



Bitwise Functions

Most of the bitwise functions should be familiar to Fortran 77 programmers as longstanding standard extensions of that language. Note that the bit *positions* number from zero to one less than the value returned by the `bit_size` function. Also note that bit positions number *from right to left*. Except for `bit_size`, the following functions are all elemental.

[Int] `bit_size(i)`

Number of bits in the integer type of `i`.

[Lgcl] `btest(i,pos)`

True if bit position `pos` is 1, false otherwise.

[Int] `iand(i,j)`

Bitwise logical and.

[Int] `ibclr(i,pos)`

Returns `i` but with bit position `pos` set to zero.

[Int] `ibits(i,pos,len)`

Extracts `len` consecutive bits starting at position `pos` and puts them in the low bit positions of the returned value. (The high positions are zero.)

[Int] `ibset(i,pos)`

Returns `i` but with bit position `pos` set to 1.

[Int] `ieor(i,j)`

Bitwise exclusive or.