

LongMul

Obtain 64-bit product of two 32-bit longs

#include <ToolUtils.h>**Toolbox Utilities**

```
void      LongMul(a32, b32, dest64 );  
long      a32 ;           two 32-bit signed longs . . .  
long      b32 ;           . . .to be multiplied  
Int64Bit   *dest64 ;      address of structure to receive product
```

LongMul performs 32-bit signed multiplication, storing the 64-bit signed product into a specified structure.

a32 and . . .
b32 are any two 32-bit longs.

dest64 is the address of an 8-byte Int64Bit structure. Upon return, it will contain the signed 64-bit product of (*a32* * *b32*).

Returns: none

Notes: The multiplicand range (i.e., the range of any signed long) is $\pm 2,147,483,647$ (i.e., $\pm 2G$).

The toolbox provides no corresponding 64-bit division function.

Use **FixMul** to multiply fixed-point values.