R&S® NGC10x Power Supply Open Source Acknowledgment



5800885200 Version 01.01



This document is valid for the following Rohde & Schwarz instruments:

- NGC101
- NGC102
- NGC103
- NGC101-G
- NGC102-G
- NGC103-G

© 2023 Rohde & Schwarz GmbH & Co. KG Mühldorfstr. 15, 81671 München, Germany

Phone: +49 89 41 29 - 0
Fax: +49 89 41 29 12 164
Email: info@rohde-schwarz.com
Internet: www.rohde-schwarz.com

Subject to change – Data without tolerance limits is not binding. $R\&S^{\otimes}$ is a registered trademark of Rohde & Schwarz GmbH & Co. KG.

Trade names are trademarks of their owners.

5800.8852.00 | Version 01.01 | R&S® NGC10x

Contents

1	Introduction	5
2	Software packages	6
3	Verbatim license texts	7
4	Copyrights	16
	Annex	17
Α	Base system license texts	17

R&S® NGC10x Contents

R&S® NGC10x Introduction

How to obtain the source code

1 Introduction

This product uses a number of open source software packages which are listed in the section "Software packages" on page 6.

The open source software is provided free of charge. You are entitled to use the open source software in accordance with the respective license conditions as provided in the following chapters.

Rohde & Schwarz would like to thank the open source community for their valuable contribution to our products.

1.1 Disclaimer

The open source software is distributed WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. The respective licenses may contain more details.

1.2 How to obtain the source code

The software included in this product may contain copyrighted software that is licensed under a license requiring us to provide the source code of that software, such as the GPL or LGPL. You may obtain the complete corresponding source code for such copyrighted software from us for an unlimited period of time and at no charge. In this case, please contact:

Rohde & Schwarz GmbH & Co. KG

Muehldorfstr. 15, 81671 Muenchen, Germany

Phone: +49 89 41 29 - 12345

Internet: www.rohde-schwarz.com/support

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

R&S® NGC10x Software packages

2 Software packages

➤ The software contained in this product makes use of the following open source software packages.

Package	Version	License
libpng	1.4.12	libpng License
MicroChip TCPIP	5.42.08	MICROCHIP Non-Exclusive Software License Agreement
MicroChip USB	2.9J	MICROCHIP Non-Exclusive Software License Agreement
nano-X	0.91	Mozilla Public License Version 1.1
newlib	2.2.0	BSD 3-clause "New" or "Revised" License
zlib	1.2.8	zlib License

Mozilla Public License Version 1.1

3 Verbatim license texts

3.1 BSD 3-clause "New" or "Revised" License

All rights reserved.

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.
- 3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 COPYRIGHT HOLDER OR CONTRIBUTORS 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.

3.2 Mozilla Public License Version 1.1

Mozilla Public License Version 1.1

- 1. Definitions.
- 1.0.1. "Commercial Use" means distribution or otherwise making the Covered Code available to a third party.
- 1.1. "Contributor" means each entity that creates or contributes to the creation of Modifications
- 1.2. "Contributor Version" means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor.
- 1.3. "Covered Code" means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof.

- 1.4. "Electronic Distribution Mechanism" means a mechanism generally accepted in the software development community for the electronic transfer of data.
- 1.5. "Executable" means Covered Code in any form other than Source Code.
- 1.6. "Initial Developer" means the individual or entity identified as the Initial Developer in the Source Code notice required by Exhibit A. 1.7. "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License. 1.8. "License" means this document.
- 1.8.1. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.

1.9. "Modifications"

means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is:

a. Any addition to or deletion from the contents of a file containing Original Code or previous Modifications.

b.Any new file that contains any part of the Original Code or previous Modifications.

- 1.10. "Original Code" means Source Code of computer software code which is described in the Source Code notice required by Exhibit A as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License.
- 1.10.1. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.
- 1.11. "Source Code" means the preferred form of the Covered Code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an Executable, or source code differential comparisons against either the Original Code or another well known, available Covered Code of the Contributor's choice. The Source Code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge.
- 1.12. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License or a future version of this License issued under Section 6.1. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.
- 2. Source Code License.
- 2.1. The Initial Developer Grant.

The Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims:

Mozilla Public License Version 1.1

a.under intellectual property rights (other than patent or trademark) Licensable by Initial Developer to use, reproduce, modify, display, perform, sublicense and distribute the Original Code (or portions thereof) with or without Modifications, and/or as part of a Larger Work; and

b.under Patents Claims infringed by the making, using or selling of Original Code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Code (or portions thereof).

c.the licenses granted in this Section 2.1 (a) and (b) are effective on the date Initial Developer first distributes Original Code under the terms of this License.

d.Notwithstanding Section 2.1 (b) above, no patent license is granted: 1) for code that You delete from the Original Code; 2) separate from the Original Code; or 3) for infringements caused by: i) the modification of the Original Code or ii) the combination of the Original Code with other software or devices.

2.2. Contributor Grant.

Subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license

a.under intellectual property rights (other than patent or trademark) Licensable by Contributor, to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof) either on an unmodified basis, with other Modifications, as Covered Code and/or as part of a Larger Work; and

b.under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) Modifications made by that Contributor (or portions thereof); and 2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

c.the licenses granted in Sections 2.2 (a) and 2.2 (b) are effective on the date Contributor first makes Commercial Use of the Covered Code.

d.Notwithstanding Section 2.2 (b) above, no patent license is granted: 1) for any code that Contributor has deleted from the Contributor Version; 2) separate from the Contributor Version; 3) for infringements caused by: i) third party modifications of Contributor Version or ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or 4) under Patent Claims infringed by Covered Code in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

3.1. Application of License.

The Modifications which You create or to which You contribute are governed by the terms of this License, including without limitation Section 2.2. The Source Code version of Covered Code may be distributed only under the terms of this License or a future version of this License released under Section 6.1, and You must include a copy of this License with every copy of the Source Code You distribute. You may not offer or impose any terms on any Source Code version that alters or restricts the applicable

Mozilla Public License Version 1.1

version of this License or the recipients' rights hereunder. However, You may include an additional document offering the additional rights described in Section 3.5.

3.2. Availability of Source Code.

Any Modification which You create or to which You contribute must be made available in Source Code form under the terms of this License either on the same media as an Executable version or via an accepted Electronic Distribution Mechanism to anyone to whom you made an Executable version available; and if made available via Electronic Distribution Mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular Modification has been made available to such recipients. You are responsible for ensuring that the Source Code version remains available even if the Electronic Distribution Mechanism is maintained by a third party.

3.3. Description of Modifications.

You must cause all Covered Code to which You contribute to contain a file documenting the changes You made to create that Covered Code and the date of any change. You must include a prominent statement that the Modification is derived, directly or indirectly, from Original Code provided by the Initial Developer and including the name of the Initial Developer in (a) the Source Code, and (b) in any notice in an Executable version or related documentation in which You describe the origin or ownership of the Covered Code.

3.4. Intellectual Property Matters

(a) Third Party Claims

If Contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such Contributor under Sections 2.1 or 2.2, Contributor must include a text file with the Source Code distribution titled "LEGAL" which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If Contributor obtains such knowledge after the Modification is made available as described in Section 3.2, Contributor shall promptly modify the LEGAL file in all copies Contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the Covered Code that new knowledge has been obtained.

(b) Contributor APIs

If Contributor's Modifications include an application programming interface and Contributor has knowledge of patent licenses which are reasonably necessary to implement that API, Contributor must also include this information in the legal file.

(c) Representations.

Contributor represents that, except as disclosed pursuant to Section 3.4 (a) above, Contributor believes that Contributor's Modifications are Contributor's original creation(s) and/or Contributor has sufficient rights to grant the rights conveyed by this License.

3.5. Required Notices.

Mozilla Public License Version 1.1

You must duplicate the notice in Exhibit A in each file of the Source Code. If it is not possible to put such notice in a particular Source Code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more Modification(s) You may add your name as a Contributor to the notice described in Exhibit A. You must also duplicate this License in any documentation for the Source Code where You describe recipients' rights or ownership rights relating to Covered Code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Code. However, You may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.6. Distribution of Executable Versions.

You may distribute Covered Code in Executable form only if the requirements of Sections 3.1, 3.2, 3.3, 3.4 and 3.5 have been met for that Covered Code, and if You include a notice stating that the Source Code version of the Covered Code is available under the terms of this License, including a description of how and where You have fulfilled the obligations of Section 3.2. The notice must be conspicuously included in any notice in an Executable version, related documentation or collateral in which You describe recipients' rights relating to the Covered Code. You may distribute the Executable version of Covered Code or ownership rights under a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable version does not attempt to limit or alter the recipient's rights in the Source Code version from the rights set forth in this License. If You distribute the Executable version under a different license You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or any Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.7. Larger Works.

You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Code.

4. Inability to Comply Due to Statute or Regulation.

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Code due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the legal file described in Section 3.4 and must be included with all distributions of the Source Code. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Application of this License.

This License applies to code to which the Initial Developer has attached the notice in Exhibit A and to related Covered Code.

6. Versions of the License.

6.1. New Versions

Netscape Communications Corporation ("Netscape") may publish revised and/or new versions of the License from time to time. Each version will be given a distinguishing version number.

6.2. Effect of New Versions

Once Covered Code has been published under a particular version of the License, You may always continue to use it under the terms of that version. You may also choose to use such Covered Code under the terms of any subsequent version of the License published by Netscape. No one other than Netscape has the right to modify the terms applicable to Covered Code created under this License.

6.3. Derivative Works

If You create or use a modified version of this License (which you may only do in order to apply it to code which is not already Covered Code governed by this License), You must (a) rename Your license so that the phrases "Mozilla", "MOZILLAPL", "MOZPL", "Netscape", "MPL", "NPL" or any confusingly similar phrase do not appear in your license (except to note that your license differs from this License) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public License and Netscape Public License. (Filling in the name of the Initial Developer, Original Code or Contributor in the notice described in Exhibit A shall not of themselves be deemed to be modifications of this License.)

7. Disclaimer of warranty

Covered code is provided under this license on an "as is" basis, without warranty of any kind, either expressed or implied, including, without limitation, warranties that the covered code is free of defects, merchantable, fit for a particular purpose or non-infringing. The entire risk as to the quality and performance of the covered code is with you. Should any covered code prove defective in any respect, you (not the initial developer or any other contributor) assume the cost of any necessary servicing, repair or correction. This disclaimer of warranty constitutes an essential part of this license. No use of any covered code is authorized hereunder except under this disclaimer.

8. Termination

- 8.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the Covered Code which are properly granted shall survive any termination of this License. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.
- 8.2. If You initiate litigation by asserting a patent infringement claim (excluding declatory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as "Participant") alleging that:

Mozilla Public License Version 1.1

a.such Participant's Contributor Version directly or indirectly infringes any patent, then any and all rights granted by such Participant to You under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively, unless if within 60 days after receipt of notice You either: (i) agree in writing to pay Participant a mutually agreeable reasonable royalty for Your past and future use of Modifications made by such Participant, or (ii) withdraw Your litigation claim with respect to the Contributor Version against such Participant. If within 60 days of notice, a reasonable royalty and payment arrangement are not mutually agreed upon in writing by the parties or the litigation claim is not withdrawn, the rights granted by Participant to You under Sections 2.1 and/or 2.2 automatically terminate at the expiration of the 60 day notice period specified above.

b.any software, hardware, or device, other than such Participant's Contributor Version, directly or indirectly infringes any patent, then any rights granted to You by such Participant under Sections 2.1(b) and 2.2(b) are revoked effective as of the date You first made, used, sold, distributed, or had made, Modifications made by that Participant.

- 8.3. If You assert a patent infringement claim against Participant alleging that such Participant's Contributor Version directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.
- 8.4. In the event of termination under Sections 8.1 or 8.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or any distributor hereunder prior to termination shall survive termination.

9. Limitation of liability

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall you, the initial developer, any other contributor, or any distributor of covered code, or any supplier of any of such parties, be liable to any person for any indirect, special, incidental, or consequential damages of any character including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such party's negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion and limitation may not apply to you.

10. U.S. government end users

The Covered Code is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

11. Miscellaneous

Mozilla Public License Version 1.1

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by California law provisions (except to the extent applicable law, if any, provides otherwise), excluding its conflict-of-law provisions. With respect to disputes in which at least one party is a citizen of, or an entity chartered or registered to do business in the United States of America, any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California, with venue lying in Santa Clara County, California, with the losing party responsible for costs, including without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License.

12. Responsibility for claims

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

13. Multiple-licensed code

Initial Developer may designate portions of the Covered Code as "Multiple-Licensed". "Multiple-Licensed" means that the Initial Developer permits you to utilize portions of the Covered Code under Your choice of the MPL or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

Exhibit A - Mozilla Public License.

"The contents of this file are subject to the Mozilla Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.mozilla.org/MPL/

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code is						
The Initial Developer of the Original Code is						
Portions created by	are Copyright (C)					
All Rights Re	served.					
Contributor(s):	······································					
Alternatively, the contents of this file may be (the "[] License"), in which case the	e used under the terms of the license					
provisions of [] License are applicable allow use of your version of this file only unto allow others to use your version of this file.	der the terms of the [] License and not					

Mozilla Public License Version 1.1

deleting the provisions above and replace them with the notice and other provisions	S
required by the [] License. If you do not delete the provisions above, a recipient	
may use your version of this file under either the MPL or the [] License."	

NOTE: The text of this Exhibit A may differ slightly from the text of the notices in the Source Code files of the Original Code. You should use the text of this Exhibit A rather than the text found in the Original Code Source Code for Your Modifications.

R&S® NGC10x Copyrights

4 Copyrights

The following table lists copyright notices for open source software packages (or parts of such software packages).

Package	Version	Copyright
libpng	1.4.12	Copyright (c) 2004, 2006 - 2010 Glenn Randers-Pehrson.
nano-X	0.91	Copyright (c) 1999, 2000, 2001, 2002, 2003, 2004, 2005 Greg Haerr.
		Copyright (c) 2002 Koninklijke Philips Electronics N.V.
zlib	1.2.8	Copyright (c) 1995 - 2013 Jean-loup Gailly and Mark Adler.

Annex

A Base system license texts

This annex contains the license texts for the base system of the product, i.e., the bootloader, the Linux kernel, and the root filesystem.

For the standard licenses, see the chapter "3 Verbatim license texts":

The other license texts (usually MIT-style or BSD-style licenses) are appended below:

- libpng : LICENSE
- MICROCHIP Non-Exclusive Software License Agreement
- zlib License

libpng: LICENSE

This copy of the libpng notices is provided for your convenience. In case of any discrepancy between this copy and the notices in the file png.h that is included in the libpng distribution, the latter shall prevail.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libpng you may insert additional notices immediately following this sentence.

This code is released under the libpng license.

libpng versions 1.2.6, August 15, 2004, through 1.4.12, July 10, 2012, are Copyright (c) 2004, 2006-2010 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.2.5 with the following individual added to the list of Contributing Authors

Cosmin Truta

libpng versions 1.0.7, July 1, 2000, through 1.2.5 - October 3, 2002, are Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors

Simon-Pierre Cadieux

Eric S. Raymond

Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane

Glenn Randers-Pehrson

Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996, 1997 Andreas Dilger Distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler

Kevin Bracey

Sam Bushell

Magnus Holmgren

Greg Roelofs

Tom Tanner

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc. For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger

Dave Martindale

Guy Eric Schalnat

Paul Schmidt

Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source , or portions hereof, for any purpose, without fee, subject to the following restrictions:

1

The origin of this source code must not be misrepresented.

2.

Altered versions must be plainly marked as such and must not be misrepresented as being the original source.

3.

This Copyright notice may not be removed or altered from any source or altered source distribution. The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated. A "png get copyright" function is available, for convenient use in "about"

boxes and the like: printf("%s",png_get_copyright(NULL)); Also, the PNG logo (in PNG format, of course) is supplied in the files "pngbar.png" and "pngbar.jpg (88x31) and "pngnow.png" (98x31).

Libpng is OSI Certified Open Source Software. OSI Certified Open Source is a certification mark of the Open Source Initiative.

Glenn Randers-Pehrson

glennrp at users.sourceforge.net
July 10, 2012

MICROCHIP Non-Exclusive Software License Agreement

MICROCHIP IS WILLING TO LICENSE THE ACCOMPANYING SOFTWARE AND DOCUMENTATION TO YOU ONLY ON THE CONDITION THAT YOU ACCEPT ALL OF THE FOLLOWING TERMS. TO ACCEPT THE TERMS OF THIS LICENSE, CLICK "I ACCEPT" AND PROCEED WITH THE DOWNLOAD OR INSTALL. IF YOU DO NOT ACCEPT THESE LICENSE TERMS, CLICK "I DO NOT ACCEPT," AND DO NOT DOWNLOAD OR INSTALL THIS SOFTWARE.

This Microchip Nonexclusive Software License Agreement ("Agreement") is a contract between you, your heirs, successors and assigns ("Licensee") and Microchip Technology Incorporated, a Delaware corporation, with a principal place of business at 2355

- W. Chandler Blvd., Chandler, AZ 85224-6199, and its subsidiaries including, Microchip Technology (Barbados) II Incorporated (collectively, "Microchip") for the accompanying Microchip software, including any PC programs, and any modifications or updates thereto (collectively, the "Software"), and accompanying documentation, including images and any other graphic provided by Microchip ("Documentation").
- 1. Definitions. As used in this Agreement, the following capitalized terms will have the meanings defined below:
- a) "Microchip Products" means Microchip integrated circuit devices.
- b) "Licensee Products" means Licensee products that use or incorporate Microchip Products.
- c) "Third Party" means Licensee's agents, distributors, consultants, clients, customers, contract manufacturers, resellers, or representatives.
- d) "Third Party Products" means Third Party products that use or incorporate Microchip Products.
- 2. Software License Grant. Microchip grants strictly to Licensee a non-exclusive, nontransferable, worldwide license:
- a) To use the Software in connection with Licensee Products or Third Party Products;
- b) If source code is provided by Microchip to Licensee, to modify the Software for the sole purpose of rendering the Software operable with Licensee Products or Third Party Products, provided that Licensee clearly notifies Third Parties regarding the source of such modifications; and c) To distribute the Software to Third Parties for use with or incorporation into Licensee Products or Third Party Products, provided that Licensee ensures that: (i) such Third Party agrees to be bound by this Agreement (in writing or by "click to accept"), and (ii) this Agreement accompanies such distribution. The procedure described in sub-clauses (i) and (ii) is not required when the Software is embedded in machine-readable object code form as firmware in Licensee Products or Third Party Products. Further, the procedure described in sub-clauses (i) and (ii) is not required when modified versions of PC programs are re-distributed in machine-readable object code form, provided that Licensee notifies end users that: (1) the modified PC program is derived from a Microchip PC program and is governed by the terms of this Agreement including the requirement to use such program with Microchip Products, (2)

a copy of this Agreement is available upon request, and (3) the supports the modified PC program.

For purposes of clarity, Licensee may NOT embed the Software on a non-Microchip Product, except as expressly described in this Section 2 or the Documentation. 3. Documentation License Grant. Microchip grants to Licensee a non-exclusive, nontransferable, worldwide license to use the Documentation in support of the authorized use of the Software as set forth in this Agreement. 4. Third Party Requirements. Licensee acknowledges that it is Licensee's responsibility to comply with any third party license terms or requirements applicable to the use of such third party software, specifications, systems, or tools. This includes, by way of example but not as a limitation, any standards setting organizations requirements and, particularly with respect to Security Package Software, if any, local encryption laws and requirements. Microchip is not responsible and will not be held responsible in any manner for Licensee's failure to comply with such applicable third party terms or requirements. 5. Open Source Components. Notwithstanding the license grant in Section 2 above, Licensee further acknowledges that certain components of the Software may be covered by so-called "open source" software licenses ("Open Source Components"). Open Source Components means any software licenses approved as open source licenses by the Open Source Initiative or any substantially similar licenses, including without limitation any license that, as a condition of distribution of the software licensed under such license, requires that the distributor make the software available in source code format. To the extent required by the licenses covering Open Source Components, the terms of such license will apply in lieu of the terms of this Agreement. To the extent the terms of the licenses applicable to Open Source Components prohibit any of the restrictions in this Agreement with respect to such Open Source Components, such restrictions will not apply to such Open

- 6. Licensee Obligations. Licensee will not: (a) engage in unauthorized use, modification, disclosure or distribution of Software or Documentation, or its modifications or derivatives; (b) use all or any portion of the Software, Documentation, or its modifications or derivatives except in conjunction with Microchip Products, Licensee Products, or Third Party Products as set forth in this Agreement; or (c) reverse engineer (by disassembly, decompilation or otherwise) Software or any portion thereof. Licensee may not remove or alter any Microchip copyright or other proprietary notice posted in any portion of the Software or Documentation. Licensee will defend, indemnify and hold Microchip and its subsidiaries harmless from and against any and all claims, costs, damages, expenses (including reasonable attorney's fees), liabilities, and losses, including without limitation: (x) any claims directly or indirectly arising from or related to the use, modification, disclosure or of the Software, Documentation, or any intellectual property rights related thereto; (y) the use, sale and distribution of Licensee Products or Third Party Products; and (z) breach of this Agreement.
- 7. Confidentiality. Licensee agrees that the Software (including but not limited to the source code, object code and library files) and its modifications or derivatives, Documentation and underlying inventions, algorithms, know-how and ideas relating to Software and the Documentation are proprietary information belonging to Microchip and its licensors ("Proprietary Information"). Except as expressly and unambiguously allowed herein, Licensee will hold in confidence and not use or disclose any Proprietary Information and will similarly bind its employees and Third Party(ies) in writing.

Source Component.

Proprietary Information will not include information that: (i) is in or enters the public domain without breach of this Agreement and through no fault of the receiving party; (ii) the receiving party was legally in possession of prior to receiving it; (iii) the receiving party can demonstrate was developed by the receiving party independently and without use of or reference to the disclosing party's Proprietary Information; or (iv) the receiving party receives from a third party without restriction on disclosure. If Licensee is required to disclose Proprietary Information by law, court order, or government agency, License will give Microchip prompt notice of such requirement in order to allow Microchip to object or limit such disclosure. Licensee agrees that the provisions of this Agreement regarding unauthorized use and nondisclosure of the Software, Documentation and related Proprietary Rights are necessary to protect the legitimate business interests of Microchip and its licensors and that monetary damage alone cannot adequately compensate Microchip or its licensors if such provisions are violated. Licensee, therefore, agrees that if Microchip alleges that Licensee Third Party has breached or violated such provision then Microchip will have the right to injunctive relief, without the requirement for the posting of a bond, in addition to all other remedies at law or in equity.

- 8. Ownership of Proprietary Rights. Microchip and its licensors retain all right, title and interest in and to the Software and Documentation including, but not limited to all patent, copyright, trade secret and other intellectual property rights in the Software, Documentation, and underlying technology and all copies and derivative works thereof (by whomever produced). Licensee and Third Party use of Software modifications and derivatives is limited to the license rights described this Agreement.
- 9. Termination of Agreement. Without prejudice to any other rights, this Agreement terminates immediately, without notice by Microchip, upon a failure by Licensee or Third Party to comply with any provision of this Agreement. Upon termination, Licensee and Third Party will immediately stop using the Software, Documentation, modifications and derivatives thereof, and immediately destroy all such copies.

 10. Warranty Disclaimers. THE SOFTWARE AND DOCUMENTATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE. MICROCHIP AND ITS LICENSORS ASSUME NO RESPONSIBILITY FOR THE ACCURACY, RELIABILITY OR APPLICATION OF THE SOFTWARE OR DOCUMENTATION. MICROCHIP AND ITS LICENSORS DO NOT WARRANT THAT THE SOFTWARE WILL MEET REQUIREMENTS OF LICENSEE OR THIRD PARTY, BE UNINTERRUPTED OR ERROR-FREE. MICROCHIP AND ITS LICENSORS HAVE NO OBLIGATION TO CORRECT ANY DEFECTS IN THE SOFTWARE.
- 11. Limited Liability. IN NO EVENT WILL MICROCHIP OR ITS LICENSORS BE LIABLE
 OBLIGATED UNDER ANY LEGAL OR EQUITABLE THEORY FOR ANY DIRECT OR INDIRECT DAMAGES OR
 EXPENSES INCLUDING BUT NOT LIMITED TO INCIDENTAL, SPECIAL, INDIRECT, PUNITIVE OR
 CONSEQUENTIAL DAMAGES, LOST PROFITS OR LOST DATA, COST OF PROCUREMENT OF SUBSTITUTE
 GOODS, TECHNOLOGY, SERVICES, OR ANY CLAIMS BY THIRD PARTIES (INCLUDING BUT NOT
 LIMITED TO ANY DEFENSE THEREOF), OR OTHER SIMILAR COSTS. The aggregate and cumulative
 liability of Microchip and its licensors for damages hereunder will in no event
 exceed \$1000 or the amount Licensee paid Microchip for the Software and
 Documentation, whichever is greater. Licensee acknowledges that the foregoing
 limitations are reasonable and an essential part of this Agreement.
- 12. General. THIS AGREEMENT WILL BE GOVERNED BY AND CONSTRUED UNDER THE LAWS OF THE STATE OF ARIZONA AND THE UNITED STATES WITHOUT REGARD TO CONFLICTS OF LAWS PROVISIONS. Licensee agrees that any disputes arising out of or related to this Agreement,

Software or Documentation will be brought exclusively in either the U.S. District Court for the District of Arizona, Phoenix Division, or the Superior Court of Arizona located in Maricopa County, Arizona. This Agreement will constitute the entire agreement between the parties with respect to the subject matter hereof. It will not be modified except by a written agreement signed by an authorized representative of Microchip. If any provision of this Agreement will be held by a court of competent jurisdiction to be illegal, invalid or unenforceable, that provision will be limited or eliminated to the minimum extent necessary so that this Agreement will otherwise remain in full force and effect and enforceable. No waiver of any breach of any provision of this Agreement will constitute a waiver of any prior, concurrent or subsequent breach of the same or any other provisions hereof, and no waiver will be effective unless made in writing and signed by an authorized representative of the waiving party. Licensee agrees to comply with all import and export laws and restrictions and regulations of the Department of Commerce or other United States or foreign agency or authority. The indemnities, obligations of confidentiality, and limitations on liability described herein, and any right of action for breach of this Agreement prior to termination, will survive any termination of this Agreement. Any prohibited assignment will be null and void. Use, duplication or disclosure by the United States Government is subject to restrictions set forth in subparagraphs (a) through (d) of the Commercial Computer-Restricted Rights clause of FAR 52.227when applicable, or in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013, and in similar clauses in the NASA FAR Supplement. Contractor/manufacturer is Microchip Technology Inc., 2355 W. Chandler Blvd., Chandler, AZ 85224-6199.

If Licensee has any questions about this Agreement, please write to Microchip Technology Inc., 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 USA. ATTN: Marketing. License Rev. No. 06-010914

zlib License

zlib.h

-- interface of the 'zlib' general purpose compression library v. 1.2.8, April 28th, 2013

Copyright (c) 1995-2013 Jean-loup Gailly and Mark Adler
This software is provided 'as-is', without any express or implied warranty.
In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software a product, an acknowledgment in the product documentation would be appreciated but is not required.

2.

Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.

3.

This notice may not be removed or altered from any source distribution. Jean-loup Gailly, jloup@gzip.org
Mark Adler, madler@alumni.caltech.edu