

PBblas/ Vector2Diag

[Go Up](#)

IMPORTS

PBblas | PBblas.internal | PBblas.internal.MatDims | PBblas.Types |
PBblas.internal.Types | PBblas.Constants |

DESCRIPTIONS

FUNCTION Vector2Diag

DATASET (Layout_Cell)	Vector2Diag
(DATASET(Layout_Cell) X)	

Convert a vector into a diagonal matrix. The typical notation is $D = \text{diag}(V)$. The input X must be a 1 x N column vector or an N x 1 row vector. The resulting matrix, in either case will be N x N, with zero everywhere except the diagonal.

PARAMETER X A row or column vector (i.e. N x 1 or 1 x N) in Layout_Cell format

RETURN An N x N matrix in Layout_Cell format

SEE PBblas/Types.Layout_cell
