

NAME

TIFFGetField, TIFFVGetField - get the value(s) of a tag in an open TIFF file

SYNOPSIS

```
#include <tiffio.h>
```

```
int TIFFGetField(TIFF *tif, ttag_t tag, ...)
```

```
#include <stdarg.h>
```

```
int TIFFVGetField(TIFF *tif, ttag_t tag, va_list ap)
```

```
int TIFFGetFieldDefaulted(TIFF *tif, ttag_t tag, ...)
```

```
int TIFFVGetFieldDefaulted(TIFF *tif, ttag_t tag, va_list ap)
```

DESCRIPTION

TIFFGetField returns the value of a tag or pseudo-tag associated with the the current directory of the opened TIFF file *tif*. (A *pseudo-tag* is a parameter that is used to control the operation of the TIFF library but whose value is not read or written to the underlying file.) The file must have been previously opened with *TIFFOpen(3TIFF)*. The tag is identified by *tag*, one of the values defined in the include file **tiff.h** (see also the table below). The type and number of values returned is dependent on the tag being requested. The programming interface uses a variable argument list as prescribed by the *stdarg(3)* interface. The returned values should only be interpreted if *TIFFGetField* returns 1.

TIFFVGetField is functionally equivalent to *TIFFGetField* except that it takes a pointer to a variable argument list. *TIFFVGetField* is useful for layering interfaces on top of the functionality provided by *TIFFGetField*.

TIFFGetFieldDefaulted and *TIFFVGetFieldDefaulted* are identical to *TIFFGetField* and *TIFFVGetField*, except that if a tag is not defined in the current directory and it has a default value, then the default value is returned.

The tags understood by *libtiff(3TIFF)*, the number of parameter values, and the types for the returned values are shown below. The data types are specified as in C and correspond to the types used to specify tag values to *TIFFSetField(3TIFF)*. Remember that *TIFFGetField* returns parameter values, so all the listed data types are pointers to storage where values should be returned. Consult the TIFF specification (or relevant industry specification) for information on the meaning of each tag and their possible values.

<i>Tag Name</i>	<i>Count</i>	<i>Types</i>	<i>Notes</i>
TIFFTAG_ARTIST	1	const char**	

TIFFTAG_BADFAXLINES	1	uint32_t*	
TIFFTAG_BITSPERSAMPLE	1	uint16_t*	
TIFFTAG_CLEANFAXDATA	1	uint16_t*	
TIFFTAG_COLORMAP	3	const uint16_t**	1<<BitsPerSample arrays
TIFFTAG_COMPRESSION	1	uint16_t*	
TIFFTAG_CONSECUTIVEBADFAXLINES	1	uint32_t*	
TIFFTAG_COPYRIGHT	1	const char**	
TIFFTAG_DATATYPE	1	uint16_t*	
TIFFTAG_DATETIME	1	const char**	
TIFFTAG_DOCUMENTNAME	1	const char**	
TIFFTAG_DOTRANGE	2	uint16_t*	
TIFFTAG_EXTRASAMPLES	2	uint16_t*,const uint16_t**count & types array	
TIFFTAG_FAXFILLFUNC	1	TIFFFaxFillFunc*	G3/G4 compression pseudo-tag
TIFFTAG_FAXMODE	1	int*	G3/G4 compression pseudo-tag
TIFFTAG_FILLORDER	1	uint16_t*	
TIFFTAG_GROUP3OPTIONS	1	uint32_t*	
TIFFTAG_GROUP4OPTIONS	1	uint32_t*	
TIFFTAG_HALFTONEHINTS	2	uint16_t*	
TIFFTAG_HOSTCOMPUTER	1	const char**	
TIFFTAG_ICCPROFILE	2	const uint32_t*,const void**count, profile data	
TIFFTAG_IMAGEDEPTH	1	uint32_t*	
TIFFTAG_IMAGEDESCRIPTION	1	const char**	
TIFFTAG_IMAGELENGTH	1	uint32_t*	
TIFFTAG_IMAGEWIDTH	1	uint32_t*	
TIFFTAG_INKNAMES	1	const char**	
TIFFTAG_INKSET	1	uint16_t*	
TIFFTAG_JPEGCOLORMODE	1	int*	JPEG pseudo-tag
TIFFTAG_JPEGQUALITY	1	int*	JPEG pseudo-tag
TIFFTAG_JPEGTABLES	2	uint32_t*,const void**	count & tables
TIFFTAG_JPEGTABLESMODE	1	int*	JPEG pseudo-tag
TIFFTAG_MAKE	1	const char**	
TIFFTAG_MATTEING	1	uint16_t*	
TIFFTAG_MAXSAMPLEVALUE	1	uint16_t*	
TIFFTAG_MINSAMPLEVALUE	1	uint16_t*	
TIFFTAG_MODEL	1	const char**	
TIFFTAG_ORIENTATION	1	uint16_t*	
TIFFTAG_PAGENAME	1	const char**	
TIFFTAG_PAGENUMBER	2	uint16_t*	
TIFFTAG_PHOTOMETRIC	1	uint16_t*	
TIFFTAG_PHOTOSHOP	2	uint32_t*,const void**	count, data

TIFFTAG_PLANARCONFIG	1	uint16_t*	
TIFFTAG_PREDICTOR	1	uint16_t*	
TIFFTAG_PRIMARYCHROMATICITIES	1	const float**	6-entry array
TIFFTAG_REFERENCEBLACKWHITE	1	const float**	6-entry array
TIFFTAG_RESOLUTIONUNIT	1	uint16_t*	
TIFFTAG_RICHTIFFIPTC	2	uint32_t*,const void**	count, data
TIFFTAG_ROWSPERSTRIP	1	uint32_t*	
TIFFTAG_SAMPLEFORMAT	1	uint16_t*	
TIFFTAG_SAMPLESPPERPIXEL	1	uint16_t*	
TIFFTAG_SMAXSAMPLEVALUE	1	double*	
TIFFTAG_SMINSAMPLEVALUE	1	double*	
TIFFTAG_SOFTWARE	1	const char**	
TIFFTAG_STONITS	1	const double**	
TIFFTAG_STRIPBYTECOUNTS	1	const uint64_t**	
TIFFTAG_STRIPOFFSETS	1	const uint64_t**	
TIFFTAG_SUBFILETYPE	1	uint32_t*	
TIFFTAG_SUBIFD	2	uint16_t*,const uint64_t**	count & offsets array
TIFFTAG_TARGETPRINTER	1	const char**	
TIFFTAG_THRESHHOLDING	1	uint16_t*	
TIFFTAG_TILEBYTECOUNTS	1	const uint64_t**	
TIFFTAG_TILEDEPTH	1	uint32_t*	
TIFFTAG_TILELENGTH	1	uint32_t*	
TIFFTAG_TILEOFFSETS	1	const uint64_t**	
TIFFTAG_TILEWIDTH	1	uint32_t*	
TIFFTAG_TRANSFERFUNCTION	1 or 3<*>		const uint16_t**1<<BitsPerSample
TIFFTAG_WHITEPOINT	1	const float**	2-entry array
TIFFTAG_XMLPACKET	2	uint32_t*,const void**	count, data
TIFFTAG_XPOSITION	1	float*	
TIFFTAG_XRESOLUTION	1	float*	
TIFFTAG_YCBCRCOEFFICIENTS	1	const float**	3-entry array
TIFFTAG_YCBCRPOSITIONING	1	uint16_t*	
TIFFTAG_YCBCRSUBSAMPLING	2	uint16_t*	
TIFFTAG_YPOSITION	1	float*	
TIFFTAG_YRESOLUTION	1	float*<***>	

<*> If *SamplesPerPixel* is one, then a single array is returned; otherwise three arrays are returned.

<***> The contents of this field are quite complex. See *The ICC Profile Format Specification*, Annex B.3 "Embedding ICC Profiles in TIFF Files" (available at <http://www.color.org>) for an explanation.

AUTOREGISTERED TAGS

If you can't find the tag in the table above that means this is an unsupported tag and is not directly

supported by **libtiff(3TIFF)** library. You will still be able to read it's value if you know the data type of that tag. For example, if you want to read the LONG value from the tag 33424 and ASCII string from the tag 36867 you can use the following code:

```
uint32_t count;
void *data;

TIFFGetField(tiff, 33424, &count, &data);
printf("Tag %d: %d, count %d0, 33424, *(uint32_t *)data, count);
TIFFGetField(tiff, 36867, &count, &data);
printf("Tag %d: %s, count %d0, 36867, (char *)data, count);
```

RETURN VALUES

1 is returned if the tag is defined in the current directory; otherwise a 0 is returned.

DIAGNOSTICS

All error messages are directed to the **TIFFError(3TIFF)** routine.

Unknown field, tag 0x%x. An unknown tag was supplied.

SEE ALSO

TIFFOpen(3TIFF), **TIFFSetField(3TIFF)**, **TIFFSetDirectory(3TIFF)**, **TIFFReadDirectory(3TIFF)**, **TIFFWriteDirectory(3TIFF)** **libtiff(3TIFF)**,

Libtiff library home page: <http://www.simplesystems.org/libtiff/>