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[Linux Kernel 2.6.25 Released](#)

New technologies, new drivers and more!

Linus Torvalds [announced last evening](#) the immediate availability of the 2.6.25 Linux kernel. This new release contains new technologies, some updated drivers and miscellaneous fixes: *"It's been long promised, but there it is now. Special thanks to Ingo who found and fixed a nasty-looking regression that turned out to not be a regression at all, but an old bug that just had not been triggering as reliably before. [...] So it's mostly one-liners, with some updates to drivers (net and usb) and to networking that are a bit larger (although a number of the driver updates are things like just new IDs etc)." said Linus Torvalds.* **Let's have a look now at the most important technologies introduced in this release:** Memory Resource Controller; Real Time Group scheduling; RCU Preemption support; FIFO ticket spinlocks in x86; Better process memory usage measurement; timerfd() syscall; SMACK, Simplified Mandatory Access Control; Latencytop; BRK and PIE executable randomization; Controller area network (CAN) protocol support; ACPI thermal regulation/WMI; EXT4 update; MN10300/AM33 architecture support **Among the new drivers introduced in this release we can mention:** Graphic drivers; i915: -Add suspend/resume support. -Add support for E7221 chipset -Add chipset ID for Intel Integrated Graphics Device. ; Add initial ATI r500 DRM support; Suspend support for SiS AGP; Add initial rs690 support to drm; Add support for Sis 662/671; fbdev: add BF52x EZkit Display driver; Add S3c2412 support to S3c2410 fb driver SCSI drivers; Bidirectional command support; lpfc: Added support for ASICs that report temperature; megaraid_sas: add hibernation support; AHS Support; qla2xxx: Add Fibre Channel Event (FCE) tracing support; aacraid: Add Voodoo Lite class of cards, add optional MSI support; psi240i: Remove driver; seagate: Remove driver; mvscas: Add Marvell 6440 SAS/SATA driver, convert from rough draft to working driver; qla4xxx: add async scan support; ses: add new Enclosure ULD; enclosure: add support for enclosure services; mca_53c9x: remove driver; remove m68k NCR53C9x based drivers; dec_esp: Remove driver; NCR53C9x: remove driver Sound drivers; Scheduled OSS driver removal; HDA: Add Asus VX1 support, add support for RV610/RV630 HDMI audio; STAC92HD71 codec mixer; add support of HP Thin Client T5735; add support for RV6xx HDMI audio; initial support of the Mitac 8252D (based on ALC883); add ALC889/ALC267/ALC269 support; add support for VIA VT1708B HD audio codec; added more 92HD71 codecs; added STAC92HD73 support; add IEC958 digital out support for Lenovo Thinkpads T61/X61; device ID for Macbook sound card., 92HD71BXX Mono Mute Support., 92HD7XXX power management support; add the support of Dell OEM laptops with ALC268., new model for conexant 5045 codec to support benq r55e; add model for Acer Aspire 5315; add Conexant 5051 codec support; add model for Acer Aspire 5310., add model for HP DV9553EG laptop; ALSA HD Audio patch for Intel ICH10 DeviceID's; add Dell T3400 support; add support for Intel SCH; add missing model for HD-audio Cx5045 codec, add support for Samsung Q1 Ultra Vista edition.; ice1724: Add support of Onkyo SE-90PCI and SE-200PCI.; soc: ln2440sbc ac97 support.; Remove sequencer instrument layer.; Xilinx ML403 AC97 Controller Reference device driver.; ASoC TLV320AIC3X codec driver.; usb-caiaq: add support for Kore controller 2.; sis7019: Support the SiS 7019 Audio Accelerator.; USB audio suspend support.; Add Asus Xonar driver.; Add CMI8788 driver.; ASoC TLV support, S3c2412 IIS driver.; soc: Preliminary ac97 drivers for Toshiba e800 PDAs.; Add ASoC drivers for the Freescale MPC8610 SoC.; ICE1724: Added support for Audiotrak Prodigy 7.1 Hifi & HD2, Hercules Fortissimo IV. Hwmon drivers; Add support for Texas Instruments/Burr-Brown ADS7828; Add support for Winbond W83L786NG/NR; lm87: Add support for the Analog Devices ADM1024; w83781d: Drop W83627HF support; coretemp: Add Penryn CPU to coretemp; New driver for Analog Devices ADT7473 sensor chip Network drivers; Add driver for enc28j60 ethernet chip; b43legacy: LED triggers support, RF-kill support; e1000e: alternate MAC address support;

Add support for the RDC R6040 Fast Ethernet controller; E1000: Secondary unicast address support; Add bnx2x driver for BCM57710; cxgb3 - Add EEH support; pasemi_mac: Software-based LRO support, add support for changing mac address, add support for setting MTU; zd1211rw: port to mac80211; b43: Changes to enable BCM4311 rev 02 with wireless core revision 13; libertas: implement suspend and resume, add ethtool support for wake-on-lan configuration; ixgb: enable sun hardware support for broadcom phy; iwlwifi: proper monitor support; sky2: support for Yukon Supreme; BNX2: Support multiple MSIX IRQs; ucc_geth: add support for netpoll; IPoB: Add send gather support; IB/core: Add IP checksum offload support; DM9000: Add initial ethtool support; ehea: add kdump support; ipwireless: driver for PC Card 3G/UMTS modem; bas_gigaset: suspend support; usb_gigaset: suspend support USB drivers; Add support for 4348:5523 Winchiphead USB->RS 232 adapter; Sierra - Add support for Aircard 881U; Adding YC Cable USB Serial device to pl2303; sierra driver - add devices, add support for Onda H600/Zte MF330 datacard to USB Driver for Sierra Wireless; ftdi-sio: Patch to add vendor/device id for ATK_16IC CCD; pl2303: add support for RATOC REX-USB60F; Variant of the Dell Wireless 5520 driver; add iuu_phoenix driver; m66592-udc: Add support for SH7722 USBF; Add Printer Gadget Driver; Export suspend statistics; Add support for SuperH OHCI; usb: ohci-sm501 driver; Add support for Motorola ROKR Z6 cellphone in mass storage mode SATA/IDE drivers; Palmchip BK3710 IDE driver; pata_ninja32: Cardbus ATA initial support; pata_legacy: Merge winbond support; libata: implement drain buffers; cmd64x: Remove /proc/ide/cmd64x; cdrom: Add support for Sega Dreamcast GD-ROM; Add support for the RB500 PATA Compactflash; ahci: Add Marvell 6121 SATA support; sata_mv: Enable NCQ, support SoC controllers; pata_sl82c105: dual channel support; sata_svw: Add support for HT1100 SATA controller I2C drivers; i2c-i801: Implement I2C block read support; i2c-viapro: Add support for the VT8237S; tsl2550: Add power management added; Add support for the PCF8575 chip; The scheduled I2C RTC driver removal; Some overdue driver removal MTD drivers; Remove Photron PNC-2000 map driver; NAND-Add Blackfin BF52x support in bf5xx_nand driver-pasemi_nand driver-Marvell Orion device bus NAND controller -Freescale enhanced Local Bus Controller FCM NAND support; NOR-Add support for the SST 39VF1601 flash chip V4L/DVB; Add tuner-xc2028 driver; v4l2: Add support for bus-based I2C drivers; Add support for MT9V111 on sn9c102; Add support for the DViCO FusionHDTV Dual Digital 4; Add support for the DViCO FusionHDTV NANO2 w/ZL10353 and firmware; Add support for MT352-based DViCO FusionHDTV DVB-T NANO devices; ivtv: Add AVerMedia EZMaker PCI Deluxe support; cs5345: New i2c driver; Add support for the Xceive xc5000 silicon tuner; Add support for the Hauppauge HVR1500Q; cx23885: Add support for Hauppauge WinTV HVR-1500., enable EZ-QAM mode for Hauppauge WinTV HVR-1800; tda18271: Add support for NXP TDA18271HD/C2; Add Beholder TV 401/405/407/409/505/507/609/M6 support; cx25840: Add basic CX23885 AVCore support., add basic video support for the HVR1800; V4L: Add support for Syntek DC1125 webcams; New card supported (partially): Pinnacle 800i; zr364xx: add support for Creative DiVi CAM 516; Support for Twinhan Hybrid DTV-DVB 3056 PCI; saa7134: add support for the Medion / Creatix CTX948 card; Adds support for Genius TVGo A11MCE ACPI drivers; thinkpad-acpi: add X61t HKEY events; Create /sys/firmware/acpi/interrupts; Enable MWAIT for C1 idle; cpuidle: Add a poll_idle method, create processor.latency_factor tunable, default processor.latency_factor=2; asus_acpi: add support for F3sa; sony-laptop: add Type4 model; intel_menlo: introduce new platform specific driver For a full change-log with all the new features, drivers and improvements, please click [here](#). The Linux Kernel is the essential part of all Linux Distributions, responsible for resource allocation, low-level hardware interfaces, security, simple communications, and basic file system management. Linux is a clone of the Unix operating system, initially written from scratch by Linus Torvalds, assisted by a loosely-knit team of hackers across the Net. It aims to achieve POSIX and Single UNIX Specification compliance. You can download the full Linux kernel source archive now from [Softpedia](#).