**NAME**

xil_lookup_set_values, xil_lookup_get_values – set and get values in a lookup table

**SYNOPSIS**

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

**void xil_lookup_set_values ( XilLookup** *lookup***,**
  **short** *start***,**
  **unsigned int** *num_values***,**
  **void** **data***);**

**void xil_lookup_get_values ( XilLookup** *lookup***,**
  **short** *start***,**
  **unsigned int** *num_values***,**
  **void** **data***);**

**DESCRIPTION**

**xil_lookup_set_values** () sets the specified values in the lookup table to those in *data.* The version number of the lookup table is updated whenever this is done.

**xil_lookup_get_values** () copies *num_values* lookup table values into the user-supplied buffer *data. start* is the table entry position at which to begin reading values. The user is responsible for allocating and freeing the buffer. The example below shows how big to make the buffer.

**ERRORS**

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

**EXAMPLES**

Get a sequence of data values out of a lookup table containing XIL_SHORT data values, and add 1 to each entry:

```
XilLookup table;
unsigned int count, buf_size, i, j, output_nbands;
short start;
void* buffer;

/* extract 100 entries starting at the 42nd value in the table /*
        /* (assumes a table offset of 0 )*/
count = 100; start = 42;

/* determine how big to make the values buffer (assume XIL_SHORT datatype) */
output_nbands = xil_lookup_get_output_nbands (table);
buf_size = output_nbands * count * sizeof(Xil_signed16);

/* allocate the values buffer */
buffer = (void *) malloc (buf_size);

/* get the current values in the lookup table */
xil_lookup_get_values (table, start, count, buffer);
```

```
/* increment all the extracted values by 1 */
pixel_ptr = (Xil_signed16 *) buffer;
for (i = 0; i < count; i++)
   for (j = 0; j < output_nbands; j++) {
     *pixel_ptr += 1;
      pixel_ptr++;
   }

/* replace the values in the lookup table */
xil_lookup_set_values (table, start, count, buffer);
```

**NOTES**

These functions cannot be used on combined lookup tables.

**SEE ALSO**

**xil_lookup_create**(3), **xil_lookup_create_copy**(3), **xil_lookup_destroy**(3), **xil_lookup_get_input_datatype**(3), **xil_lookup_get_num_entries**(3), **xil_lookup_get_offset**(3), **xil_lookup_get_output_datatype**(3), **xil_lookup_get_output_nbands**(3), **xil_lookup_set_offset**(3), **xil_lookup_convert**(3), **xil_lookup_get_version**(3).