

FixRound

Get nearest short integer to a fixed-point value

#include <ToolUtils.h>

Toolbox Utilities

```
short      FixRound(fixedNum );  
Fixed      fixedNum ;      fixed-point number to round  
      returns      16-bit integer rounded up from fixedNum
```

FixRound rounds a positive fixed-point number, returning the value of the nearest short integer.

fixedNum is a 4-byte fixed-point value. The function rounds correctly for positive values only. See Notes, below

Returns: a 16-bit signed integer; the nearest integer to *fixedNum*. If the fractional part of *fixedNum* is .5, the return value is rounded up to the next higher integer.

Notes: To round a negative fixed-point number correctly (i.e., a larger fraction being more negative), you should first negate *fixedNum*, call **FixRound**, then negate the returned integer; e.g.:

```
Fixed unRounded;  
short rounded;  
  
if (unRounded < 0 )  
    rounded = -FixRound( -unRounded );  
else  
    rounded = FixRound( unRounded );
```