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GNU GPL: qdb 7.3

GPL: stunnel 4.48, Binutils 2.14, readline 6.0, alsa-lib 0.0.9

GPLv2: u-Boot 1.3.4, Izo 2.0.0, gSOAP 2.8.17 Linux Kernel 2.6.32-rc2, mtdutils 1.5.0, freetype 2.4.0, iproute2

3.10.0-r0, openvpn 2.3.2, iptable 1.4.2, busybox 1.9.1, util-linux 2.18,

**GPLv3:** dosfstools 2.11, wget 1.14-r16.0, gzip 1.4 **LGPL:** eglibc 2.5, gupnp 0.1, libiconf 1.14, alsa-lib 0.0.9

**LGPLv2:** tslib 1.0.0

**PHP:** PHP 5.4.4 PHP 5.6.30

BSD: lighttpd 1.4.39, flex 2.5.37, wpa\_suplicant\_hostapd v0.7.0, libcap 1.10, libqpxx 3.01,

**zlib:** zlib 1.2.3

MIT: jquery 1.8.3, jquery-ui 1.80, libxml2 2.9.1, libxslt 1.1.28, libxt X11R7.4

MIT(X11): ncurses 5.7

OpenSSL Combined: openssl 1.0.1s Apple Public Source: mDNSResponder 1.07 IJG – JPEG-Library License: libjpeg ZLIB/LIBPNG License:libpng 1.2.28

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zlib.h -- interface of the 'zlib' general purpose compression library

version 1.2.8, April 28th, 2013

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# REFERENCES

We 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 PDF file containing a revised version of Wallace's article is available at

is available at http://www.ijg.org/files/Wallace.JP EG.pdf. 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

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A somewhat less technical, more

ACM and IEEE.

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 industrialstrength, but when you are ready

at a full implementation, you've got one here...

The best currently available 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).

The original JPEG 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.

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. JFIF 1.02 has been adopted as an Ecma International Technical Report and thus received a formal publication status. It is available as a free download in PDF format from http://www.ecmainternational.org/publications/tech reports/E-TR-098.htm. A PostScript version of the JFIF document is available at http://www.ijg.org/files/jfif.ps.gz. There is also a plain text version http://www.ijg.org/files/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/TIFF 6.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

design proposed by TIFF Technical Note #2 (Compression tag 7). Copies of this Note can be obtained from

http://www.ijg.org/files/. 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.

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