

License information of OSS in the wireless insidephone

Technics EAH-AZ80, EAH-AZ60M2, EAH-AZ40M2

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1. FreeRTOS(10.1.1)

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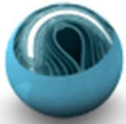
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FreeRTOS kernel license comparison

	FreeRTOS kernel MIT license	OpenRTOS Commercial license
Is it free?	Yes	No
Can I use it in a commercial application?	Yes	Yes
Is it royalty free?	Yes	Yes
Is a warranty provided?	No	Yes
Can I receive professional technical support on a commercial basis?	Yes	Yes
Is legal protection provided?	No	Yes, IP infringement protection is provided
Do I have to open source my application code that makes use of the FreeRTOS services?	No	No
Do I have to open source my changes to the FreeRTOS kernel?	No	No
Do I have to document that my product uses FreeRTOS?	No	No
Do I have to offer to provide the FreeRTOS code to users of my application?	No	No

2. LZMA decoder(21.04)

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About FatFs License

FatFs has being developped as a personal project of the author, ChaN. It is free from the code anyone else wrote at current release. Following code block shows a copy of the FatFs license document that included in the source files.

```
/*-----*/
/ FatFs - Generic FAT Filesystem Module  Rx.xx /
/-----*/
/
/ Copyright (C) 20xx, ChaN, all right reserved.
/
/ FatFs module is an open source software. Redistribution and use of FatFs in
/ source and binary forms, with or without modification, are permitted provided
/ that the following condition is met:
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/ 1. Redistributions of source code must retain the above copyright notice,
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/-----*/
```

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5. micro-ecc(Commit ID: 601bd11)

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Version 2.0, January 2004

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7. utf8_check()

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8. Opus codec(1.1.4)

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Opus has a freely available specification, a BSD-licensed, high-quality reference encoder and decoder, and protective, royalty-free licenses for the required patents. The copyright and patent licenses for Opus are

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In brief:

(see [below](#) for details)

- ✓ You can encode or decode Opus-compatible streams for any purpose at no cost.
- ✓ You can integrate the reference Opus encoder and decoder in any application, program or product, even commercially, at no cost.
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Specification

The specification is freely available as part of IETF RFC 6716. The RFC includes the reference implementation, which is available under the three-clause BSD license (see below).

Implementation

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Tools

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Xiph.Org Patents/Applications covered:

- US 61/284,154
- US 61/450,041
- US 61/450,053
- US 61/450,060
- and any other applicable
-

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- US 61/406,106
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- US 7,353,168
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Microsoft Patents/Applications covered:

- US-2008-0201137-A1
- US-2010-0174535-A1
- US-2010-0174534-A1
- US-2010-0174547-A1
- US-2010-0174532-A1
- US-2010-0174537-A1
- US-2010-0174542-A1
- US-2010-0174531-A1
- US-2010-0174541-A1
- US-2010-0174538-A1
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11-7-2012

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6.2. Code Implementation. "Code Implementation" means making, using, selling, offering for sale, importing or distributing 1) the Reference Implementation, or 2) an implementation that, in the case of an encoder, produces a bitstream that can be decoded by a Specification Implementation solely to the extent it produces such a bitstream, and, in the case of decoder, is a Specification Implementation, where that Specification Implementation may also infringe Necessary Reference Implementation Claims.

6.3. Control. "Control" means direct or indirect control of more than 50% of the voting power to elect directors of that corporation, or for any other entity, the power to direct management of such entity.

6.4. I, Me, or My. "I," "me," or "my" refers to the party making this declaration, and any entity that I Control.

6.5. Necessary Claims. "Necessary Claims" means Necessary Decoder Claims and Necessary Reference Implementation Claims.

6.6. Necessary Decoder Claims. "Necessary Decoder Claims" are those patent claims that a party owns or controls, including those claims acquired after the date of this declaration, that are necessarily infringed by an implementation of the required portions (including the required elements of optional portions) of the decoder Specification that are described in detail and not merely referenced in the Specification.

6.7. Necessary Reference Implementation Claims. "Necessary Reference Implementation Claims" are those patent claims that a party owns or controls, including those claims acquired after the date of this declaration, that are necessarily infringed by the Reference Implementation. Necessary Reference Implementation Claims do not include claims that would be infringed only as a consequence of further modification of the Reference Implementation.

6.8. Reference Implementation. "Reference Implementation" means the implementation of the Opus encoder and/or decoder code extracted from Appendix A of the Specification.

6.9. Specification. "Specification" means IETF RFC 6716 dated September 2012.

6.10. Specification Implementation. "Specification Implementation" means making, using, selling, offering for sale, importing or distributing any conformant implementation of the decoder set forth in the Specification 1) only to the extent it implements the Specification and 2) so long as all required portions of the Specification are implemented. Specification Implementation also includes any implementation of a decoder included in subsequent versions of RFC 6716 1) only to the extent that it implements the decoder Specification, and 2) so long as all required portions of the decoder Specification are implemented.

6.11. You or Your. "You," "you," or "your" means any person or entity who exercises patent rights granted under this Agreement, and any person or entity you Control.

This license is also filed on the [IETF site](#). The [old license](#) is still available.

Other disclosures

While Xiph.Org, Broadcom, and Microsoft filed IPR disclosures giving royalty-free licenses to their patents used in Opus, four companies that did not directly participate in the development of Opus, Qualcomm, Huawei, France Telecom, and Ericsson, filed IPR disclosures with potentially royalty-bearing terms. The IETF allows anyone (and their dog) to file an IPR disclosures if they think that their patents "covers or may ultimately cover" a standard. In fact, for any organization who can be said to have contributed in any (very loosely defined) way, these IPR statements are not just allowed, but required. It is thus safer for organisations to declare as much as they can. As an example, one can find similar non-free Qualcomm IPR statements on both [SIP](#) and [SDP](#). To our advantage, however, the IETF IPR disclosure policies require companies to provide the actual patent numbers. This allows anyone to verify these claims for themselves, which is definitely a good thing.

When it comes to patents, it is difficult to say much without making lawyers nervous. However, we can say something quite direct: **external counsel Dergosits & Noah has advised us that Opus can be implemented**

without the need to license the patents disclosed by Qualcomm, Huawei, France Telecom, or Ericsson. We can also say that Mozilla is confident enough in Opus to ship it to hundreds of millions of Firefox users. Similarly, Cisco and Google are also supporting Opus in some products. More companies are expected to do the same soon.

Mozilla invested significant legal resources into avoiding known patent thickets when designing Opus. Whenever possible, we used processes and methods that have been long known in the field and which are considered patent-free. In addition, we filed numerous patent applications on the new things we invented to help defend the Opus community. As a result, Opus is available on a royalty-free basis and can be deployed by anyone, including other open-source projects. Everyone knows this is an incredibly challenging legal environment to operate in, but we think we've succeeded.

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9. nanopb(0.4.5)

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10. mSBC Encoder(5.1.0)

```
/*
 *
 * Bluetooth low-complexity, subband codec (SBC) encoder
 *
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```


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