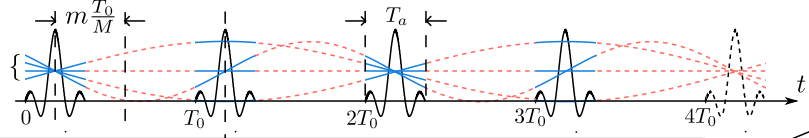
$$x(t) = \sum_{m=0}^{M-1} x_m(t)$$

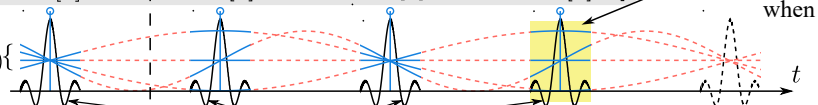
$$= \sum_{m=0}^{M-1} \tilde{x}_m\left(t - m\frac{T_0}{M}\right) u\left(t - m\frac{T_0}{M}\right)$$

$$\tilde{x}_0(t)$$
$$= \sum_{n=-2}^{1} X[0,n] e^{j2\pi \frac{n}{NT_0} t}$$
$$\vdots$$
$$\tilde{x}_m\left(t - m\frac{T_0}{M}\right)$$
$$= \sum_{n=-2}^{1} X[m,n] e^{j2\pi \frac{n}{NT_0}\left(t - m\frac{T_0}{M}\right)}$$
$$\vdots$$
$$\tilde{x}_{M-1}\left(t - (M-1)\frac{T_0}{M}\right)$$
$$= \sum_{n=-2}^{1} X[M-1,n] e^{j2\pi \frac{n}{NT_0}\left(t - (M-1)\frac{T_0}{M}\right)}$$



$$\tilde{\mathbf{x}}_m^T = [\ \tilde{x}_m[0] \quad \tilde{x}_m[1] \quad \tilde{x}_m[2] \quad \tilde{x}_m[3]\ ]$$

can be *approximated* by $\tilde{x}_m[3] a\left(t - 3T_0 - m\frac{T_0}{M}\right)$ when $T_a = 2Q\frac{T_0}{M} \ll T_0$



$u\left(t - m\frac{T_0}{M}\right)$