

$$\left( \mathcal{F} \left\{ \underbrace{\Re(x)}_r + j \underbrace{\Im(x)}_i \right\} = \underbrace{R + jI}_F \right) \Leftrightarrow \left( \begin{cases} R[0] & = & \Re(F[0]) \\ I[0] & = & \Im(F[0]) \\ R[n] & = & \frac{1}{2} \left( F[n] + (F[K-n])^* \right), & n \in [1 \dots K-1] \\ I[n] & = & -\frac{j}{2} \left( F[n] - (F[K-n])^* \right), & n \in [1 \dots K-1] \end{cases} \right)$$