



## LegalInformation:STM32MPU distribution for Android licenses - v1.0.0



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A quality version of this page, approved on 2 April 2020, was based off this revision.

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SLA0048 Rev4/March 2018

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## 1.2 gcnano userland multi binary

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BROADCOM BCM43XX

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## License

## 2 Partitions

### 2.1 FSBL partition

Name	Version	License
tf-a-stm32mp1	2.0	BSD-3-Clause

### 2.2 SSBL partition

Name	Version	License
u-boot-stm32mp1	2018.1 1	GPLv2+

### 2.3 TEE partitions

#### 2.3.1 Header partition

Name	Version	License
optee_os-stm32mp1	3.3.0	BSD-2-Clause & BSD-3-Clause

#### 2.3.2 Pager partition

Name	Version	License
optee_os-stm32mp	3.3.0	BSD-2-Clause & BSD-3-Clause

#### 2.3.3 Pageable partition

Name	Version	License
optee_os-stm32mp	3.3.0	BSD-2-Clause & BSD-3-Clause

### 2.4 Splash partition

Name	Version	License
stmicroelectronics.bmp	NA	No license to ST trademarks



## License

### 2.5 Boot partition

Name	Version	License
linux-stm32mp1	4.19	GPLv2

### 2.6 DTB partition

Name	Version	License
linux-stm32mp1	4.19	GPLv2

### 2.7 Vendor partition

All modules follows the official AOSP licence rule<sup>[1]</sup>

Module Name	License	Description
/etc/init/*.rc	Apache-2.0	All start service script
/lib/modules/*.ko	GPL-2.0	All kernels modules
/app/*	Apache-2.0	STM32MP1 Application examples
/firmware/copro/*	Apache-2.0 & MIT & BSD-3-Clause	STM32MP1 Firmware examples for CM4
android.hardware.audio.effect@4.0-impl	Apache-2.0	lib for audio effect HAL
android.hardware.audio@2.0-service	Apache-2.0	Audio HAL service binary
android.hardware.audio@2.0-service.rc	Apache-2.0	The audio HAL start service script
android.hardware.audio@4.0-impl	Apache-2.0	lib for audio HAL
android.hardware.bluetooth@1.0-service.btlinux	Apache-2.0	Bluetooth HAL service
android.hardware.bluetooth@1.0-service.btlinux.rc	Apache-2.0	The Bluetooth HAL start service script
android.hardware.boot@1.0-impl	Apache-2.0	lib for boot HAL
android.hardware.boot@1.0-service	Apache-2.0	Boot HAL service binary
android.hardware.boot@1.0-service.rc	Apache-2.0	The boot HAL start service script



License		
Module Name	License	Description
android.hardware.camera.provider@2.4-service.stm32mp1	Apache-2.0	Camera HAL service
android.hardware.camera.provider@2.4-service.stm32mp1.rc	Apache-2.0	The camera HAL start service script
android.hardware.cas@1.0-service	Apache-2.0	Cas HAL service binary
android.hardware.cas@1.0-service.rc	Apache-2.0	The cas HAL start service script
android.hardware.configstore@1.1-service	Apache-2.0	Configstore HAL service binary
android.hardware.configstore@1.1-service.rc	Apache-2.0	The configstore HAL start service script
android.hardware.copro@1.0-service.stm32mp1	Apache-2.0	Copro HAL service
android.hardware.copro@1.0-service.stm32mp1.rc	Apache-2.0	The copro HAL start service script
android.hardware.dumpstate@1.0-service.<board>	Apache-2.0	Dumpstate HAL service
android.hardware.dumpstate@1.0-service.<board>.rc	Apache-2.0	The dumpstate HAL start service script
android.hardware.graphics allocator@2.0-impl	Apache-2.0	lib for graphics allocator HAL
android.hardware.graphics allocator@2.0-service	Apache-2.0	Graphics allocator HAL service binary
android.hardware.graphics allocator@2.0-service.rc	Apache-2.0	The graphics allocator HAL start service script
android.hardware.graphics composer@2.1-impl	Apache-2.0	lib for graphics composer HAL
android.hardware.graphics composer@2.1-service	Apache-2.0	Graphics composer HAL service binary
android.hardware.graphics composer@2.1-service.rc	Apache-2.0	The graphics composer HAL start service script
android.hardware.graphics mapper@2.0-impl	Apache-2.0	lib for graphics mapper HAL
android.hardware.health@2.0-service.stm32mp1	Apache-2.0	Health HAL service



License		
Module Name	License	Description
android.hardware.health@2.0-service.stm32mp1.rc	Apache-2.0	The health HAL start service script
android.hardware.keymaster@3.0-impl	Apache-2.0	lib for keymaster HAL
android.hardware.keymaster@3.0-service	Apache-2.0	Keymaster HAL service binary
android.hardware.keymaster@3.0-service.rc	Apache-2.0	The keymaster HAL start service script
android.hardware.light@2.0-impl	Apache-2.0	lib for light HAL
android.hardware.light@2.0-service	Apache-2.0	Light HAL service binary
android.hardware.light@2.0-service.rc	Apache-2.0	The light HAL start service script
android.hardware.media.omx@1.0-service	Apache-2.0	Media OMX HAL service binary
android.hardware.media.omx@1.0-service.rc	Apache-2.0	The media omx HAL start service script
android.hardware.memtrack@1.0-impl	Apache-2.0	lib for memtrack HAL
android.hardware.memtrack@1.0-service	Apache-2.0	Memtrack HAL service binary
android.hardware.memtrack@1.0-service.rc	Apache-2.0	The memtrack HAL start service script
android.hardware.oemlock@1.0-service.stm32mp1	Apache-2.0	OemLock HAL service
android.hardware.oemlock@1.0-service.stm32mp1.rc	Apache-2.0	The oemlock HAL start service script
android.hardware.power@1.0-impl	Apache-2.0	lib for power HAL
android.hardware.power@1.0-service	Apache-2.0	Power HAL service binary
android.hardware.power@1.0-service.rc	Apache-2.0	The power HAL start service script
android.hardware.soundtrigger@2.1-impl	Apache-2.0	lib for soundtrigger HAL
android.hardware.thermal@1.1-service.stm32mp1	Apache-2.0	Thermal HAL service



## License

Module Name	License	Description
android.hardware.thermal@1.1-service.stm32mp1.rc	Apache-2.0	The thermal HAL start service script
android.hardware.usb@1.1-service.stm32mp1	Apache-2.0	USB HAL service
android.hardware.usb@1.1-service.stm32mp1.rc	Apache-2.0	The usb HAL start service script
android.hardware.wifi@1.0-service	Apache-2.0	Wifi HAL service binary
android.hardware.wifi@1.0-service.rc	Apache-2.0	The wifi HAL start service script
audio.primary.default	Apache-2.0	Audio library
audio.primary.stm	Apache-2.0	Audio library
audio.r_submix.default	Apache-2.0	Audio library
audio.usb.default	Apache-2.0	Audio library
awk	BSD-3-Clause	Linux parsing tool
bootctrl.stm	Apache-2.0	Bootctrl library
DisplayCutoutEmulationCornerOverlay.apk	Apache-2.0	Launcher layout
DisplayCutoutEmulationDoubleOverlay.apk	Apache-2.0	Launcher layout
DisplayCutoutEmulationTallOverlay.apk	Apache-2.0	Launcher layout
fstab.stm	Apache-2.0	Mounting point
gralloc.default	Apache-2.0	Gralloc library
gralloc.stm	Proprietary (gcnano-userland)	Gralloc library
grep	BSD-2-Clause	Linux parsing tool
hostapd	BSD-3-Clause	Hostapd dameon
hostapd_cli	BSD-3-Clause	Hostapd client dameon
htc_9271.fw	Proprietary (firmware-atheros)	WiFi firmware
hwcomposer.drm_stm32mp1	Apache-2.0	Hw composer library
initdriver	Apache-2.0	Initialise driver
initprop	Apache-2.0	Initialise propertie
libalsautils	Apache-2.0	Alsa library
libaudiohalcm	Apache-2.0	Audio library





License		
Module Name	License	Description
libaudiopreprocessing	Apache-2.0	Audio library
libavservices_minijail_vendor	Apache-2.0	Av services library
libbundlewrapper	Apache-2.0	Bundle library
libclearkeycasplugin	Apache-2.0	Cas library
libdownmix	Apache-2.0	Down mix library
libdrm	MIT	Drm library
libdrm_vivante	Proprietary (gcnano-userland)	Drm library
libdrmclearkeyplugin	Apache-2.0	Drm library
libdynproc	Apache-2.0	Alsa library
libeffectproxy	Apache-2.0	Audio library
libeffects	Apache-2.0	Audio library
libeffectsconfig	Apache-2.0	Audio library
libEGL_VIVANTE	Proprietary (gcnano-userland)	Lib Vivante
libGAL	Proprietary (gcnano-userland)	GAL library
libGLESv1_CM_VIVANTE	Proprietary (gcnano-userland)	Lib Vivante
libGLESv2_VIVANTE	Proprietary (gcnano-userland)	Lib Vivante
libGLSLC	Proprietary (gcnano-userland)	GLSC library
libhwc2on1adapter	Apache-2.0	Library
libhwc2onfbadapter	Apache-2.0	Library
libhwminijail	Apache-2.0	Library
libkeymaster3device	Apache-2.0	Library
libkeystore-engine-wifi-hidl	Apache-2.0	Keystore library
libkeystore-wifi-hidl	Apache-2.0	Keystore library
libldnhncr	Apache-2.0	Library
liblightsconfig	Apache-2.0	Light library
libnbaio_mono	Apache-2.0	Library
libreference-ril	Apache-2.0	Library
libreverbwrapper	Apache-2.0	Library
libril	Apache-2.0	Library
librilutils	Apache-2.0	Library
libteec	BSD-2-Clause	Tee library



## License

Module Name	License	Description
libthermalconfig	Apache-2.0	Thermal library
libtinycompress	BSD-3-Clause	Tiny library
libvisualizer	Apache-2.0	Visualizer library
libVSC	Proprietary (gcnano-userland)	VSC library
libwebrtc_audio_preprocessing	BSD-3-Clause	Audio library
libwifi-hal	Apache-2.0	Wifi library
libwpa_client	BSD-3-Clause	WPA library
lights.stm	Apache-2.0	Light library
local_time.default	Apache-2.0	Time library
logwrapper	Apache-2.0	Wrap logs to logcat
memtrack.stm	Apache-2.0	Memtrack library
mkshrc	MirOS	Bashrc
optee_test/ta/*	BSD-2-Clause	Trusted application
power.default	Apache-2.0	Power library
rtl8723aufw_A.bin	Proprietary (firmware-cypress & firmware-broadcom)	Wi-Fi with BT firmware (rev A)
rtl8723aufw_B.bin	Proprietary (firmware-cypress & firmware-broadcom)	Wi-Fi with BT firmware (rev B)
rtl8723aufw_B_NoBT.bin	Proprietary (firmware-cypress & firmware-broadcom)	Wi-Fi only firmware (rev B)
sh	MirOS	Shell
SysuiDarkThemeOverlay.apk	Apache-2.0	Launcher layout
tee-suppllicant	BSD-2-Clause	OP-TEE suppllicant
toolbox	Apache-2.0	Various Linux tools
toybox_vendor	0BSD	Various Linux tools
ueventd.rc	Apache-2.0	Uevent start service script
vibrator.default	Apache-2.0	Vibrator library
vndservice	Apache-2.0	service dedicated for vendor application
vndservicemanager	Apache-2.0	servicemanager dedicated for vendor application
wpa_cli	BSD-3-Clause	Manage Wifi connection



## License

Module Name	License	Description
wpa_supplicant	BSD-3-Clause	Manage Wifi connection
xtest	GPL-2.0	OP-TEE binary

## 2.8 System partition

All modules follows the official AOSP licence rule<sup>[2]</sup>

Module Name	License	Description
BasicDreams	Apache-2.0	Application
BookmarkProvider	Apache-2.0	Application
Browser2	Apache-2.0	Application
BuiltInPrintService	Apache-2.0	Application
CaptivePortalLogin	Apache-2.0	Application
CertInstaller	Apache-2.0	Application
CompanionDeviceManager	Apache-2.0	Application
CtsShimPrebuilt	Apache-2.0	Application
EasterEgg	Apache-2.0	Application
ExtShared	Apache-2.0	Application
Gallery2	Apache-2.0	Application
HTMLViewer	Apache-2.0	Application
KeyChain	Apache-2.0	Application
LatinIME	Apache-2.0	Application
LiveWallpapersPicker	Apache-2.0	Application
Music	Apache-2.0	Application
PacProcessor	Apache-2.0	Application
PhotoTable	Apache-2.0	Application
PrintRecommendationService	Apache-2.0	Application
PrintSpooler	Apache-2.0	Application
QuickSearchBox	Apache-2.0	Application
SecureElement	Apache-2.0	Application
SimAppDialog	Apache-2.0	Application
Traceur	Apache-2.0	Application
WallpaperBackup	Apache-2.0	Application



License		
Module Name	License	Description
WAPPushManager	Apache-2.0	Application
webview	Apache-2.0	Application
BackupRestoreConfirmation	Apache-2.0	Application
BlockedNumberProvider	Apache-2.0	Application
CalendarProvider	Apache-2.0	Application
ContactsProvider	Apache-2.0	Application
CoproService	Apache-2.0	Application
CtsShimPrivPrebuilt	Apache-2.0	Application
DefaultContainerService	Apache-2.0	Application
DocumentsUI	Apache-2.0	Application
DownloadProvider	Apache-2.0	Application
DownloadProviderUi	Apache-2.0	Application
ExternalStorageProvider	Apache-2.0	Application
ExtServices	Apache-2.0	Application
FusedLocation	Apache-2.0	Application
InputDevices	Apache-2.0	Application
Launcher3Go	Apache-2.0	Application
ManagedProvisioning	Apache-2.0	Application
MediaProvider	Apache-2.0	Application
MmsService	Apache-2.0	Application
MtpDocumentsProvider	Apache-2.0	Application
OneTimeInitializer	Apache-2.0	Application
PackageInstaller	Apache-2.0	Application
Provision	Apache-2.0	Application
ProxyHandler	Apache-2.0	Application
Settings	Apache-2.0	Application
SettingsIntelligence	Apache-2.0	Application
SettingsProvider	Apache-2.0	Application
SharedStorageBackup	Apache-2.0	Application
Shell	Apache-2.0	Application
StatementService	Apache-2.0	Application



## License

Module Name	License	Description
StorageManager	Apache-2.0	Application
SystemUI	Apache-2.0	Application
Telecom	Apache-2.0	Application
TelephonyProvider	Apache-2.0	Application
TeleService	Apache-2.0	Application
UserDictionaryProvider	Apache-2.0	Application
VpnDialogs	Apache-2.0	Application
WallpaperCropper	Apache-2.0	Application
adbd	Apache-2.0	Binary
am	Apache-2.0	Binary
applypatch	Apache-2.0	Binary
appops	Apache-2.0	Binary
app_process32	Apache-2.0	Binary
appwidget	Apache-2.0	Binary
atrace	Apache-2.0	Binary
audioserver	Apache-2.0	Binary
awk	BSD-3-Clause	Binary
bcc	Apache-2.0	Binary
blank_screen	Apache-2.0	Binary
blkid	GPL-2.0	Binary
bmgr	Apache-2.0	Binary
bootanimation	Apache-2.0	Binary
bootstat	Apache-2.0	Binary
bpfloader	Apache-2.0	Binary
bu	Apache-2.0	Binary
bugreport	Apache-2.0	Binary
bugreportz	Apache-2.0	Binary
bzip2	BSD-3-Clause	Binary
cameraserver	Apache-2.0	Binary
clatd	Apache-2.0	Binary
cmd	Apache-2.0	Binary



## License

Module Name	License	Description
content	Apache-2.0	Binary
crash_dump32	Apache-2.0	Binary
dalvikvm32	Apache-2.0	Binary
debuggerd	Apache-2.0	Binary
dex2oat	Apache-2.0	Binary
dexdiag	Apache-2.0	Binary
dexdump	Apache-2.0	Binary
dexlist	Apache-2.0	Binary
dexoptanalyzer	Apache-2.0	Binary
dnsmasq	GPL-2.0	Binary
dpm	Apache-2.0	Binary
drmserver	Apache-2.0	Binary
dumpstate	Apache-2.0	Binary
dumpsys	Apache-2.0	Binary
e2fsck	GPL-2.0	Binary
e2fsdroid	GPL-2.0	Binary
fsck.f2fs	GPL-2.0	Binary
fsck_msdos	BSD-3-Clause	Binary
gatekeeperd	Apache-2.0	Binary
grep	BSD-2-Clause	Binary
healthd	Apache-2.0	Binary
hid	Apache-2.0	Binary
android.hidl.allocator@1.0-service	Apache-2.0	Binary
hw servicemanager	Apache-2.0	Binary
idmap	Apache-2.0	Binary
ime	Apache-2.0	Binary
incident	Apache-2.0	Binary
incidentd	Apache-2.0	Binary
incident_helper	Apache-2.0	Binary
input	Apache-2.0	Binary
installd	Apache-2.0	Binary



License		
Module Name	License	Description
ip	GPL-2.0	Binary
ip6tables	GPL-2.0	Binary
iptables	GPL-2.0	Binary
keystore	Apache-2.0	Binary
keystore_cli_v2	Apache-2.0	Binary
ld.mc	BSD-3-Clause	Binary
linker	BSD-3-Clause	Binary
lmkd	Apache-2.0	Binary
locksettings	Apache-2.0	Binary
logcat	Apache-2.0	Binary
logd	Apache-2.0	Binary
logwrapper	Apache-2.0	Binary
lshal	Apache-2.0	Binary
make_f2fs	Apache-2.0	Binary
mdnsd	Apache-2.0	Binary
media	Apache-2.0	Binary
mediadrmsserver	Apache-2.0	Binary
mediaextractor	Apache-2.0	Binary
mediametrics	Apache-2.0	Binary
mediaserver	Apache-2.0	Binary
mke2fs	GPL-2.0	Binary
monkey	Apache-2.0	Binary
mtpd	Apache-2.0	Binary
ndc	Apache-2.0	Binary
netd	Apache-2.0	Binary
netutils-wrapper-1.0	Apache-2.0	Binary
oatdump	Apache-2.0	Binary
patchoat	Apache-2.0	Binary
perfetto	Apache-2.0	Binary
ping	BSD-3-Clause	Binary
ping6	BSD-3-Clause	Binary



## License

Module Name	License	Description
pm	Apache-2.0	Binary
pppd	BSD-3-Clause	Binary
profman	Apache-2.0	Binary
racoon	BSD-3-Clause	Binary
reboot	BSD-3-Clause	Binary
recovery-persist	Apache-2.0	Binary
recovery-refresh	Apache-2.0	Binary
requestsync	Apache-2.0	Binary
resize2fs	GPL-2.0	Binary
run-as	Apache-2.0	Binary
schedtest	Apache-2.0	Binary
screencap	Apache-2.0	Binary
screenrecord	Apache-2.0	Binary
sdcard	Apache-2.0	Binary
secdiscard	Apache-2.0	Binary
secilc	BSD-3-Clause	Binary
sensorservice	Apache-2.0	Binary
service	Apache-2.0	Binary
servicemanager	Apache-2.0	Binary
settings	Apache-2.0	Binary
sgdisk	GPL-2.0	Binary
sh	BSD-3-Clause	Binary
sload_f2fs	Apache-2.0	Binary
sm	Apache-2.0	Binary
stagefright	Apache-2.0	Binary
statsd	Apache-2.0	Binary
storaged	Apache-2.0	Binary
surfaceflinger	Apache-2.0	Binary
svc	Apache-2.0	Binary
tc	GPL-2.0	Binary
telecom	Apache-2.0	Binary





License		
Module Name	License	Description
thermalserviced	Apache-2.0	Binary
tinycap	BSD-3-Clause	Binary
tinymix	BSD-3-Clause	Binary
tinypcminfo	BSD-3-Clause	Binary
tinypplay	BSD-3-Clause	Binary
tombstoned	Apache-2.0	Binary
toolbox	BSD-2-Clause	Binary
toybox	0BSD	Binary
traced	Apache-2.0	Binary
traced_probes	Apache-2.0	Binary
tune2fs	GPL-2.0	Binary
tzdatacheck	Apache-2.0	Binary
uiautomator	Apache-2.0	Binary
uncrypt	Apache-2.0	Binary
update_engine	Apache-2.0	Binary
update_verifier	Apache-2.0	Binary
usbd	Apache-2.0	Binary
vdc	Apache-2.0	Binary
vold	Apache-2.0	Binary
vold_prepare_subdirs	Apache-2.0	Binary
vr	Apache-2.0	Binary
wait_for_keymaster	Apache-2.0	Binary
wificond	Apache-2.0	Binary
wm	Apache-2.0	Binary
libart	Apache-2.0	Library
android.frameworks.display.service@1.0	Apache-2.0	Library
android.frameworks.schedulerservice@1.0	Apache-2.0	Library
android.frameworks.sensorservice@1.0	Apache-2.0	Library
android.frameworks.vr.composer@1.0	Apache-2.0	Library
android.hardware.audio@2.0	Apache-2.0	Library
android.hardware.audio@4.0	Apache-2.0	Library



## License

Module Name	License	Description
android.hardware.audio.common@2.0	Apache-2.0	Library
android.hardware.audio.common@2.0-util	Apache-2.0	Library
android.hardware.audio.common@4.0	Apache-2.0	Library
android.hardware.audio.common@4.0-util	Apache-2.0	Library
android.hardware.audio.common-util	Apache-2.0	Library
android.hardware.audio.effect@2.0	Apache-2.0	Library
android.hardware.audio.effect@4.0	Apache-2.0	Library
android.hardware.boot@1.0	Apache-2.0	Library
android.hardware.broadcastradio@1.0	Apache-2.0	Library
android.hardware.broadcastradio@1.1	Apache-2.0	Library
android.hardware.camera.common@1.0	Apache-2.0	Library
android.hardware.camera.device@1.0	Apache-2.0	Library
android.hardware.camera.device@3.2	Apache-2.0	Library
android.hardware.camera.device@3.3	Apache-2.0	Library
android.hardware.camera.device@3.4	Apache-2.0	Library
android.hardware.camera.provider@2.4	Apache-2.0	Library
android.hardware.cas@1.0	Apache-2.0	Library
android.hardware.cas.native@1.0	Apache-2.0	Library
android.hardware.configstore@1.0	Apache-2.0	Library
android.hardware.configstore@1.1	Apache-2.0	Library
android.hardware.configstore-utils	Apache-2.0	Library
android.hardware.confirmationui@1.0	Apache-2.0	Library
android.hardware.contexthub@1.0	Apache-2.0	Library
android.hardware.drm@1.0	Apache-2.0	Library
android.hardware.drm@1.1	Apache-2.0	Library
android.hardware.dumpstate@1.0	Apache-2.0	Library
android.hardware.gatekeeper@1.0	Apache-2.0	Library
android.hardware.gnss@1.0	Apache-2.0	Library
android.hardware.gnss@1.1	Apache-2.0	Library
android.hardware.graphics allocator@2.0	Apache-2.0	Library
android.hardware.graphics.bufferqueue@1.		



License		
Module Name	License	Description
0	Apache-2.0	Library
android.hardware.graphics.common@1.0	Apache-2.0	Library
android.hardware.graphics.common@1.1	Apache-2.0	Library
android.hardware.graphics.composer@2.1	Apache-2.0	Library
android.hardware.graphics.composer@2.2	Apache-2.0	Library
android.hardware.graphics.mapper@2.0	Apache-2.0	Library
android.hardware.graphics.mapper@2.1	Apache-2.0	Library
android.hardware.health@1.0	Apache-2.0	Library
android.hardware.health@2.0	Apache-2.0	Library
android.hardware.ir@1.0	Apache-2.0	Library
android.hardware.keymaster@3.0	Apache-2.0	Library
android.hardware.keymaster@4.0	Apache-2.0	Library
android.hardware.light@2.0	Apache-2.0	Library
android.hardware.media@1.0	Apache-2.0	Library
android.hardware.media.omx@1.0	Apache-2.0	Library
android.hardware.memtrack@1.0	Apache-2.0	Library
android.hardware.neuralnetworks@1.0	Apache-2.0	Library
android.hardware.neuralnetworks@1.1	Apache-2.0	Library
android.hardware.power@1.0	Apache-2.0	Library
android.hardware.power@1.1	Apache-2.0	Library
android.hardware.power@1.2	Apache-2.0	Library
android.hardware.power@1.3	Apache-2.0	Library
android.hardware.renderscript@1.0	Apache-2.0	Library
android.hardware.sensors@1.0	Apache-2.0	Library
android.hardware.undtrigger@2.0	Apache-2.0	Library
android.hardware.undtrigger@2.1	Apache-2.0	Library
android.hardware.tetheroffload.config@1.0	Apache-2.0	Library
android.hardware.thermal@1.0	Apache-2.0	Library
android.hardware.thermal@1.1	Apache-2.0	Library
android.hardware.tv.cec@1.0	Apache-2.0	Library
android.hardware.tv.input@1.0	Apache-2.0	Library



## License

Module Name	License	Description
android.hardware.usb.gadget@1.0	Apache-2.0	Library
android.hardware.vibrator@1.0	Apache-2.0	Library
android.hardware.vibrator@1.1	Apache-2.0	Library
android.hardware.vibrator@1.2	Apache-2.0	Library
android.hardware.vr@1.0	Apache-2.0	Library
android.hardware.wifi.offload@1.0	Apache-2.0	Library
android.hidl allocator@1.0	Apache-2.0	Library
android.hidl.memory@1.0	Apache-2.0	Library
android.hidl.memory.token@1.0	Apache-2.0	Library
android.hidl.token@1.0	Apache-2.0	Library
android.hidl.token@1.0-utils	Apache-2.0	Library
android.system.net.netd@1.0	Apache-2.0	Library
android.system.net.netd@1.1	Apache-2.0	Library
android.system.wifi.keystore@1.0	Apache-2.0	Library
libfdwlockengine	Apache-2.0	Library
libaacextractor	Apache-2.0	Library
libamrextractor	Apache-2.0	Library
libflacextractor	Apache-2.0	Library
libmidiextractor	Apache-2.0	Library
libmkvextractor	Apache-2.0	Library
libmp3extractor	Apache-2.0	Library
libmp4extractor	Apache-2.0	Library
libmpeg2extractor	Apache-2.0	Library
liboggextractor	Apache-2.0	Library
libwavextractor	Apache-2.0	Library
android.hidl.memory@1.0-impl	Apache-2.0	Library
audio.a2dp.default	Apache-2.0	Library
Id-android	BSD-2-Clause	Library
libaaudioservice	Apache-2.0	Library
libaaudio	Apache-2.0	Library
libadbconnection	Apache-2.0	Library



## License

Module Name	License	Description
libandroidfw	Apache-2.0	Library
libandroid_net	Apache-2.0	Library
libandroid_runtime	Apache-2.0	Library
libandroid_servers	Apache-2.0	Library
libandroid	Apache-2.0	Library
libappfuse	Apache-2.0	Library
libart-compiler	Apache-2.0	Library
libart-dexlayout	Apache-2.0	Library
libart-disassembler	Apache-2.0	Library
libart	Apache-2.0	Library
libasyncio	Apache-2.0	Library
libaudioclient	Apache-2.0	Library
libaudioeffect_jni	Apache-2.0	Library
libaudioflinger	Apache-2.0	Library
libaudiohal@2.0	Apache-2.0	Library
libaudiohal@4.0	Apache-2.0	Library
libaudiohal_deathhandler	Apache-2.0	Library
libaudiohal	Apache-2.0	Library
libaudiomanager	Apache-2.0	Library
libaudiopolicyenginedefault	Apache-2.0	Library
libaudiopolicymanagerdefault	Apache-2.0	Library
libaudiopolicymanager	Apache-2.0	Library
libaudiopolicyservice	Apache-2.0	Library
libaudioprocessing	Apache-2.0	Library
libaudio-resampler	Apache-2.0	Library
libaudiospdif	Apache-2.0	Library
libaudioutils	Apache-2.0	Library
libavservices_minijail	Apache-2.0	Library
libbacktrace	Apache-2.0	Library
libbase	Apache-2.0	Library
libbcc	Apache-2.0	Library



## License

Module Name	License	Description
libbcinfo	Apache-2.0	Library
libbinder	Apache-2.0	Library
libbinderwrapper	Apache-2.0	Library
libblas	Apache-2.0	Library
libbootanimation	Apache-2.0	Library
libbpf	Apache-2.0	Library
libbrillo-binder	Apache-2.0	Library
libbrillo	Apache-2.0	Library
libbrillo-stream	Apache-2.0	Library
libbrotli	MIT	Library
libbufferhubqueue	Apache-2.0	Library
libbz	BSD-3-Clause	Library
libcamera2ndk	Apache-2.0	Library
libcamera_client	Apache-2.0	Library
libcamera_metadata	Apache-2.0	Library
libcameraservice	Apache-2.0	Library
libcap	BSD-3-Clause	Library
libchrome	BSD-3-Clause	Library
libclang_rt.asan-arm-android	NCSA	Library
libclcore.bc	Apache-2.0	Library
libclcore_debug.bc	Apache-2.0	Library
libclcore_debug_g.bc	Apache-2.0	Library
libclcore_g.bc	Apache-2.0	Library
libclcore_neon.bc	Apache-2.0	Library
libc_malloc_debug	BSD-2-Clause	Library
libc_malloc_hooks	BSD-2-Clause	Library
libcompiler_rt	MIT	Library
libcrypto	BSD-3-Clause	Library
libcrypto_utils	BSD-3-Clause	Library
libc	BSD-3-Clause	Library
libc++	BSD-3-Clause	Library



## License

Module Name	License	Description
libcups	GPL-2.0 & LGPL-2.0	Library
libcurl	MIT	Library
libcutils	Apache-2.0	Library
libdebuggerd_client	Apache-2.0	Library
libdefcontainer_jni	Apache-2.0	Library
libdexfile	Apache-2.0	Library
libdiskconfig	Apache-2.0	Library
libdisplayhidl	Apache-2.0	Library
libdl	BSD-3-Clause	Library
libdng_sdk	BSD-3-Clause	Library
libdrmframework_jni	Apache-2.0	Library
libdrmframework	Apache-2.0	Library
libdrm	BSD-3-Clause	Library
libdt_fd_forward	GPL-2.0-with-classpath-exception	Library
libdt_socket	GPL-2.0-with-classpath-exception	Library
libdumpstateaidl	Apache-2.0	Library
libdumpstateutil	Apache-2.0	Library
libdumputils	Apache-2.0	Library
libeffectsconfig	Apache-2.0	Library
libEGL	Apache-2.0	Library
libETC1	Apache-2.0	Library
libevent	BSD-3-Clause	Library
libexif	LGPL-2.1	Library
libexpat	BSD-3-Clause	Library
libext2_blkid	GPL-2.0	Library
libext2_com_err	MIT	Library
libext2_e2p	GPL-2.0	Library
libext2fs	GPL-2.0	Library
libext2_misc	GPL-2.0	Library
libext2_quota	GPL-2.0	Library



## License

Module Name	License	Description
libext2_uuid	GPL-2.0	Library
libext4_utils	Apache-2.0	Library
libf2fs_sparseblock	Apache-2.0	Library
libFFTEm	Apache-2.0	Library
libfilterfw	Apache-2.0	Library
libfilterpack_imageproc	Apache-2.0	Library
libfmq	Apache-2.0	Library
libft2	BSD-3-Clause	Library
libgatekeeper	Apache-2.0	Library
libGLESV1_CM	Apache-2.0	Library
libGLESV2	Apache-2.0	Library
libGLESV3	Apache-2.0	Library
libgraphicsenv	Apache-2.0	Library
libgtest_prod	BSD-3-Clause	Library
libgui	Apache-2.0	Library
libhardware_legacy	Apache-2.0	Library
libhardware	Apache-2.0	Library
libharfbuzz_ng	MIT	Library
libheif	Apache-2.0	Library
libhidcommand_jni	Apache-2.0	Library
libhidlallocatorutils	Apache-2.0	Library
libhidlbase	Apache-2.0	Library
libhidl-gen-hash	Apache-2.0	Library
libhidl-gen-utils	Apache-2.0	Library
libhidlmemory	Apache-2.0	Library
libhidltransport	Apache-2.0	Library
libhwbinder	Apache-2.0	Library
libhwui	Apache-2.0	Library
libicu18n	BSD-3-Clause	Library
libicuuc	BSD-3-Clause	Library
libimg_utils	Apache-2.0	Library





## License

Module Name	License	Description
libincident	Apache-2.0	Library
libinputflinger	Apache-2.0	Library
libinputservice	Apache-2.0	Library
libinput	Apache-2.0	Library
libion	Apache-2.0	Library
libiprouteutil	GPL-2.0	Library
libjavacore	Apache-2.0	Library
libjavacrypto	Apache-2.0	Library
libjdwj	GPL-2.0-with-classpath-exception	Library
libjni_eglfnce	Apache-2.0	Library
libjni_filtershow_filters	Apache-2.0	Library
libjnigraphics	Apache-2.0	Library
libjni_jpegstream	Apache-2.0	Library
libjni_latinime	Apache-2.0	Library
libjni_pacprocessor	Apache-2.0	Library
libjpeg	BSD-3-Clause	Library
libkeymaster4support	Apache-2.0	Library
libkeymaster_messages	Apache-2.0	Library
libkeymaster_portable	Apache-2.0	Library
libkeystore_aidl	Apache-2.0	Library
libkeystore_binder	Apache-2.0	Library
libkeystore-engine	Apache-2.0	Library
libkeystore_parcelables	Apache-2.0	Library
libkeyutils	BSD-2-Clause	Library
liblayers_proto	Apache-2.0	Library
libLLVM_android	BSD-3-Clause	Library
liblogcat	Apache-2.0	Library
liblog	Apache-2.0	Library
liblogwrap	Apache-2.0	Library
liblshal	Apache-2.0	Library



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Module Name	License	Description
liblz4	BSD-2-Clause	Library
liblzma	Apache-2.0	Library
libmdnssd	Apache-2.0	Library
libmedia2_jni	Apache-2.0	Library
libmediadrmmetrics_lite	Apache-2.0	Library
libmediadrmm	Apache-2.0	Library
libmediaextractorservice	Apache-2.0	Library
libmediaextractor	Apache-2.0	Library
libmedia_helper	Apache-2.0	Library
libmedia_jni	Apache-2.0	Library
libmedialogservice	Apache-2.0	Library
libmediametrics	Apache-2.0	Library
libmediandk	Apache-2.0	Library
libmedia_omx	Apache-2.0	Library
libmediaplayerservice	Apache-2.0	Library
libmedia	Apache-2.0	Library
libmediautils	Apache-2.0	Library
libmemtrack	Apache-2.0	Library
libmemunreachable	Apache-2.0	Library
libmetricslogger	Apache-2.0	Library
libmidi	Apache-2.0	Library
libminijail	BSD-3-Clause	Library
libminikin	Apache-2.0	Library
libm	BSD-3-Clause	Library
libmtp	LGPL-2.0	Library
libnativebridge	Apache-2.0	Library
libnativehelper	Apache-2.0	Library
libnativeloader	Apache-2.0	Library
libnativewindow	Apache-2.0	Library
libnbaio	Apache-2.0	Library
libnblog	Apache-2.0	Library



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Module Name	License	Description
libnetdaidl	Apache-2.0	Library
libnetd_client	Apache-2.0	Library
libnetdutils	Apache-2.0	Library
libnetlink	GPL-2.0	Library
libnetutils	Apache-2.0	Library
libneuralnetworks	Apache-2.0	Library
libnpt	GPL-2.0	Library
libopenjdkjvm	GPL-2.0-with-classpath-exception	Library
libopenjdkjvmti	GPL-2.0-with-classpath-exception	Library
libopenjdk	GPL-2.0	Library
libOpenMAXAL	Apache-2.0	Library
libOpenSLES	Apache-2.0	Library
libopus	Apache-2.0	Library
libpackagelistparser	Apache-2.0	Library
libpac	BSD-3-Clause	Library
libpagemap	Apache-2.0	Library
libpcap	BSD-3-Clause	Library
libpcre2	BSD-3-Clause	Library
libpcrecpp	BSD-3-Clause	Library
libpdfium	BSD-3-Clause	Library
libpdx_default_transport	Apache-2.0	Library
libpiex	Apache-2.0	Library
libpixelflinger	Apache-2.0	Library
libpng	BSD-3-Clause	Library
libpowermanager	Apache-2.0	Library
libpower	Apache-2.0	Library
libprintspooler_jni	Apache-2.0	Library
libprocessgroup	Apache-2.0	Library
libprocinfo	Apache-2.0	Library
libprotobuf-cpp-full	Apache-2.0	Library



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Module Name	License	Description
libprotobuf-cpp-lite	Apache-2.0	Library
libprotoutil	Apache-2.0	Library
libqtaguid	Apache-2.0	Library
libradio_metadata	Apache-2.0	Library
libresourcemanager-service	Apache-2.0	Library
libRSCacheDir	Apache-2.0	Library
libRScpp	Apache-2.0	Library
libRSCpuRef	Apache-2.0	Library
libRSDriver	Apache-2.0	Library
libRS_internal	Apache-2.0	Library
librs_jni	Apache-2.0	Library
libRS	Apache-2.0	Library
librtsp_jni	Apache-2.0	Library
libschedulerservicehidl	Apache-2.0	Library
libselinux	GPL-2.0	Library
libsensorservicehidl	Apache-2.0	Library
libsensorservice	Apache-2.0	Library
libsensor	Apache-2.0	Library
libsepol	LGPL-2.1	Library
libservices	Apache-2.0	Library
libserviceutility	Apache-2.0	Library
libsigchain	Apache-2.0	Library
libsoftkeymasterdevice	Apache-2.0	Library
libsonic	Apache-2.0	Library
libsonivox	Apache-2.0	Library
libsoundpool	Apache-2.0	Library
libsoundtriggerservice	Apache-2.0	Library
libsoundtrigger	Apache-2.0	Library
libsparse	Apache-2.0	Library
libspeexresampler	BSD-3-Clause	Library
libsqlite	Apache-2.0	Library



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Module Name	License	Description
libssl	BSD-3-Clause	Library
libstagefright_amrnb_common	Apache-2.0	Library
libstagefright_bufferqueue_helper	Apache-2.0	Library
libstagefright_codecbase	Apache-2.0	Library
libstagefright_enc_common	Apache-2.0	Library
libstagefright_flacdec	Apache-2.0	Library
libstagefright_foundation	Apache-2.0	Library
libstagefright_httplive	Apache-2.0	Library
libstagefright_http_support	Apache-2.0	Library
libstagefright_omx	Apache-2.0	Library
libstagefright_omx_utils	Apache-2.0	Library
libstagefright	Apache-2.0	Library
libstagefright_soft_aacdec	Apache-2.0	Library
libstagefright_soft_aacenc	Apache-2.0	Library
libstagefright_soft_amrdec	Apache-2.0	Library
libstagefright_soft_amrnbenc	Apache-2.0	Library
libstagefright_soft_amrwbenc	Apache-2.0	Library
libstagefright_soft_avcdec	Apache-2.0	Library
libstagefright_soft_avcenc	Apache-2.0	Library
libstagefright_soft_flacdec	Apache-2.0	Library
libstagefright_soft_flacenc	Apache-2.0	Library
libstagefright_soft_g711dec	Apache-2.0	Library
libstagefright_soft_gsmdec	Apache-2.0	Library
libstagefright_soft_hevcdec	Apache-2.0	Library
libstagefright_soft_mp3dec	Apache-2.0	Library
libstagefright_soft_mpeg2dec	Apache-2.0	Library
libstagefright_soft_mpeg4dec	Apache-2.0	Library
libstagefright_soft_mpeg4enc	Apache-2.0	Library
libstagefright_soft_opusdec	Apache-2.0	Library
libstagefright_soft_rawdec	Apache-2.0	Library
libstagefright_soft_vorbisdec	Apache-2.0	Library



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Module Name	License	Description
libstagefright_soft_vpxdec	Apache-2.0	Library
libstagefright_soft_vpxenc	Apache-2.0	Library
libstagefright_xmlparser	Apache-2.0	Library
libstatslog	Apache-2.0	Library
libstdc++	BSD-3-Clause	Library
libsurfaceflinger_ddmconnection	Apache-2.0	Library
libsurfaceflinger	Apache-2.0	Library
libsuspend	Apache-2.0	Library
libsync	Apache-2.0	Library
libsysutils	Apache-2.0	Library
libtextclassifier_hash	Apache-2.0	Library
libtextclassifier	Apache-2.0	Library
libtflite	Apache-2.0	Library
libthermalcallback	Apache-2.0	Library
libthermalservice	Apache-2.0	Library
libtimestats_proto	Apache-2.0	Library
libtinyalsa	BSD-3-Clause	Library
libtinyxml2	BSD-3-Clause	Library
libtombstoned_client	Apache-2.0	Library
libtraced_shared	Apache-2.0	Library
libui	Apache-2.0	Library
libunwind	MIT	Library
libunwindstack	Apache-2.0	Library
libusbhost	Apache-2.0	Library
libutilscallstack	Apache-2.0	Library
libutils	Apache-2.0	Library
libvintf	Apache-2.0	Library
libvixl-arm64	BSD-3-Clause	Library
libvixl-arm	BSD-3-Clause	Library
libvndksupport	Apache-2.0	Library
libvorbisidec	BSD-3-Clause	Library



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Module Name	License	Description
libvulkan	Apache-2.0	Library
libwebviewchromium_loader	Apache-2.0	Library
libwebviewchromium_plat_support	Apache-2.0	Library
libwfds	Apache-2.0	Library
libwifikeystorehal	Apache-2.0	Library
libwifi-service	Apache-2.0	Library
libwifi-system-iface	Apache-2.0	Library
libwifi-system	Apache-2.0	Library
libwilhelm	Apache-2.0	Library
libxml2	MIT	Library
libziparchive	Apache-2.0	Library
libz	Zlib	Library

## 2.9 Misc partition

Name	Version	License
bootloader message	1	Apache-2.0



License

3 Licenses

Official licenses	Link to text of license
Apache-2.0	[Apache-2.0]
0BSD	[Zero-Clause BSD]
BSD-2-Clause	[BSD-2-Clause]
BSD-3-Clause	[BSD-3-Clause]
GPL-2.0	[GPL-2.0]
GPL-2.0-with-classpath-exception	[GPL-2.0-with-classpath-exception]
LGPL-2.0	[LGPL-2.0]
LGPL-2.1	[LGPL-2.1]
MirOS	[MirOS]
MIT	[MIT]
NCSA	[NCSA]
Proprietary (gcnano-userland)	<a href="#">gcnano-userland-license</a>
Proprietary (firmware-atheros)	<a href="#">firmware-atheros-license</a>
Proprietary (firmware-broadcom)	<a href="#">firmware-broadcom-bcm43xx-license</a>
Proprietary (firmware-cypress)	<a href="#">firmware-cypress-bcm4343-license</a>
Zlib	[Zlib]

License name	Authorized variations names			
Apache-2.0	<table border="1"> <tr><td>Apachev2</td></tr> <tr><td>Apache-2</td></tr> </table>	Apachev2	Apache-2	
Apachev2				
Apache-2				
GPL-2.0	<table border="1"> <tr><td>GPL-2</td></tr> <tr><td>GPLv2</td></tr> <tr><td>GPLv2.0</td></tr> </table>	GPL-2	GPLv2	GPLv2.0
GPL-2				
GPLv2				
GPLv2.0				
	<table border="1"> <tr><td>LGPLv2</td></tr> <tr><td>LGPLv2.0</td></tr> </table>	LGPLv2	LGPLv2.0	
LGPLv2				
LGPLv2.0				





**License**

License name	Authorized variations names		
LGPL-2.0			
MIT	<table border="1"> <tr> <td>MIT-X</td> </tr> <tr> <td>MIT-style</td> </tr> </table>	MIT-X	MIT-style
MIT-X			
MIT-style			

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- <https://source.android.com/setup/start/licenses>

First Stage Boot Loader

Second Stage Boot Loader

Trusted Execution Environment

Non Applicable

Device Tree Binary (or Blob)

Android Open Source Project

Hardware Abstraction Layer

technology for wireless local area networking with devices based on the IEEE 802.11 standards

BlueTooth

Open Portable Trusted Execution Environment