$$\left(\begin{cases} y[k] = x[k], & k \in [0 \ldots K-1] \\ y[k] = 0, & k \in [K \ldots 2\,K-1] \end{cases} \right) \Leftrightarrow \left(\begin{cases} \underbrace{Y[2\,n]}_{\mathcal{F}_{k<2\,K}\{y[k]\}[2\,n]} & = & \underbrace{X[n]}_{\mathcal{F}_{k<K}\{x[k]\}[n]} & \\ \underbrace{Y[2\,n+1]}_{\mathcal{F}_{k<2\,K}\{y[k]\}[2\,n+1]} & = & \frac{1}{K}\sum_{m=0}^{K-1} \underbrace{X[m]}_{\mathcal{F}_{k<K}\{x[k]\}[m]} & \varphi[n-m] \end{cases} \right)$$