

$$y_9^{\text{out}} = \text{Linear}_{\text{out}} \left( y_9^{\text{int}} \right) = \text{Linear}_{\text{out}} \left( \text{Linear}_{\text{int}} \left( \bar{z}_9 \right) \right)$$

$$\mathbf{Y}_{1:9}^{\text{out}} = \begin{bmatrix} y_1^{\text{out}} & y_2^{\text{out}} & y_3^{\text{out}} & y_4^{\text{out}} & y_5^{\text{out}} & y_6^{\text{out}} & y_7^{\text{out}} & y_8^{\text{out}} & y_9^{\text{out}} \end{bmatrix} = \left[ \begin{bmatrix} y_1^{\text{out}} \\ y_2^{\text{out}} \\ y_3^{\text{out}} \\ y_4^{\text{out}} \end{bmatrix}, \begin{bmatrix} y_5^{\text{out}} \\ y_6^{\text{out}} \\ y_7^{\text{out}} \\ y_8^{\text{out}} \end{bmatrix}, \begin{bmatrix} y_9^{\text{out}} \end{bmatrix} \right]$$