

$$I(t) = d_i(t) \sin(2\pi f_c t)$$

$$Q(t) = d_q(t) \cos(2\pi f_c t)$$

$$d_i(t) \in \{-1, 1\}$$

$$d_q(t) \in \{-1, 1\}$$

$$\text{Data}(t) = [1, 1, 0, 0, 0, 1, 1, 0]$$

$$d_i(t) = [1, -1, -1, -1, -1, 1, -1, -1]$$

