NAME

xil_copy_with_planemask – using a plane mask, copy a source image into a destination image

SYNOPSIS

```
#include <xil/xil.h>

void xil_copy_with_planemask (XilImage src,
        XilImage dst,
        unsigned int planemask[]);
```

DESCRIPTION

xil_copy_with_planemask () copies a *src* (source) image into a specified *dst* (destination) image, using a *plane mask* to specify which source-image planes (bits) are copied.

Each pixel in the destination image is defined by the following operation:

dst = (dst & ˜mask) | (src & mask)

Here, *dst* is the destination image, *mask* is the plane mask, and *src* is the source image. Thus, if the plane-mask bit is "on," the copy overwrites the corresponding bit in the destination image; otherwise, the bit in the destination image is unchanged.

ERRORS

For a complete list of XIL error messages by number, consult Appendix B of the *XIL Programmer's Guide.*

EXAMPLES

Copy the low order bit of *src1* into the *dst* low order bit. Copy the high order seven bits of *src2* into the *dst* high order seven bits:

```
XilImage src1, src2, dst;
unsigned int planemask1[1], planemask2[1];

planemask1[0] = 0x1;
planemask2[0] = 0xfe;

xil_copy_with_planemask(src1, dst, planemask1);
xil_copy_with_planemask(src2, dst, planemask2);
```

NOTES

The plane mask must be an array of unsigned integers. The number of array elements must match the number of image bands; each array element specifies the plane mask for the corresponding band in the destination. Both the source and destination images must have the same type and number of bands. Standard ROI and in-place operations are supported.

When using a plane mask for copying an image to the display, the window's depth is the upper limit on the number of meaningful bits you can set in the plane mask, and you must manipulate the colormap to get a reasonable display.

SEE ALSO

xil_copy(3), **xil_copy_pattern**(3).