

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

I. Overview - Third-party software components, copyrights and licenses

Software provided by PI may incorporate and/or make use of the following third-party software components (open source and freeware software). Components listed below are open source or freeware and are covered by their respective copyrights, license agreements and/or disclaimers of warranty, presented in the following table and the following section II.

In the event an applicable open source license agreement requires the provision of the source code and/or object code of Software or parts thereof provided by PI, such source code and/or object code will be made available to the Customer within a reasonable period of time upon legitimate request via e-mail to support-software@pi.ws for a charge limited to the expenses PI has in complying with such Customer request; provided, however, that PI shall be entitled to reject such Customer request if it is made after the third anniversary of the delivery date of the Software.

In the event a certain source code is delivered in executable form and has to be made available pursuant to the terms of the applicable open source license agreement, please follow the corresponding link in the 'URL' column of the table below or contact support-software@pi.ws.

Component/Software	URL	License	Copyright owner	Incorporated in
dglOpenGL.pas 1.8 BETA	https://github.com/saschawillems/dglopengl	MPL 1.1	Copyright © DGL-OpenGL-Portteam - All Rights Reserved	Hexapod_Simutool
Expat XML Parser 1.95.6	http://expat.sourceforge.net/	MIT License	Copyright © 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper Copyright © 2001, 2002 Expat maintainers	PI C++ Std. Libraries with GUI*
Expat XML Parser 2.1.0	http://expat.sourceforge.net/	MIT License	Copyright © 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper Copyright © 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers	PI C++ Std. Libraries with GUI*
Firebird® 2.5.3	http://www.firebirdsql.org/	IDPL Version 1.0	Copyright © 2000-2015, Firebird Project	PI_GCS2_DLL PIMikroMove PIStages3Editor
Firebird® InterBase® components 2.5.3	http://www.firebirdsql.org/	IPL Version 1.0	The Original Code was created by Inprise Corporation and its predecessors. Portions created by Inprise Corporation are Copyright © Inprise Corporation. All Rights Reserved.	PI_GCS2_DLL PIMikroMove PIStages3Editor
GLScene 1.0.0.0714	http://glscene.org/	MPL 1.1	Copyright © 2000-2002 Eric Grange, based on previous work by Mike Lischke	HexDLL PIVeriMove
glut.pas	http://www.delphi3d.net/(archived)	glut.pas License	Copyright © by Tom Nuydens	HexDLL PIVeriMove
ibpp 2.5.3	http://www.ibpp.org/	IBPP License v1.1	Copyright © 2000-2006 T.I.P. Group S.A. and the IBPP Team	PI_GCS2_DLL PIMikroMove PIStages3Editor
Kiss FFT 1.3.0	http://kissfft.sourceforge.net/	Kiss FFT License	Copyright © 2003-2010 Mark Borgerding	PI C++ Std. Libraries with GUI* PI C++ Std. Libraries without GUI**
libjpeg 6b ("the Independent JPEG Group's software")	http://libjpeg.sourceforge.net/	Libjpeg License	Copyright © 1991-1998, Thomas G. Lane	PI C++ Std. Libraries with GUI*
LibTIFF 3.6.1	http://www.simplesystems.org/libtiff/	LibTIFF License	Copyright © 1988-1997 Sam Leffler Copyright © 1991-1997 Silicon Graphics, Inc.	PI C++ Std. Libraries with GUI*
LibTIFF 3.8.2	http://www.simplesystems.org/libtiff/	LibTIFF License	Copyright © 1988-1997 Sam Leffler Copyright © 1991-1997 Silicon Graphics, Inc.	PI C++ Std. Libraries with GUI*
LibTIFF 4.0.3	http://www.simplesystems.org/libtiff/	LibTIFF License	Copyright © 1988-1997 Sam Leffler Copyright © 1991-1997 Silicon Graphics, Inc.	PI C++ Std. Libraries with GUI*
libusb-1.0	http://libusb.info/	GPL Version 2.1	Copyright © 2007-2009 Daniel Drake <dsd@gentoo.org> Copyright © 2001 Johannes Erdfelt <johannes@erdfelt.com> Copyright © 2008-2012 Nathan Hjelm <hjelmn@users.sourceforge.net> Copyright © 2009-2012 Pete Batard <pete@akeo.ie> Copyright © 2010 Michael Plante <michael.plante@gmail.com> Copyright © 2010-2012 Peter Stuge <peter@stuge.se> Copyright © 2011-2012 Hans de Goede <hdegoede@redhat.com> Copyright © 2012 Martin Pieuchot <mpi@openbsd.org>	libpi_pi_gcs2.so libpi_pi_gcs2.a

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

Linux® kernel	https://www.kernel.org/	GPL Version 2	Copyright © 1991-2016 Linus Torvalds (copyright holder in the "collective work", individual copyrights in the "separate contributions" may still apply)	Linux® E-761 device driver
Modified Tcl Regex 8.4.5	http://tcl.sourceforge.net/	Modified Tcl Regex 8.4.5 License	Several copyrights apply: Copyright © 1998, 1999 Henry Spencer. All rights reserved. Copyright © by the Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, ActiveState Corporation and other parties. Copyright © 1998-2005 Julian Smart, Robert Roebling et al	PI C++ Std. Libraries with GUI*
Newton Game Dynamics SDK 2.0 Beta Header Translations to Delphi/Pascal	http://newtondynamics.com/forum/viewtopic.php?f=9&t=5273&start=0	MPL 1.1	Copyright © 2004,05,06,09 Stuart "Stucuk" Carey, Sascha Willems, Jon Walton, Dominique Louis Initial Author : S.Spasov (Sury)	HexDLL PIVeriMove
NI LabWindows™/CVI Runtime	https://www.ni.com/	National Instruments Software License Agreement	Copyright © 1993–2013 National Instruments. All rights reserved.	NanoCapture
psimpl v7	http://psimpl.sourceforge.net/	MPL 1.1	Copyright © 2010-2011 Elmar de Koning. All Rights Reserved.	PIMikroMove PIStages2Editor
WX 2.8.7	http://wxwidgets.org/	wxWindows Library License 3.1	Copyright © 1998-2005 Julian Smart, Robert Roebling et al	PI C++ Std. Libraries with GUI*
WX 2.9.3	http://wxwidgets.org/	wxWindows Library License 3.1	Copyright © 1998-2005 Julian Smart, Robert Roebling et al	PI C++ Std. Libraries with GUI*
WX 3.0.2	http://wxwidgets.org/	wxWindows Library License 3.1	Copyright © 1998-2005 Julian Smart, Robert Roebling et al	PI C++ Std. Libraries with GUI*
zlib 1.2.x	http://www.zlib.net/zlib.html	zlib License 1.2.x	Copyright © 1995-2013 Jean-loup Gailly and Mark Adler	PI C++ Std. Libraries with GUI* PI C++ Std. Libraries without GUI**

* "PI C++ Std. Libraries with GUI" are used in: C7XX_GCS_DLL, E7XX_GCS_DLL, E7XX_GCS2_DLL, E816_DLL, generic_i, NanoCapture, PI E870Control, PI_GCS2_DLL, PI_Mercury_GCS_DLL, PIMICOS_StageEditor, PIMikroMove, PIStages2Editor, PIStages3Editor, PITerminal, PITuningTool DLL, PIUpdateFinder

** "PI C++ Std. Libraries without GUI" are used in: C-843 DLL, GCSTranslator, libpi_e7xx_gcs.so, libpi_e7xx_gcs.a, libpi_pi_gcs2.dylib, libpi_pi_gcs2.so, libpi_pi_gcs2.a, PI_HydraPollux_GCS_DLL

Notes on trademarks:

Firebird® is a registered trademark of the Firebird Foundation Incorporated. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries. CVI, LabVIEW, National Instruments and NI are trademarks of National Instruments. Neither PI, nor any software programs or other goods or services offered by PI, are affiliated with, endorsed by, or sponsored by National Instruments. The mark LabWindows™ is used under a license from Microsoft® Corporation. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. OpenGL® is a registered trademark of SGI (Silicon Graphics International Corp.).

II. License texts / notes

This section lists the full license agreements and/or license notes with regard to third-party software components that may be incorporated in or used with Software provided by PI.

(1) glut.pas License

The Dot is completely free for both non-commercial and commercial use. If you distribute an application based on the Dot, please give credit by putting a link to www.delphi3d.net in an end user-visible place.

The Dot is provided without warranty of any kind, so use it at your own risk.

Please do not redistribute the Dot source code. If you want to share the Dot with others, please provide a link to www.delphi3d.net/dot instead, so people can download the latest version of the Dot from there.

(2) GPL Version 2

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.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

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.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

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.

(3) IBPP License v1.1

IBPP License v1.1

© Copyright 2000-2006 T.I.P. Group S.A. and the IBPP Team (www.ibpp.org)

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

Permission is hereby granted, free of charge, to any person or organization ("You") obtaining a copy of this software and associated documentation files covered by this license (the "Software") to use the Software as part of another work; to modify it for that purpose; to publish or distribute it, modified or not, for that same purpose; to permit persons to whom the other work using the Software is furnished to do so; subject to the following conditions: the above copyright notice and this complete and unmodified permission notice shall be included in all copies or substantial portions of the Software; You will not misrepresent modified versions of the Software as being the original.

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 of other dealings in the Software.

(4) IDPL Version 1.0

Initial Developer's Public License Version 1.0

1. Definitions

1.0 "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:

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

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:

(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

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

or restricts the applicable 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. 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 Section 3.1-3.5 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. The Initial Developer of this code 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 the Initial Developer. No one other than the Initial Developer 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 phrases 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.)

6.4 Origin of the Initial Developer's Public License. The Initial Developer's Public License is based on the Mozilla Public License V 1.1 with the following changes:

1) The license is published by the Initial Developer of this code. Only the Initial Developer can modify the terms applicable to Covered Code.

2) The license can be modified and used for code which is not already governed by this license. Modified versions of the license must be renamed to avoid confusion with the Initial Developer's Public License and must include a description of changes from the Initial Developer's Public License.

3) The name of the license in Exhibit A is the "Initial Developer's Public License".

4) The reference to an alternative license in Exhibit A has been removed.

5) Amendments I, II, III, V, and VI have been deleted.

6) Exhibit A, Netscape Public License has been deleted

7. DISCLAIMER OF WARRANTY.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

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, MERCHANTABILITY, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. 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 declaratory 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:

(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.

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 IDPL or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

EXHIBIT A -Initial Developer's Public License.

The contents of this file are subject to the Initial Developer's Public License Version 1.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License from the Firebird Project website, at <http://www.firebirdsql.org/en/initial-developer-s-public-license-version-1-0/> 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 Reserved.

Contributor(s): _____.

(5) IPL Version 1.0

INTERBASE PUBLIC LICENSE
Version 1.0

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:

(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 Patent 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 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.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

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.

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 that 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 Section 3.1-3.5 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.

Inprise Corporation ("Inprise") 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 Inprise. No one other than Inprise 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", "InterBase", "Inprise", "Borland" 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.)

6.4 Origin of the InterBase Public License.

The InterBase public license is based on the Mozilla Public License V 1.1 with the following changes:

1. The license is published by Inprise Corporation. Only Inprise Corporation can modify the terms applicable to Covered Code.
2. The license can be modified and used for code which is not already governed by this license. Modified versions of the license must be renamed to avoid confusion with Netscape's or Inprise's license and must include a description of changes from the InterBase Public License.
3. The name of the license in Exhibit A is the "InterBase Public License".
4. The reference to an alternative license in Exhibit A has been removed.
5. Amendments I, II, III, V, and VI have been deleted.
6. Exhibit A, Netscape Public License has been deleted
7. A new amendment (II) has been added, describing the required and restricted rights to use the trademarks of Inprise Corporation.

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, MERCHANTABILITY, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. 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.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

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 declaratory 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:

(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.

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 Georgia 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 Georgia and/or the state courts of Gwinnett County, Georgia, 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 InterBase Public License or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

EXHIBIT A - InterBase Public License.

"The contents of this file are subject to the InterBase Public License Version 1.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.interbase.com/IPL.html>

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 was created by InterBase Software Corp and its successors.

Portions created by Borland/Inprise are Copyright (C) Borland/Inprise. All Rights Reserved.

Contributor(s): _____.

AMENDMENTS

I. InterBase and logo. This License does not grant any rights to use the trademarks "InterBase", "Java" or "JavaScript" even if such marks are included in the Original Code or Modifications.

II. Trademark Usage.

II.1. Advertising Materials. All advertising materials mentioning features or use of the covered Code must display the following acknowledgement: "This product includes software developed by Inprise Corporation. "

II.2. Endorsements. The names "InterBase", "Inprise," and "Borland" must not be used to endorse or promote Contributor Versions or Larger Works without the prior written permission of InterBase.

II.3. Product Names. Contributor Versions and Larger Works may not be called "InterBase" or "InterBase" nor may the word "InterBase" appear in their names without the prior written permission of Inprise.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

(6) Kiss FFT License

Copyright (c) 2003-2010 Mark Borgerding

All rights reserved.

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

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * 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.
- * Neither the author nor the names of any 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 OWNER 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.

(7) LGPL Version 2.1

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 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.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, 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 and use pieces of it in new free programs; and that you are informed that you can do these things.

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

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, 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 library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete 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 distribute a copy of this License along with the Library.

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 Library or any portion of it, thus forming a work based on the Library, 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)** The modified work must itself be a software library.
- **b)** You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- **c)** You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- **d)** If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, 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 Library, 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 Library.

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

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you 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.

If distribution of 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 satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- **a)** Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- **b)** Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- **c)** Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

- **d)** If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- **e)** Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be 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.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- **a)** Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- **b)** Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library 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.

9. 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 Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library 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 with this License.

11. 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 Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library 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 Library.

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.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library 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.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser 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 Library 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 Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, 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

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "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 LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. 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 LIBRARY 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 LIBRARY (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 LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), 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 Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. 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 library's name and an idea of what it does.

Copyright (C) year name of author

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; 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.

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

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

signature of Ty Coon, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

(8) Libjpeg License

The Independent JPEG Group's JPEG software

=====

README for release 6b of 27-Mar-1998

=====

This distribution contains the sixth public release of the Independent JPEG Group's free JPEG software. You are welcome to redistribute this software and to use it for any purpose, subject to the conditions under LEGAL ISSUES, below.

Serious users of this software (particularly those incorporating it into larger programs) should contact IJG at jpeg-info@uunet.uu.net to be added to our electronic mailing list. Mailing list members are notified of updates and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge' Weijers, and other members of the Independent JPEG Group.

IJG is not affiliated with the official ISO JPEG standards committee.

DOCUMENTATION ROADMAP

=====

This file contains the following sections:

OVERVIEW General description of JPEG and the IJG software.
 LEGAL ISSUES Copyright, lack of warranty, terms of distribution.
 REFERENCES Where to learn more about JPEG.
 ARCHIVE LOCATIONS Where to find newer versions of this software.
 RELATED SOFTWARE Other stuff you should get.
 FILE FORMAT WARS Software *not* to get.
 TO DO Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:

install.doc How to configure and install the IJG software.
 usage.doc Usage instructions for cjpeg, djpeg, jpegtran, rdjpgcom, and wrjpgcom.
 *.1 Unix-style man pages for programs (same info as usage.doc).
 wizard.doc Advanced usage instructions for JPEG wizards only.
 change.log Version-to-version change highlights.

Programmer and internal documentation:

libjpeg.doc How to use the JPEG library in your own programs.
 example.c Sample code for calling the JPEG library.
 structure.doc Overview of the JPEG library's internal structure.
 filelist.doc Road map of IJG files.
 coderules.doc Coding style rules --- please read if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information can also be found in the JPEG FAQ (Frequently Asked Questions) article. See ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or more of the REFERENCES, then looking at the documentation files (in roughly the order listed) before diving into the code.

OVERVIEW

=====

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

This package contains C software to implement JPEG image compression and decompression. JPEG (pronounced "jay-peg") is a standardized compression method for full-color and gray-scale images. JPEG is intended for compressing "real-world" scenes; line drawings, cartoons and other non-realistic images are not its strong suit. JPEG is lossy, meaning that the output image is not exactly identical to the input image. Hence you must not use JPEG if you have to have identical output bits. However, on typical photographic images, very good compression levels can be obtained with no visible change, and remarkably high compression levels are possible if you can tolerate a low-quality image. For more details, see the references, or just experiment with various compression settings.

This software implements JPEG baseline, extended-sequential, and progressive compression processes. Provision is made for supporting all variants of these processes, although some uncommon parameter settings aren't implemented yet. For legal reasons, we are not distributing code for the arithmetic-coding variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting the hierarchical or lossless processes defined in the standard.

We provide a set of library routines for reading and writing JPEG image files, plus two sample applications "cjpeg" and "djpeg", which use the library to perform conversion between JPEG and some other popular image file formats. The library is intended to be reused in other applications.

In order to support file conversion and viewing software, we have included considerable functionality beyond the bare JPEG coding/decoding capability; for example, the color quantization modules are not strictly part of JPEG decoding, but they are essential for output to colormapped file formats or colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial-strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

We welcome the use of this software as a component of commercial products.

No royalty is required, but we do ask for an acknowledgement in product documentation, as described under LEGAL ISSUES.

LEGAL ISSUES

=====

In plain English:

1. We don't promise that this software works. (But if you find any bugs, please let us know!)
2. You can use this software for whatever you want. You don't have to pay us.
3. You may not pretend that you wrote this software. If you use it in a program, you must acknowledge somewhere in your documentation that you've used the IJG code.

In legalese:

The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.
All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

- (1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
- (2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
- (3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor.

ansi2knr.c is included in this distribution by permission of L. Peter Deutsch, sole proprietor of its copyright holder, Aladdin Enterprises of Menlo Park, CA. ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally, that you must include source code if you redistribute it. (See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

(Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that

"The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

REFERENCES

=====

We highly recommend reading one or more of these references before trying to understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is

Wallace, Gregory K. "The JPEG Still Picture Compression Standard", Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30-44.

(Adjacent articles in that issue discuss MPEG motion picture compression, applications of JPEG, and related topics.) If you don't have the CACM issue handy, a PostScript file containing a revised version of Wallace's article is available at <ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz>. The file (actually a preprint for an article that appeared in IEEE Trans. Consumer Electronics) omits the sample images that appeared in CACM, but it includes corrections and some added material. Note: the Wallace article is copyright ACM and IEEE, and it may not be used for commercial purposes.

A somewhat less technical, more leisurely introduction to JPEG can be found in "The Data Compression Book" by Mark Nelson and Jean-loup Gailly, published by M&T Books (New York), 2nd ed. 1996, ISBN 1-55851-434-1. This book provides good explanations and example C code for a multitude of compression methods including JPEG. It is an excellent source if you are comfortable reading C code but don't know much about data compression in general. The book's JPEG sample code is far from industrial-strength, but when you are ready to look at a full implementation, you've got one here...

The best full description of JPEG is the textbook "JPEG Still Image Data Compression Standard" by William B. Pennebaker and Joan L. Mitchell, published by Van Nostrand Reinhold, 1993, ISBN 0-442-01272-1. Price US\$59.95, 638 pp. The book includes the complete text of the ISO JPEG standards (DIS 10918-1 and draft DIS 10918-2). This is by far the most complete exposition of JPEG in existence, and we highly recommend it.

The JPEG standard itself is not available electronically; you must order a paper copy through ISO or ITU. (Unless you feel a need to own a certified official copy, we recommend buying the Pennebaker and Mitchell book instead; it's much cheaper and includes a great deal of useful explanatory material.) In the USA, copies of the standard may be ordered from ANSI Sales at (212) 642-4900, or from Global Engineering Documents at (800) 854-7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging \$95 for Part 1 and \$47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918-1, ITU-T T.81. Part 2 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918-2, ITU-T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918-3 and ITU-T T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department
C-Cube Microsystems, Inc.
1778 McCarthy Blvd.
Milpitas, CA 95035
phone (408) 944-6300, fax (408) 944-6314

A PostScript version of this document is available by FTP at <ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz>. There is also a plain text version at <ftp://ftp.uu.net/graphics/jpeg/jfif.txt.gz>, but it is missing the figures.

The TIFF 6.0 file format specification can be obtained by FTP from <ftp://ftp.sgi.com/graphics/tiff/TIFF6.ps.gz>. The JPEG incorporation scheme found in the TIFF 6.0 spec of 3-June-92 has a number of serious problems. IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6). Instead, we recommend the JPEG design proposed by TIFF Technical Note #2 (Compression tag 7). Copies of this Note can be obtained from <ftp://ftp.sgi.com> or from <ftp://ftp.uu.net/graphics/jpeg/>. It is expected that the next revision of the TIFF spec will replace the 6.0 JPEG design with the Note's design. Although IJG's own code does not support TIFF/JPEG, the free libtiff library uses our library to implement TIFF/JPEG per the Note. libtiff is available from <ftp://ftp.sgi.com/graphics/tiff/>.

ARCHIVE LOCATIONS

=====

The "official" archive site for this software is <ftp.uu.net> (Internet address 192.48.96.9). The most recent released version can always be found there in directory [graphics/jpeg](ftp://ftp.uu.net/graphics/jpeg/). This particular version will be archived as <ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz>. If you don't have direct Internet access, UUNET's archives are also available via UUCP; contact help@uunet.uu.net for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only <ftp.uu.net> is guaranteed to have the latest official version.

You can also obtain this software in DOS-compatible "zip" archive format from the SimTel archives (<ftp://ftp.simtel.net/pub/simtelnet/msdos/graphics/>), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the <ftp.uu.net> release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups <comp.graphics.misc>, <news.answers>, and other groups. It is available on the World Wide Web at <http://www.faqs.org/faqs/jpeg-faq/> and other <news.answers> archive sites, including the official <news.answers> archive at <rtfm.mit.edu>: <ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/>. If you don't have Web or FTP access, send e-mail to mail-server@rtfm.mit.edu with body

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

send usenet/news.answers/jpeg-faq/part1
send usenet/news.answers/jpeg-faq/part2

RELATED SOFTWARE

=====

Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.

If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBMPLUS software, which provides many useful operations on PPM-format image files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cjpeg/djpeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites, notably <ftp://wuarchive.wustl.edu/graphics/graphics/packages/NetPBM/>. Unfortunately PBMPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non-Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford, is available from <ftp://havefun.stanford.edu/pub/jpeg/>. This program is designed for research and experimentation rather than production use; it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)

FILE FORMAT WARS

=====

Some JPEG programs produce files that are not compatible with our library. The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read. (For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation. We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format called SPIFF. SPIFF is interoperable with JFIF, in the sense that most JFIF decoders should be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether SPIFF will supersede JFIF or whether JFIF will remain the de-facto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not. (In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist. We have little or no sympathy for the existence of these formats. Indeed, one of the original reasons for developing this free software was to help force convergence on common, open format standards for JPEG files. Don't use a proprietary file format!

TO DO

=====

The major thrust for v7 will probably be improvement of visual quality. The current method for scaling the quantization tables is known not to be very good at low Q values. We also intend to investigate block boundary smoothing, "poor man's variable quantization", and other means of improving quality-vs-file-size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG Part 3 extensions --- principally, variable quantization and the SPIFF file format.

As always, speeding things up is of great interest.

Please send bug reports, offers of help, etc. to jpeg-info@uunet.uu.net.

(9) LibTIFF License

Copyright (c) 1988-1997 Sam Leffler
Copyright (c) 1991-1997 Silicon Graphics, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Sam Leffler and Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

(10) MIT License

The MIT License (MIT)

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.

(11) Modified Tcl Regex 8.4.5 License

This regular expression package was originally developed by Henry Spencer. It bears the following copyright notice:

Copyright (c) 1998, 1999 Henry Spencer. All rights reserved.

Development of this software was funded, in part, by Cray Research Inc., UUNET Communications Services Inc., Sun Microsystems Inc., and Scriptics Corporation, none of whom are responsible for the results. The author thanks all of them.

Redistribution and use in source and binary forms -- with or without modification -- are permitted for any purpose, provided that redistributions in source form retain this entire copyright notice and indicate the origin and nature of any modifications.

I'd appreciate being given credit for this package in the documentation of software which uses it, but that is not a requirement.

THIS SOFTWARE IS PROVIDED ``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 HENRY SPENCER 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.

wxWindows adopted the code out of Tcl 8.4.5. Portions of regc_locale.c and re_syntax.n were developed by Tcl developers other than Henry Spencer; these files bear the Tcl copyright and license notice:

This software is copyrighted by the Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, ActiveState Corporation and other parties. The following terms apply to all files associated with the software unless explicitly disclaimed in individual files.

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

IN NO EVENT SHALL THE AUTHORS OR DISTRIBUTORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE, ITS DOCUMENTATION, OR ANY DERIVATIVES THEREOF, EVEN IF THE AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. THIS SOFTWARE IS PROVIDED ON AN "AS IS" BASIS, AND THE AUTHORS AND DISTRIBUTORS HAVE NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

GOVERNMENT USE: If you are acquiring this software on behalf of the U.S. government, the Government shall have only "Restricted Rights" in the software and related documentation as defined in the Federal Acquisition Regulations (FARs) in Clause 52.227.19 (c) (2). If you are acquiring the software on behalf of the Department of Defense, the software shall be classified as "Commercial Computer Software" and the Government shall have only "Restricted Rights" as defined in Clause 252.227-7013 (c) (1) of DFARS. Notwithstanding the foregoing, the authors grant the U.S. Government and others acting in its behalf permission to use and distribute the software in accordance with the terms specified in this license.

The wxWindows license applies to further modifications to regcustom.h and regc_locale.c.

(12) MPL 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:

- 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

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

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 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.

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 that 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 declaratory 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:

- 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

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 Reserved.

Contributor(s): _____.

Alternatively, the contents of this file may be used under the terms

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

of the _____ license (the "[] License"), in which case the provisions of [] License are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of the [] License and not to allow others to use your version of this file under the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions 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.

(13) National Instruments Software License Agreement

NATIONAL INSTRUMENTS SOFTWARE LICENSE AGREEMENT

CAREFULLY READ THIS SOFTWARE LICENSE AGREEMENT ("AGREEMENT"). BY DOWNLOADING THE SOFTWARE AND/OR CLICKING THE APPLICABLE BUTTON TO COMPLETE THE INSTALLATION PROCESS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT WISH TO BECOME A PARTY TO THIS AGREEMENT AND BE BOUND BY ITS TERMS AND CONDITIONS, DO NOT INSTALL OR USE THE SOFTWARE, AND RETURN THE SOFTWARE (WITH ALL ACCOMPANYING WRITTEN MATERIALS AND THEIR CONTAINERS) WITHIN THIRTY (30) DAYS OF RECEIPT. ALL RETURNS TO NI WILL BE SUBJECT TO NI'S THEN-CURRENT RETURN POLICY. If you are accepting these terms on behalf of an entity, you agree that you have authority to bind the entity to these terms.

The terms of this Agreement apply to the computer software provided with this Agreement, all updates or upgrades to the software that may be provided later by NI as part of any maintenance, technical support, or other services program for the software, unless such update or upgrade comes with separate software license terms, and all accompanying documentation, utilities, and Driver Interface Software (collectively "Software" or "SOFTWARE"). Software does not include certain third party software that NI provides to you but that is subject to separate license terms either presented at the time of installation or otherwise provided with the Software ("Third Party Software"), and Software does not include Source Code, which is defined in and licensed pursuant to the terms set forth in Addendum A – Source Code License.

1. Grant of License; Restrictions

A. In consideration of, and conditioned upon, your payment of any applicable fees to NI and subject to the terms set forth in this Agreement, National Instruments Corporation or National Instruments Ireland Resources Ltd. ("NI"), as applicable depending on the country of manufacture, hereby grants you a limited, revocable, non-exclusive right and license to use the Software only in the specific configuration allowed by the license type identified in the applicable documentation provided by NI to you. Unless otherwise provided in this Agreement or in the applicable documentation provided by NI to you, the applicable license type is a named user license and the term of the license, if purchased and not evaluation, is perpetual and not term. With the exception of Authorized Applications (as hereinafter defined), the Software is for your internal use only.

B. Restrictions. You must not violate any applicable laws in your use of the Software. Unless and only to the extent that this Agreement expressly permits, you must not

- (i) modify or create derivatives of the Software;
- (ii) install or use the Software in a floating, concurrent, or any other shared context;
- (iii) distribute or otherwise make the Software or any password, key, or other access code for the Software available to any third party;
- (iv) reverse engineer, decompile, or disassemble the Software, unless and only to the extent that applicable law expressly prohibits this restriction;
- (v) defeat or work around any access restrictions or encryption in the Software, unless and only to the extent that applicable law expressly prohibits this restriction;
- (vi) sublicense, lease, lend, or rent the Software;
- (vii) remove, minimize, block, or modify any titles, logos, trademarks, copyright and patent notices, digital watermarks, disclaimers, or other legal notices that are included in the Software, whether or not they are NI or a third party's;
- (viii) cause any of the Software, including any Software included in an Authorized Application, to become subject to a license that requires, as a condition of use, modification, or distribution, that (a) code subject to the license be disclosed or distributed in source code form or (b) others have the right to modify or create derivative works of the code subject to the license (such license type an "Excluded License"); or
- (ix) use any Software scripting functionality to create an application that performs the functionality of an editor for a graphical programming environment.

C. Your use of the Software must also be in accordance with the applicable documentation that accompanies the Software and not in any manner that circumvents or is intended to circumvent such documentation or the intent of this Agreement.

D. You may make a reasonable number of copies of the Software solely for backup or archival purposes and make a reasonable number of copies of the documentation that accompanies the Software solely for your internal use in connection with your use of the Software.

2. License Types

A. Named User License. If you have acquired a named user license, you may install the Software on up to three (3) computers in a single workplace of one (1) individual you designate and register with NI ("Named User"). For the purposes of this Agreement, a computer will be one computing device or, if the Software is being used in connection with a virtual machine, one virtual machine on a computing device. The Named User must be identified in writing through the NI registration process. Only the Named User may use or otherwise run the Software, and the Software may not be run on more than one computer at a time. You may not share access to the installed Software over a network such that the installed Software can be run by a different user. You may change the Named User to another designated employee provided that each new named user license is registered with NI; no more than four (4) such changes may occur per calendar year. At your discretion, you may convert a named user license to a computer-based license.

B. Computer-Based License. If you have acquired a computer-based license, you may install the Software on one (1) computer in your workplace. For the purposes of this Agreement, a computer will be one computing device or, if the Software is being used in connection with a virtual machine, one virtual machine on a computing device. There is no limitation on the number of your employees that may access and use the Software installed on such computer. All of the Software must be installed and used on the same computer. You may not share access to the installed Software over a network such that the installed Software can be run on a different computer. You may change the designated computer to another computer within the applicable single workplace, provided that none of the Software remains installed on the previous designated computer; no more than four (4) such changes may occur per calendar year.

C. Home Usage Exception. If you are a business or other entity, the designated Named User for the applicable license or, in the case of a computer-based license, the single individual who is the primary user of the single computer on which the Software is installed and used, may also install and use the Software on one (1) computer located in such user's home, provided that the use of the Software on such home computer is limited to work performed in the scope of such person's employment with you and complies with all terms and conditions of this Agreement. The Software must be promptly uninstalled from the individual's home computer upon the earlier of the underlying license's expiration or termination date or the date the individual's authority to use the Software pursuant to the underlying license terminates.

3. **Additional Terms.** You may have additional rights and obligations to the Software through special license types and license programs, as set forth in addenda to this Agreement and which are incorporated as part of this Agreement. Additional product-specific provisions may be provided in a specific Product Addendum to this Agreement for the relevant product and the terms of which are incorporated into this Agreement. In the event of a conflict between an addendum and the other terms set forth in this Agreement, the terms of the addendum will control.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

Addendum A Source Code License
 Addendum B Special License Types
 Evaluation License; Pre-Release Software
 Compile-Only License (Measurement Studio)
 Driver Interface Software
 Multiple Access License (NI-488.2 Software for GPIB-ENET)
 Concurrent Use License
 Debug License
 Addendum C Volume License Program Terms
 Addendum D Enterprise Program Terms
 Addendum E Academic License Terms
 Addendum F Product-Specific Provisions (TestStand, Measurement Studio)

4. Third Party Contractors. Your third party contractors may access and use the Software, provided that they do so solely for your benefit, they agree to use the Software solely in accordance with the terms of this Agreement, and you agree to remain liable to NI for any breach by your contractors of this Agreement.

5. Software Services. This Agreement does not entitle you to any upgrades or maintenance, technical, or other services for the Software ("Software Services"), which you may be required to purchase separately.

6. License Term; Termination and Expiration

A. Term Licenses. If you have purchased a term license, this Agreement will commence on the date you click the applicable button to complete the installation process or otherwise accept these terms and, unless terminated pursuant to the provisions herein, continues for the period of time specified in the product description or other applicable documentation provided to you by NI. The license will expire automatically at the end of such term.

B. Perpetual Licenses. If you have purchased a license and the license is specified as "perpetual" or no period of time is specified in the product description or other applicable documentation provided to you by NI, your license will be perpetual and, unless terminated pursuant to the provisions herein, you have the right to use the Software indefinitely.

C. Termination. NI conditions its license grant on you complying with the terms set forth in this Agreement, and this Agreement will automatically terminate, immediately and without prior notice, if you fail to comply with its terms.

D. Effect of Termination or Expiration. Upon termination or expiration of this Agreement, regardless of the reason, the license grants contained herein will terminate and you must immediately cease all use of the Software, cease all distribution of Authorized Applications, and destroy all copies of the Software; provided, however, you must deliver the Software and all copies to NI if NI has so demanded in lieu of any destruction. Sections 11, 15, 16, 17, 19, 20, 21, 22.A., and 23 of this Agreement will survive any expiration or termination of this Agreement.

7. Transfer. You may transfer a named user license or computer-based license to a third party in the same country in which you purchased the license, or within the European Union if you purchased the license in the European Union, provided that (i) you notify NI in writing of such transfer, including the name and location of such third party; (ii) such third party accepts the terms and conditions of this Agreement; and (iii) after such transfer you do not retain any copies of the Software or any of the written materials accompanying the Software. NI may, in its discretion, charge you a fee for the license transfer.

8. Upgrades; Prior Versions. If the Software is an upgrade, you may only use the Software if you have a valid license to use the prior version of the Software, and you may not use both the upgrade and the prior version of the Software concurrently. You may elect to use a prior version of any Software delivered and licensed under this Agreement in lieu of using the Software delivered and licensed under this Agreement ("Delivered Software"), provided (i) you have an authorized copy of the prior version of the Delivered Software; (ii) all use is pursuant to and in accordance with this Agreement; and (iii) notwithstanding anything in this Agreement to the contrary, in no event will NI be required to support any version of the Software, including providing applicable software key codes or hardware keys, other than the then most current version of the Delivered Software.

9. Multiple Versions. If NI distributes the Software on installation media containing multiple versions of the Software for use with different operating systems, you may use only one version of the Software.

10. Software/Hardware Key. You agree to use any software key codes or hardware keys provided by NI solely with the Software for which it is provided. While NI may in its sole discretion provide you with the applicable key prior to receipt from you of the applicable license fees, you will remain obligated to pay such fees to NI.

11. Copyright; No Other Licenses. The Software is licensed and not sold. The Software, all copies of the Software, related contents, and all rights therein, are owned by NI or its suppliers and are protected by applicable copyright laws and international treaty provisions. All rights not expressly granted to you in this Agreement are reserved to NI. Further, and without limiting the foregoing, no license or any right of any kind, whether by express license, implied license, the doctrine of exhaustion, or otherwise, is granted under any NI patents (whether identified herein or not) or other intellectual property right of NI with respect to any other product of NI or of any third party, including the right to use any such other product.

12. Application Deployment

A. An "Authorized Application" is (i) an application that you create with a development version of the Software; (ii) an application that you create with third party software using real-time operating system components of the LabVIEW Real-Time Module and the LabWindows/CVI Real-Time Module in accordance with the licenses for such modules; or (iii) an application that you create with a third party software development environment that utilizes Driver Interface Software, if such software development environment is supported by such Driver Interface Software as indicated in the applicable documentation for such Driver Interface Software. "Driver Interface Software" means computer software and other code provided with this Agreement that are listed as hardware drivers or device drivers on NI's hardware driver listing web page, which is currently located at www.ni.com/driverinterfacesoftware, or that are added by NI at any time to such listing or any similar successor listings, together with all accompanying documentation and utilities. In no event, however, will the term "Driver Interface Software" ever include any Third Party Software, operating system software, instrument driver software, application software, toolkits, modules, driver development kit (DDK) or portion thereof, software development kit (SDK) or portion thereof, module development kit (MDK) or portion thereof, or any software or other code designated by NI as being any of the foregoing; or any of the foregoing's accompanying documentation or utilities.

B. Deployment and Distribution Requirements. You may distribute, deploy, or otherwise make available Authorized Applications, along with applicable runtime engines for the Software and applicable Driver Interface Software that you may include as part of or together with your Authorized Applications, provided that you comply with each of the requirements set forth below.

(i) You must include the following copyright notice in the Authorized Application's About Box (if applicable) and in any applicable written documentation or, if no such documentation exists, in a "read me" or other .txt file distributed with each copy of the Authorized Application.

"Copyright © [insert year] National Instruments Corporation. All Rights Reserved."

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

You may instead, or in addition, include your own copyright notice with the notice required above, but in no event may you remove or alter any copyright, patent, trademark, or other legal notices or disclaimers that exist in the Software and with respect to any runtime engines for the Software and any Driver Interface Software that you include as part of or together with your Authorized Application, your copyright notice will be understood as protecting NI or its licensor's copyrights in the Software and will not be understood as meaning that you have any copyright in or with respect to any Software.

(ii) You may not use NI's name, logo, or trademarks to market your Authorized Application without NI's express prior written permission.

(iii) If you distribute to any third parties your Authorized Application with Driver Interface Software or any runtime engine for the Software, you must either pass through to your end users this Agreement or do so subject to your own license agreement that is substantially in accordance with this Agreement and at least as protective of NI as this Agreement.

(iv) The Authorized Application must not consist of or include any malicious, deceptive, or unlawful programs.

C. Fees. You may distribute, deploy, or otherwise make available Authorized Applications without paying additional fees to NI. Provided, however, if the Authorized Application was created utilizing any of the software identified in NI's Deployment Licenses listing web page, which is currently located at <http://zone.ni.com/devzone/cda/tut/p/id/9561>, or any similar successor listings, as such listings may be updated by NI from time to time, or such other software as NI may from time to time designate (any of the foregoing a "Designated Deployment License"), then you must, before distributing, deploying, or otherwise making available the Authorized Application for use on any other computer, either (i) verify that the recipient has a valid license to run the applicable Authorized Application on, or has a valid Deployment License for, each computer on which the Authorized Application will be used or (ii) obtain written distribution authorization from NI and, if required by NI, pay to NI a per copy fee for each Authorized Application distributed, deployed, or otherwise made available. In the case of any Driver Interface Software identified as being subject to the license verification or distribution authorization requirements stated above, if the Authorized Application utilizes, calls, or otherwise accesses any such Driver Interface Software, the Authorized Application will be deemed to have been created utilizing such Driver Interface Software for purposes of this Section. Unless otherwise specified by NI in writing, Designated Deployment Licenses are computer-based licenses and the home usage exception does not apply to Designated Deployment Licenses.

13. Patent and Trademark Notice. For patents covering National Instruments products, refer to the appropriate location: **Help»Patents** in the Software, the patents.txt file on the installation media on which the Software was distributed to you, or ni.com/patents. National Instruments, NI, ni.com, and LabVIEW are trademarks of National Instruments Corporation. Refer to ni.com/trademarks for more information about National Instruments trademarks. All other product and company names mentioned herein are or may be trademarks or trade names of their respective companies.

14. Limited Warranty. NI warrants, for your benefit alone, that for a period of ninety (90) days from the date the Software is shipped to you or, if downloaded, from the date the Software is first downloaded by you, (i) the Software will perform substantially in accordance with the documentation that accompanies the Software and (ii) the installation media on which NI provides the Software (if any) will be free from defects in materials and workmanship under normal use and service ("Limited Warranty"). Any replacement Software will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Some jurisdictions do not allow exclusion of or limitation on duration of an express or implied warranty or limitation on any applicable statutory rights of a consumer, so the above limitations may not apply to you; in such event, such warranties are limited to the minimum warranty period allowed by applicable law. The Limited Warranty is void if failure of the Software has resulted from accident, abuse, misapplication, improper calibration by you, third party products (either hardware or software) used by you that are not intended by NI for use with the Software, utilization of an improper hardware or software key, or unauthorized maintenance of the Software.

15. Customer Remedies. NI's sole obligation, and your sole remedy, with respect to the foregoing Limited Warranty will be to, at NI's option, repair or replace the Software or return the fees paid by you to NI for the Software license, in which event you must return or destroy all copies of the Software in accordance with NI's instructions and the license granted to you will terminate without liability on the part of NI by reason of such termination. NI's obligations as set forth in this Section are contingent on you providing NI with written notice of applicable defects during the warranty period. In addition, you must obtain a Return Material Authorization number from NI before returning the Software under warranty to NI, and you agree to pay any expenses for shipment to and from NI.

16. No Other Warranties. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NO WARRANTY, EITHER EXPRESS OR IMPLIED, IS MADE BY NI WITH RESPECT TO THE SOFTWARE OR USE OF THE SOFTWARE. NI DOES NOT MAKE ANY WARRANTY OR REPRESENTATION HEREUNDER WITH RESPECT TO ANY THIRD PARTY SOFTWARE, SOURCE CODE, OR SOFTWARE SERVICES. NI DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATION THAT THE SOFTWARE, THE OPERATION OF THE SOFTWARE, OR ANY RELATED SOFTWARE SERVICES, SOURCE CODE, OR THIRD PARTY SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE AND DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATION REGARDING CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE. THERE ARE NO OTHER WARRANTIES THAT MAY ARISE FROM USAGE OF TRADE OR COURSE OF DEALING. NI DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, RELATING TO THE SOFTWARE AND ANY RELATED THIRD PARTY SOFTWARE, SOURCE CODE, AND SOFTWARE SERVICES.

17. Limitations Period. You hereby agree not to bring an action to enforce your remedies under the Limited Warranty or for breach of warranty more than one (1) year after the accrual of such cause of action.

18. Intellectual Property Liability. NI will, at its own expense, defend any claim brought against you by a third party resulting from your use of the Software, to the extent that such claim alleges that the Software infringes any patent, copyright, or trademark of such third party protected by the laws of the U.S.A., Canada, Mexico, Japan, Australia, Switzerland, Norway, or the European Union and provided that such claim does not arise from (i) your use of the Software in combination with equipment, devices, software, or code not made by NI; (ii) your use of the Software in a manner not in accordance with this Agreement or for a purpose not intended by NI; (iii) your failure to incorporate Software updates or upgrades provided by NI that would have avoided the alleged infringement; or (iv) any modification of the Software not made by NI. NI's obligations in this Section are further contingent on you notifying NI in writing promptly upon your obtaining notice of such impending claim and your fully cooperating with NI in preparing a defense. If you provide to NI the authority, assistance, and information NI needs to defend or settle such claim, NI will pay any final award of damages or settlement with respect to such claim and any expense you incur at NI's written request. NI will not be liable for a settlement made without its prior written consent. If the Software is held to be infringing of the rights stated above in this Section and the use of the Software is enjoined, NI will, or if NI believes the Software might be held to infringe a third party's intellectual property rights NI may, at its option, (i) procure for you the right to use the Software; (ii) replace or modify the Software with other software that does not infringe; or (iii) receive your return of the infringing Software and refund to you the license fee payment made by you to NI for the Software. **TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NI'S LIABILITY, THE LIABILITY OF ITS LICENSORS AND SUPPLIERS, AND THE LIABILITY OF ITS AND THEIR DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS, UNDER THIS SECTION AND REGARDLESS OF THE REASON FOR SUCH LIABILITY, WILL NOT EXCEED IN THE AGGREGATE \$50,000 (U.S.).** The foregoing states your sole remedy for, and NI's entire liability and responsibility for, infringement of any patent, trademark, copyright, or other intellectual or industrial property right relating to the Software. **THIS LIMITED INDEMNITY IS IN LIEU OF ANY OTHER STATUTORY OR IMPLIED WARRANTY AGAINST INFRINGEMENT. THE FOREGOING OBLIGATIONS WILL NOT APPLY TO ANY THIRD PARTY SOFTWARE OR TO ANY THIRD PARTY PRODUCTS INCORPORATED IN OR OTHERWISE PROVIDED WITH THE SOFTWARE, AND YOU AGREE TO LOOK TO THE APPLICABLE THIRD PARTY MANUFACTURER WITH RESPECT TO ANY CLAIMS FOR INFRINGEMENT INVOLVING THIRD PARTY SOFTWARE OR THIRD PARTY PRODUCTS.**

19. Limitation On Liability. **TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT WILL NI OR ITS LICENSORS, DISTRIBUTORS, OR SUPPLIERS (INCLUDING NI'S AND THEIR DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS) BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING DAMAGES ARISING FROM LOST PROFITS, LOST SAVINGS, LOST BUSINESS OPPORTUNITY, BUSINESS**

INTERRUPTION, OR LOST OR CORRUPTED DATA OR SOFTWARE, EVEN IF NI OR ITS LICENSORS, DISTRIBUTORS, OR SUPPLIERS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND REGARDLESS OF WHETHER CAUSED OR CONTRIBUTED TO BY THE NEGLIGENCE OF NI OR OTHERS, AND, EXCEPT AS SET FORTH IN SECTION 18, IN NO EVENT WILL NI'S LIABILITIES UNDER THIS AGREEMENT, WHETHER UNDER CONTRACT LAW, TORT LAW, WARRANTY, OR OTHERWISE, EXCEED THE TOTAL AMOUNT RECEIVED BY NI FOR THE APPLICABLE SOFTWARE LICENSE. You acknowledge that the applicable fees and prices reflect this allocation of risk. To the extent the foregoing limitation of liability is not enforceable or fails of its essential purpose, except for liability for bodily injury or death caused by the Software in the form provided by NI or any liability not capable of being excluded by applicable law, the sole liability of NI to you under or in connection with this Agreement shall be limited to the greater of \$50,000 (U.S.) or the license fee paid to NI for the Software.

20. HIGH-RISK USES AND YOUR RESPONSIBILITIES FOR YOUR APPLICATIONS

A. NI PRODUCTS ARE NOT DESIGNED, MANUFACTURED, OR TESTED FOR USE IN HAZARDOUS ENVIRONMENTS OR ANY OTHER ENVIRONMENTS REQUIRING FAIL-SAFE PERFORMANCE, INCLUDING IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION, AIR TRAFFIC CONTROL SYSTEMS; LIFE SAVING OR LIFE SUSTAINING SYSTEMS OR SUCH OTHER MEDICAL DEVICES; OR ANY OTHER APPLICATION IN WHICH THE FAILURE OF THE SOFTWARE COULD LEAD TO DEATH, PERSONAL INJURY, SEVERE PROPERTY DAMAGE, OR ENVIRONMENTAL HARM. YOU WILL DEFEND, INDEMNIFY, AND HOLD HARMLESS NI AND ITS DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS FROM ANY AND ALL CLAIMS, LOSSES, DAMAGES, ACTIONS, AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES) ARISING OUT OF YOUR USE OF THE SOFTWARE FOR HIGH-RISK USES, INCLUDING CLAIMS FOR PRODUCT LIABILITY, PERSONAL INJURY OR DEATH, OR DAMAGE TO PROPERTY, AND REGARDLESS OF WHETHER SUCH CLAIMS ARE FOUNDED IN WHOLE OR IN PART ON THE ALLEGED OR ACTUAL NEGLIGENCE OF NI.

B. YOU ACKNOWLEDGE AND AGREE THAT YOU ARE RESPONSIBLE FOR TAKING STEPS TO PROTECT AGAINST PRODUCT AND SYSTEM FAILURES, INCLUDING PROVIDING BACK-UP OR SHUTDOWN MECHANISMS. BECAUSE EACH END-USER SYSTEM IS CUSTOMIZED AND DIFFERS FROM NI'S TESTING PLATFORMS AND BECAUSE YOU MAY USE NI PRODUCTS IN COMBINATION WITH OTHER PRODUCTS IN A MANNER NOT EVALUATED OR CONTEMPLATED BY NI, YOU ARE ULTIMATELY RESPONSIBLE FOR VERIFYING AND VALIDATING THE SUITABILITY OF NI PRODUCTS FOR YOUR INTENDED USE. YOU WILL DEFEND, INDEMNIFY, AND HOLD HARMLESS NI AND ITS DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS FROM ANY AND ALL CLAIMS, LOSSES, DAMAGES, ACTIONS, AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES) ARISING OUT OF YOUR AUTHORIZED APPLICATION OR YOUR INCORPORATION OF THE SOFTWARE IN YOUR SYSTEM OR APPLICATION; PROVIDED, HOWEVER, THAT YOUR CONTRACTUAL OBLIGATION OF INDEMNIFICATION SHALL NOT EXTEND TO THE PERCENTAGE OF THE CLAIMANT'S DAMAGES OR INJURIES OR THE SETTLEMENT AMOUNT ATTRIBUTABLE TO NI'S NEGLIGENCE OR OTHER FAULT OR TO STRICT LIABILITY IMPOSED UPON NI AS A MATTER OF LAW.

21. U.S. Government Rights. The Software is a "commercial item" developed exclusively at private expense, consisting of "commercial computer software" and "commercial computer software documentation" as such terms are defined or used in the applicable U.S. acquisition regulations. If you are an agency, department, or other entity of the United States Government, the Software is licensed hereunder (i) only as a commercial item and (ii) with only those rights as are granted to all other licensees pursuant to the terms and conditions of this Agreement. You agree not to use, duplicate, or disclose the Software in any way not expressly permitted by this Agreement. Nothing in this Agreement requires NI to produce or furnish technical data for or to you. Manufacturer is National Instruments Corporation or National Instruments Ireland Resources Ltd.

22. Compliance

A. You agree to make, upon reasonable notice, all applicable records available for review by NI during normal business hours so as to permit NI to verify your compliance with the terms and conditions of this Agreement. NI may, upon written notice, inspect your use of the Software during normal business hours to ensure your compliance with this Agreement. Further, if you are a business or other entity, you agree that upon the request of NI or its authorized representative you will promptly document and certify in writing to NI that your and your employees' use of the Software complies with the terms and conditions of this Agreement. If the results of any such inspection indicate the underpayment by you of applicable fees due and payable to NI, you must immediately pay such amounts to NI and reimburse NI for the cost of such inspection.

B. You agree that the Software may collect and communicate certain software, hardware, and use information to NI or its service providers' servers for the purposes of (i) checking for and performing any updates; (ii) ensuring that you have complied and are complying with the terms and conditions in this Agreement, including your use of valid software key codes, hardware keys, or both; and (iii) NI's internal product development. The information collected and communicated does not include any proprietary application data. NI will not provide any of the information to any third party except as required by law or legal process or to enforce compliance with the terms in this Agreement, including your use of valid software key codes, hardware keys, or both.

23. General

A. Governing Law; Venue

If the Software is manufactured in the Republic of Ireland: This Agreement is governed by the laws of the Republic of Ireland, exclusive of any provisions of the United Nations Convention on the International Sale of Goods, and without regard to principles of conflicts of law. The non-exclusive venue for all actions under this Agreement will be in the courts located in Dublin, the Republic of Ireland, and the parties agree to submit to the jurisdiction of such courts.

If the Software is not manufactured in the Republic of Ireland: This Agreement is governed by the laws of the State of Texas, U.S.A., exclusive of any provisions of the United Nations Convention on the International Sale of Goods, and without regard to principles of conflicts of law. The non-exclusive venue for all actions under this Agreement will be in the courts located in Travis County, Texas, U.S.A. and the parties agree to submit to the jurisdiction of such courts.

If you are not sure where the Software is manufactured, please contact National Instruments Corporation, 11500 N. Mopac Expressway, Austin, Texas, U.S.A. 78759-3504 (Attention: Legal Department).

B. This Agreement constitutes the complete agreement between you and NI regarding use of the Software and supersedes any oral or written proposals, prior agreements, purchase orders, or any other communication between you and NI relating to the subject matter of this Agreement. NI's applicable standard Terms and Conditions of Sale, the current version of which is set forth at <http://www.ni.com/legal/termsofsale>, will apply to any technical support services provided as part of Software Services and to any Training & Certification Services; provided, however, as set forth herein the provisions of this Agreement may apply and control with respect to any upgrades or updates or other Software that may be provided as part of or in connection with any such services. No delay or omission by NI to exercise any right or power it has under this Agreement will impair or be construed as a waiver of such right or power. Any waiver by NI of a term of this Agreement must be in writing by NI. The waiver by NI of any breach of any provision hereof will not be construed to be a waiver of any succeeding breach of that provision or of any breach of any other provision. No modification of this Agreement will be effective unless set forth in a writing signed by a duly authorized representative of you and NI. The word "including" as used in this Agreement will be understood as meaning "including without limitation". If you are unable to access the internet to view any of the web pages referred to in this Agreement, you may request the information from your local NI sales office.

C. If any action is brought by either party to this Agreement against the other regarding the subject matter hereof, the prevailing party will be entitled to recover, in addition to any relief granted, reasonable attorneys' fees and court costs.

D. If any provision of this Agreement is held invalid, the offending clause will be modified so as to make it enforceable, as modified, and the remainder of this Agreement will continue in full force and effect.

E. Software is, and Third Party Software and Source Code may be, subject to control under the U.S. Export Administration Regulations (15 CFR Part 730 et. seq.), other applicable U.S. export control

laws and regulations, and applicable global export control laws and regulations, including, for products exported from the European Union, the Council Regulation (EC) No. 428/2009. You agree that you will not export, re-export, or transfer any Software, Third Party Software, or Source Code in violation of any U.S. and applicable global export control laws and that you will not export, re-export, or transfer the Software, Third Party Software, or Source Code by any means to any prohibited destination, entity, or individual without the required export licenses or authorizations from the U.S. Government or other applicable export licensing authority. NI reserves the right not to ship or permit downloading of the Software ordered if, at any time, NI believes that such shipment or downloading of such Software, Third Party Software, or Source Code may

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

violate U.S. or other applicable export control laws. If you are downloading the Software, you hereby represent and warrant to NI that (i) you are not located in, or under the control of, any country the laws and regulations of which prohibit importation of the Software, Third Party Software, or Source Code and (ii) you are not located in, or under the control of, any country to which the laws and regulations of the U.S. or other applicable export control laws prohibit exportation of the Software, Third Party Software, or Source Code. For text of the relevant legal materials, see

<http://www.ni.com/legal/export-compliance.htm>.

(c) 2001–2015 National Instruments. All Rights Reserved.

370406V-01

May 2015

ADDENDUM A – Source Code License

1. "Source Code" means the NI-created human-readable computer code that NI provides with the Software, that is not password protected, and that is in the preferred form for modifying the code (whether graphical or text-based). Source Code does not include any Third Party Software.

2. This license permits you to use, modify, and distribute the Source Code on the conditions that

A. you may distribute the Source Code, whether or not you have modified it, only

i. for a non-commercial purpose and

ii. under a license identical to this Source Code License;

B. you may distribute object code derived from the Source Code, whether or not you have modified it, for any purpose;

C. you maintain and do not minimize, block, or modify any titles, logos, trademarks, copyright, digital watermarks, disclaimers, or other notices that are included in the Source Code;

D. YOU AGREE THAT THE COPYRIGHT HOLDERS (I) PROVIDE THE SOFTWARE "AS IS" WITH ALL FAULTS (KNOWN AND UNKNOWN) AND WITHOUT ANY WARRANTY, REPRESENTATION, OR OTHER GUARANTEE OF ANY KIND AND (II) DISCLAIM ALL WARRANTIES, REPRESENTATIONS, AND OTHER GUARANTEES RELATING TO YOUR USE, MODIFICATION, OR DISTRIBUTION OF THE SOURCE CODE, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OF TITLE, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, AND ANY IMPLIED WARRANTY ARISING OUT OF COURSE OF DEALING, PERFORMANCE, OR TRADE USAGE;

E. YOU ASSUME ALL OF THE RISK AND LIABILITY ASSOCIATED WITH YOUR USE, MODIFICATION, OR DISTRIBUTION OF THE SOURCE CODE;

F. YOU AGREE THAT THE COPYRIGHT HOLDERS ARE NOT LIABLE TO YOU FOR, AND YOU AGREE NOT TO ASSERT ANY CLAIM AGAINST ANY COPYRIGHT HOLDER OR ITS DIRECTORS, OFFICERS, EMPLOYEES, OR AGENTS FOR, ANY DAMAGE, LOSS, OR OTHER PREJUDICE OF ANY KIND, HOWEVER CAUSED, AND ON ANY THEORY OF LIABILITY, INCLUDING CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE), THAT ARISES IN ANY WAY OUT OF THE USE, MODIFICATION, OR DISTRIBUTION OF THE SOURCE CODE, EVEN IF THE COPYRIGHT HOLDER WAS ADVISED OF THE POSSIBILITY OF ANY SUCH DAMAGE, LOSS, OR OTHER PREJUDICE, INCLUDING ANY DAMAGE, LOSS, OR OTHER PREJUDICE THAT (I) IS LOST PROFITS (WHETHER YOURS OR A THIRD PARTY'S); (II) ARISES OUT OF OR RELATES TO ANY TEMPORARY OR PERMANENT LOSS OF TANGIBLE PROPERTY (WHETHER REAL OR PERSONAL) OR INTANGIBLE PROPERTY (INCLUDING SOFTWARE AND DATA); OR (III) IS DIRECT, SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, COLLATERAL, EXEMPLARY, PUNITIVE, OR ANY OTHER DAMAGE; and,

G. you agree that these Sections 1-3 express the entire agreement between you and the copyright holders regarding your use, modification, and distribution of the Source Code.

3. The copyright holders reserve all of their rights. Except for the non-exclusive licenses expressly granted in Section 2, no rights or licenses are granted expressly, by implication, or otherwise.

ADDENDUM B – Special License Types

Evaluation License; Pre-Release Software

If you have acquired an evaluation license, you may install and use the Software on one (1) computer in your workplace for internal evaluation purposes only and only for the limited period of the evaluation term.

You may not distribute or transfer any applications you create with Software under an evaluation license. Any application created with Software acquired under an evaluation license is not an Authorized Application.

You acknowledge and agree that the **SOFTWARE IS EVALUATION ONLY AND MAY ALSO BE PRE-RELEASE SOFTWARE. AS SUCH, THE SOFTWARE MAY NOT BE FULLY FUNCTIONAL AND YOU ASSUME THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE SOFTWARE. NI WILL NOT UPDATE THE SOFTWARE, NOR WILL NI SUPPORT THE SOFTWARE. Software provided under an evaluation license is provided without warranty OR OBLIGATION OF INDEMNITY ON NI. THE SOFTWARE MAY CONTAIN CODE THAT WILL, AFTER A CERTAIN TIME PERIOD, DEACTIVATE THE SOFTWARE AND RENDER THE SOFTWARE UNUSABLE, AND IT MAY DO SO WITHOUT WARNING.** Upon such deactivation, this Agreement will be considered terminated. NI may in its sole discretion terminate the evaluation license at any time. If the Software consists of pre-release software and is also covered by a separate, written alpha/beta license (the "Beta Agreement") between you and NI, the terms and conditions of the Beta Agreement, which are incorporated herein by reference, will also apply to your use of the Software. In the event of a conflict between this Agreement and the Beta Agreement, the terms of the Beta Agreement will control.

You agree to use reasonable efforts to provide feedback to NI regarding your use of the Software, including promptly reporting to NI errors or bugs that you might find. Any such feedback you disclose to NI, including any changes or suggested changes to NI's current or future products and services (collectively "Feedback"), will be received and treated by NI on a non-confidential and unrestricted basis, notwithstanding any restrictive or proprietary legends to the contrary accompanying or otherwise associated with the Feedback. You hereby grant to NI a worldwide, royalty-free, non-exclusive, perpetual, and irrevocable license to use, copy, and modify Feedback for any purpose, including incorporation or implementation of such Feedback into NI products or services, and to display, market, sublicense, and distribute Feedback as incorporated or embedded in any product or service distributed or offered by NI. The Feedback license set forth herein will survive expiration or termination of the Agreement.

Compile-Only License (Measurement Studio)

If you have acquired a Measurement Studio compile-only license, you must have also licensed a full version of Measurement Studio under a separate license with NI. The Measurement Studio compile-only license allows you to install the Measurement Studio Software on the number of computers in your workplace identified in the applicable documentation provided to you by NI or its authorized affiliate, including on a network device and run concurrently, provided that only your licensed applicable employee(s) may access or use the Measurement Studio Software on the network device and only up to the number of licenses specified in the documentation. You may only use the compile/build function of the Measurement Studio Software, and you may only perform that function on source code for your Authorized Application that references the Measurement Studio libraries. In no event may you use the Measurement Studio compile-only license for development, including writing code that creates a new instance of a class defined in a Measurement Studio library or that calls a static method of a class defined in the Measurement Studio library.

The home usage exception is not available for Measurement Studio under a compile-only license. Measurement Studio under a compile-only license is not transferable.

Driver Interface Software

If the Software is or contains Driver Interface Software, you may use the Software for your internal development of Authorized Applications. If you are a business or other entity, you may make and install a reasonable number of copies of the Driver Interface Software, other than NI-VISA or NI-488.2, as may be reasonably required for your internal development of Authorized Applications. You may not make additional copies of NI-VISA and NI-488.2 except for backup or archival purposes as expressly permitted in the

Agreement or as expressly permitted by NI in writing. If you received the Driver Interface Software from a third party with or as part of an Authorized Application, then you may only use the Driver Interface Software with such Authorized Application.

Multiple Access License (NI-488.2 Software for GPIB-ENET)

If you have acquired a multiple access license, you may install and use the NI-488.2 Software on any number of computers or storage devices in your workplace solely for the purpose of accessing Ethernet to GPIB controllers. The limitation against using multiple versions of Software shipped by NI on installation media does not apply to the NI-488.2 software.

You may transfer the license to a third party in the same country in which you purchased the license, or within the European Union if you purchased the license in the European Union, provided that you notify NI in writing of such transfer, including the name and location of such third party; such third party accepts the terms and conditions of this Agreement; and after such transfer you do not retain any copies of the Software, including any upgrades and updates that you may have received, nor retain any of the written materials accompanying the Software. NI may, in its discretion, charge you a fee for the transfer.

Concurrent Use License

If you have acquired a concurrent use license, you may install the Software on any or all computers at the physical location to which NI initially delivered the Software ("Site"). The Software may be used by all of your employees at the Site; provided, however, in no event may the number of authorized users who are accessing or running any of the Software at the same time exceed the maximum number of licenses you have purchased. You agree that you will also use an NI-approved volume license manager and the license file provided by NI that controls end-user access to the Software to ensure compliance with the foregoing.

There is no home use exception for a concurrent use license. Concurrent use licenses are not transferrable.

Debug License

If you have acquired a debug license, you must have licensed the applicable software components (identified below as "Software Components Required") under a separate named user license, computer based license, or VLP license with NI, in which case your applicable employee(s) may now, under the debug license, install such software components on one (1) additional target production computer for each debug license acquired and for debug purposes only or, in the case of a concurrent debug license, in accordance with the use restrictions applicable to concurrent licenses and for debug purposes only.

Debug License: NI TestStand

Software Components Required:

NI TestStand runtime execution engine for executing your sequences and the complete NI TestStand sequence editor development environment;

one (1) copy of LabVIEW and the applicable software toolkits;

one (1) copy of LabWindows/CVI and the applicable software toolkit;

one (1) copy of Measurement Studio and the applicable software toolkits

Debug License; NI TestStand Semiconductor Module

Software Components Required:

NI TestStand Semiconductor Module;

NI TestStand runtime execution engine for executing your sequences and the complete NI TestStand sequence editor development environment;

one (1) copy of LabVIEW and the applicable software toolkits;

one (1) copy of LabWindows/CVI and the applicable software toolkit;

one (1) copy of Measurement Studio and the applicable software toolkits

Debug License: LabVIEW

Software Components Required:

one (1) copy of LabVIEW and the applicable software toolkits

Debug License: LabWindows/CVI

Software Components Required:

one (1) copy of LabWindows/CVI and applicable software toolkits

Debug License: Measurement Studio

Software Components Required:

one (1) copy of Measurement Studio and the applicable software toolkits

Debug License: For each of the following software or any other software designated by NI as being software with respect to which NI offers a debug license, you must acquire a copy of the software for which the debug software was developed (for example, one copy NI Switch Executive for the debug license for NI Switch Executive).

NI Switch Executive

LabVIEW Mobile Module

LabVIEW Touch Panel Module

LabVIEW Real-Time Module

LabWindows/CVI Real-Time Module

LabVIEW FPGA Module

LabVIEW Control Design and Simulation Module

LabVIEW Vision Development Module

LabVIEW Statechart Module

LabVIEW DSC Module

LabVIEW DSP Module

If you licensed the applicable software components under a license other than a concurrent use license, then each of the applicable components must be used on the same target production computer. In no event may you use components subject to a debug license for developing new programs (e.g., test sequences/modules, virtual instruments). Further, if you acquire any upgrade to the applicable software, your existing debug license cannot be used with such upgrade. Rather, you must acquire a separate, "upgraded" debug license from NI for use with such upgrade.

There is no home usage exception for debug licenses.

With the exception of concurrent debug licenses, you may transfer the debug license to a third party in the same country in which you purchased the license or within the European Union if you purchased the license in the European Union, provided that you notify NI in writing of such transfer, including the name and location of such third party; such third party accepts the terms and conditions of this Agreement; and after such transfer you do not retain any copies of the Software, including any upgrades and updates that you may have received, nor retain any of the written materials accompanying the Software. NI may, in its discretion, charge you a fee for the transfer of the license.

ADDENDUM C – Volume License Program Terms

Volume License Program ("VLP"). The VLP is a program to assist customers in managing their licenses. The following terms apply to the VLP.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

1. The quote you obtained from NI or its authorized affiliate regarding the VLP and the VLP Startup Kit ("VLP Documentation") is incorporated into this Agreement. In the event of a conflict between the terms and conditions of this Agreement and the VLP Documentation, the terms and conditions of this Agreement will control.
2. **Term.** The VLP will be effective the date that NI sends the VLP Startup Kit to you ("VLP Effective Date"). The initial term of the VLP will start on the VLP Effective Date and continue for a period of one (1) year (the "Initial VLP Term"). You may renew the VLP for additional one (1) year periods (the Initial VLP Term and each such renewal term each referred to herein as a "VLP Term").
3. Software under the VLP may be used by your employees only on those computers located at the physical location to which NI delivers the Software unless otherwise specified in the VLP Documentation (the "Site"). Your use of the Software under the VLP will, at all times during the VLP Term and thereafter, be subject to all terms and conditions set forth in the Agreement regarding the specific type of license you have acquired under the VLP (i.e. named user, computer-based, or concurrent).
4. You must acquire and maintain during the VLP Term the Software Services for each individual Software license identified in the VLP Documentation and for which NI makes such Software Services available. Software Services will be described in VLP Documentation. NI reserves the right to restrict Software Service to the then most current version of the Software that is commercially available. You understand that NI may not make available Software Service for all Software available under the VLP. You must maintain during the VLP Term a minimum of five (5) licenses to a version of a single NI software product that is considered by NI to be a development version.
5. You must designate an individual in your organization who is responsible for distributing and overseeing the installation and use of the Software, including use of any master installation media and any approved volume license manager, ("Software Administrator") for each Site. You must promptly notify NI in writing of any changes to a Software Administrator.
6. NI will deliver the master installation media for the Software and, if provided for in the applicable written quotation from NI or its authorized affiliate, make available NI's volume license manager to the Software Administrator(s) for internal installation and use by your employees. Software documentation is provided in electronic form only and comes with the master installation media for the Software.
7. You are responsible for ensuring that an Approved Volume License Manager, together with the most current license file provided by NI that controls end-user access to the Software (to the extent NI has made the Software compatible with an Approved Volume License Manager) is in use at all times, during the term of the VLP and thereafter, with the Software. An "Approved Volume License Manager" means NI's computer software for controlling end user access to the Software and that generates applicable usage compliance information ("NI VLM"); FLEXnet or FLEXlm software; or any other third party software approved in writing by NI for controlling end user access to the Software. If the Approved Volume License Manager is the NI VLM or if NI makes documentation available for the applicable Approved Volume License Manager, such Approved Volume License Manager must be installed and used in accordance with the documentation provided by NI.
8. If you have existing computer-based or named user licenses for the Software that are to be covered by the VLP, you must notify NI in writing of the product, platform, and serial number information for each such license. Each such license and the individual serial number for each license will, as of the VLP Effective Date, no longer be in effect and will be superseded by the licenses within the VLP, which will have a single, common serial number.
9. **Concurrent Use License.** If you have obtained a concurrent use license under the VLP, you will be bound by the terms for concurrent use licenses. However, the definition of "Site" will also include all of your physical locations located within the same country as the Site. In addition, (i) if your Site is located in a member of the North American Free Trade Agreement, then all of your physical locations within a member of the North American Free Trade Agreement will be considered in the same country; (ii) if your Site is located in South America, then all of your physical locations within South America will be considered in the same country; (iii) if your Site is located in Iceland, Norway, Switzerland, Africa or any member country of the European Union, then any of your physical locations within the foregoing countries will be considered in the same country; and (iv) if your Site is located in Asia, then all of your physical locations in Asia will be considered located in the same country. If you have purchased a global concurrent license, then all of your locations worldwide will be considered in the same country as the Site.
10. You acknowledge and agree that in no event may your use of the Software under the VLP exceed the maximum total number of licenses set forth in the VLP Documentation in addition to any licenses that may be added to the VLP after the Effective Date and any licenses available through the "Overdraft" feature. You agree to pay for licenses accessed through the Overdraft feature.
11. **Activity Compliance Logs.** You are required to provide an activity compliance log ("Activity Compliance Log") for each Site to NI promptly, but in no event no later than fifteen (15) days following the annual anniversary of the VLP Effective Date and following the VLP termination date. The Activity Compliance Log must be in a format acceptable to NI.
12. **Renewals.** If you desire to renew the VLP, you must provide a current Activity Compliance Log to NI at least sixty (60) days before the end of the then current VLP Term. NI or its authorized affiliate will then provide you with a quote for Software Services, any fees for additional VLP licenses added during the VLP Term, including through the "Overdraft" feature, that are applicable ("Additional VLP Fees"), and any new VLP licenses that you request for the renewal VLP Term (the "VLP Renewal Fee"). You must promptly notify NI if the information in the Activity Compliance Log regarding the number of VLP licenses in use changes following your submission, and NI reserves the right to revise the VLP Renewal Fee to reflect any additional VLP licenses used and not reflected in the applicable Activity Compliance Log that you provided to NI at the time you renewed. **IF, PRIOR TO THE END OF THE THEN CURRENT VLP TERM, YOU DO NOT ISSUE A PURCHASE ORDER FOR THE SOFTWARE SERVICES AND ANY ADDITIONAL VLP FEES THAT ARE DUE, (I) THE VLP WILL AUTOMATICALLY TERMINATE AT THE END OF THE CURRENT VLP TERM AND (II) ALL SOFTWARE SERVICES FOR THE VLP WILL AUTOMATICALLY AND IMMEDIATELY TERMINATE AT THE END OF THE THEN CURRENT VLP TERM.**
13. **Purchase Orders; Invoices.** You must submit purchase orders to NI or its authorized affiliate as follows.
 - i. for initial activation of the VLP: in the amount specified in the applicable written quotation from NI or its authorized affiliate for initial activation of the VLP license and the initial annual user fee for Software Services within the time-frame specified in the quote provided to you
 - ii. for each renewal term: in the amount of VLP Renewal Fees and any Additional VLP Fees prior to the end of the then current VLP Term
14. Software Services are charged on an annual basis. Additional VLP Fees will be pro-rated on a quarterly basis, based on the quarter of the VLP Term in which the Software under such VLP license was first used or such shorter basis as NI may designate.
15. **THE SOFTWARE AND THE APPROVED VOLUME LICENSE MANAGER MAY CONTAIN CODE THAT WILL, FOLLOWING TERMINATION OF THE VLP, DEACTIVATE YOUR ABILITY TO USE THE SOFTWARE UNDER THE VLP. NI MAY ATTEMPT TO PROVIDE YOU WITH AN UPDATED LICENSE FILE, BUT IT IS YOUR RESPONSIBILITY TO OBTAIN SUCH LICENSE FILE FROM NI AND TO INSTALL AND USE THE LICENSE FILE AS SOON AS POSSIBLE AFTER DELIVERY OF SUCH LICENSE FILE, BUT IN NO EVENT NO LATER THAN SIXTY (60) DAYS AFTER THE TERMINATION OF THE VLP.** Upon termination of the VLP, you may continue to use the VLP licenses in effect and for which you have paid the required fees to NI or its authorized affiliate prior to the date of termination (the "Surviving VLP Licenses"), provided that all such use is conducted with an Approved Volume License Manager and otherwise pursuant to the terms and conditions of the Agreement. **IN NO EVENT MAY YOU INCREASE THE NUMBER OF THE SURVIVING VLP LICENSES FOLLOWING THE TERMINATION OF THE VLP. ANY REACTIVATION OF THE VLP FOLLOWING ITS TERMINATION WILL BE AT THE SOLE DISCRETION OF NI AND MAY BE SUBJECT TO REACTIVATION FEES, AND THE VLP EFFECTIVE DATE THEREAFTER WILL BE THE DATE THAT THE VLP IS REACTIVATED BY NI.**
16. You may obtain individual serial numbers for any of the VLP licenses or Surviving VLP Licenses. There may be a charge for conversion. No more than four (4) such conversions may occur per calendar year.
17. Software under a VLP license or a Surviving VLP License is non-transferable and you may not, without the prior written consent of NI or its authorized affiliate, distribute or otherwise provide the Software to any third party or to any of your sites or facilities not expressly identified in the applicable documents from NI.

ADDENDUM D – Enterprise Program Terms

Enterprise Program ("EP"). The following terms apply to the EP.

1. NI or its authorized affiliate and you will enter into NI Enterprise Program documentation ("EP Documentation") that, among other things, identifies the Software items that are covered under the EP; the types and maximum number of your licenses for such Software during the term of the EP; the types and maximum number of any licenses that you will obtain on expiration of the EP term; any of your pre-existing licenses that will be converted to licenses under your EP ("EP Pre-Existing Licenses") and any Software Services that are included. The EP Documentation is incorporated into this Agreement; provided, however, if there is a conflict between the terms and conditions of this Agreement and the EP Documentation, the terms and conditions of this Agreement will prevail and control.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

2. **Term.** The EP will be effective on the date set forth in the EP Documentation or, if not specified, the date that the EP Documentation is signed by NI or its authorized affiliate and sent to you (the "EP Effective Date"). The EP will continue for such term as set forth in the EP Documentation or, if not specified, for three years after the EP Effective Date ("EP Term").

3. You must designate an individual in your organization who is responsible for distributing and overseeing the installation and use of the Software, including use of any master installation media and any approved volume license manager, ("Software Administrator") for each Site. You must promptly notify NI in writing of any changes to a Software Administrator.

4. During the EP Term, you may distribute the master installation media containing the Software for internal installation and use by your employees only on those computers located at the locations designated in the EP Documentation ("EP Locations"). Software may be used under the EP (i) solely in accordance with the terms and conditions set forth in this Agreement regarding the specific type of license applicable to such license type acquired under the EP; (ii) solely at, and on computers located at, the EP Locations; and (iii) solely during the EP Term. You acknowledge and agree that (i) in no event may your use of the Software under the EP exceed the maximum total number of licenses set forth in the EP Documentation and (ii) no NI software (including any copies of the Software) other than the copies of the Software expressly identified in the EP Documentation may be used by you under the EP.

5. You must install and use, at all times, an Approved Volume License Manager with the most current license file provided to you by NI that controls end-user access to the Software licensed pursuant to the EP. An "Approved Volume License Manager" means NI's computer software for controlling end user access to the Software and that generates applicable usage compliance information ("NI VLM"); FLEXnet or FLEXlm software; or any other third party software approved in writing by NI for controlling end user access to the Software. If the Approved Volume License Manager is the NI VLM or if NI makes documentation available for the applicable Approved Volume License Manager, such Approved Volume License Manager must be installed and used in accordance with the documentation provided by NI.

6. **Training & Certification Services.** If the services to be provided under your EP include software training classes or "certification preparation" courses and certification testing services for NI software ("Training & Certification Services"), you may use available training credits during the EP Term for your employees to attend applicable training classes regarding the use of the Software or to receive applicable "certification preparation" courses and certification testing services from NI, as specified in the EP Documentation. Training & Certification Services will be provided in accordance with NI's then-current standard policies for software training and certification. Training credits may not be used for customized training that would constitute a "defense service" as defined by International Traffic in Arms Regulations 22 CFR 120.9. Training credits have no cash value and any unused training credits will expire upon termination or expiration of your EP or such other term set forth in the EP Documentation.

7. **Software Services.** If the services to be provided under the EP include Software Services, then NI will provide (i) your Software Administrator a master copy of all upgrades after the applicable commercial release date and (ii) the number of your users designated in the EP Documentation with access to NI's application engineers for issues involving the installation and use of the Software ("Phone Support") and with access to NI's customer on-line technical support system ("Web Support"). All services will be provided in accordance with NI's then current standard software maintenance and support policies. NI reserves the right to restrict Software Services to the then most current version of the Software that is commercially available. You understand that NI may not make available Software Services for all Software available under the EP.

8 **No Hardware or Hardware Services.** You acknowledge and agree that no hardware or hardware-related services are being provided or otherwise made available by NI under the EP.

9. Annual Management Review; Reports

A. Upon such periodic basis as set forth in the EP Documentation (but at least annually), your representatives must meet with NI's representatives to discuss the EP and your use of the EP, including evaluating usage of the NI Software and any training credits under the EP and determining the adequacy of licensing levels and number of EP Locations under the EP.

B. Thirty (30) days prior to the meeting referenced in sub-section A above or upon such other reasonable basis as NI may request, you must provide NI with (i) an activity compliance log identifying requests for permission to use the Software in a format acceptable to NI ("Activity Compliance Logs") for each of the EP Locations and (ii) a usage log showing check-outs and check-ins of the Software ("Usage Log") as generated by the Approved Volume License Manager for the Software at the EP Locations.

10. **EP Fees.** The fees that will be charged to you in connection with the EP are set forth in the EP Documentation. Unless set forth otherwise in the EP Documentation, all amounts to be paid by you under the EP will be in U.S. dollars. Amounts set forth in the EP Documentation do not include applicable taxes or import/export duties, and all taxes and other duties relating to any deliverables provided by NI under the EP will be your responsibility and be borne by you. If you acquire a business that has current NI software licenses that you wish to include in the EP, then the fees that may be charged to you in connection with the EP may be increased.

11. Termination

A. Either NI or you may in each's discretion terminate the EP upon written notice to the other party, if such other party is in material breach of any of its obligations under these Enterprise Program Terms and such breach has not been cured to the reasonable satisfaction of the non-breaching party within thirty (30) days of receiving written notice of such breach, provided that if the breach is not capable of cure the EP Term will terminate immediately.

B. **Effect of EP Expiration or Termination.** Upon expiration or termination of the EP, you must stop immediately all use of the Software under the EP and you must destroy all copies of the Software, provided however that you must deliver the Software and all copies to NI if NI has so demanded prior to such destruction. Notwithstanding the foregoing, with respect to any licenses from NI for Software covered by the EP that were in effect before the EP Effective Date and that are identified as Pre-Existing NI Software in the EP Documentation ("EP Pre-Existing Software"), if the EP is terminated by NI based on a breach only of the terms set forth in these Enterprise Program Terms and not based on a failure to comply with any other term of the Agreement, you may use such number of copies EP Pre-Existing Software as may be designated in the EP Documentation for the post-EP Term, solely at the EP Locations, and pursuant to, and solely in accordance with, the software license agreements that accompany the software. With respect to any copies of the EP Pre-Existing Software that are designated in the EP Documentation for post-EP Term use that were either the most current version or the immediately prior version of the Software as of the EP Effective Date, provided that the EP Term was not terminated by NI, you may elect to upgrade such copies to the current version of the applicable Software as of the effective date of termination or expiration of the EP Term for use by you solely in accordance with this Section.

C. Your right to use EP Pre-Existing Software after the EP Term is contingent on you providing NI with the Activity Compliance Logs and Usage Logs within thirty (30) days of the expiration or termination of the EP Term and you immediately paying to NI all amounts due but not paid as of the expiration or termination of the EP Term.

D. THE SOFTWARE AND THE APPROVED VOLUME LICENSE MANAGER MAY CONTAIN CODE THAT WILL, FOLLOWING EXPIRATION OR TERMINATION OF THE EP TERM, DEACTIVATE YOUR ABILITY TO USE THE SOFTWARE UNDER THE EP. YOU ACKNOWLEDGE AND AGREE THAT THE SOFTWARE MAY BE AUTOMATICALLY DEACTIVATED OR RENDERED UNUSABLE WITHOUT WARNING UPON THE EXPIRATION OR TERMINATION OF THE EP. IT IS YOUR RESPONSIBILITY TO OBTAIN ANY NECESSARY LICENSE FILES FROM NI TO ENABLE ANY PERMITTED POST-EP TERM USE OF EP PRE-EXISTING SOFTWARE AS DESIGNATED IN THE EP DOCUMENTATION. YOU MUST INSTALL AND USE THE LICENSE FILE AS SOON AS POSSIBLE AFTER DELIVERY OF SUCH LICENSE FILE BY NI, BUT IN NO EVENT NO LATER THAN SIXTY (60) DAYS AFTER THE TERMINATION OF THE EP TERM.

12. Licenses under the EP are non-transferable and you may not, without the prior written consent of NI or its authorized affiliate, distribute or otherwise provide the Software to any third party or to any of your sites or facilities other than EP Locations.

13. **Confidentiality.** The terms of your EP Documentation; any proposals or other documents submitted by NI or its authorized affiliate in connection with your EP (including all pricing and fees); and any information about NI product development efforts provided in connection with your EP are considered the confidential information of NI. You must not disclose any NI confidential information to any third party.

ADDENDUM E – Academic Licenses

1. Software under any of the academic license types may not be used for commercial or industrial purposes. Only software licenses subject to the academic research terms may be used for research purposes.

2. Authorized Applications developed using Software subject to an academic license may not be distributed for commercial purposes and must be distributed with a prohibition against redistribution for commercial purposes.

3. Academic licenses are nontransferable.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

4. **Student Edition License.** If the Software is a student edition (including Software acquired by you from your academic institution pursuant to its student install option license), you must be a student enrolled in or taking continuing education classes at (a) a degree-granting educational institution or (b) an online education course in which the teacher is recommending or requiring the use of the Software and that has been approved by NI for Student Edition licenses (either (a) or (b) an "Academic Institution") or an instructor teaching at an Academic Institution in order to use the Software. If you are a student, you may use the Software for your personal education purposes and not for any other purpose. If you are an instructor, you may use the Software for your preparation for classroom or lab coursework and not for any other purpose, such as academic research or classroom instruction regarding the use of the Software. You may install the Software on up to three (3) physical computers; provided, however, only you may use or otherwise run the Software and the Software may only be launched on one computer at a time. You may not install any of the Software on a network device from which the Software may be accessed and used by anyone other than you. There is no home usage exception for student edition licenses. You hereby understand and agree that your license will automatically expire upon the conclusion or termination of your enrollment in the Academic Institution, if you are a student, or at such time as you stop being an instructor, if you are an instructor. Upon any such expiration, you must promptly uninstall all copies of the Software.
5. **Primary and Secondary School License.** If you have acquired a primary and secondary school license, you may use the Software solely for educational purposes in your primary and secondary school. Primary and secondary schools are defined as levels K–12 and International Standard Classification of Education (ISCED) levels 0–3. You may install the Software on no more than the number of your school's computers specified by NI or its authorized affiliate in writing in the applicable quote. The foregoing rights apply to a single school or campus (as specified by NI or its authorized affiliate in writing in the applicable quote) and do not extend to an entire school district.
6. **Teaching License.** If you have acquired an academic teaching license, you may use the Software solely for instructional purposes in your department, college, or on a specific university campus, as applicable, of an Academic Institution. A use will be considered as one for "instructional purposes" only if such use meets either of the following criteria: (i) a common exam is given to students at the end of a semester or other academic period and the exam relates (in whole or part) to the students' use of the Software or (ii) homework or similar projects requiring the use of the Software are used for grading in lieu of an exam. You may install the Software on no more than the number of your Academic Institution's computers located within the applicable department, college, or specific university campus as specified by NI or its authorized affiliate in writing in the applicable quote. Without limiting the foregoing, any use of the Software by any person who is not an instructor at your Academic Institution is prohibited.
7. **Research License.** If you have acquired an academic research license, you may use the Software solely for academic research. You may install the Software on no more than the number of your computers located within the applicable department, college, or specific university campus as specified by NI or its authorized affiliate in writing in the applicable quote.
8. Combined teaching and research licenses are subject to the terms and conditions of both teaching licenses and research licenses.
9. **Student Install Option.** If you are an Academic Institution and have acquired student install option licenses, NI will deliver to you the master installation media for the applicable student edition Software. You may make the student edition Software available to no more than the number of students specified by NI or its authorized affiliate in writing in the applicable quote, and each student must be currently enrolled at the applicable department, college, or specific university campus of your Academic Institution specified in writing in the applicable quote.

ADDENDUM F – Product-Specific Provisions

TestStand Development System License, TestStand Custom Sequence Editor License

If you have acquired a computer-based NI TestStand Development System License or NI TestStand Custom Sequence Editor License, you may not remotely access the Software. If you have acquired a named user NI TestStand Development System License or NI TestStand Custom Sequence Editor License, only the then-current Named User may remotely access the Software.

Measurement Studio

Any application created with Measurement Studio Software that uses any Measurement Studio controls in a "design time" context is not an Authorized Application.

(14) wxWindows Library License 3.1

wxWindows Library Licence, Version 3.1

=====

Copyright (c) 1998-2005 Julian Smart, Robert Roebing et al

Everyone is permitted to copy and distribute verbatim copies of this licence document, but changing it is not allowed.

WXWINDOWS LIBRARY LICENCE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

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

This library 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 Library General Public Licence for more details.

You should have received a copy of the GNU Library General Public Licence along with this software, usually in a file named COPYING.LIB. If not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

EXCEPTION NOTICE

1. As a special exception, the copyright holders of this library give permission for additional uses of the text contained in this release of the library as licenced under the wxWindows Library Licence, applying either version 3.1 of the Licence, or (at your option) any later version of the Licence as published by the copyright holders of version 3.1 of the Licence document.
2. The exception is that you may use, copy, link, modify and distribute under your own terms, binary object code versions of works based on the Library.
3. If you copy code from files distributed under the terms of the GNU General Public Licence or the GNU Library General Public Licence into a copy of this library, as this licence permits, the exception does not apply to the code that you add in this way. To avoid misleading anyone as to the status of such modified files, you must delete this exception notice from such code and/or adjust the licensing conditions notice accordingly.
4. If you write modifications of your own for this library, it is your choice whether to permit this exception to apply to your modifications. If you do not wish that, you must delete the exception notice from such code and/or adjust the licensing conditions notice accordingly.

Third Party Software Note of Physik Instrumente (PI) GmbH & Co. KG

Issued: June 19, 2017

(15) zlib License 1.2.x

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:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in 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 Mark Adler
jloup@gzip.org madler@alumni.caltech.edu