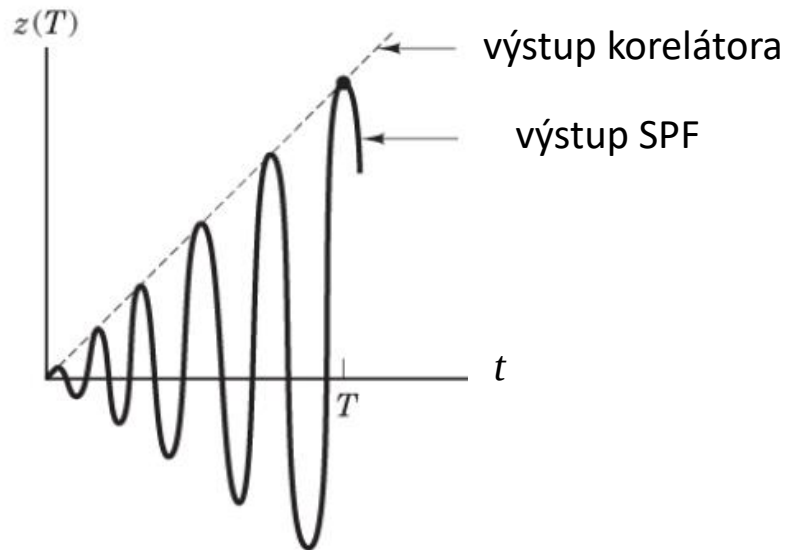


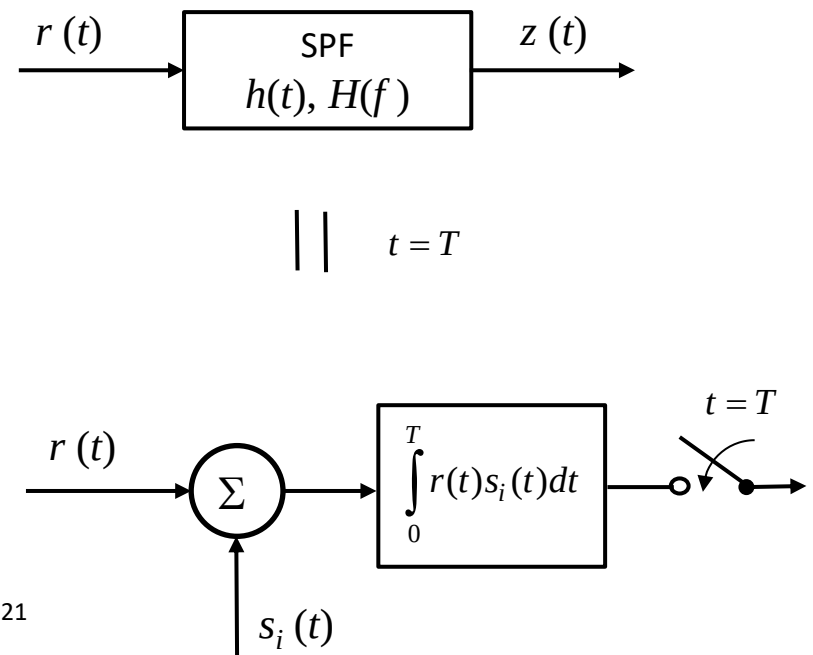
Charakteristika SPF

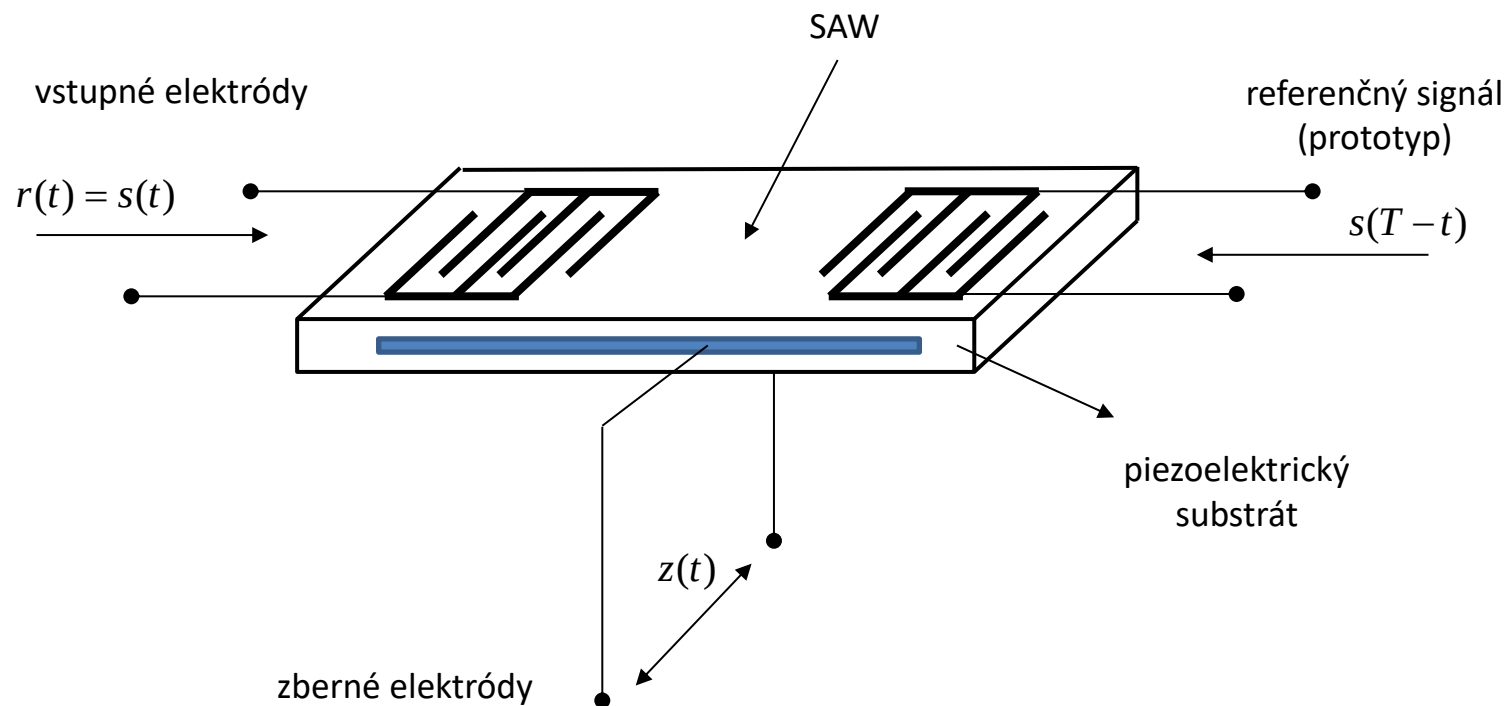
zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



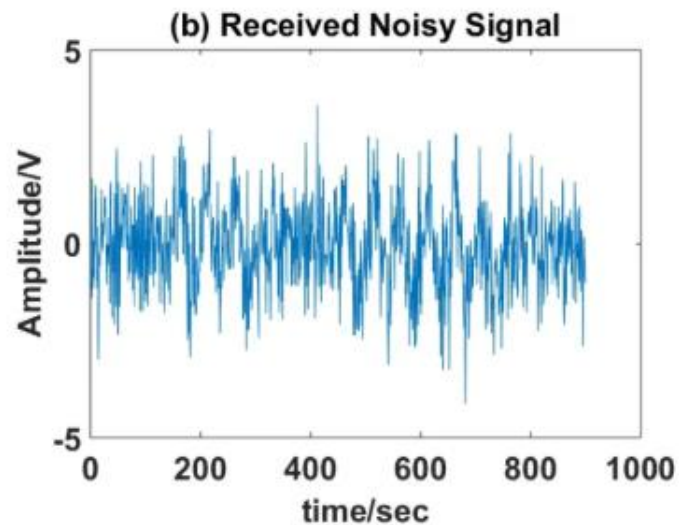
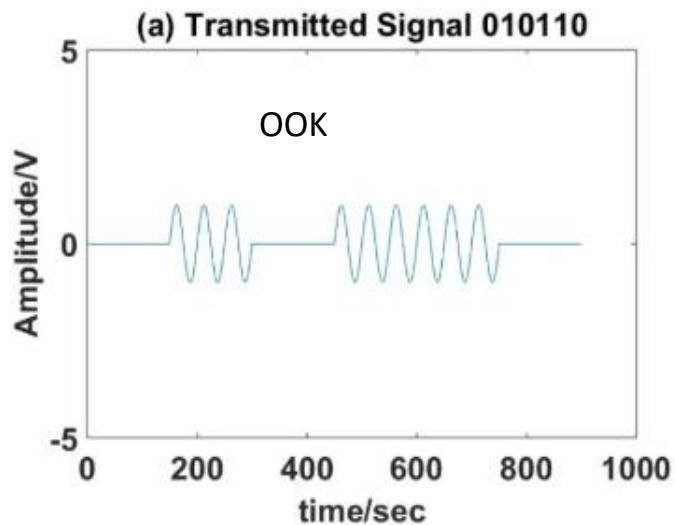
Porovnanie analógového SPF a korelátoru

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021

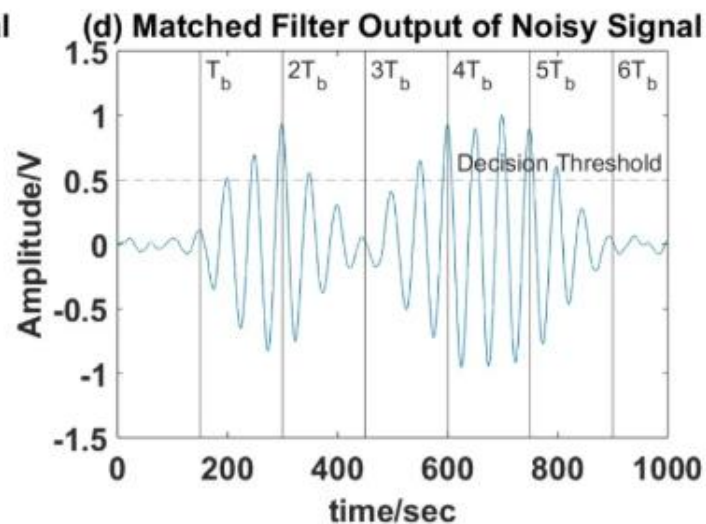
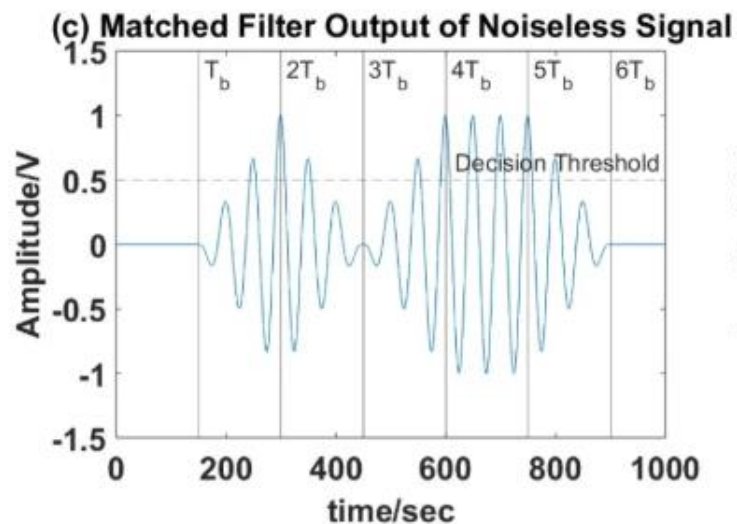




Princíp analógového SAW SPF



$SNR = -3,01 \text{ dB}$



$SNR = 18,74 \text{ dB}$

$\Delta = 21,75 \text{ dB}$

Demonštrácia analógového SPF

zdroj: <https://liquidinstruments.com/application-notes/matched-filter-with-fir-filter-builder/>

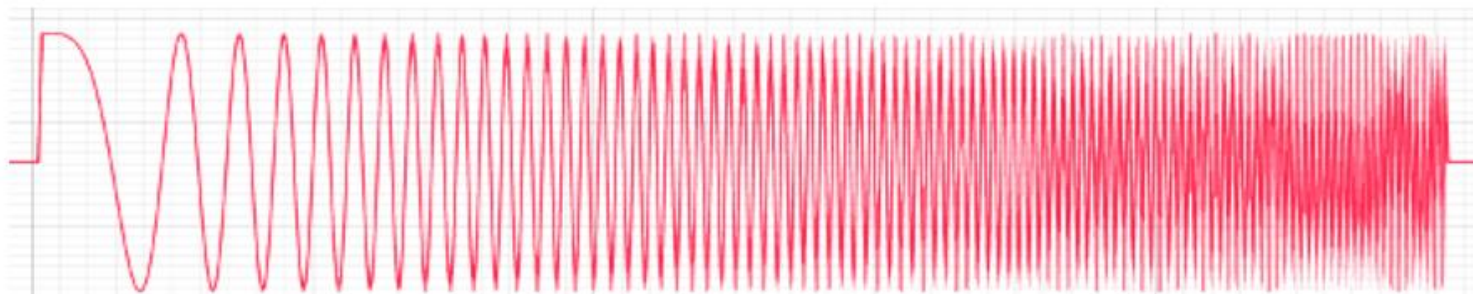


$$r(t) = s(t) + n(t)$$

$$N = -73,98 \text{ dBm}$$

$$S = -93,46 \text{ dBm}$$

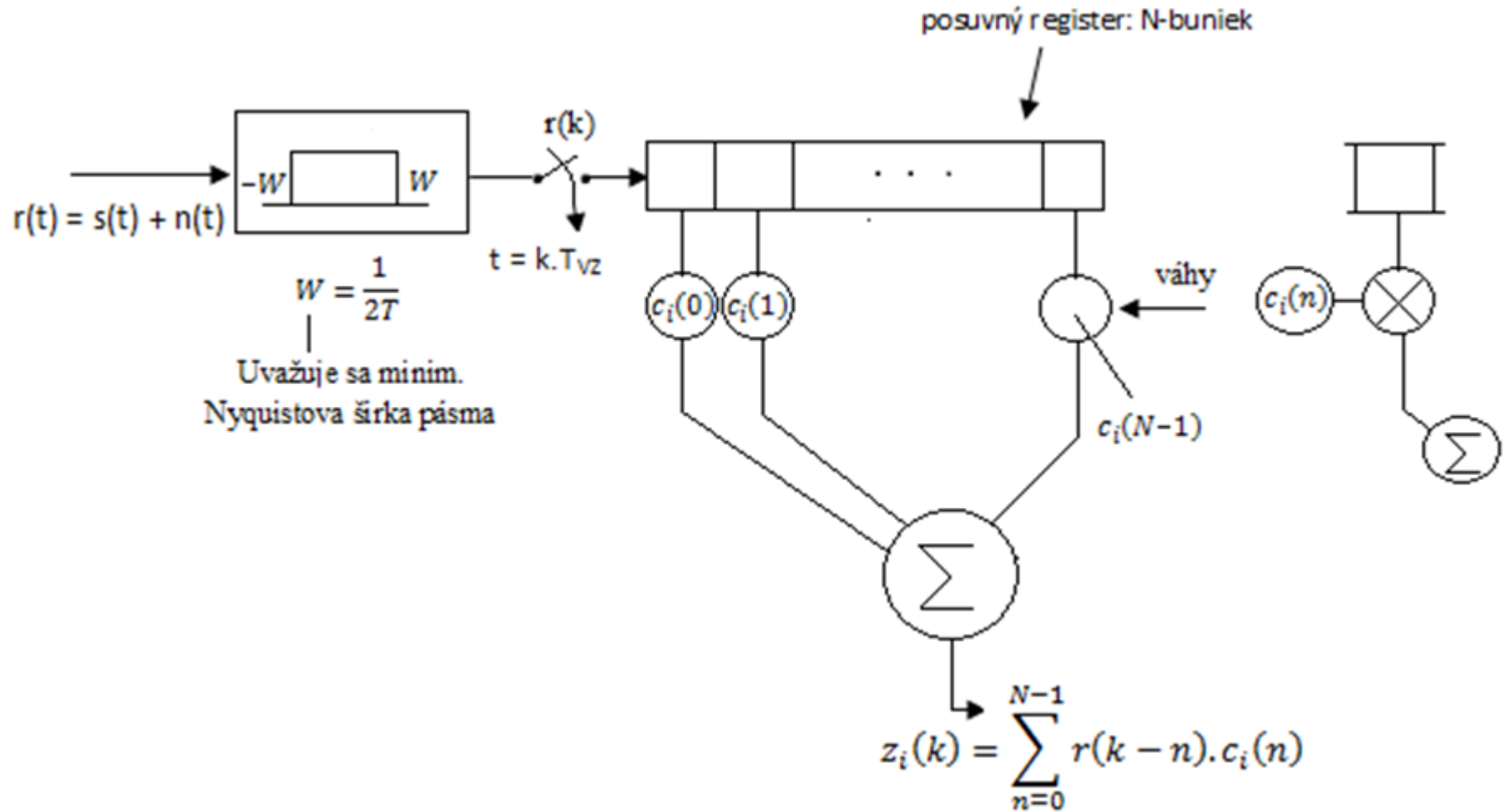
$$SNR = -19,48 \text{ dB}$$



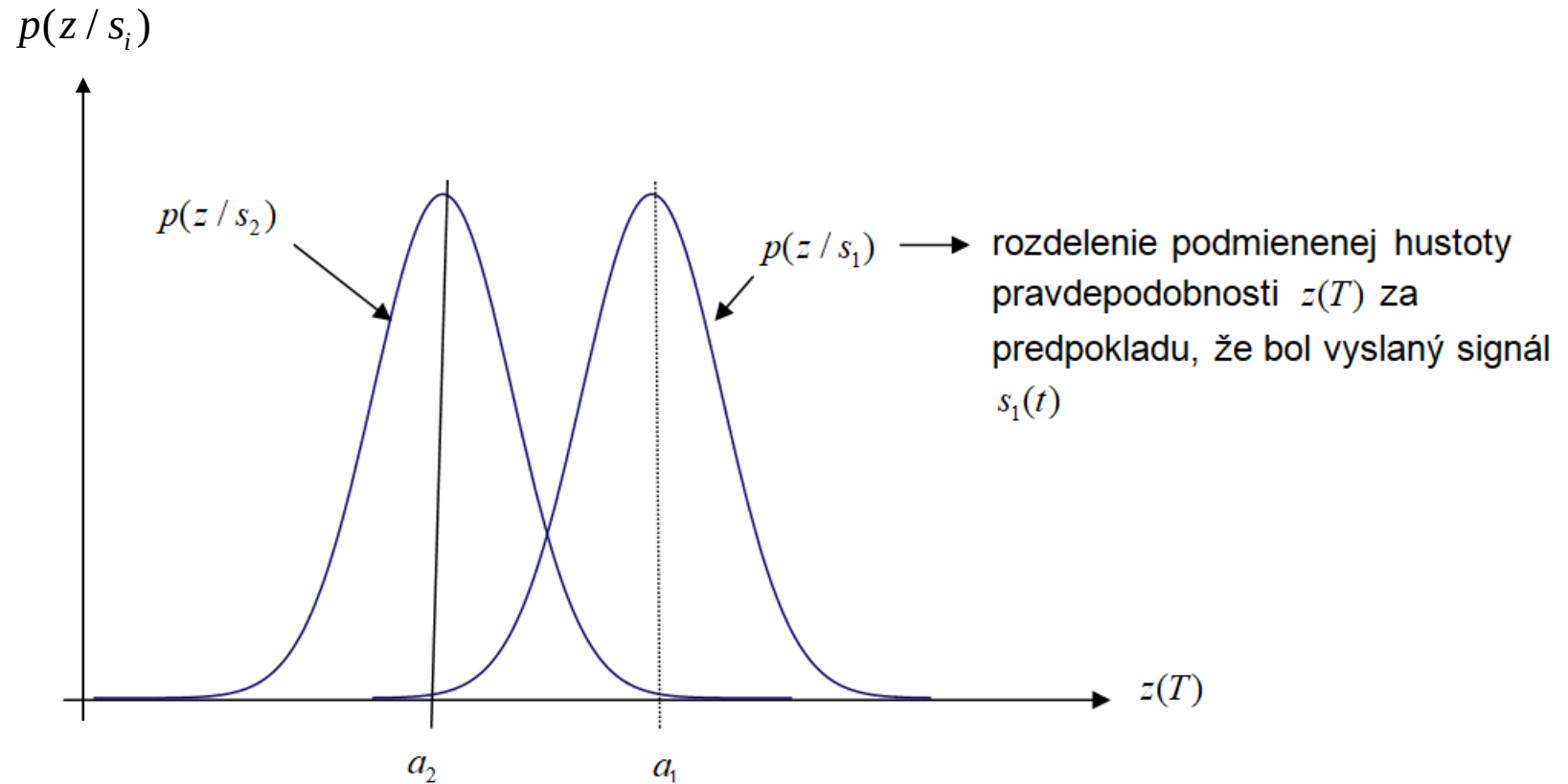
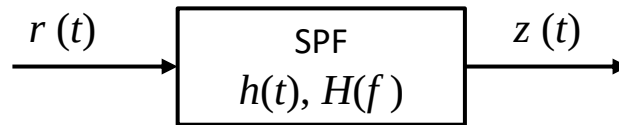
chirp (upchirp)

Detekcia radarových pulzov

zdroj: <https://liquidinstruments.com/application-notes/matched-filter-with-fir-filter-builder/>

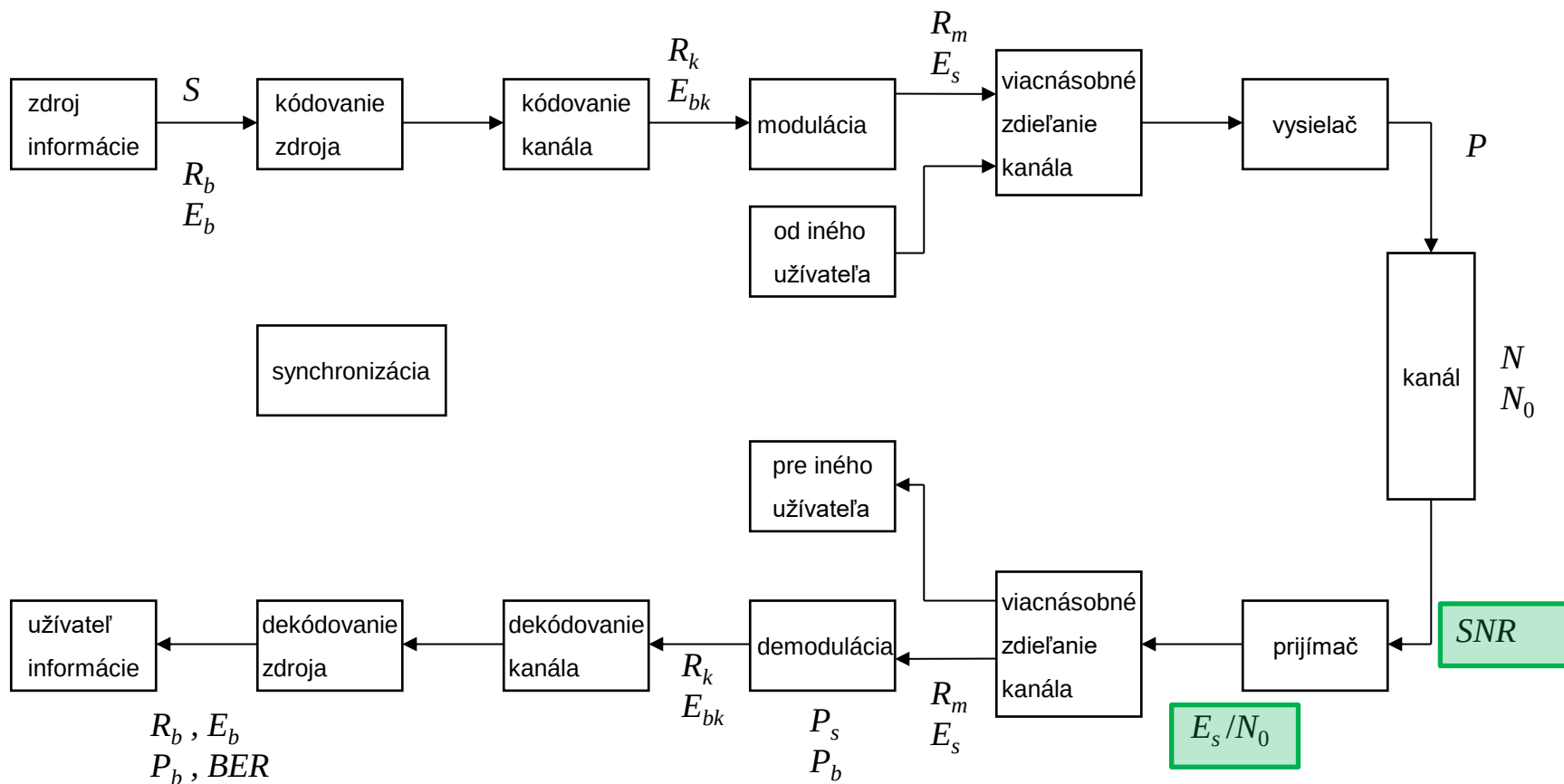


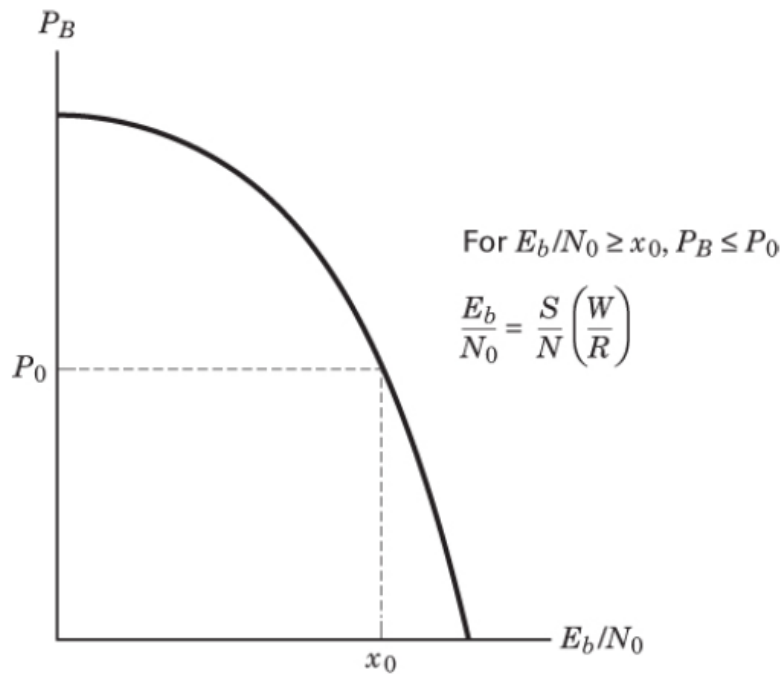
Bloková schéma digitálneho SPF



Výstup SPF v prípade AWGN kanála

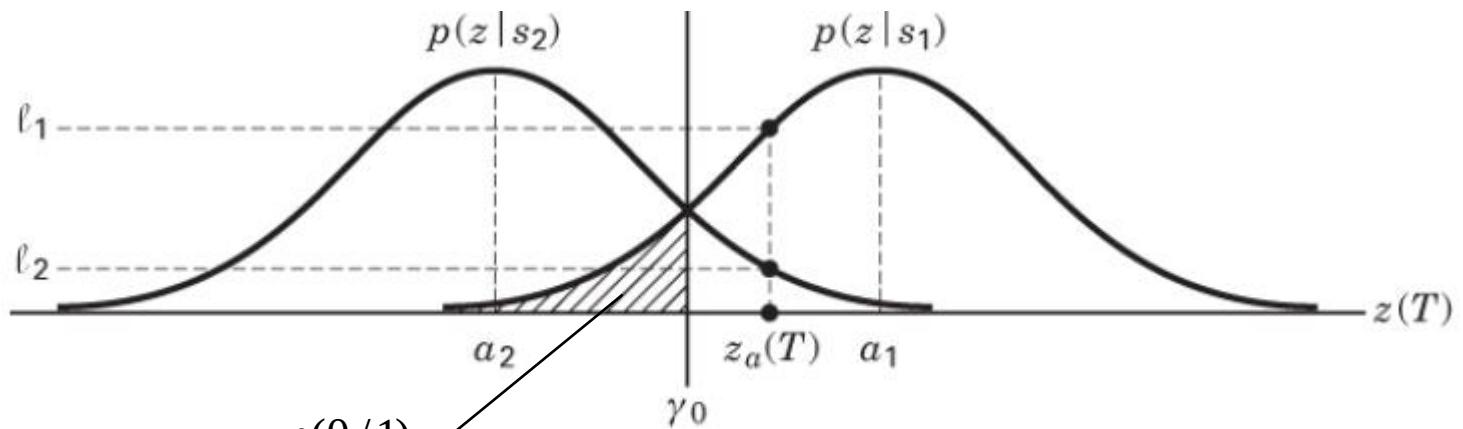
Digitálny prenosový systém:





Vodopádová krivka

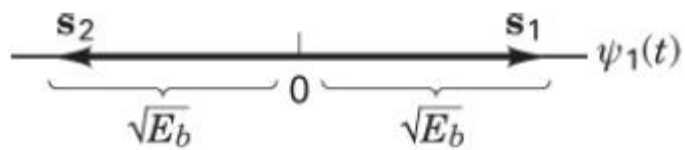
zdroj: B. Sklar, F. Harris.: Digital Communications,
Pearson Education, Inc., 2021



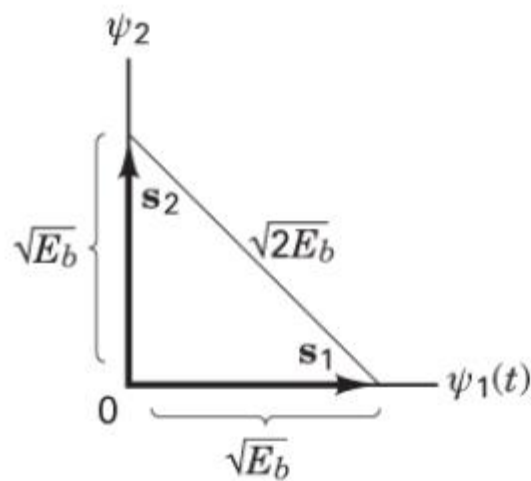
chyba: $p(0/1)$

pdf na výstupe SPF

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



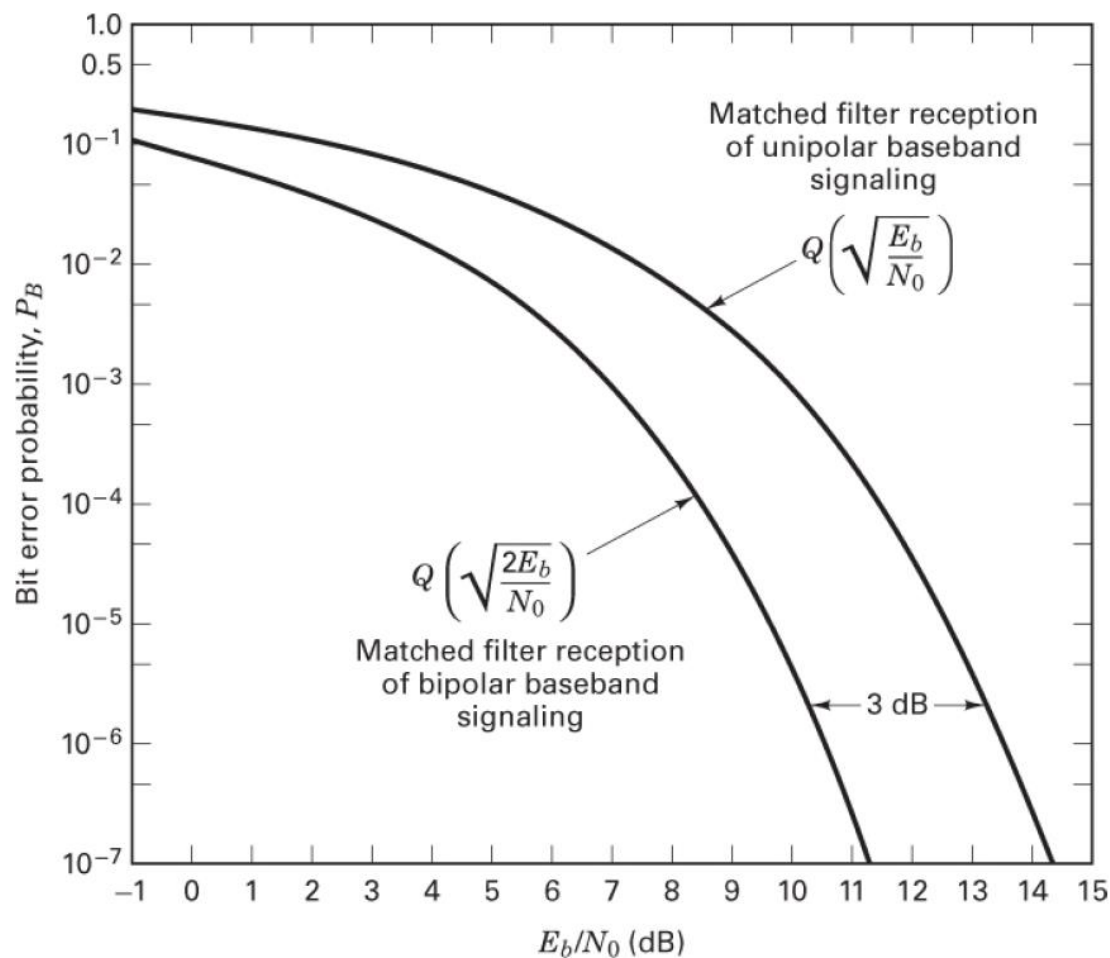
(a)



(b)

a) Antipodálne signály, b) Ortogonálne signály

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



Porovnanie antipódálnej a ortogonálnej signalizácie

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021