API Collection

Multiplication

Multiply vectors that contain real or complex values.

Topics

Multiplying real matrices

`vDSP_mmul`

Performs an out-of-place multiplication of two single-precision real matrices.

`vDSP_mmulD`

Performs an out-of-place multiplication of two double-precision real matrices.

Multiplying complex matrices

`vDSP_zmmul`

Performs an out-of-place multiplication of two single-precision complex matrices.

`vDSP_zmmulD`

Performs an out-of-place multiplication of two double-precision complex matrices.

Multiplying and adding complex matrices

`vDSP_zmma`

Adds a single-precision complex matrix to the product of two single-precision complex matrices.

`vDSP_zmmaD`

Adds a double-precision complex matrix to the product of two double-precision complex matrices.

Multiplying and subtracting complex matrices

`vDSP_zmms`

Subtracts a single-precision complex matrix from the product of two single-precision complex matrices.

`vDSP_zmmsD`

Subtracts a double-precision complex matrix from the product of two double-precision complex matrices.

`vDSP_zmsm`

Subtracts the product of two single-precision complex matrices from a single-precision complex matrix.

`vDSP_zmsmD`

Subtracts the product of two double-precision complex matrices from a double-precision complex matrix.

See Also

Matrix operations

- Transposition

  Tranpose vectors that contain real values.

- Matrix and submatrix copying functions

  Copy the contents of a submatrix to another submatrix.