

$$\left(\begin{array}{l} y[2k] = x[k] \\ y[2k+1] = 0 \end{array} \right) \Leftrightarrow \left(\begin{array}{l} \underbrace{\mathcal{F}_{k < 2K} \{y[k]\}}_{Y[n]}[n] = \underbrace{\mathcal{F}_{k < K} \{x[k]\}}_{X[n]}[n], \quad n \in [0 \dots K-1] \\ \underbrace{\mathcal{F}_{k < 2K} \{y[k]\}}_{Y[n]}[n] = \underbrace{\mathcal{F}_{k < K} \{x[k]\}}_{X[n-K]}[n-K], \quad n \in [K \dots 2K-1] \end{array} \right)$$