



## OPEN SOURCE SOFTWARE NOTICE

Please note we provide an open source software notice along with this product and/or this product firmware (in the following just “this product”). The open source software licenses are granted by the respective right holders. And the open source licenses prevail all other license information with regard to the respective open source software contained in the product, including but not limited to End User Software Licensing Agreement. This notice is provided on behalf of Huawei Technologies Co. Ltd. and any of its local subsidiaries which may have provided this product to you in your local country.

### Warranty Disclaimer

**THE OPEN SOURCE SOFTWARE IN THIS PRODUCT IS DISTRIBUTED IN THE HOPE THAT IT WILL BE USEFUL, BUT WITHOUT ANY WARRANTY, WITHOUT EVEN THE IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SEE THE APPLICABLE LICENSES FOR MORE DETAILS.**

### Copyright Notice and License Texts

**Software:** @ant-design/icons 5.2.5

**Copyright notice:**

No copyright notice found in source files of this software

**License:** MIT License

The MIT License

Copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in



all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

**Software:** ant-design 4.24.13

**Copyright notice:**

Copyright (c) 2015-present Ant UED, <https://xtech.antfin.com>

**License:** MIT License

Please see above

**Software:** babel 7.23.2

**Copyright notice:**

Copyright JS Foundation and other contributors

Copyright 2020 Bloomberg Finance L.P.

Copyright (c) 2012 Yusuke Suzuki <[utatane.tea@gmail.com](mailto:utatane.tea@gmail.com)>

Copyright (c) 2014-2015 Jason Quense <[jason@quense.me](mailto:jason@quense.me)>

Copyright OpenJS Foundation and other contributors

Copyright (c) 2012-2014 by various contributors

Copyright 2013-2015, Facebook, Inc. All rights reserved

Copyright (c) 2015 Jed Watson

Copyright (c) jQuery Foundation, Inc. and Contributors, All Rights Reserved

Copyright (c) 2014-present, Facebook, Inc.

Copyright (c) 2014-present Sebastian McKenzie and other contributors

**License:** MIT License

Please see above

**Software:** binary-parser 2.2.1

**Copyright notice:**

Copyright (c) 2013-2021 Keichi Takahashi <keichi.t@me.com>

**License:** MIT License

Please see above

**Software:** command-exists 1.2.9

**Copyright notice:**

Copyright (c) 2014 Matthew Conlen

**License:** MIT License

Please see above

**Software:** compressing 1.6.2

**Copyright notice:**

No copyright notice found in source files of this software

**License:** MIT License

Please see above

**Software:** cortex-debug 1.2.0

**Copyright notice:**

Copyright (c) 2011 Dominic Tarr



Copyright (c) 2018 NAN WG Members  
Copyright (c) 2013-2018, Viacheslav Lotsmanov  
Copyright (c) 2013, Dominic Tarr  
Copyright (c) 2013-2019 bl contributors  
Copyright (c) 2014, Rebecca Turner <me@re-becca.org>  
Copyright (c) 2014 Mathias Buus  
Copyright (c) 2013-2018 Viacheslav Lotsmanov  
Copyright (c) 2016 Lukas Geiger  
Copyright (c) 2016, Contributors  
(c) Sindre Sorhus (<https://sindresorhus.com>)  
Copyright (c) Isaac Z. Schlueter  
(c) Sindre Sorhus (<http://sindresorhus.com>)  
Copyright (c) 2015, Rebecca Turner  
Copyright (c) 2014 Nathan Rajlich <nathan@tootallnate.net>  
Copyright 2017-2022 Marcel Ball  
Copyright 2008 Fair Oaks Labs, Inc.  
Copyright (c) 2014 Jameson Little  
Copyright (c) Feross Aboukhadijeh (<http://feross.org>), and other contributors  
Copyright (c) 2015, Rebecca Turner <me@re-becca.org>  
Copyright (c) 2015 Calvin Metcalf  
Copyright (c) 2016 Stef Levesque  
(c) Zoltan Kochan (<http://kochan.io>)  
Copyright (c) Feross Aboukhadijeh, and other contributors  
Copyright (c) 2018 Mathias Buus  
Copyright (c) Isaac Z. Schlueter and Contributors  
Copyright (c) 2014-2017 TJ Holowaychuk <tj@vision-media.ca>  
Copyright (c) 2017 Zoltan Kochan  
Copyright 2010 Christopher Williams  
Copyright (c) 2015 TJ Holowaychuk <tj@vision-media.ca>  
Copyright (c) 2018 NAN contributors  
Copyright 2017 Lovell Fuller  
Copyright (c) 2020 James Halliday (mail@substack.net) and Mathias Buus  
Copyright (c) 2018 Lars-Magnus Skog  
Copyright (c) 2018 NAN contributors - Rod Vagg <<https://github.com/rvagg>>  
Copyright (c) Feross Aboukhadijeh  
Copyright (c) 2015 Mathias Buus  
Copyright (c) 2012 Nathan Rajlich <nathan@tootallnate.net>  
Copyright (c) 2016 Zeit, Inc.  
Copyright (c) Feross Aboukhadijeh (<http://feross.org>)  
Copyright Joyent, Inc. and other Node contributors  
Copyright (c) 2018 inspiredware  
Copyright (c) Sindre Sorhus <sindresorhus@gmail.com> (<https://sindresorhus.com>)



Copyright Isaac Z.  
Copyright (c) 2015, Contributors  
(c) Sindre Sorhus  
Copyright Isaac Z. Schlueter  
Copyright (c) 2014 TJ Holowaychuk <tj@vision-media.ca>  
Copyright (c) 2013 Julian Gruber <julian@juliangruber.com>  
Copyright (c) Sindre Sorhus <sindresorhus@gmail.com> (sindresorhus.com)  
Copyright (c) 2012 Google Inc.  
Copyright (c) 2008, Fair Oaks Labs, Inc.

**License:** MIT License

Please see above

**Software:** d3 7.8.2

**Copyright notice:**

Copyright 2010-2023 Mike Bostock

**License:** ISC License

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.  
THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

**Software:** echarts 5.4.3

**Copyright notice:**

Copyright 2017-2023 The Apache Software Foundation  
Copyright (c) Microsoft Corporation  
Copyright 2011 Data Arts Team, Google Creative Lab



(c) 2005, 2015 jQuery Foundation, Inc.

Copyright (c) 2013, Baidu Inc. All rights reserved

Copyright (c) Paul Johnston 1999 - 2009 Other contributors Greg Holt, Andrew Kepert, Ydnar, Lostinet

(c) 2016 Fractal Design

Copyright 2010-2016 Mike Bostock All rights reserved

Copyright 2015 Platfora, Inc.

Copyright 2011, Sebastian Tschan <https://blueimp.net>

## **License:** Apache License V2.0

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to

submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

You must give any other recipients of the Work or Derivative Works a copy of this License; and

You must cause any modified files to carry prominent notices stating that You changed the files; and

You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.



5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

**Software:** exceljs 4.4.0

**Copyright notice:**

Copyright (c) 2014-2019 Guyon Roche

**License:** MIT License

Please see above





**Software:** i18next 23.4.6

**Copyright notice:**

Copyright (c) 2023 i18next  
Copyright (c) 2015 Jan Mühlemann (jamuhl).

**License:** MIT License

Please see above

**Software:** iconv-lite 0.6.3

**Copyright notice:**

Copyright (c) 2011 Alexander Shtuchkin

**License:** MIT License

Please see above

**Software:** ini 3.0.0

**Copyright notice:**

Copyright (c) Isaac Z. Schlueter and Contributors

**License:** ISC License

Please see above

**Software:** jimp 0.22.4

**Copyright notice:**

Copyright (c) 2018 Oliver Moran  
Copyright (c) 2011 Elliot Shepherd  
Copyright (c) 2010 Dave Perrett  
Copyright (c) 2011 Mario Klingemann  
Copyright (c) 2012 Grant Galitz  
Copyright (c) 2015 Guyon Roche

**License:** MIT License

Please see above

**Software:** log4js-node 6.7.1

**Copyright notice:**

Copyright 2015 Gareth Jones

**License:** Apache License V2.0

Please see above

**Software:** marked 4.3.0

**Copyright notice:**

Copyright (c) 2011- Christopher Jeffrey. (MIT Licensed)  
Copyright (c) 2011-2013, Christopher Jeffrey (MIT License)  
Copyright (c) 2011-2014, Christopher Jeffrey (MIT License).  
Copyright (c) 2011-2018, Christopher Jeffrey  
Copyright (c) 2011-2023, Christopher Jeffrey. (MIT Licensed)  
Copyright (c) 2018+, MarkedJS  
Copyright © 2004, John Gruber



**License:** MIT License

Please see above

**Software:** node-serialport 10.4.0

**Copyright notice:**

Copyright (C) 2010 Christopher Williams.

Copyright (C) 2018 Francis Gulotta.

**License:** MIT License

Please see above

**Software:** nunjucks 3.2.4

**Copyright notice:**

Copyright (c) 2012-2015, James Long

Copyright 2012 Twitter, Inc

Copyright 2013 Twitter, Inc

(c) 2012-2013 Ivan Malopinsky

(c) 2005, 2013 jQuery Foundation, Inc.

(c) 2009-2012 Stuart Knightley

Copyright (c) 2009-2013, Alexis Sellier

copyright (c) 2012 Scott Jehl, Paul Irish, Nicholas Zakas

(c) Scott Jehl

Copyright (c) 2011, The Dojo Foundation

(c) 2013 Company, Inc.

(c) Company 2013

Copyright (c) 2013 Cowboy Ben Alman

Copyright (c) 2012 John Resig, Jorn Zaefferer

Copyright (c) 2008 Ariel Flesler

Copyright 2005, 2013 jQuery Foundation, Inc. and other contributors

(c) 2005, 2013 jQuery Foundation, Inc. and other contributors



**License:** BSD 2-Clause License

BSD Two Clause License

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

**Software:** OpenOCD - Open On-Chip Debugger (JTAG) 0.12.0

**Copyright notice:**

(c) 2008 Steve Bennett <steveb@workware.net.au>  
(c) 2008 Steve Bennett <steveb@workware.net.au>  
(c) 2010 Steve Bennett <steveb@workware.net.au>  
(c) 2010-2016 Steve Bennett <steveb@workware.net.au>  
(c) 2011 Steve Bennett <steveb@workware.net.au>  
(c) 2012 Alexander Shpilkin <ashpilkin@gmail.com>  
(c) 2016 Steve Bennett <steveb@workware.net.au>  
(c) 2017 Workware Systems Pty Ltd -- All Rights Reserved  
(c) 2019 Steve Bennett <steveb@workware.net.au>  
(c) 2020 Steve Bennett <steveb@workware.net.au>

Copyright (C) 2014 Paul Fertser

Copyright (C) 2011-2013 by Martin Schmoelzer ; <martin.schmoelzer@student.tuwien.ac.at>

Copyright 2005 Salvatore Sanfilippo <antirez@invece.org>

Copyright @copyright{} 2007-2008 Spencer Oliver @email{spen@@spen-soft.co.uk}

Copyright @copyright{} 2008 Duane Ellis @email{openocd@@duaneellis.com}

Copyright @copyright{} 2008-2010 Oyvind Harboe @email{oyvind.harboe@@zylin.com}



Copyright © 2008-2022 The OpenOCD Project  
Copyright © 2009-2010 David Brownell  
(c) 2010 Wojciech A. Koszek <wkoszek@FreeBSD.org>  
Copyright (C) 2009 by David Brownell  
Copyright (C) 2009 by Magnus Lundin  
Copyright (C) 2009-2011 by Øyvind Harboe  
Copyright (C) 2010-2011 by Karl Kurbjun  
Copyright (C) 2011 by Karl Kurbjun  
Copyright (C) @var{year} @var{your name}.  
Copyright (C) YEAR YOUR NAME.  
Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
Copyright (C) 1992-1996, 1998-2012 Free Software Foundation, Inc.  
Copyright (C) 1994 X Consortium  
Copyright (C) 1994-1996, 1999-2002, 2004-2016 Free Software Foundation, Inc.  
Copyright (C) 1994-2020 Free Software Foundation, Inc.  
Copyright (C) 1995-2020 Free Software Foundation, Inc.  
Copyright (C) 1996-2001, 2003-2015 Free Software Foundation, Inc.  
Copyright (C) 1996-2018 Free Software Foundation, Inc.  
Copyright (C) 1996-2020 Free Software Foundation, Inc.  
Copyright (C) 1997-2020 Free Software Foundation, Inc.  
Copyright (C) 1999-2018 Free Software Foundation, Inc.  
Copyright (C) 1999-2020 Free Software Foundation, Inc.  
Copyright (C) 2000 David Woodhouse <dwmw2@mvhi.com>  
Copyright (C) 2000 Steven J. Hill <sjhill@realitydiluted.com>  
Copyright (C) 2000 Thomas Gleixner <tglx@linutronix.de>  
Copyright (C) 2000,2001,2002 Free Software Foundation, Inc.  
Copyright (C) 2000,2001,2002 Free Software Foundation, Inc.  
Copyright (C) 2000-2004 Steven J. Hill (sjhill at realitydiluted.com)  
Copyright (C) 2001-2020 Free Software Foundation, Inc.  
Copyright (C) 2002 Thomas Gleixner <tglx@linutronix.de>  
Copyright (C) 2002-2020 Free Software Foundation, Inc.  
Copyright (C) 2003-2020 Free Software Foundation, Inc.  
Copyright (C) 2004, 2005 by Dominic Rath Dominic.Rath@gmx.de  
Copyright (C) 2004, 2005 by Simtec Electronics linux@simtec.co.uk  
Copyright (C) 2004, 2011-2015 Free Software Foundation, Inc.  
Copyright (C) 2004-2005, 2007, 2009, 2011-2015 Free Software Foundation, Inc.  
Copyright (C) 2004-2005, 2007-2008, 2011-2015 Free Software Foundation, Inc.  
Copyright (C) 2004-2005, 2007-2009, 2011-2015 Free Software Foundation, Inc.  
Copyright (C) 2004-2020 Free Software Foundation, Inc.  
Copyright (C) 2005 Pat Thoyts <patthoyts@users.sourceforge.net>  
Copyright (C) 2005 Salvatore Sanfilippo.  
Copyright (C) 2005 by Dominic Rath <Dominic.Rath@gmx.de>



Copyright (C) 2005 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2005, 2006 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2005, 2007 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2005-2006 by egnite Software GmbH.  
Copyright (C) 2006 Kolja Waschk  
Copyright (C) 2006 Kolja Waschk [usbtag@ixo.de](mailto:usbtag@ixo.de)  
Copyright (C) 2006 Thomas Gleixner [tgx@linutronix.de](mailto:tgx@linutronix.de)  
Copyright (C) 2006 by Anders Larsen [al@alarsen.net](mailto:al@alarsen.net)  
Copyright (C) 2006 by Dominic Rath [<Dominic.Rath@gmx.de>](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2006 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2006 by Magnus Lundin [lundin@mlu.mine.nu](mailto:lundin@mlu.mine.nu)  
Copyright (C) 2006, 2007 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2006-2020 Free Software Foundation, Inc.  
Copyright (C) 2007 Free Software Foundation, Inc. [<http://fsf.org/>](http://fsf.org/)  
Copyright (C) 2007 Free Software Foundation, Inc. [<https://fsf.org/>](https://fsf.org/)  
Copyright (C) 2007 by Benedikt Sauter [sauter@ixbat.de](mailto:sauter@ixbat.de)  
Copyright (C) 2007 by Dominic Rath [<Dominic.Rath@gmx.de>](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2007 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2007 by Juergen Stuber [<juergen@jstuber.net>](mailto:juergen@jstuber.net)  
Copyright (C) 2007 by Pavel Chromy [chromy@asix.cz](mailto:chromy@asix.cz)  
Copyright (C) 2007 by Vincent Palatin [vincent.palatinopenocd@m4x.org](mailto:vincent.palatinopenocd@m4x.org)  
Copyright (C) 2007, 2008 by Ben Dooks [ben@fluff.org](mailto:ben@fluff.org)  
Copyright (C) 2007,2008 by Christopher Kilgour [techie\[at\]whiterocker\[dot\]com](mailto:techie[at]whiterocker[dot]com)  
Copyright (C) 2007,2008 Øyvind Harboe [<oyvind.harboe@zylin.com>](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007,2008 Øyvind Harboe [oyvind.harboe@zylin.com](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007,2008,2009 by Øyvind Harboe [oyvind.harboe@zylin.com](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007,2008,2009 Øyvind Harboe [oyvind.harboe@zylin.com](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007-2008 Spencer Oliver [<spen@spen-soft.co.uk>](mailto:spen@spen-soft.co.uk)  
Copyright (C) 2007-2008 by Øyvind Harboe [<oyvind.harboe@zylin.com>](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007-2009 Øyvind Harboe [<oyvind.harboe@zylin.com>](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007-2009 Øyvind Harboe [oyvind.harboe@zylin.com](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007-2010 Øyvind Harboe [<oyvind.harboe@zylin.com>](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2007-2010 Øyvind Harboe [oyvind.harboe@zylin.com](mailto:oyvind.harboe@zylin.com)  
Copyright (C) 2008 Duane Ellis [<openocd@duaneellis.com>](mailto:openocd@duaneellis.com)  
Copyright (C) 2008 Georg Acher [<acher@in.tum.de>](mailto:acher@in.tum.de)  
Copyright (C) 2008 Lou Deluxe [lou.openocd012@fixit.nospammail.net](mailto:lou.openocd012@fixit.nospammail.net)  
Copyright (C) 2008 Peter Hettkamp [peter.hettkamp@htp-tel.de](mailto:peter.hettkamp@htp-tel.de)  
Copyright (C) 2008 Richard Missenden [richard.missenden@gmail.com](mailto:richard.missenden@gmail.com)  
Copyright (C) 2008 Rob Brown, Lou Deluxe [rob@cobbleware.com](mailto:rob@cobbleware.com), [lou.openocd012@fixit.nospammail.net](mailto:lou.openocd012@fixit.nospammail.net)  
Copyright (C) 2008 by David T.L. Wong  
Copyright (C) 2008 by Dominic Rath [Dominic.Rath@gmx.de](mailto:Dominic.Rath@gmx.de)  
Copyright (C) 2008 by Frederik Kriewitz [frederik@kriewitz.eu](mailto:frederik@kriewitz.eu)

Copyright (C) 2008 by Gheorghe Guran (atlas)  
Copyright (C) 2008 by Hongtao Zheng hontor@126.com  
Copyright (C) 2008 by John McCarthy jgmcc@magma.ca  
Copyright (C) 2008 by Karl RobinSod <karl.robinsod@gmail.com>  
Copyright (C) 2008 by Kevin McGuire  
Copyright (C) 2008 by Marcel Wijlaars  
Copyright (C) 2008 by Oyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2008 by Rick Altherr kc8apf@kc8apf.net>  
Copyright (C) 2008 by Spencer Oliver  
Copyright (C) 2008 by Spencer Oliver <spen@spen-soft.co.uk>  
Copyright (C) 2008 by Spencer Oliver spen@spen-soft.co.uk  
Copyright (C) 2008 by Øyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2008 digenius technology GmbH.  
Copyright (C) 2008, Duane Ellis openocd@duaneellis.com  
Copyright (C) 2008,2009 Oyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2008-2009 by Marvell Semiconductors, Inc.  
Copyright (C) 2008-2010 Nathan Yawn nyawn@opencores.net  
Copyright (C) 2008-2010 Oyvind Harboe <oyvind.harboe@zylin.com>  
Copyright (C) 2008-2022 The OpenOCD Project  
Copyright (C) 2009 - 2010 by Simon Qian <SimonQian@SimonQian.com>  
Copyright (C) 2009 Catalin Patulea  
Copyright (C) 2009 Catalin Patulea cat@vv.carleton.ca  
Copyright (C) 2009 David Brownell  
Copyright (C) 2009 Marvell Semiconductor, Inc.  
Copyright (C) 2009 Michael Schwingen michael@schwingen.org  
Copyright (C) 2009 SoftPLC Corporation dick@softplc.com  
Copyright (C) 2009 SoftPLC Corporation, http://softplc.com, Dick Hollenbeck <dick@softplc.com>  
Copyright (C) 2009 SoftPLC Corporation. http://softplc.com Dick Hollenbeck <dick@softplc.com>  
Copyright (C) 2009 Zachary T Welch <zw@superlucidity.net>  
Copyright (C) 2009 Zachary T Welch zw@superlucidity.net  
Copyright (C) 2009 by Alexei Babich Rezonans plc., Chelyabinsk, Russia impatt@mail.ru  
Copyright (C) 2009 by Cahya Wirawan <cahya@gmx.at>  
Copyright (C) 2009 by David Brownell  
Copyright (C) 2009 by David N. Claffey <dnclaffey@gmail.com>  
Copyright (C) 2009 by Dean Glazeski dnglaze@gmail.com  
Copyright (C) 2009 by Dimitar Dimitrov <dinuxbg@gmail.com>  
Copyright (C) 2009 by Dirk Behme dirk.behme@gmail.com - copy from cortexm3  
Copyright (C) 2009 by Duane Ellis <openocd@duaneellis.com>  
Copyright (C) 2009 by Franck Hereson franck.hereson@secad.fr  
Copyright (C) 2009 by Marvell Semiconductors, Inc.  
Copyright (C) 2009 by Marvell Technology Group Ltd.  
Copyright (C) 2009 by Mathias Kuester mkdorg@users.sourceforge.net

Copyright (C) 2009 by Michael Ashton  
Copyright (C) 2009 by Michael Ashton and - stm32f1x.c  
Copyright (C) 2009 by Oyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2009 by Paulius Zaleckas paulius.zaleckas@gmail.com  
Copyright (C) 2009 by Rolf Meeser <rolfm9dq@yahoo.de>  
Copyright (C) 2009 by Simon Qian <SimonQian@SimonQian.com>  
Copyright (C) 2009 by Simon Qian SimonQian@SimonQian.com  
Copyright (C) 2009 by Vladimir Fonov <vladimir.fonov@gmail.com>  
Copyright (C) 2009 by Zachary T Welch <zw@superlucidity.net>  
Copyright (C) 2009 by Øyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2009 Øyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2009-2010 David Brownell  
Copyright (C) 2009-2010 by David Brownell  
Copyright (C) 2009-2010 by Oyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2009-2010 by Simon Qian <SimonQian@SimonQian.com>  
Copyright (C) 2009-2011 by Mathias Kuester mkdorg@users.sourceforge.net  
Copyright (C) 2009-2020 Free Software Foundation, Inc.  
Copyright (C) 2009-2021 Free Software Foundation, Inc.  
Copyright (C) 2010 Oyvind Harboe <oyvind.harboe@zylin.com>  
Copyright (C) 2010 Serge Vakulenko serge@vak.ru  
Copyright (C) 2010 Spencer Oliver spen@spen-soft.co.uk  
Copyright (C) 2010 by Antonio Borneo <borneo.antonio@gmail.com>  
Copyright (C) 2010 by Antonio Borneo borneo.antonio@gmail.com  
Copyright (C) 2010 by David Brownell  
Copyright (C) 2010 by Drasko DRASKOVIC drasko.draskovic@gmail.com  
Copyright (C) 2010 by Gaetan CARLIER Trump s.a., Belgium  
Copyright (C) 2010 by Ivan Meleca <mileca@gmail.com>  
Copyright (C) 2010 by Konstantin Kostyukhin, Nikolay Shmyrev  
Copyright (C) 2010 by Michal Demin based on usbprog.c and arm-jtag-ew.c Several fixes by R. Diez in 2013.  
Copyright (C) 2010 by Olaf Lüke <olaf@uni-paderborn.de>  
Copyright (C) 2010 by Oleksandr Tymoshenko <gonzo@bluezbox.com>  
Copyright (C) 2010 by Peter Korsgaard <jacmet@sunsite.dk>  
Copyright (C) 2010 by Spencer Oliver spen@spen-soft.co.uk  
Copyright (C) 2010 by Øyvind Harboe  
Copyright (C) 2010 richard vegh <vegh.ricsi@gmail.com>  
Copyright (C) 2010 Øyvind Harboe <oyvind.harboe@zylin.com>  
Copyright (C) 2010 Øyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2010-2018 Free Software Foundation, Inc.  
Copyright (C) 2011 Ali Lown ali@lown.me.uk  
Copyright (C) 2011 Andreas Fritiofson andreas.fritiofson@gmail.com  
Copyright (C) 2011 Bjarne Steinsbo <bsteinsbo@gmail.com>





Copyright (C) 2011 Clement Burin des Roziers clement.burin-des-roziers@hikob.com  
Copyright (C) 2011 Free Software Foundation, Inc.  
Copyright (C) 2011 Ronny Strutz  
Copyright (C) 2011 Tomasz Boleslaw CEDRO (<http://www.tomek.cedro.info>)  
Copyright (C) 2011 by Andreas Fritiofson andreas.fritiofson@gmail.com  
Copyright (C) 2011 by Broadcom Corporation Evan Hunter - ehunter@broadcom.com  
Copyright (C) 2011 by Clement Burin des Roziers clement.burin-des-roziers@hikob.com  
Copyright (C) 2011 by Drasko DRASKOVIC drasko.draskovic@gmail.com  
Copyright (C) 2011 by Erik Ahlen Avalon Innovation, Sweden  
Copyright (C) 2011 by Erik Botö  
Copyright (C) 2011 by James K. Larson jlarson@pacifier.com  
Copyright (C) 2011 by Jean-Christophe PLAGNIOL-VIILARD plagnioj@jcrosoft.com  
Copyright (C) 2011 by Julius Baxter julius@opencores.org  
Copyright (C) 2011 by Marc Willam, Holger Wech openOCD.fseu(AT)de.fujitsu.com  
Copyright (C) 2011 by Martin Schmoelzer <martin.schmoelzer@student.tuwien.ac.at>  
Copyright (C) 2011 by Mathias Kuester Mathias Kuester <kesmtp@freenet.de>  
Copyright (C) 2011 by Mathias Kuester kesmtp@freenet.de  
Copyright (C) 2011 by Mauro Gamba <maurillo71@gmail.com>  
Copyright (C) 2011 by Olivier Schonken and Jim Norris  
Copyright (C) 2011 by Olivier Schonken, Jim Norris  
Copyright (C) 2011 by Richard Uhler ruhler@mit.edu  
Copyright (C) 2011 by Rodrigo L. Rosa rodrigorosa.LG@gmail.com  
Copyright (C) 2011 by STEricsson Heythem Bouhaja heythem.bouhaja@stericsson.com : creation  
Michel JAOUEN michel.jaouen@stericsson.com : adaptation to rtos  
Copyright (C) 2011 by Spencer Oliver spen@spen-soft.co.uk  
Copyright (C) 2011 sleep(5) ltd tomas@sleepfive.com  
Copyright (C) 2011 Øyvind Harboe oyvind.harboe@zylin.com  
Copyright (C) 2011-2012 by Mathias Kuester Mathias Kuester <kesmtp@freenet.de>  
Copyright (C) 2011-2013 by Martin Schmoelzer <martin.schmoelzer@student.tuwien.ac.at>  
Copyright (C) 2011-2020 Free Software Foundation, Inc.  
Copyright (C) 2012 Free Software Foundation, Inc.  
Copyright (C) 2012 Robert Jarzmik robert.jarzmik@free.fr  
Copyright (C) 2012 by Andreas Fritiofson andreas.fritiofson@gmail.com  
Copyright (C) 2012 by Christopher D. Kilgour techie at whiterocker.com  
Copyright (C) 2012 by Creative Product Design, marc @ cpdesign.com.au  
Copyright (C) 2012 by Franck Jullien elec4fun@gmail.com  
Copyright (C) 2012 by George Harris george@luminairecoffee.com  
Copyright (C) 2012 by Jan Dakinevich jan.dakinevich@gmail.com  
Copyright (C) 2012 by Matthias Blaicher Matthias Blaicher - matthias@blaicher.com  
Copyright (C) 2012 by Spencer Oliver spen@spen-soft.co.uk  
Copyright (C) 2012-2018 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2013 Andes Technology Hsiangkai Wang <hkwang@andestech.com>

Copyright (C) 2013 Andes technology.  
Copyright (C) 2013 Cosmin Gorgovan cosmin [at] linux-geek [dot] org  
Copyright (C) 2013 Franck Jullien elec4fun@gmail.com  
Copyright (C) 2013 Franck Jullien franck.jullien@gmail.com  
Copyright (C) 2013 Franck Jullien, <elec4fun@gmail.com>  
Copyright (C) 2013 Kamal Dasu kdasu.kdev@gmail.com  
Copyright (C) 2013 Nemui Trinomius nemuisankawausogasuki@live.jp  
Copyright (C) 2013 Nobuhiro Iwamatsu <nobuhiro.iwamatsu.yj@renesas.com>  
Copyright (C) 2013 Paul Fertser <fercerpav@gmail.com>  
Copyright (C) 2013 Renesas Electronics Corporation  
Copyright (C) 2013 Synapse Product Development Andrey Smirnov <andrew.smirnov@gmail.com>  
Copyright (C) 2013 by Andes Technology Hsiangkai Wang <hkwang@andestech.com>  
Copyright (C) 2013 by Andreas Fritiofson andreas.fritiofson@gmail.com  
Copyright (C) 2013 by Andrey Yurovsky Andrey Yurovsky <yurovsky@gmail.com>  
Copyright (C) 2013 by Franck Jullien elec4fun@gmail.com  
Copyright (C) 2013 by Henrik Nilsson henrik.nilsson@bytequest.se  
Copyright (C) 2013 by Marek Czerski ma.czerski@gmail.com  
Copyright (C) 2013 by Paul Fertser fercerpav@gmail.com  
Copyright (C) 2013 by Paul Fertser, fercerpav@gmail.com  
Copyright (C) 2013 by Roman Dmitrienko me@iamroman.org  
Copyright (C) 2013 by Ryan Corbin, GlueLogix Inc. <corbin.ryan@gmail.com>  
Copyright (C) 2013 by Sergio Chico sergio.chico@gmail.com  
Copyright (C) 2013 by Spencer Oliver spen@spen-soft.co.uk  
Copyright (C) 2013 by mike brown mike@theshedworks.org.uk  
Copyright (C) 2013-2014 by Franck Jullien elec4fun@gmail.com  
Copyright (C) 2013-2014,2019-2020 Synopsys, Inc.  
Copyright (C) 2013-2015,2019-2020 Synopsys, Inc.  
Copyright (C) 2013-2018 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2014 Andreas Ortmann (ortmann@inf.uni-hannover.de)  
Copyright (C) 2014 Angus Gratton gus@projectgus.com  
Copyright (C) 2014 Free Software Foundation, Inc.  
Copyright (C) 2014 Nemui Trinomius nemuisankawausogasuki@live.jp  
Copyright (C) 2014 Pawel Si stawel+openocd@gmail.com  
Copyright (C) 2014 by Aleksey Kuleshov <rndfax@yandex.ru>  
Copyright (C) 2014 by Andrey Sidorov <anysidorov@gmail.com>  
Copyright (C) 2014 by Angus Gratton Derived from stm32f1x.S:  
Copyright (C) 2014 by Antony Pavlov <antonynpavlov@gmail.com>  
Copyright (C) 2014 by Franck Jullien franck.jullien@gmail.com  
Copyright (C) 2014 by Jean-Christian de Rivaz <jc@eclis.ch>  
Copyright (C) 2014 by Ladislav Babel ladababel@seznam.cz  
Copyright (C) 2014 by Mahavir Jain <mjain@marvell.com>  
Copyright (C) 2014 by Marian Cingel cingel.marian@gmail.com



Copyright (C) 2014 by Paul Fertser <fercerpav@gmail.com>  
Copyright (C) 2014 by Paul Fertser fercerpav@gmail.com  
Copyright (C) 2014 by Peter Mamonov <pmamonov@gmail.com>  
Copyright (C) 2014 by Tomas Vanek (PSoC 4 support derived from STM32)  
Copyright (C) 2014-2015 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2014-2015,2020 Synopsys, Inc.  
Copyright (C) 2014-2016 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2014-2016,2020 Synopsys, Inc.  
Copyright (C) 2014-2018 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2014-2019 by Peter Mamonov <pmamonov@gmail.com>  
Copyright (C) 2015 Paul Fertser <fercerpav@gmail.com>  
Copyright (C) 2015 Andreas Fritiofson andreas.fritiofson@gmail.com  
Copyright (C) 2015 Jeff Ciesielski <jeffciesielski@gmail.com>  
Copyright (C) 2015 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2015 Morgan Quigley  
Copyright (C) 2015 Nemui Trinomius nemuisankawausogasuki@live.jp  
Copyright (C) 2015 Oleksij Rempel linux@rempel-privat.de  
Copyright (C) 2015 Robert Jordens <jordens@gmail.com>  
Copyright (C) 2015 Tomas Vanek vanekt@fbl.cz  
Copyright (C) 2015 Vianney le Clément de Saint-Marcq, Essensium NV  
<vianney.leclement@essensium.com>  
Copyright (C) 2015 by Andreas Bomholtz andreas@seluxit.com  
Copyright (C) 2015 by Bogdan Kolbov kolbov@niiet.ru  
Copyright (C) 2015 by Daniel Krebs Daniel Krebs - [github@daniel-krebs.net](https://github.com/daniel-krebs)  
Copyright (C) 2015 by David Ung  
Copyright (C) 2015 by Esben Haabendal <eha@deif.com>  
Copyright (C) 2015 by Ivan Buliev i.buliev@mikrosistemi.com  
Copyright (C) 2015 by Ivan Meleca ivan@artekit.eu  
Copyright (C) 2015 by Marc Schink openocd-dev@marcschink.de  
Copyright (C) 2015 by Matthias Welwarsky <matthias.welwarsky@sysgo.com>  
Copyright (C) 2015 by Oleksij Rempel linux@rempel-privat.de  
Copyright (C) 2015 by Paul Fertser fercerpav@gmail.com  
Copyright (C) 2015 by Tobias Diedrich <ranma+openwrt@tdiedrich.de>  
Copyright (C) 2015 by Uwe Bonnes bon@elektron.ikp.physik.tu-darmstadt.de  
Copyright (C) 2015 by pierrr kuo <vichy.kuo@gmail.com>  
Copyright (C) 2015, 2020 Synopsys, Inc.  
Copyright (C) 2015-2016 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2015-2017 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2015-2017 by Forest Crossman cyrozap@gmail.com  
Copyright (C) 2016 - 2018 by Andreas Bolsch andreas.bolsch@mni.thm.de  
Copyright (C) 2016 - 2019 by Andreas Bolsch andreas.bolsch@mni.thm.de  
Copyright (C) 2016 Chengyu Zheng chengyu.zheng@polimi.it : watchpoint support

Copyright (C) 2016 Cogent Embedded, Inc.  
Copyright (C) 2016 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2016 Renesas Electronics Corporation  
Copyright (C) 2016 by Maksym Hilliaka oter@frozen-team.com  
Copyright (C) 2016 by Matthias Welwarsky  
Copyright (C) 2016 by Matthias Welwarsky <matthias.welwarsky@sysgo.com>  
Copyright (C) 2016 by Matthias Welwarsky matthias.welwarsky@sysgo.com  
Copyright (C) 2016 by Maxim Integrated Kevin Gillespie <kevin.gillespie@maximintegrated.com>  
Copyright (C) 2016 by Maxim Integrated Kevin Gillespie <kevin.gillespie@maximintegrated.com>  
Copyright (C) 2016 by Phillip Pearson pp@myelin.co.nz  
Copyright (C) 2016 by Square, Inc.  
Copyright (C) 2016 by Tomas Vanek vanekt@fbl.cz  
Copyright (C) 2016 by Uladzimir Pylinski aka barthess barthess@yandex.ru  
Copyright (C) 2016,2020 Synopsys, Inc.  
Copyright (C) 2016-2017 Marc Schink <jaylink-dev@marcschink.de>  
Copyright (C) 2016-2017 by Marc Schink <dev@zapb.de>  
Copyright (C) 2016-2017 by Nuvoton Zale Yu <cyyu@nuvoton.com>  
Copyright (C) 2016-2018 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2016-2019 Espressif Systems Ltd.  
Copyright (C) 2016-2020 Marc Schink <dev@zapb.de>  
Copyright (C) 2016-2020 by Marc Schink <dev@zapb.de>  
Copyright (C) 2017 Ake Rehnman ake.rehnman(at)gmail.com  
Copyright (C) 2017 Ake Rehnman ake.rehnman(at)gmail.com  
Copyright (C) 2017 Armin van der Togt armin@otheruse.nl  
Copyright (C) 2017 Espressif Systems Ltd.  
Copyright (C) 2017 Tomas Vanek vanekt@fbl.cz  
Copyright (C) 2017 by Grzegorz Kostka, kostka.grzegorz@gmail.com  
Copyright (C) 2017 by Intel Corporation Leandro Pereira <leandro.pereira@intel.com>  
Copyright (C) 2017 by Michele Sardo msmittchr@gmail.com  
Copyright (C) 2017 by STMicroelectronics  
Copyright (C) 2017 by Square, Inc.  
Copyright (C) 2017 by Texas Instruments, Inc.  
Copyright (C) 2017 by Tomas Vanek vanekt@fbl.cz  
Copyright (C) 2017-2018 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2017-2018 Tomas Vanek <vanekt@fbl.cz>  
Copyright (C) 2017-2019 Marek Vasut <marek.vasut@gmail.com>  
Copyright (C) 2018 Pengutronix, Oleksij Rempel <kernel@pengutronix.de>  
Copyright (C) 2018 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2018 by Advantest florian.meister@advantest.com  
Copyright (C) 2018 by Andreas Bolsch andreas.bolsch@mni.thm.de  
Copyright (C) 2018 by Bohdan Tymkiv bohdan.tymkiv@cypress.com bohdan200@gmail.com  
Copyright (C) 2018 by Jean-Christian de Rivaz Many thanks to Dries Moors from NXP support.



Copyright (C) 2018 by Liviu Ionescu <ilg@livius.net>  
Copyright (C) 2018 by Liviu Ionescu ilg@livius.net  
Copyright (C) 2018 by Marvell Technology Group Ltd.  
Copyright (C) 2018 by Mickaël Thomas mickael9@gmail.com  
Copyright (C) 2018 by Simon Qian SimonQian@SimonQian.com  
Copyright (C) 2018 by Square, Inc.  
Copyright (C) 2018 by Texas Instruments, Inc.  
Copyright (C) 2018, STMicroelectronics - All Rights Reserved Author(s): Antonio Borneo <borneo.antonio@gmail.com> for STMicroelectronics  
Copyright (C) 2018-2019 by Andreas Bolsch andreas.bolsch@mni.thm.de  
Copyright (C) 2019 Caleb Szalacinski <contact@skiboy.net>  
Copyright (C) 2019 Espressif Systems Ltd.  
Copyright (C) 2019 Icenowy Zheng <icenowy@aosc.io>  
Copyright (C) 2019 Marek Vasut <marek.vasut@gmail.com>  
Copyright (C) 2019 by Andreas Bolsch <andreas.bolsch@mni.thm.de>  
Copyright (C) 2019 by Andreas Bolsch andreas.bolsch@mni.thm.de  
Copyright (C) 2019 by Mete Balci metebalci@gmail.com  
Copyright (C) 2019 by STMicroelectronics.  
Copyright (C) 2019 by Tarek Bochkati for STMicroelectronics tarek.bouchkati@gmail.com  
Copyright (C) 2019 by Tomas Vanek vanekt@fbl.cz  
Copyright (C) 2019, 2020 Synopsys, Inc.  
Copyright (C) 2019, STMicroelectronics - All Rights Reserved Author(s): Antonio Borneo <borneo.antonio@gmail.com> for STMicroelectronics  
Copyright (C) 2019,2020 Synopsys, Inc.  
Copyright (C) 2019-2020 by Marc Schink <dev@zapb.de>  
Copyright (C) 2019-2020, Ampere Computing LLC  
Copyright (C) 2019-2021 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2019-2021, Ampere Computing LLC  
Copyright (C) 2020 Antonio Borneo <borneo.antonio@gmail.com>  
Copyright (C) 2020 Espressif Systems (Shanghai) Co. Ltd.  
Copyright (C) 2020 Espressif Systems Ltd.  
Copyright (C) 2020 Espressif Systems Ltd. Co  
Copyright (C) 2020 Synopsys, Inc.  
Copyright (C) 2020 by Antonio Borneo <borneo.antonio@gmail.com>  
Copyright (C) 2020 by Daniel Anselmi <danselmi@gmx.ch>  
Copyright (C) 2020 by Nuvoton Technology Corporation Mulin Chao <mlchao@nuvoton.com>  
Copyright (C) 2020 by Tarek Bochkati Tarek Bochkati <tarek.bouchkati@gmail.com>  
Copyright (C) 2020, Ampere Computing LLC  
Copyright (C) 2020-2021, Ampere Computing LLC  
Copyright (C) 2020-2022 Cadence Design Systems, Inc.  
Copyright (C) 2021 Doug Brunner doug.a.brunner@gmail.com  
Copyright (C) 2021 Tarek BOCHKATI tarek.bouchkati@st.com





Copyright (C) 2021 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2021 by Adrian Negreanu [groleo@gmail.com](mailto:groleo@gmail.com)  
Copyright (C) 2021 by Andreas Fritiofson <[andreas.fritiofson@gmail.com](mailto:andreas.fritiofson@gmail.com)>  
Copyright (C) 2021 by Nuvoton Technology Corporation Mulin Chao <[mlchao@nuvoton.com](mailto:mlchao@nuvoton.com)>  
Copyright (C) 2021 by Synopsys, Inc.  
Copyright (C) 2021-2022 Marc Schink <[dev@zapb.de](mailto:dev@zapb.de)>  
Copyright (C) 2021-2022 Texas Instruments Incorporated - <http://www.ti.com/>  
Copyright (C) 2022 Espressif Systems Ltd.  
Copyright (C) 2022 by NanoXplore, France - all rights reserved  
Copyright (C) 2022 by Steve Marple, [stevemarple@gmail.com](mailto:stevemarple@gmail.com)  
Copyright (C) 2022 by Toms Stürmanis [toms.sturmanis@gmail.com](mailto:toms.sturmanis@gmail.com)  
Copyright (C) Broadcom 2012 [ehunter@broadcom.com](mailto:ehunter@broadcom.com) : Cortex-R4 support  
Copyright (C) David Parrish ([david@dparrish.com](mailto:david@dparrish.com))  
Copyright (C) ST-Ericsson SA 2011 Author : [michel.jaouen@stericsson.com](mailto:michel.jaouen@stericsson.com) U8500 target  
Copyright (C) ST-Ericsson SA 2011 Author: Michel Jaouen <[michel.jaouen@stericsson.com](mailto:michel.jaouen@stericsson.com)> for ST-Ericsson.  
Copyright (C) ST-Ericsson SA 2011 [michel.jaouen@stericsson.com](mailto:michel.jaouen@stericsson.com)  
Copyright (C) ST-Ericsson SA 2011 [michel.jaouen@stericsson.com](mailto:michel.jaouen@stericsson.com) : smp minimum support  
Copyright (c) YEAR YOUR NAME.  
Copyright (c) 1986 by University of Toronto.  
Copyright (c) 1991-1993 The Regents of the University of California.  
Copyright (c) 1991-1994 The Regents of the University of California.  
Copyright (c) 1994 Sun Microsystems, Inc.  
Copyright (c) 1994 The Regents of the University of California.  
Copyright (c) 1994-1995 Sun Microsystems, Inc.  
Copyright (c) 1994-1996 Sun Microsystems, Inc.  
Copyright (c) 1994-1997 Sun Microsystems, Inc.  
Copyright (c) 1994-1998 Sun Microsystems, Inc.  
Copyright (c) 1995-1996 Sun Microsystems, Inc.  
Copyright (c) 1995-1997 Sun Microsystems, Inc.  
Copyright (c) 1995-1998 Sun Microsystems, Inc.  
Copyright (c) 1996-1997 Sun Microsystems, Inc.  
Copyright (c) 1996-1998 by Sun Microsystems, Inc.  
Copyright (c) 1997 Sun Microsystems, Inc.  
Copyright (c) 1997 by Sun Microsystems, Inc.  
Copyright (c) 1998 Sun Microsystems, Inc.  
Copyright (c) 1998-1999 by Scriptics Corporation.  
Copyright (c) 1998-2000 Ajuba Solutions.  
Copyright (c) 1999 by Scriptics Corporation.  
Copyright (c) 2001 by Kevin B. Kenny.  
Copyright (c) 2003-2009 Donal K.  
Copyright (c) 2005-2006 Miguel Sofer



Copyright (c) 2005-2011 Jim Tcl Project.  
Copyright (c) 2006 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2006 by Michael Fischer.  
Copyright (c) 2006-2010 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2006-2011 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2007-2010 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2009, Atmel Corporation.  
Copyright (c) 2010 Serge A. Zaitsev  
Copyright (c) 2010 Wojciech A. Koszek <[wkoszek@FreeBSD.org](mailto:wkoszek@FreeBSD.org)>  
Copyright (c) 2010 WorkWare Systems <http://workware.net.au/>  
Copyright (c) 2010 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2010 by David Brownell  
Copyright (c) 2010, Pieter Noordhuis <[pcnoordhuis@gmail.com](mailto:pcnoordhuis@gmail.com)>  
Copyright (c) 2010, Salvatore Sanfilippo <[antirez@gmail.com](mailto:antirez@gmail.com)>  
Copyright (c) 2010-2011, WorkWare Systems <<http://workware.net.au/>>  
Copyright (c) 2011 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2011, Steve Bennett <[steveb@workware.net.au](mailto:steveb@workware.net.au)>  
Copyright (c) 2012 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2015 - 2016 Svyatoslav Mishyn <[juef@openmailbox.org](mailto:juef@openmailbox.org)>  
Copyright (c) 2015 Andreas Färber  
Copyright (c) 2015, David Racine <[dracine@ambiqmicro.com](mailto:dracine@ambiqmicro.com)>  
Copyright (c) 2015-2016, Ambiq Micro, Inc.  
Copyright (c) 2016 Andreas Färber  
Copyright (c) 2016 WorkWare Systems <http://www.workware.net.au/>  
Copyright (c) 2016, Rick Foos <[rfoos@solengtech.com](mailto:rfoos@solengtech.com)>  
Copyright (c) 2018 National Instruments Corp Author: Moritz Fischer <[moritz.fischer@ettus.com](mailto:moritz.fischer@ettus.com)>  
Copyright (c) 2018 Pengutronix, Oleksij Rempel <[kernel@pengutronix.de](mailto:kernel@pengutronix.de)>  
Copyright (c) 2019 Google, LLC.  
Copyright (c) 2019 Steve Bennett <[steveb@workware.net.au](mailto:steveb@workware.net.au)>  
Copyright (c) 2019-2021, Ampere Computing LLC  
Copyright (c) 2019-2022, Ampere Computing LLC  
Copyright (c) 2020 Espressif Systems (Shanghai) Co. Ltd.  
Copyright (c) 2020, Ampere Computing LLC  
Copyright (c) 2020, Mellanox Technologies Ltd. - All Rights Reserved Liming Sun <[lsun@mellanox.com](mailto:lsun@mellanox.com)>  
Copyright (c) 2022 JEDEC.  
Copyright (c) 2022 RISC-V International  
Copyright 1987-1991 Regents of the University of California  
Copyright 1991-1994 Karl Lehenbauer and Mark Diekhans.  
Copyright 1992-2018 Free Software Foundation, Inc.  
Copyright 1992-2021 Free Software Foundation, Inc.  
Copyright 2005 Clemens Hintze <[c.hintze@gmx.net](mailto:c.hintze@gmx.net)>  
Copyright 2005 Clemens Hintze <[c.hintze@gmx.net](mailto:c.hintze@gmx.net)>



Copyright 2005 Salvatore Sanfilippo <antirez@invece.org>  
Copyright 2005 patthoyts - Pat Thoyts <patthoyts@users.sf.net>  
Copyright 2005 patthoyts - Pat Thoyts <patthoyts@users.sf.net>  
Copyright 2008 Andrew Lunn <andrew@lunn.ch>  
Copyright 2008 Andrew Lunn <andrew@lunn.ch>  
Copyright 2008 Duane Ellis <openocd@duaneellis.com>  
Copyright 2008 Duane Ellis <openocd@duaneellis.com>  
Copyright 2008 Steve Bennett <steveb@workware.net.au>  
Copyright 2008 Uwe Klein <uklein@klein-messgeraete.de>  
Copyright 2008 Uwe Klein <uklein@klein-messgeraete.de>  
Copyright 2008 oharboe - Oyvind Harboe - oyvind.harboe@zylin.com  
Copyright 2008 oharboe - Øyvind Harboe - oyvind.harboe@zylin.com  
Copyright 2008, SoftPLC Corporation <http://softplc.com> Dick Hollenbeck dick@softplc.com  
Copyright 2008,2009 oharboe - Øyvind Harboe - oyvind.harboe@zylin.com  
Copyright 2009 David Brownell  
Copyright 2009 Nico Coesel <ncoesel@dealogic.nl>  
Copyright 2009 Steve Bennett <steveb@workware.net.au></code></pre>  
Copyright 2009 Steve Bennett <steveb@workware.net.au>  
Copyright 2009 Zachary T Welch zw@superlucidity.net  
Copyright 2010 Jean-Christophe PLAGNIOL-VILLARD <plagnioj@jcrosoft.com>  
Copyright 2015, 2016 Dima Krasner <dima@dimakrasner.com>  
Copyright 2016,2017 Sony Video & Sound Products Inc.  
Copyright 2020-2022 Cadence Design Systems, Inc.  
Copyright © 2000,2001,2002 Free Software Foundation, Inc.  
Copyright Kevlin Henney, 1997, 2003.  
Copyright Salvatore Sanfilippo ,2005.  
Copyright(C) 2005 Salvatore Sanfilippo <antirez@invece.org>  
Copyright(c) 2013 Intel Corporation.  
Copyright(c) 2013-2016 Intel Corporation.  
Copyright(c) 2015-2016 Intel Corporation.  
Copyright (C) 2014 by Cosmin Gorgovan cosmin [at] linux-geek [dot] org  
Copyright (C) 2009 by Audrius Urmanavicius didele.deze@gmail.com  
Copyright (C) 2013/2014 by Nemui Trinomius nemuisankawausogasuki@live.jp  
Copyright (C) 2018 by Jean-Christian de Rivaz jcdr [at] innodelec [dot] ch  
Copyright © 2004 Scott James Remnant <scott@netsplit.com>.  
Copyright © 2012-2015 Dan Nicholson <dbn.lists@gmail.com>  
Copyright (C) 2002 Pat Thoyts <patthoyts@users.sourceforge.net>

**License:** GPL V2.0

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991





Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running

the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute



software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these



terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and an idea of what it does.

Copyright (C) yyyy name of author

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details

type `show w'. This is free software, and you are welcome

to redistribute it under certain conditions; type `show c'

for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision'

(which makes passes at compilers) written

by James Hacker.

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

**Software:** react 18.2.0

**Copyright notice:**

Copyright (c) Facebook, Inc. and its affiliates  
Copyright (c) 2018 Brian Vaughn  
(c) bvaughn (<https://github.com/bvaughn>)  
Copyright (c) 2012-2013 TJ Holowaychuk  
Copyright (c) 2015 Andreas Lubbe  
Copyright (c) 2015 Tiancheng Timothy Gu  
(c) Facebook, Inc. and its affiliates. Confidential  
Copyright (c) 2017, Amjad Masad

**License:** MIT License

Please see above

**Software:** react-i18next v12.1.4

**Copyright notice:**

Copyright (c) 2022 i18next  
Copyright (c) Facebook, Inc. and its affiliates.  
Copyright 2015 the original author or authors.

**License:** MIT License

Please see above

**Software:** react-native 0.68.7

**Copyright notice:**

Copyright (c) Meta Platforms, Inc. and affiliates  
Copyright (c) 2015-2021 the original  
Copyright 2015 the original author or authors  
Copyright (c) Facebook, Inc. and its affiliates  
Portions Copyright (c) Meta Platforms, Inc. and affiliates



copyright 2014-2015 Gaetan Renaudeau  
(c) Meta Platforms, Inc. and affiliates. Confidential  
Copyright 2012 Square Inc.  
Copyright Joyent, Inc. and other Node contributors  
Copyright 2012 Google Inc.  
Copyright (c) 2014 The Android Open Source Project  
Copyright 2015 The Rubik Project AuthorsRubikBold2.000 UKWN Rubik-BoldRubik BoldVersion  
Copyright 2015 The Rubik Project AuthorsRubik LightRegular2.000 UKWN Rubik-LightVersion  
Copyright 2015 The Rubik Project AuthorsRubik MediumRegular2.000 UKWN Rubik-MediumVersion  
Copyright 2015 The Rubik Project AuthorsRubik MediumItalic2.000 UKWN Rubik-MediumItalicRubik  
Medium ItalicVersion  
Copyright 2015 The Rubik Project AuthorsRubikRegular2.000 UKWN Rubik-RegularRubik RegularVersion  
Copyright (c) Meta Platforms, Inc. and affiliates. NSPrincipalClass  
Copyright (c) 2009-2014 Erik Doernenburg and contributors  
Copyright (c) 2007-2014 Erik Doernenburg and contributors  
Copyright (c) 2014 Erik Doernenburg and contributors  
Copyright (c) 2004-2014 Erik Doernenburg and contributors  
Copyright (c) 2007 The Guava Authors  
Copyright (c) 2005 The Android Open Source Project  
Copyright (c) 2006 The Android Open Source Project  
Copyright Oliver Kowalke 2009  
Copyright Edward Nevill  
Copyright 2004-present Facebook  
Copyright (c) 2014-present, Facebook, Inc.

**License:** MIT License

Please see above

**Software:** react-redux 8.0.0

**Copyright notice:**

Copyright (c) Microsoft Corporation  
Copyright (c) 2014-2016, Jon Schlinkert  
Copyright (c) 2015-present Dan Abramov  
Copyright (c) Facebook, Inc.  
Copyright (c) 2014-present, Jon Schlinkert  
Copyright (c) 2015-present, Jon Schlinkert  
Copyright (c) 2017-present, Facebook, Inc.



**License:** MIT License

Please see above

**Software:** react-resizable 3.0.5

**Copyright notice:**

Copyright (c) 2016-2018 Samuel Reed

**License:** MIT License

Please see above

**Software:** redux v4.2.1

**Copyright notice:**

Copyright (c) 2015-present Dan Abramov

Copyright (c) 2017-present, Facebook, Inc.

Copyright (c) 2015-present Dan Abramov and the Redux

copyright a href <https://fontawesome.com/license/free>

**License:** MIT License

Please see above

**Software:** redux-saga 1.2.1

**Copyright notice:**

Copyright (c) Redux-Saga team and other contributors

Copyright (c) 2015 Yassine Elouafi





**License:** MIT License

Please see above

**Software:** tmp 0.0.33

**Copyright notice:**

Copyright (c) 2011-2015 KARASZI Istvan [github@spam.raszi.hu](mailto:github@spam.raszi.hu)

Copyright (c) 2014 KARASZI Istvan

Copyright (c) 2011-2017 KARASZI Istvan <[github@spam.raszi.hu](mailto:github@spam.raszi.hu)>

**License:** MIT License

Please see above

**Software:** tslib 2.3.0

**Copyright notice:**

Copyright (c) Microsoft Corporation

**License:** BSD Zero Clause License

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.



**Software:** videojs 7.21.5

**Copyright notice:**

Copyright Brightcove, Inc.

Copyright 2006 Netherlands Media Art Institute / Montevideo Blender Foundation

Copyright 2011-2015 Twitter, Inc.

Copyright Dave Gandy 2015

Copyright Joyent, Inc. and other Node contributors

**License:** Apache License V2.0

Please see above

**Software:** vscode 1.69.2

**Copyright notice:**

Copyright (c) Microsoft Corporation.

Copyright (C) 1997-2020 Jordan Russell.

Copyright (c) 1991-2017 Unicode, Inc.

Copyright (c) 2002-2020 K.Kosako <kkosako0@gmail.com>

Copyright (c) 2008 Tim Harper

Copyright (c) 2011 Jxck"

Copyright (c) 2014 - present, Travis Webb <me@traviswebb.com>

Copyright (c) 2014 Darin Morrison

Copyright (c) 2014 GitHub Inc.

Copyright (c) 2015 David Owens II

Copyright (c) 2015 FichteFoll <fichtefoll2@googlemail.com>

Copyright (c) 2018 Mozilla Corporation

Copyright (c) 2018, Forrest L Norvell <ogd@aoaioxxysz.net>

Copyright (c) 2020 - present Microsoft Corporation

Copyright (c) Microsoft Corporation.

Copyright (c) Microsoft Corporation.

Copyright (c) daaain/Handlebars project authors

Copyright (c) markdown.tmbundle authors

Copyright (c) sumneko-lua.tmbundle project authors

Copyright (c) textmate-asp.vb.net.tmbundle project authors

Copyright (c) textmate-c.tmbundle authors

Copyright (c) textmate-diff.tmbundle project authors



Copyright (c) textmate-groovy.tmbundle project authors  
Copyright (c) textmate-html.tmbundle project authors  
Copyright (c) textmate-ini.tmbundle project authors  
Copyright (c) textmate-javascript.tmbundle project authors  
Copyright (c) textmate-make.tmbundle project authors  
Copyright (c) textmate-perl.tmbundle project authors  
Copyright (c) textmate-ruby.tmbundle project authors  
Copyright (c) tunnel-agent author  
Copyright (c) vscode-latex-basics authors  
Copyright 2015 The Chromium Authors.  
Copyright 2020, the Dart project authors.  
Copyright Joyent, Inc.  
Copyright © 2015 W3C® (MIT, ERCIM, Keio, Beihang)  
Portions Copyright (C) 2000-2020 Martijn Laan.  
Copyright (c) Microsoft Corporation.  
Copyright (c) Microsoft Corporation.  
Copyright (c) Microsoft Corporation.  
Copyright (c) Microsoft Corporation.  
Copyright (c) Microsoft Corporation.  
Copyright (C) Microsoft Corporation.  
Copyright (c) Microsoft Corporation.  
Copyright (c) Microsoft Corporation.  
Copyright (c) Microsoft Corporation  
Copyright (c) Microsoft Corporation.  
Copyright (C) 2008 Microsoft Corporation @minifierdonotpreserve  
Copyright (C) Microsoft Corporation.  
Copyright (c) 1991-2017 Unicode, Inc.  
Copyright (c) 2007-2018 Einar Lielmanis, Liam Newman, and contributors.  
Copyright (c) 2008 Tim Harper  
Copyright (c) 2009-2014 Jeremy Ashkenas  
Copyright (c) 2010 Scott Kyle and Rasmus Andersson  
Copyright (c) 2010- Mark McGranaghan  
Copyright (c) 2011 Fabrice Bellard  
Copyright (c) 2011 Jxck  
Copyright (c) 2011-2014, Christopher Jeffrey (<https://github.com/chjj/>)  
Copyright (c) 2011-2018, Christopher Jeffrey (<https://github.com/chjj/>)  
Copyright (c) 2012 Alex Sancho, <http://alexsancho.name>  
Copyright (c) 2012-2013, Christopher Jeffrey (MIT License)  
Copyright (c) 2014 Darin Morrison  
Copyright (c) 2014 GitHub Inc.  
Copyright (c) 2014 James Summerton  
Copyright (c) 2014 Jesse Weed



Copyright (c) 2014 The xterm.js authors.  
Copyright (c) 2015 - present Microsoft Corporation  
Copyright (c) 2015 Colors sublime.com  
Copyright (c) 2015 David Owens II  
Copyright (c) 2015 FichteFoll <fichtefoll2@googlemail.com>  
Copyright (c) 2015 Krzysztof Cieslak  
Copyright (c) 2015 emilast  
Copyright (c) 2015-present MagicStack Inc. <http://magic.io>  
Copyright (c) 2016 - present Microsoft Corporation  
Copyright (c) 2016 .NET Foundation  
Copyright (c) 2016 David Rios  
Copyright (c) 2016 James Yu  
Copyright (c) 2016 Microsoft The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.  
Copyright (c) 2017 Emmet.io  
Copyright (c) 2017 Tim Jones  
Copyright (c) 2018 Mozilla Corporation  
Copyright (c) 2018+, MarkedJS (<https://github.com/markedjs/>)  
Copyright (c) 2019 Jeff Hykin  
Copyright (c) 2020 Dustin Pomerleau  
Copyright (c) 2021 Michael Mims  
Copyright (c) 2022 REditorSupport  
Copyright (c) <2013> <Elegant Themes, Inc.>  
Copyright (c) Isaac Z. Schlueter and Contributors  
Copyright (c) Microsoft 2018  
Copyright (c) Microsoft Corporation  
Copyright (c) Microsoft Corporation.  
Copyright (c) daaain/Handlebars project authors  
Copyright (c) markdown.tmbundle authors  
Copyright (c) sumneko-lua.tmbundle project authors  
Copyright (c) textmate-asp.vb.net.tmbundle project authors  
Copyright (c) textmate-c.tmbundle authors  
Copyright (c) textmate-diff.tmbundle project authors  
Copyright (c) textmate-groovy.tmbundle project authors  
Copyright (c) textmate-html.tmbundle project authors  
Copyright (c) textmate-ini.tmbundle project authors  
Copyright (c) textmate-javascript.tmbundle project authors  
Copyright (c) textmate-make.tmbundle project authors  
Copyright (c) textmate-perl.tmbundle project authors  
Copyright (c) textmate-ruby.tmbundle project authors  
Copyright (c) vscode-latex-basics authors  
Copyright 2013-2018 Docker, Inc.



Copyright 2015 Mario Heiderich  
Copyright 2020, the Dart project authors.  
Copyright 2021 NVIDIA Corporation  
Copyright 2021 Trond Snekvik  
Copyright Joyent, Inc.  
Copyright Joyent, Inc. and other Node contributors.  
Copyright © 2004, John Gruber <http://daringfireball.net/>  
Copyright © 2015 W3C® (MIT, ERCIM, Keio, Beihang)  
Copyright (c) Microsoft Corporation  
Copyright (c) Microsoft Corporation

**License:** MIT License

Please see above

## Written Offer

This product contains software whose rights holders license it on the terms of the GNU General Public License, version 2 (GPLv2) and/or other open source software licenses. We will provide you and any third party with the source code of the software licensed under an open source software license if you send us a written request by mail or email to the following addresses:

[foss@huawei.com](mailto:foss@huawei.com)

detailing the name of the product and the firmware version for which you need the source code and indicating how we can contact you.

Please note you need to make a payment before you obtain the complete Corresponding Source Code from us. For how much you will pay and how we will deliver the complete Corresponding Source Code to you, we will further discuss it by mail or email.

This offer is valid to anyone in receipt of this information.

**THIS OFFER IS VALID FOR THREE YEARS FROM THE MOMENT WE DISTRIBUTED THE PRODUCT OR FIRMWARE.**