network |
| pcmcia | orinoco_cs | PCMCIA Lucent Orinoco, Prism II based and similar wireless cards |
| pci | orinoco_nortel | wireless LAN cards using the Nortel PCI bridge |
| pci | orinoco_plx | wireless LAN cards using the PLX9052 PCI bridge |
| pci | orinoco_tmd | wireless LAN cards using the TMD7160 PCI bridge |
| usb | orinoco_usb | Orinoco wireless LAN cards using EZUSB bridge |
| pci | p54pci | Prism54 PCI wireless |
| usb | p54usb | Prism54 USB wireless |
| pcmcia | ray_cs | Raylink/WebGear wireless LAN |
| usb | rndis_wlan | RNDIS based USB Wireless adapters |
| usb | rsi_usb | Common USB layer for RSI drivers |
| pci | rt2400pci | Ralink RT2400 PCI & PCMCIA Wireless LAN |
| pci | rt2500pci | Ralink RT2500 PCI & PCMCIA Wireless LAN |
| usb | rt2500usb | Ralink RT2500 USB Wireless LAN |
| pci | rt2800pci | Ralink RT2800 PCI & PCMCIA Wireless LAN |
| usb | rt2800usb | Ralink RT2800 USB Wireless LAN |

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Table 1.2: Available WLAN adapter drivers in Linux 5.4 (continued)

| Bus | NET_DRV_x | Adapter family |
|------------|------------------|----------------------------------------------------------|
| pci | rt61pci | Ralink RT61 PCI & PCMCIA Wireless LAN |
| usb | rt73usb | Ralink RT73 USB Wireless LAN |
| usb | rtl8187 | RTL8187/RTL8187B USB wireless |
| pci | rtl8188ee | Realtek 8188E 802.11n PCI wireless |
| pci | rtl818x_pci | RTL8180 / RTL8185 / RTL8187SE PCI wireless |
| pci | rtl8192ce | Realtek 8192C/8188C 802.11n PCI wireless |
| usb | rtl8192cu | Realtek 8192C/8188C 802.11n USB wireless |
| pci | rtl8192de | Realtek 8192DE 802.11n Dual Mac PCI wireless |
| pci | rtl8192ee | Realtek 8192EE 802.11n PCI wireless |
| pci | rtl8192se | Realtek 8192S/8191S 802.11n PCI wireless |
| pci | rtl8723ae | Realtek 8723E 802.11n PCI wireless |
| pci | rtl8723be | Realtek 8723BE 802.11n PCI wireless |
| pci | rtl8821ae | Realtek 8821ae 802.11ac PCI wireless |
| usb | rtl8xxxu | RTL8XXXu USB mac80211 Wireless LAN |
| usb | sierra_net | USB-to-WWAN Driver for Sierra Wireless modems |
| pcmcia | spectrum_cs | Symbol Spectrum24 Trilogy cards with firmware downloader |
| usb | usb8xxx | 8388 USB WLAN |
| pci | wil6210 | 60g WiFi WIL6210 card |
| pcmcia | wl3501_cs | Planet wl3501 wireless |
| usb | zd1201 | ZyDAS ZD1201 based USB Wireless adapters |
| usb | zd1211rw | USB driver for devices with the ZD1211 chip |

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