API Collection

Zero crossing search

Count and find the zero crossings in a vector.

Topics

Single-Vector Zero Crossing Search

The functions in this group find a specified number of zero crossings, returning the last crossing found and the number of crossings found.

`static func countZeroCrossings<U>(U) -> UInt`

Returns the number of zero crossings in a double-precision vector.

`static func countZeroCrossings<U>(U) -> UInt`

Returns the number of zero crossings in a single-precision vector.

`vDSP_nzcros`

Counts and finds the zero crossings in a single-precision vector.

`vDSP_nzcrosD`

Counts and finds the zero crossings in a double-precision vector.

See Also

Single-vector arithmetic functions

☰   Absolute and negation functions

Compute the absolute or negated value of each element in a vector.

☰ Integration functions

Compute the running sum, Simpson, or trapezoidal integration of a vector.

☰ Clipping, limit, and threshold operations

Apply clipping, limit, or threshold rules to the elements in a vector.

☰ Normalization functions

Compute the mean and standard deviation of a vector and calculate new elements to have a zero mean and a unit standard deviation.

☰ Phase computation functions

Calculate the element-wise phase values, in radians, of a complex vector.

☰ Complex conjugation functions

Calculate the complex conjugate of the elements in a vector.

☰ Vector squaring functions

Compute the square, signed square, or squared magnitude of the elements in a vector.

☰ Fractional part extraction

Truncate the elements of a vector to a fraction.