

$$\begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array} = \text{Linear}_{\text{out}} \left( \begin{array}{c} \text{light blue box} \\ \text{light blue box} \\ \text{light blue box} \\ \text{light blue box} \\ \text{light blue box} \\ \text{light blue box} \end{array} \right) = \text{Linear}_{\text{out}} \left( \text{Linear}_{\text{int}} \left( \begin{array}{c} \text{red box} \\ \text{red box} \\ \text{red box} \end{array} \right) \right)$$

$y_9^{\text{out}}$ 
 $y_9^{\text{int}}$ 
 $\bar{z}_9$

$$\mathbf{Y}_{1:9}^{\text{out}} = \begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array}$$

$y_1^{\text{out}}$ 
 $y_3^{\text{out}}$ 
 $y_9^{\text{out}}$

$$= \left[ \begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{light gray box} \\ \text{light gray box} \\ \text{light gray box} \end{array} \begin{array}{c} \text{blue box} \\ \text{blue box} \\ \text{blue box} \end{array} \right], y_9^{\text{out}}$$

$y_1^{\text{out}}$ 
 $y_3^{\text{out}}$ 
 $y_9^{\text{out}}$