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GNU GPL, Version 2

Module Name	Author	Copyright	Description
killall	Werner Almesberger and Linux community	1990s- present	A command-line utility to kill processes by name.
logrotate	Erik Troan and Linux community	1990s- present	A utility to manage log file rotation, compression, and deletion.
netbase	Debian/Ubuntu contributors	1990s- present	Provides basic TCP/IP networking configuration files (e.g., /etc/services, /etc/protocols).
optee- examples	OP-TEE community	2010s- present	Example applications for the OP-TEE framework, demonstrating secure execution environment capabilities.
usbinit	Embedded system or Linux distribution maintainers		A utility to initialize USB devices or configure USB-related settings during system boot.
usleep	GNU Project (coreutils)	1990s- present	A command-line utility to pause execution for a specified number of microseconds.
base-files	Debian/Ubuntu maintainers	1990s- present	Contains basic system configuration files and scripts for Linux distributions.
e2fsprogs- badblocks	Theodore Ts'o	1990s- present	A utility to search for bad blocks on a storage device.
e2fsprogs- e2fsck	Theodore Ts'o	1990s- present	A file system checker for the ext2/ext3/ext4 file systems.

e2fsprogs-		1990s-	
mke2fs	Theodore Ts'o	present	A utility to create ext2/ext3/ext4 file systems.
ifupdown	Debian/Ubuntu maintainers	1990s- present	A tool to configure network interfaces.
kernel-base	Linux kernel community	1991- present	The core Linux kernel package.
kernel- devicetree	Linux kernel community	2000s- present	Support for device tree blobs used in embedded systems.
kernel-image	Linux kernel community	1991– present	The Linux kernel image for booting the system.
kernel-image- fitimage	Linux kernel community	2000s- present	A flattened image tree (FIT) format for kernel images.
kernel-image- vmlinux	Linux kernel community	1991- present	The uncompressed Linux kernel image.
kernel-image- zimage	Linux kernel community	1991– present	A compressed Linux kernel image.
kernel-module- aes-arm- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	AES encryption module optimized for ARM processors.
kernel-module- aes-arm-bs- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	AES encryption module with bit-sliced implementation for ARM.
kernel-module- aes-arm-ce- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	AES encryption module using ARM cryptographic extensions.
kernel-module- af-alg- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the AF_ALG socket interface for cryptographic operations.
kernel-module- algif-aead- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for AEAD (Authenticated Encryption with Associated Data) support.
kernel-module- algif-hash- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for hash algorithm support via AF_ALG.
kernel-module- algif-rng-	Linux kernel community	2000s- present	A kernel module for random number generation via AF_ALG.

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kernel-module- algif-skcipher- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for symmetric key cipher support via AF_ALG.
kernel-module- am35x- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for AM35x SoC support.
kernel-module- arc4-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the ARC4 encryption algorithm.
kernel-module- authenc- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for combined authentication and encryption.
kernel-module- authencesn- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for authenticated encryption with sequence numbers.
kernel-module- brcmfmac- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Broadcom FullMAC wireless drivers.
kernel-module- brcmutil- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A utility module for Broadcom wireless drivers.
kernel-module- bsd-comp- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for BSD compression protocol.
kernel-module- cbc-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Cipher Block Chaining (CBC) mode encryption.
kernel-module- ccm-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Counter with CBC-MAC (CCM) mode encryption.
kernel-module- cdc-acm- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB CDC ACM (Abstract Control Model) devices.

kernel-module- cfg80211- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for wireless configuration API.
kernel-module- chacha20- generic- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the ChaCha20 stream cipher.
kernel-module- chacha20- neon-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for ChaCha20 optimized for ARM NEON.
kernel-module- cifs-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the Common Internet File System (CIFS).
kernel-module- cm36651- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the CM36651 proximity and light sensor.
kernel-module- cmac-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Cipher-based MAC (CMAC) algorithm.
kernel-module- cmdlinepart- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for command-line partition parsing.
kernel-module- crc-ccitt- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the CRC-CCITT algorithm.
kernel-module- crc-itu-t- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the CRC-ITU-T algorithm.
kernel-module- crc32-arm-ce- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for CRC32 optimized for ARM cryptographic extensions.
kernel-module- cryptd- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for cryptographic operations offloading.

kernel-module- crypto-engine- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for cryptographic engine support.
kernel-module- crypto-simd- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for SIMD-accelerated cryptographic operations.
kernel-module- crypto-user- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for user-space cryptographic API.
kernel-module- ctr-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Counter (CTR) mode encryption.
kernel-module- des-generic- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the DES encryption algorithm.
kernel-module- drbg-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Deterministic Random Bit Generator (DRBG).
kernel-module- dumb-vga-dac- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for simple VGA DAC support.
kernel-module- dwc3-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the DesignWare USB3 controller.
kernel-module- dwc3-of- simple- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for simple DesignWare USB3 controller support.
kernel-module- dwc3-omap- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for OMAP-specific DesignWare USB3 controller support.
kernel-module- ecb-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Electronic Codebook (ECB) mode encryption.
kernel-module- ecdh-generic-	Linux kernel community	2000s- present	A kernel module for Elliptic Curve Diffie-Hellman (ECDH) support.

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kernel-module- echainiv- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for encrypted chain IV generation.
kernel-module- ehci-hcd- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB 2.0 (EHCI) host controller support.
kernel-module- ehci-omap- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for OMAP-specific EHCI host controller support.
kernel-module- ehci-pci- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for PCI-based EHCI host controller support.
kernel-module- ehci-platform- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for platform-based EHCI host controller support.
kernel-module- extcon-palmas- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Palmas PMIC extcon support.
kernel-module- extcon-usb- gpio-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB extcon support using GPIO.
kernel-module- g-acm-ms- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget ACM (Abstract Control Model) and mass storage.
kernel-module- g-cdc- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget CDC (Communications Device Class).
kernel-module- g-dbgp- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget debug support.
kernel-module- g-ether-	Linux kernel community	2000s- present	A kernel module for USB gadget Ethernet support.

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kernel-module- g-ffs-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget FunctionFS support.
kernel-module- g-hid-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget HID (Human Interface Device) support.
kernel-module- g-mass- storage- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget mass storage support.
kernel-module- g-multi- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget multi-function support.
kernel-module- g-ncm- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget NCM (Network Control Model) support.
kernel-module- g-printer- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget printer support.
kernel-module- g-serial- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget serial support.
kernel-module- g-zero- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget zero support.
kernel-module- gadgetfs- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget filesystem support.
kernel-module- gcm-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Galois/Counter Mode (GCM) encryption.
kernel-module- gf128mul- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for GF(2^128) multiplication operations.

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kernel-module- ghash-arm-ce- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for GHASH optimized for ARM cryptographic extensions.
kernel-module- ghash-generic- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for generic GHASH implementation.
kernel-module- gpio-decoder- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for GPIO decoder support.
kernel-module- gpio-pisosr- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for GPIO parallel-in/serial-out shift register support.
kernel-module- hid-multitouch- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for HID multitouch device support.
kernel-module- hmac- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for Hash-based Message Authentication Code (HMAC).
kernel-module- i2c-arb-gpio- challenge- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for I2C arbitration using GPIO.
kernel-module- ina2xx- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for INA2xx current/power monitor support.
kernel-module- input-polldev- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for polling input devices.
kernel-module- isp1760- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for ISP1760 USB host controller support.
kernel-module- jitterentropy- rng-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for jitter-based entropy random number generation.

kernel-module- led-class-flash- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for LED flash class support.
kernel-module- libcomposite- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB gadget composite function support.
kernel-module- libcrc32c- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for CRC32C checksum support.
kernel-module- md4-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the MD4 hash algorithm.
kernel-module- md5-4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for the MD5 hash algorithm.
kernel-module- musb-am335x- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for AM335x MUSB (Multipoint USB) controller support.
kernel-module- musb-dsps- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for DSPS MUSB (Multipoint USB) controller support.
kernel-module- musb-hdrc- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for MUSB (Multipoint USB) host/device controller support.
kernel-module- n-gsm- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for N_GSM line discipline support.
kernel-module- ntc-thermistor- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for NTC thermistor support.
kernel-module- ohci-hcd- 4.14.336- g7885b2a7fd	Linux kernel community	2000s- present	A kernel module for USB 1.1 (OHCI) host controller support.

GPLv2+					
Module Name		Author		Copyright	Description
libidn2	Simon libidn2 t	Josefsson eam	and	2010s- present	A library for handling Internationalized Domain Names (IDNA 2008).

GPL-2.0-or-later & MPL-2.0					
Module Name	Author	Copyright	Description		
ca-certificates	Debian/Ubuntu 1990s- A package containing trusted CA certificates for maintainers present SSL/TLS verification.				

GPL-2.0-with-OpenSSL-exception						
Module Name Author Copyright Description						
cryptsetup	2000s- A utility for setting up encrypted disk volume					

GPL-2.0+ & LGPL-2.1+					
Module Name	Author	Copyright	Description		
kmod	2010s- A library and tools for managing kernel modul				

GPLv2 & LGPLv2 & BSD & MIT				
Module Name	Author	Copyright	Description	
e2fsprogs	Theodore Ts'o	1990s- present	Utilities for managing ext2/ext3/ext4 filesystems.	
libcomerr	Theodore Ts'o	1990s- present	A library for common error handling in e2fsprogs.	
libe2p	Theodore Ts'o	1990s- present	A library for ext2/ext3/ext4 filesystem parameter manipulation.	
libext2fs	Theodore Ts'o	1990s- present	A library for ext2/ext3/ext4 filesystem operations.	
libss	Theodore Ts'o	1990s- present	A library for command-line interface support in e2fsprogs.	

	GP	SPLv2.1	
Module Name	Author	Copyright	Description
libdevmapper	Linux community	2000s- present	A library for device-mapper support (used by LVM2).
libsystemd	Lennart Poettering and systemd contributors	2010s- present	A library for systemd functionality (e.g., logging, service management).
libudev	Lennart Poettering and systemd contributors	2010s- present	A library for udev device management.
lvm2	Linux community	2000s- present	Logical Volume Manager (LVM) tools for managing disk volumes.
lvm2-scripts	Linux community	2000s- present	Scripts for LVM2 (e.g., initramfs integration).
lvm2-udevrules	Linux community	2000s- present	Udev rules for LVM2 device management.
systemd	Lennart Poettering and systemd contributors	2010s- present	A system and service manager for Linux.
systemd-conf	Lennart Poettering and systemd contributors	2010s- present	Configuration files for systemd.
systemd- container	Lennart Poettering and systemd contributors	2010s- present	Tools for managing systemd containers (e.g., nspawn).
systemd-extra- utils	Lennart Poettering and systemd contributors	2010s- present	Additional utilities for systemd.
systemd- vconsole-setup	Lennart Poettering and systemd contributors	2010s- present	A utility for setting up virtual consoles in systemd.
udev	Lennart Poettering and systemd contributors	2000s- present	A device manager for the Linux kernel.
udev-hwdb	Lennart Poettering and systemd contributors	2000s- present	Hardware database for udev device management.

GPLv2+ & LGPLv2.1+				
Module Name	Author	Copyright	Description	
avahi-daemon	Lennart Poettering and Avahi contributors	2000s- present	A daemon for Zeroconf (mDNS/DNS-SD) service discovery.	
libavahi- common	Lennart Poettering and Avahi contributors	2000s- present	Common library for Avahi (used by Avahi components).	

libavahi-core	Lennart Poettering and Avahi contributors	Core library for Avahi (implements mDNS/DNS-SD functionality).
	Werner Koch and GnuPG contributors	A library for error handling in GnuPG and related cryptographic software.

	GPLv2.0			
Module Name	Author	Copyright	Description	
setserial	Linux community	1990s- present	A utility for configuring serial ports.	
apm	Linux community	1990s- present	Advanced Power Management (APM) utilities for power management.	
apmd	Linux community	1990s- present	A daemon for Advanced Power Management (APM) support.	
base-passwd	Debian/Ubuntu maintainers	1990s- present	A package containing basic user and group information.	
gmp	GNU Project	1990s- present	A library for arbitrary-precision arithmetic (GNU Multiple Precision Arithmetic Library).	
i2c-tools	Linux community	2000s- present	Tools for interacting with I2C devices.	
iproute2	Linux community	2000s- present	A suite of utilities for managing networking (replaces net-tools).	
kbd	Linux community	1990s- present	Utilities for managing keyboard settings and keymaps.	
kbd- consolefonts	Linux community	1990s- present	Console fonts for the kbd package.	
kbd-keymaps	Linux community	1990s- present	Keyboard keymaps for the kbd package.	
libapm	Linux community	1990s- present	A library for Advanced Power Management (APM) support.	
systemd- serialgetty	Lennart Poettering and systemd contributors	2010s- present	A systemd service for managing serial console logins.	
u-boot-fw-utils	U-Boot community	2000s- present	Utilities for interacting with U-Boot firmware.	
update- alternatives- opkg	OpenWrt community	2000s- present	A utility for managing symbolic links for alternative versions of programs (OpenWrt-specific).	
update-rc.d	Debian/Ubuntu maintainers	1990s- present	A utility for managing init script links in Debian- based systems.	

	Lasse Collin and XZ Utils	2000s-	A compression utility and library for the XZ format
XZ	contributors	present	(LZMA compression).

	GPLv2+ & LGPLv2+				
Module Name	Author	Copyright	Description		
procps	Utilities for monitoring and managing system processes (e.g., ps, top).				

	GPLv2+ & LGPLv2.1+ & BSD			
Module Name	Author	Copyright	Description	
util-linux	Linux community	1990s- present	A collection of essential utilities for system management and maintenance.	
util-linux-agetty	Linux community	1990s- present	A utility to manage terminal logins (alternative to getty).	
util-linux-cfdisk	Linux community	1990s- present	A curses-based disk partition table manipulator.	
util-linux-fdisk	Linux community	1990s- present	A command-line utility for disk partitioning.	
util-linux-fsck	Linux community	1990s- present	A utility to check and repair filesystems.	
util-linux-getopt	Linux community	1990s- present	A utility to parse command-line options.	
util-linux- hwclock	Linux community	1990s- present	A utility to query and set the hardware clock (RTC).	
util-linux-ionice	Linux community	1990s- present	A utility to set I/O scheduling class and priority for processes.	
util-linux- libblkid	Linux community	1990s- present	A library for block device identification and management.	
util-linux- libfdisk	Linux community	1990s- present	A library for disk partitioning and manipulation.	
util-linux- libmount	Linux community	1990s- present	A library for filesystem mounting and unmounting.	
util-linux- libsmartcols	Linux community	1990s- present	A library for formatting output in columns.	
util-linux-libuuid	Linux community	1990s- present	A library for generating and managing UUIDs.	

util-linux-		1990s-	
losetup	Linux community	present	A utility to set up and control loop devices.
		1990s-	
util-linux-lsblk	Linux community	present	A utility to list information about block devices.
		1990s-	
util-linux-mkfs	Linux community	present	A utility to create filesystems on devices.
		1990s-	
util-linux-mount	Linux community	present	A utility to mount filesystems.
util-linux-		1990s-	
mountpoint	Linux community	present	A utility to check if a directory is a mount point.
		1990s-	
•	Linux community	present	A utility to get and set process resource limits.
util-linux-	1	1990s-	A satisfies the second
readprofile	Linux community	present	A utility to read kernel profiling information.
	Lincon	1990s-	
util-linux-sfdisk	Linux community	present	A scriptable disk partition table manipulator.
util-linux-	Linux community	1990s-	A utility to allow root login in single user made
sulogin	Linux community	present	A utility to allow root login in single-user mode.
util-linux- swaponoff	Linux community	1990s- present	A utility to enable and disable swap devices.
•	Linux Community	<u>'</u>	•
util-linux- switch-root	Linux community	1990s- present	A utility to switch to a new root filesystem during boot.
	Linux Community	<u>'</u>	DOC.
util-linux- umount	Linux community	1990s- present	A utility to unmount filesystems.
umount	Linux Community	bieseiir	A dulity to drillloulit lilesystems.

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Version 2, June 1991

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Module Name	Author	Copyright	Description
		1980s-	A command-line utility to search text using
grep	GNU Project	present	patterns (regular expressions).

librelp	Rainer Gerhards and Adiscon GmbH	2000s- present	A reliable logging library for syslog over TCP.
tar	GNU Project	1980s- present	A utility to create and extract archive files (tape archives).
thin- provisioning- tools	Joe Thornber and Heinz Mauelshagen	2000s- present	Tools for managing thin-provisioned storage (e.g., LVM thin provisioning).
rsyslog	Rainer Gerhards and Adiscon GmbH	2000s- present	A high-performance syslog implementation for logging.
bash	Brian Fox and GNU Project	1980s- present	A Unix shell and command language interpreter.
coreutils	GNU Project	1980s- present	Core utilities for basic file, text, and shell operations (e.g., ls, cp, mv).
findutils	GNU Project	1980s- present	Utilities to search and locate files and directories (e.g., find, locate).
gzip	Jean-loup Gailly and Mark Adler	1990s- present	A file compression and decompression utility.
less	Mark Nudelman	1980s- present	A terminal pager program to view text files interactively.
parted	Andrew Clausen and GNU Project	1990s- present	A disk partitioning and partition resizing tool.
readline	Brian Fox and GNU Project	1980s- present	A library for command-line editing and history management.
sed	GNU Project	1980s- present	A stream editor for filtering and transforming text.

(GPLv3 & Elfutils-Exception)					
Module Name	Author	Copyright	Description		
libelf	libelf community	1990s- present	A library for reading and writing ELF (Executable and Linkable Format) files.		

GPLv3					
Module Name	Author	Copyright	Description		
grep	GNU Project	1980s- present	A command-line utility to search text using patterns (regular expressions).		

librelp	Rainer Gerhards and Adiscon GmbH	2000s- present	A reliable logging library for syslog over TCP.
tar	GNU Project	1980s- present	A utility to create and extract archive files (tape archives).
thin- provisioning- tools	Joe Thornber and Heinz Mauelshagen	2000s- present	Tools for managing thin-provisioned storage (e.g., LVM thin provisioning).

GPLv3 & LGPLv3 & Apache-2.0					
Module Name		Author		Copyright	Description
rsyslog	Rainer Adiscon	Gerhards GmbH	and	2000s- present	A high-performance syslog implementation for logging.

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Module Name	Author	Copyright	Description
libkmod	Lucas De Marchi and Linux community	2010s- present	A library to handle kernel module loading and management.
nglogc	Rainer Gerhards and Adiscon GmbH	2000s- present	A lightweight logging library for C applications.
libestr	Rainer Gerhards and Adiscon GmbH	2000s- present	A library for string handling and manipulation in C.
libnl	Thomas Graf and Linux community	2000s- present	A library for working with Netlink sockets (networking and kernel communication).
libnl-genl	Thomas Graf and Linux community	2000s- present	A library for Generic Netlink protocol support.
libnl-nf	Thomas Graf and Linux community	2000s- present	A library for Netfilter-related Netlink communication.
libnl-route	Thomas Graf and Linux community	2000s- present	A library for routing-related Netlink communication.
gnutls	Nikos Mavrogiannopoulos and GNU Project	2000s- present	A library for secure communication using TLS and SSL protocols.
libacl	Andreas Gruenbacher and Linux community	2000s- present	A library for managing Access Control Lists (ACLs) on filesystems.
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libdaemon	Lennart Poettering and Linux community	2000s- present	A library for writing lightweight daemons in C.
libgcrypt	Werner Koch and GNU Project	2000s- present	A cryptographic library providing encryption and hashing functions.
libmnl	Pablo Neira Ayuso and Linux community	2000s- present	A minimalistic library for Netlink communication.
libnss-mdns	Lennart Poettering and Linux community	2000s- present	A Name Service Switch (NSS) module for multicast DNS (mDNS) resolution.
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Moe Ghoul, President of Vice

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BSD-3-Clause

Module Name		Aut	hor	Copyright			Desci	ription		
hdparm	Mark comm		and	1990s- present	A pa	•	manage nd perform		hard	disk

Linux wireless community	2000s- present	A tool to configure and manage wireless devices using nl80211.
Andrew G. Morgan and Linux community	1990s- present	A library for working with POSIX capabilities (e.g., fine-grained permissions).
Rainer Gerhards and Adiscon GmbH	2000s- present	A library for logging and syslog functionality in C applications.
Philip Hazel and PCRE community	1990s- present	A library for Perl-compatible regular expressions.
Google and WebP community	2010s- present	A library for encoding and decoding WebP image formats.
OP-TEE community	2010s- present	A client-side component for interacting with the OP-TEE secure execution environment.
OP-TEE community	2010s- present	The OP-TEE operating system for secure execution environments.
Julianne Frances Haugh and Linux community	1980s- present	Utilities for managing user accounts and passwords (e.g., passwd, useradd).
Julianne Frances Haugh and Linux community	1980s- present	Core components of the shadow password suite for user account management.
Jouni Malinen and Linux community	2000s- present	A software implementation of the IEEE 802.11i protocol for Wi-Fi security.
	Andrew G. Morgan and Linux community Rainer Gerhards and Adiscon GmbH Philip Hazel and PCRE community Google and WebP community OP-TEE community Julianne Frances Haugh and Linux community Julianne Frances Haugh and Linux community	Linux wireless community present Andrew G. Morgan and 1990s— Linux community present Rainer Gerhards and 2000s— Adiscon GmbH 1990s— community present Google and WebP 2010s— community present 2010s— present OP-TEE community present Julianne Frances Haugh and Linux community present Julianne Frances Haugh 1980s— and Linux community present Julianne Frances Haugh 1980s— and Linux community present Julianne Frances Haugh 1980s— and Linux community present

wpa- supplicant-cli	Jouni Malinen and Linux community	2000s- present	A command-line interface for configuring and managing wpa_supplicant.
wpa- supplicant- passphrase	Jouni Malinen and Linux community	2000s- present	A utility to generate pre-shared keys (PSK) for Wi-Fi networks.
ppp	Linux community	1990s- present	A daemon and utilities for Point-to-Point Protocol (PPP) connections.
libjpeg-turbo	libjpeg-turbo contributors	2010s- present	A library for JPEG image compression and decompression with SIMD optimizations.

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Module Name	Author	Copyright	Description		
bsdiff	Colin Percival	2000s- present	A utility for generating and applying binary patches (used for delta updates).		

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ISC License

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Module Name	Author	Copyright	Description			
dhcp-client	Internet Systems Consortium (ISC)	1990s- present	A DHCP client for obtaining IP addresses and network configuration.			
dhcp-libs	Internet Systems Consortium (ISC)	1990s- present	Libraries for DHCP client and server functionality.			

		ISC & B	SD
Module Name	Author	Copyright	Description

	Internet	Systems	1990s-	
bind-libs	Consortium (ISC	()	present	Libraries for the BIND DNS server and tools.

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Module Name	Author	Copyright	Description
expat	James Clark	1998	expat is a fast XML parser library written in C. It is used to parse XML documents and extract relevant information efficiently.
external-linaro- toolchain	Linaro toolchain contributors	Varies	The Linaro toolchain provides a set of compiler tools and libraries optimized for ARM architecture development and cross-compilation.
json-c	Various contributors, maintained by json-c project team	2004-2014	json-c is a JSON implementation in C that provides functions for parsing, generating, and manipulating JSON data structures.

kernel-module- pvrsrvkm- 4.14.336- g7885b2a7fd	Imagination Technologies	Varies by version	The kernel module pvrsrvkm is part of the PowerVR graphics driver for Linux kernel versions 4.14.336 and higher. It enables hardware-accelerated graphics capabilities on supported devices.
libcurl	Daniel Stenberg and contributors	1996-2021	libcurl is a client-side URL transfer library that supports various protocols like HTTP, HTTPS, FTP, etc., making it easy to perform network operations in applications.
libdrm	Intel Open Source Technology Center	2003-2021	libdrm is a library that allows user-space applications to communicate with the Direct Rendering Manager (DRM) kernel subsystem for graphics and GPU acceleration.
libdrm-omap	Texas Instruments	Varies by version	libdrm-omap provides OMAP-specific extensions to the libdrm library, enabling user-space applications to interact with the OMAP-specific DRM kernel subsystem.
libfastjson	Various contributors	2013-2017	libfastjson is a high-performance JSON parser library in C, designed for speed and efficiency in parsing and processing JSON data.
libffi	The libffi project contributors	1996-2020	libffi is a library that provides a Foreign Function Interface (FFI) for calling functions written in one language from another, supporting dynamic calling of functions.
libgbm	Various contributors	Varies	libgbm (Generic Buffer Management) is a library that provides buffer management capabilities for graphics processing, facilitating buffer sharing between multiple graphics drivers and components.

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Apache-2.0

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Module Name	Author	Copyright	Description		
mbedtls	ARM and mbed TLS contributors	2010s- present	A lightweight cryptographic and SSL/TLS library for embedded systems.		

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AFL v. 2.0

AFL-2					
Module Name	Author	Copyright	Description		
dbus	Freedesktop.org	2000s- present	A message bus system for inter-process communication (IPC).		
dbus-lib	Freedesktop.org	2000s- present	Library components for D-Bus (used by applications to interact with the D-Bus system).		

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openssl

Module Name	Author	Copyright	Description
libcrypto	OpenSSL Project	1998– present	A library providing cryptographic functions for encryption, decryption, and hashing.
libssl	OpenSSL Project	1998– present	A library implementing SSL/TLS protocols for secure communication.
openssl	OpenSSL Project	1998– present	A toolkit for SSL/TLS and general-purpose cryptography.
openssl-bin	OpenSSL Project	1998– present	Command-line utilities for OpenSSL (e.g., encryption, certificate management).
openssl-conf	OpenSSL Project	1998– present	Configuration files for OpenSSL (e.g., default settings, policies).

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Bzip2 and libbzip2						
Module Name	Author	Copyright	Description			
bzip2	Julian Seward	1990s- present	A compression utility and library for high-quality data compression.			
libbz2	Julian Seward	1990s- present	A library for bzip2 compression and decompression.			

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