Shift

Summation

\[ y \]

\[ \text{Feedback} : \sqrt{y[n]} \]

\[ y[n+1] = y[n-1] \]

\[ \text{Input} : y[n] \]

Decision Feedback Equalizer (DFE)
\[ z[n] = y[n] - \sum_{k=1}^{n-1} C_k \]

\[ C_{n+1} = C_n \]

\[ L_1 = L_2 = \cdots = L_n \]

\[ y[n] = \sum_{k=1}^{n-1} C_k \]

\[ z[n] = y[n] - \sum_{k=1}^{n-1} C_k \]

Adaptation
\[ z(t) = y(t) + \sum C_k \hat{y}(t - kT_s) \]

\[ e(t) = z(t) - \hat{y}(t) \]

\[ z(nT_s + T_0) \]

\[ e(nT_s + T_0) \]