

NAME

TIFFTileSize, TIFFTileRowSize, TIFFVTileSize, TIFFDefaultTileSize, TIFFComputeTile, TIFFCheckTile, TIFFNumberOfTiles – tile-related utility routines

SYNOPSIS

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

```
void TIFFDefaultTileSize(TIFF *tif, uint32 *tw, uint32 *th)
tsize_t TIFFTileSize(TIFF *tif)
tsize_t TIFFTileRowSize(TIFF *tif)
tsize_t TIFFVTileSize(TIFF *tif, uint32 nrows)
ttile_t TIFFComputeTile(TIFF *tif, uint32 x, uint32 y, uint32 z, tsample_t sample)
int TIFFCheckTile(TIFF *tif, uint32 x, uint32 y, uint32 z, tsample_t sample)
ttile_t TIFFNumberOfTiles(TIFF *tif)
```

DESCRIPTION

TIFFDefaultTileSize returns the pixel width and height of a reasonable-sized tile; suitable for setting up the *TileWidth* and *TileLength* tags. If the *tw* and *th* values passed in are non-zero, then they are adjusted to reflect any compression-specific requirements. The returned width and height are constrained to be a multiple of 16 pixels to conform with the TIFF specification.

TIFFTileSize returns the equivalent size for a tile of data as it would be returned in a call to *TIFFReadTile* or as it would be expected in a call to *TIFFWriteTile*.

TIFFVTileSize returns the number of bytes in a row-aligned tile with *nrows* of data.

TIFFTileRowSize returns the number of bytes of a row of data in a tile.

TIFFComputeTile returns the tile that contains the specified coordinates. A valid tile is always returned; out-of-range coordinate values are clamped to the bounds of the image. The *x* and *y* parameters are always used in calculating a tile. The *z* parameter is used if the image is deeper than 1 slice (*ImageDepth*>1). The *sample* parameter is used only if data are organized in separate planes (*PlanarConfiguration*=2).

TIFFCheckTile returns a non-zero value if the supplied coordinates are within the bounds of the image and zero otherwise. The *x* parameter is checked against the value of the *ImageWidth* tag. The *y* parameter is checked against the value of the *ImageLength* tag. The *z* parameter is checked against the value of the *ImageDepth* tag (if defined). The *sample* parameter is checked against the value of the *SamplesPerPixel* parameter if the data are organized in separate planes.

TIFFNumberOfTiles returns the number of tiles in the image.

DIAGNOSTICS

None.

SEE ALSO

TIFFReadEncodedTile(3TIFF), TIFFReadRawTile(3TIFF), TIFFReadTile(3TIFF), TIFFWriteEncodedTile(3TIFF), TIFFWriteRawTile(3TIFF), TIFFWriteTile(3TIFF), libtiff(3TIFF)

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