

LoWord Obtain least-significant 16 bits of 32-bit operand

#include <ToolUtils.h>

Toolbox Utilities

| | | |
|--------------|-----------------------------------|---|
| <u>short</u> | LoWord (<i>theLong</i>); | |
| <u>long</u> | <i>theLong</i> ; | 32-bit source operand |
| | returns | the low-order 16 bits of <i>theLong</i> |

This returns the low-order 16-bit word of a 32-bit long value.

theLong is any 32-bit value. It is treated as an unsigned.

Returns: a 16-bit integer; it is the low-word of *theLong* (i.e., the same value as (*theLong* & 0x0000FFFF).

Notes: This function is equivalent to the faster, but less self-documenting:

```
short  theInt;  
long   theLong;  
  
theInt = theLong & 0xFFFF;
```

If you use this function often, you may wish to create a fast macro; e.g.:

```
#define LoWord(x) ( (unsigned long)x &0xFFFF )
```

LoWord and **HiWord** are handy in manipulating the 32-bit Fixed data type. The high word is the integer portion and the low word is the fractional part.