

$$W_{m,n} \cdot i_n = o_m$$

$$\begin{pmatrix} w_{1,1} & w_{1,2} & \cdots & w_{1,n} \\ w_{2,1} & w_{2,2} & \cdots & w_{2,n} \\ \vdots & \vdots & \ddots & \vdots \\ w_{4,1} & w_{m,2} & \cdots & w_{m,n} \end{pmatrix} \cdot \begin{pmatrix} i_0 \\ i_1 \\ \vdots \\ i_n \end{pmatrix} = \begin{pmatrix} o_{0,a} + o_{0,b} \\ o_{1,a} + o_{1,b} \\ \vdots \\ o_{m,a} + o_{m,b} \end{pmatrix} = \begin{pmatrix} o_0 \\ o_1 \\ \vdots \\ o_m \end{pmatrix}$$