**OPEN SOURCE SOFTWARE NOTICE**

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

**Warranty Disclaimer**

**The open source software in this product is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the applicable licenses for more details.**

**Copyright Notice and License Texts**

**Software:** python2 2.7.18

**Copyright notice:**

Copyright (c) 2008 Red Hat  
Copyright (C) 2004, 2010 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 2013 Imagination Technologies  
Copyright (C) 1995-2006, 2011 Jean-loup Gailly.  
Copyright (C) 2004-2006 Python Software Foundation Authors: Baxter, Wouters and Warsaw Contact: email-sig@python.org  
Copyright (c) 2004 by Secret Labs AB  
Copyright (C) 2011 Anthony Green  
Copyright (C) 2001-2006 Python Software Foundation email package unit tests  
Copyright (C)2007 Georg Brandl.  
Copyright (C)2008 Armin Ronacher.  
Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler  
Copyright (C) 2002 Python Software Foundation email package unit tests for (optional) Asian codecs  
Copyright (C) 2001-07-01 fl added BIGCHARSET support (from Martin von Loewis)  
Copyright (c) 2010, Plausible Labs Cooperative, Inc.  
Copyright (c) 1996-2003, 2010 Red Hat, Inc.  
Copyright 2001-2013 by Vinay Sajip. All Rights Reserved.  
Copyright (C) 2013 IBM  
Copyright (c) 1999-2002 by Fredrik Lundh  
Copyright (c) 1995-2001 Corporation for National Research Initiatives.\  
Copyright (c) 1999 by Fredrik Lundh  
Copyright (C) 1999-2001 Gregory P. Ward.  
Copyright (c) 2008 Red Hat, Inc.  
Copyright (c) 2006, Marc-Andre Lemburg (mal@egenix.com). See the documentation for further information on copyrights, or contact the author. All Rights Reserved.  
Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)  
Copyright (C) 2006 - 2010 Gregor Lingl email: glingl@aon.at  
libffi PyOBJC - Copyright (c) 1996-2003 Red Hat, Inc.  
Copyright (C)1995-1996 by Virginia Polytechnic Institute & State  
ppc-darwin.h - Copyright (c) 2002, 2003, 2004, Free Software Foundation, Inc.  
Copyright (c) 1998-2008 The OpenSSL Project. All rights reserved.  
Copyright (c) 1996-2003, 2007, 2008 Red Hat, Inc.  
Copyright (C) 1999, 2000, 2002 Aladdin Enterprises. All rights reserved.  
Copyright (C) 2000 Autonomous Zone Industries  
Copyright (c) 1999 by Secret Labs AB  
Copyright 1991-1995 by Stichting Mathematisch Centrum, Amsterdam, The Netherlands.  
Copyright (c) 1996, 2007, 2008, 2011 Red Hat, Inc.  
Copyright 2001 Autonomous Zone Industries  
Copyright (C) 1997-1998 Greg Stein. All Rights Reserved.  
Copyright (c) 1997-2000 Thai Open Source Software Center Ltd  
Copyright (c) 1996, 1998 Red Hat, Inc.  
Copyright (c) 2008, 2010 Red Hat, Inc.  
Copyright (c) 2006-2008, R Oudkerk --- see COPYING.txt  
Copyright (c) 2010, Plausible Labs Cooperative, Inc.  
Copyright (c) 2005 Axis Communications AB  
Copyright (C) 1995-2016 Jean-loup Gailly, Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (C) YEAR ORGANIZATION FIRST AUTHOR <EMAIL@ADDRESS>, YEAR.  
Copyright (C) 2001-2006 Python Software Foundation Author: Ben Gertzfield Contact: email-sig@python.org  
Copyright (C) 1995-2003, 2010 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright 1996,1997 by Oliver Andrich, Koblenz, Germany.  
Copyright (c) 2008 Anthony Green  
Copyright (c) 1996, 2003-2004, 2007-2008 Red Hat, Inc.  
Copyright (c) 2013 Miodrag Vallat. <miod@openbsd.org>  
Copyright (c) 2000-2010, eGenix.com Software GmbH;   
Copyright (c) 1998, 2001, 2007, 2008 Red Hat, Inc.  
copyright (c) 1991-1995 by Stichting Mathematisch Centrum, Amsterdam, The Netherlands. Copying is permitted under the terms associated with the main Python distribution, with the additional restriction that this additional notice be included and maintained on all distributed copies.  
Copyright (c) 1996-2003 Red Hat, Inc.  
Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 Python Software Foundation  
Copyright (C) 2000 BeOpen.com. All rights reserved.  
Copyright (c) 1993 George V. Neville-Neil All rights reserved.  
Copyright (c) 1996 Red Hat, Inc.  
Copyright (C) 2007 Free Software Foundation, Inc.  
Copyright (c) 2011, 2013 Anthony Green  
Copyright (c) 2009, 2010, 2011, 2012 ARM Ltd.  
Copyright (C) 2002-2006 Python Software Foundation Contact: email-sig@python.org email package unit tests for (optional) Asian codecs  
Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.  
Copyright (C) 1995-2005, 2010 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (C) 2002-2006 Python Software Foundation Author: Barry Warsaw Contact: email-sig@python.org  
Copyright 2007 Google, Inc. All Rights Reserved.  
Copyright (c) 2004 Simon Posnjak  
Copyright (c) 1998-2002 John Aycock  
Copyright (C) 2000, 2001 by Autonomous Zone Industries  
Copyright (C) 2007, 2008 Free Software Foundation  
Copyright (c) 2004 by Peter Astrand <astrand@lysator.liu.se>  
Copyright (c) 1995-2001 Corporation for National Research Initiatives.  
Copyright (C) 2003, 2006, 2009, 2010 Free Software Foundation, Inc.  
Copyright (c) 1997-2001 by Secret Labs AB. All rights reserved.  
Copyright (C) 2003 Python Software Foundation  
Copyright (c) 2002 Bo Thorsen  
Copyright (c) 2003-2005 by Peter Astrand <astrand@lysator.liu.se>  
Copyright (c) 2002 Peter OGorman <ogorman@users.sourceforge.net>  
Copyright (C) 1995, 1996, 1997, 1998, and 1999 WIDE Project.  
Copyright (C) 1995-2006, 2010, 2011 Jean-loup Gailly.  
Copyright (C) 1995-2017 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 2002 Jorge Acereda <jacereda@users.sourceforge.net>   
Copyright (c) 1996, 1998, 2007 Red Hat, Inc.  
Copyright (C) 2007, 2009, 2010 Free Software Foundation, Inc  
Copyright (c) 1990-1995, Stichting Mathematisch Centrum.  
Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.  
Copyright (c) 2006-2008, R Oudkerk All rights reserved.  
Copyright (C) 2008 Red Hat, Inc  
Copyright (c) 2009 Bradley Smith <brad@brad-smith.co.uk>  
Copyright (C) 1997 - 2002, Makoto Matsumoto and Takuji Nishimura, All rights reserved.  
Copyright (C) 2002, 2006, 2007, 2009, 2010 Free Software Foundation, Inc.  
Copyright (c) 2004 Renesas Technology  
Copyright (C) 2004-2017 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (C) 2008 Free Software Foundation, Inc.  
Copyright (c) 1991-1995 Stichting Mathematisch Centrum.  
Copyright (c) 2011, 2012 Anthony Green  
Copyright (c) 1999-2000, Marc-Andre Lemburg  
Copyright (c) 1991-1999 Unicode, Inc. All Rights reserved.  
Copyright (c) 2003-2010 Python Software Foundation This module is free software, and you may redistribute it and/or modify it under the same terms as Python itself, so long as this copyright message and disclaimer are retained in their original form.  
Copyright (C) 2002-2006 Python Software Foundation Author: Ben Gertzfield, Barry Warsaw Contact: email-sig@python.org  
Copyright 1991-1995, Stichting Mathematisch Centrum, all rights reserved.  
Copyright (C) 2001-2006 Python Software Foundation Author: Keith Dart Contact: email-sig@python.org  
Copyright (c) 2013 The Written Word, Inc.  
Copyright (c) 1998 Geoffrey Keating  
Copyright (c) 2000, BeOpen.com.  
Copyright (c) 1996-2014 Anthony Green, Red Hat, Inc and others.  
Copyright (c) 1999 Toby Dickenson  
Copyright (C) 2001 Python Software Foundation Barry Warsaw <barry@python.org>, 2000.  
Copyright (c) 2000 Doug White, 2006 James Knight, 2007 Christian Heimes All rights reserved.  
Copyright (C) 2002-2007 Python Software Foundation Contact: email-sig@python.org  
Copyright (c) 1999-2002 by Secret Labs AB.  
Copyright (C) 2001-2006 Python Software Foundation Author: Anthony Baxter   
Copyright (C) 1999-2001, Digital Creations, Fredericksburg, VA, USA and Andrew Kuchling. All rights reserved.  
Copyright (c) 2011 Anthony Green  
Copyright (C) 2001-2020 Python Software Foundation. All rights reserved.  
Copyright (c) 1999-2000 by Secret Labs AB  
Copyright (c) 2013 Tensilica, Inc.  
Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.  
Copyright (C) 2001-2006 Python Software Foundation Author: Ben Gertzfield, Barry Warsaw Contact: email-sig@python.org  
Copyright (C) 2001-10-18 fl fixed group reset issue (from Matthew Mueller)  
Copyright (C) 1994 Steen Lumholt.  
Copyright (c) 1999-2009 by Secret Labs AB. All rights reserved.  
Copyright (C) 1991-1995 Stichting Mathematisch Centrum. All rights reserved.  
portions copyright 2001, Autonomous Zones Industries, Inc., all rights...  
Copyright (c), 2000-2006, eGenix.com Software GmbH (info@egenix.com)  
Copyright (C) 1995-2017 Jean-loup Gailly detectdatatype() function provided freely by Cosmin Truta, 2006 For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 2004 by Fredrik Lundh <fredrik@pythonware.com>  
Copyright (c) 1999 by Fredrik Lundh.  
Copyright (c) 2013 Tensilica, Inc.  
Copyright (C) 2007 Free Software Foundation, Inc.  
Copyright (C) 2000 Guido van Rossum.  
Copyright (c) 2005-2006 ActiveState Software Inc.  
Copyright (c) 1996 Red Hat, Inc.  
Copyright (C) 1999, 2008 Red Hat, Inc.  
Copyright (C) 2001-2006 Python Software Foundation Author: Barry Warsaw, Thomas Wouters, Anthony Baxter Contact: email-sig@python.org  
Copyright (c) 2001-2006 Gregory P. Ward. All rights reserved.  
Copyright (C) 2001-2013 Vinay Sajip. All Rights Reserved.  
Copyright (C) 1999, Bioreason, Inc., all rights reserved.  
Copyright (c) 1999-2009 by Fredrik Lundh.  
Copyright (c) 2003 Python Software Foundation. All rights reserved.  
Copyright 1995-1996 by Fred L. Drake, Jr. and Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA.  
Copyright (c) 2001-2020 Python Software Foundation.\  
Copyright (c) 1999-2002 by Fredrik Lundh.  
Copyright (C) 2006 Free Software Foundation, Inc.  
Copyright (C) 2001-12-07 flfixed memory leak in sub/subn (Guido van Rossum)  
Copyright (C) 1995-2017 Jean-loup Gailly For conditions of distribution and use, see copyright notice in zlib.h  
ffitarget.h - Copyright (c) 2012, 2013 Anthony Green Target configuration macros for Moxie  
Copyright (c) 1996-2008 Red Hat, Inc and others.  
Copyright (C) 1998 Geoffrey Keating  
Copyright (c) 2011 Plausible Labs Cooperative, Inc.  
Copyright (C) 2004 Anthony Green  
Copyright (C) 2011 Anthony Green  
Copyright (c) 2013 Mentor Graphics.  
Copyright (c) 1995-2000, Corporation for National Research Initiatives.  
Copyright (C) 2011, 2012, 2013 Anthony Green   
Copyright (C) 1995-2011, 2016 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 1999, 2007, 2008 Red Hat, Inc.  
Copyright (c) 2013 Imagination Technologies Ltd.  
Copyright (c) 1996 Red Hat, Inc.  
Copyright (c) 1999-2002 by Secret Labs AB  
Copyright (c) 1997 by Fredrik Lundh  
Copyright (C) 2001,2002 Python Software Foundation csv package unit tests  
Copyright (c) 2007, 2009, 2010 Red Hat, Inc.  
Copyright (c) 1996, 1998, 2001, 2002 Red Hat, Inc.  
Copyright (c) 2002, 2007 Bo Thorsen <bo@suse.de>  
Copyright (c) 2000, 2007 Software AG  
Copyright (c) 2002 Ranjit Mathew  
Copyright (c) 2012, 2013 Xilinx, Inc  
Copyright (c) 2002 MyCompanyName. All rights reserved.  
Copyright (c) 1996-2003 Red Hat, Inc.  
Copyright 1991-1997 by Stichting Mathematisch Centrum, Amsterdam, The Netherlands.  
Copyright (C) 2008 Red Hat, Inc.  
Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler  
Copyright (C) 2003-2004 Federico Di Gregorio <fog@debian.org>  
Copyright (C) 2002-2004 Python Software Foundation  
Copyright (C) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.  
Copyright (C) 2002 Gregory P. Smith  
Copyright (c) 2008 David Daney  
Copyright (c) 2002 Roger Sayle  
Copyright (C) 1998 by Just van Rossum, Den Haag, The Netherlands.  
Copyright (c) 1998-2000 Thai Open Source Software Center Ltd and Clark Cooper  
Copyright (c) 2001 John Beniton  
Copyright (c) 2004 Python Software Foundation.  
Copyright 1996 by Sam Rushing  
Copyright (C) 2008, 2010 Free Software Foundation, Inc.  
Copyright (c) 1996-2004 Red Hat, Inc.  
Copyright (c) 2003-2004 by Fredrik Lundh. All rights reserved.  
Copyright (c), 1997-2006, Marc-Andre Lemburg (mal@lemburg.com)  
Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Python Software Foundation.  
Copyright (C) 1995-2016 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (C) 2006 Python Software Foundation.  
Copyright (c) 1998 The Open Group  
Copyright (C) 2005-2010 Gregory P. Smith (greg@krypto.org)  
Copyright (C) 2002-2006 Python Software Foundation Author: Ben Gertzfield Contact: email-sig@python.org  
Copyright 2004-2005 Elemental Security, Inc. All Rights Reserved.  
Copyright (c) 1999 by Secret Labs AB.  
Copyright 2001-2014 by Vinay Sajip. All Rights Reserved.  
Copyright 1995-1997, Automatrix, Inc., all rights reserved.  
Copyright (C) 1995-2005, 2014, 2016 Jean-loup Gailly, Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 2010 CodeSourcery  
Copyright (C) 2001 John Hornkvist  
Copyright (c) 2000 BeOpen.com.  
Copyright (c) 1991, 2000, 2001 by Lucent Technologies.  
Copyright (C) 1995-2016 Jean-loup Gailly For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 2002-2006 Python Software Foundation. All rights reserved.  
Copyright (C) 1994 by Lance Ellinghouse, Cathedral City, California Republic, United States of America.  
Copyright (C) 1992-1994, David Gottner  
Copyright (C) 1995-2000 Corporation for National Research Initiatives. All rights reserved.  
Copyright (C) 2001-2007 Python Software Foundation Contact: email-sig@python.org email package unit tests  
Copyright (c) 1998, 2008, 2011 Red Hat, Inc.  
Copyright (c) 2007 by Christian Heimes <christian@cheimes.de>  
Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.  
Copyright (C) 2005 Gregory P. Smith (greg@krypto.org)  
x86-ffi64.c - Copyright (c) 2002 Bo Thorsen <bo@suse.de>  
Copyright (c) Corporation for National Research Initiatives.  
Copyright (c) 2002 Unicode, Inc. All Rights reserved.  
Copyright (C) 2001-2010 Python Software Foundation Author: Barry Warsaw Contact: email-sig@python.org  
Copyright (C) 2000 Bastian Kleineidam  
Copyright 1994 by Lance Ellinghouse Cathedral City, California Republic, United States of America.  
Copyright (c) 2003-2009 by Fredrik Lundh. All rights reserved.  
Copyright (c) 2004, 2005, 2006 Python Software Foundation.  
Copyright (c) 2002 Gustavo Niemeyer <niemeyer@conectiva.com>  
Copyright Disney Enterprises, Inc. All Rights Reserved.  
Copyright (C) 2007 Free Software Foundation, Inc  
Copyright (C) 1995-2003, 2010, 2014, 2016 Jean-loup Gailly, Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (C) 1995-2010 Jean-loup Gailly and Mark Adler  
ffitarget.h - Copyright (c) 2012 Anthony Green  
Copyright (c) 1999-2008 by Fredrik Lundh. All rights reserved.  
Copyright (c) 2004 Renesas Technology.  
Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper  
Copyright (C) 2001,2002 Python Software Foundation email package unit tests  
Copyright (c) 2000 Hewlett Packard Company  
Copyright (c) 2001-2017 Expat maintainers   
Copyright (c) 2002 Python Software Foundation; All Rights Reserved  
Copyright 2000, Mojam Media, Inc., all rights reserved.  
Copyright 2000 by Timothy OMalley <timo@alum.mit.edu>  
Copyright (c) 1997-2001 by Total Control Software All Rights Reserved  
Copyright 2006 Georg Brandl.  
Copyright (C) 2011 Kyle Moffett  
Copyright (C) 2002, 2003 Python Software Foundation.  
Copyright (C) 2001-2010 Python Software Foundation Contact: email-sig@python.org  
Copyright (c) 1999-2003 Steve Purcell  
Copyright (c) 2001-2006 Twisted Matrix Laboratories.  
Copyright (c) 2000 BeOpen.com.  
Copyright 2009 Gabriel A. Genellina  
Copyright (c) 1998-2001 by Secret Labs AB. All rights reserved.  
Copyright (c) 2008 by Christian Heimes <christian@cheimes.de>  
Copyright (c) 2011 Free Software Foundation  
Copyright (C) 2004, 2005, 2010, 2011, 2012, 2013, 2016 Mark Adler For conditions of distribution and use, see copyright notice in zlib.h  
Copyright (c) 1999-2008 by Fredrik Lundh  
Copyright (c) 2008 Red Hat, Inc.  
Copyright (C) 2001-2010 Python Software Foundation Contact: email-sig@python.org email package unit tests

**License:** Python