

Open Source Software List

This document describes the license information for OSS components in the following table.

Software name:	CMSIS
Brief:	The CMSIS is a set of tools, APIs, frameworks, and work flows that help to simplify software re-u
path:	mcu/driver/CMSIS/Source
Category:	Open source software(OSS)
Software maker:	ARM
OSS download link:	https://github.com/ARM-software/CMSIS_5
License:	Apache 2.0
Evidence of license agreement:	https://arm-software.github.io/CMSIS_5/General/html/index.html#License
Version:	5.7.0
Software name:	FatFs
Brief:	FatFs is a generic FAT file system module for small embedded systems.
Path:	mcu/middleware/third_party/fatfs
Category:	Open source software(OSS)
Software maker:	ChaN
OSS download link:	http://elm-chan.org/fsw/ff/00index_e.html
License:	BSD-style license
Evidence of license agreement:	http://elm-chan.org/fsw/ff/doc/appnote.html#license
Version:	R0.15a
Software name:	IMU Driver(STMicroelectronics)
Brief:	STMicroelectronics IMU(Inertial Measurement Units) driver
Path:	mcu/middleware/third_party/imu_stm
Category:	Open source software(OSS)
Software maker:	STMicroelectronics
OSS download link:	https://github.com/STMicroelectronics/STMems_Standard_C_drivers
License:	BSD-3-Clause
Evidence of license agreement:	https://github.com/STMicroelectronics/STMems_Standard_C_drivers/blob/master/LICENSE
Version:	V1.0.0
Software name:	LZMA Decoder
Brief:	LZMA provides a high compression ratio and fast decompression, so it is very suitable for embedde
Path:	mcu/middleware/third_party/lzma_decoder
Category:	Open source software(OSS)
Software maker:	Igor Pavlov
OSS download link:	https://www.7-zip.org/sdk.html
License:	public domain
Evidence of license agreement:	https://www.7-zip.org/sdk.html
Version:	23.01
Software name:	Mbed TLS
Brief:	An open source, portable, easy to use, readable and flexible TLS library, and reference implement
Path:	mcu/middleware/third_party/mbedtls
Category:	Open source software(OSS)
Software maker:	ARM
OSS download link:	https://github.com/Mbed-TLS/mbedtls
License:	Apache License 2.0
Evidence of license agreement:	https://github.com/Mbed-TLS/mbedtls/blob/development/LICENSE . Starting from version 3.5.1, Mbed 1
Version:	3.6.5
Software name:	Micro-ecc
Brief:	A small and fast ECDH and ECDSA implementation for 8-bit, 32-bit, and 64-bit processors.

Path:	mcu/middleware/third_party/micro_ecc
Category:	Open source software(OSS)
Software maker:	kmackay
OSS download link:	https://github.com/kmackay/micro-ecc
License:	BSD 2-Clause 'Simplified'
Evidence of license agreement:	https://github.com/kmackay/micro-ecc/blob/master/LICENSE.txt
Version:	1.1
Software name:	nanopb
Brief:	A plain-C implementation of Google's Protocol Buffers data format.
Path:	mcu/middleware/third_party/nanopb
Category:	Open source software(OSS)
Software maker:	Petteri Aimonen <jpa at nanopb.mail.kapsi.fi>
OSS download link:	https://jpa.kapsi.fi/nanopb/download/
License:	zlib License
Evidence of license agreement:	https://jpa.kapsi.fi/nanopb/
Version:	0.4.9.1
Software name:	FreeRTOS
Brief:	FreeRTOS is a market-leading real-time operating system (RTOS) for microcontrollers and small mic
Path:	mcu/kernel/rtos/(IC_CONFIG)/FreeRTOS, dsp/kernel/rtos/(IC_CONFIG)/FreeRTOS
Category:	Open source software(OSS)
Software maker:	Amazon
OSS download link:	https://github.com/FreeRTOS/FreeRTOS/releases
License:	MIT
Evidence of license agreement:	https://www.freertos.org/a00114.html
Version:	For Cadence FreeRTOS porting layer, please refer to license disclaimer in dsp/kernel/service/cont 11.1.0
Software name:	OPUS Codec
Brief:	The audio codec library to support OGG file and opus file.
Path:	mcu/prebuilt/middleware/third_party/audio, dsp/prebuilt/middleware/third_party/dspalg/celt_decode
Category:	Open source software(OSS)
Software maker:	Xiph.Org Foundation
OSS download link:	http://opus-codec.org/
License:	The 3-Clause BSD License
Evidence of license agreement:	https://opus-codec.org/license/
Version:	1.1.4
Software name:	pre_libloader
Brief:	The pre_libloader is used to dynamic load for Position Independent Library.
path:	dsp/kernel/pre_libloader
Category:	Open source software(OSS)
Software maker:	Cadence
OSS download link:	NA(From the cadence tool-chain folder)
License:	MIT
Evidence of license agreement:	dsp/kernel/pre_libloader/inc/license.txt
Version:	RI-2023.11
Software name:	LZ4 - Extremely fast compression
Brief:	LZ4 is lossless compression algorithm,providing compression speed > 500 MB/s per core,
Path:	\${CORE}/middleware/third_party/lz4
Category:	Open source software(OSS)
Software maker:	Yann Collet
OSS download link:	https://github.com/lz4/lz4
License:	BSD 2-Clause
Evidence of license agreement:	Only use lz4 C source/header files on lz4/lib folder. https://github.com/lz4/lz4/blob/dev/LICENSE
Version:	1.9.2
Software name:	mSBC encoder
Brief:	The source code is from Android source tree located in a Git repository hosted by Google.

Path:	dsp/prebuilt/middleware/airoha/dspalg/msbc_decoder
Category:	Open source software(OSS)
Software maker:	Broadcom Corporation
OSS download link:	https://android.googlesource.com/platform/system/bt/+/refs/tags/android-wear-5.1.0_r1/embdrv/sbc/
License:	Apache License 2.0
Evidence of license agreement:	https://android.googlesource.com/platform/system/bt/+/refs/tags/android-wear-5.1.0_r1/embdrv/sbc/
Version:	5.1.0
