

$$= \begin{pmatrix} b_{11}x_{11} + b_{12}x_{21} & b_{21}x_{11} + b_{22}x_{21} \\ b_{11}x_{12} + b_{12}x_{22} & b_{21}x_{12} + b_{22}x_{22} \end{pmatrix}$$

+

$$\begin{pmatrix} b_{11}x_{11} + b_{21}x_{12} & b_{11}x_{21} + b_{21}x_{22} \\ b_{12}x_{11} + b_{22}x_{12} & b_{12}x_{21} + b_{22}x_{22} \end{pmatrix}$$

$$\boxed{= X^T B^T + B^T X^T}$$