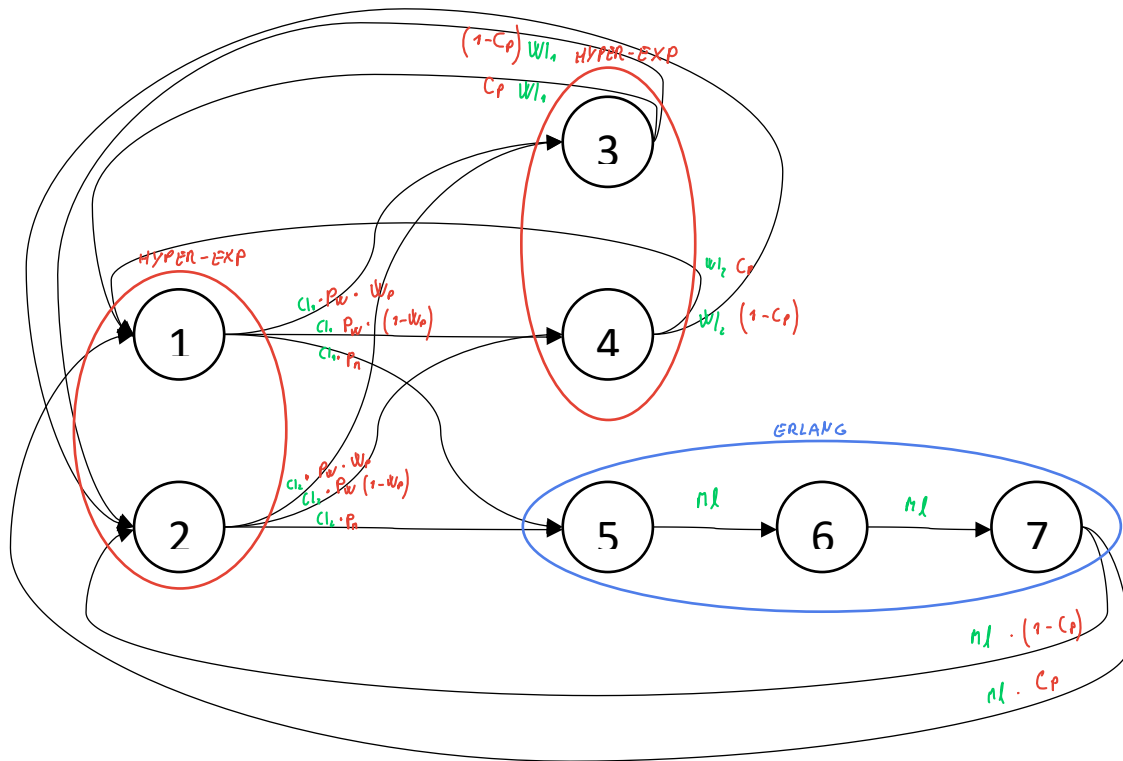


Embedded system

The state machine and performance vector and matrices describing the considered system are the following:



$$\alpha_{\text{computing}} = [1, 1, 0, 0, 0, 0, 0]$$

$$\alpha_{\text{WiFi}} = [0, 0, 1, 1, 0, 0, 0]$$

$$\alpha_{4G} = [0, 0, 0, 0, 1, 1, 1]$$

$$\xi_X = \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

Results are:

$$X = 0.997506$$

$$P_{\text{Computing}} = 0.139651$$

$$P_{\text{WiFi}} = 0.598504$$

$$P_{4G} = 0.261845$$