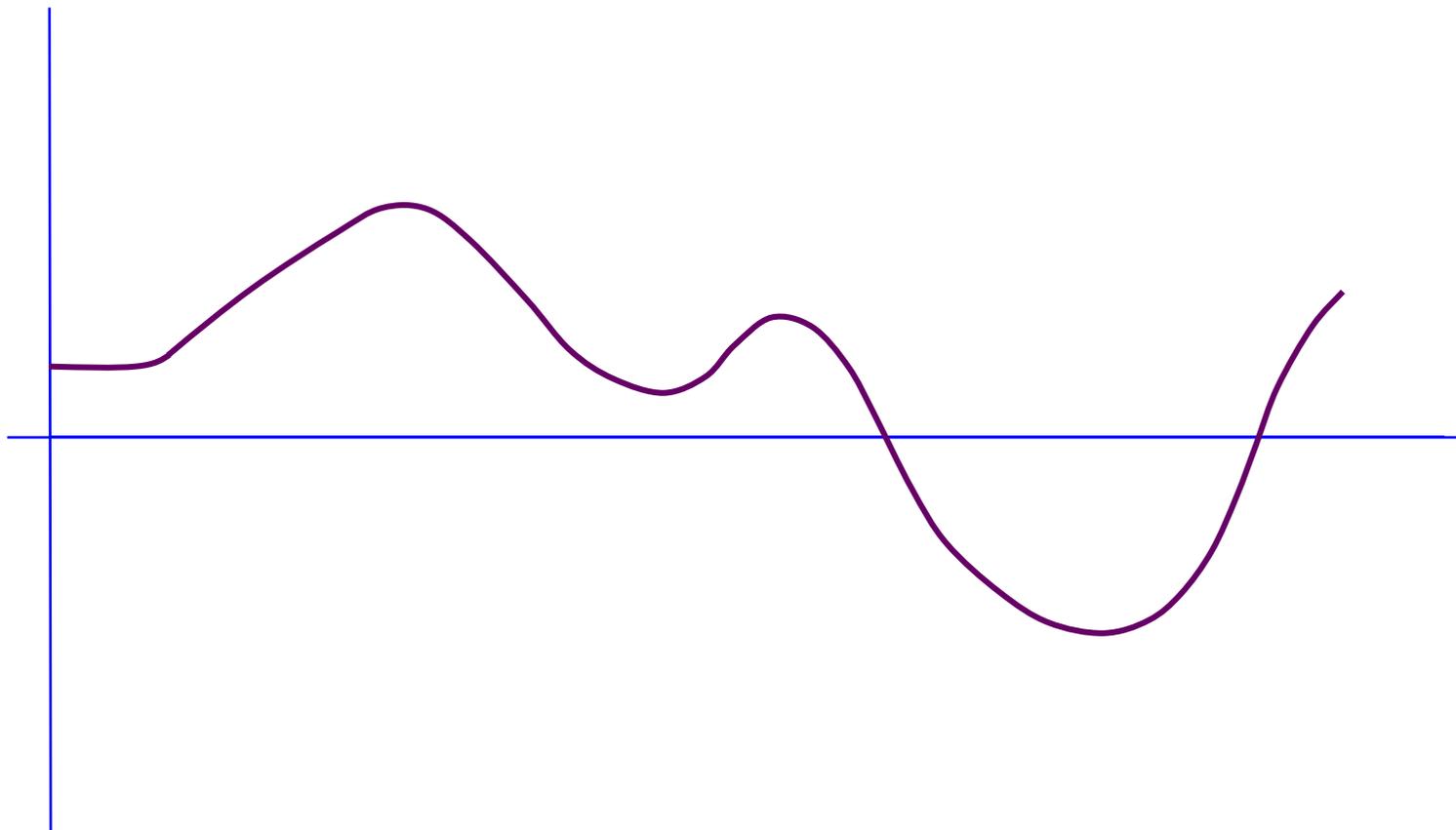


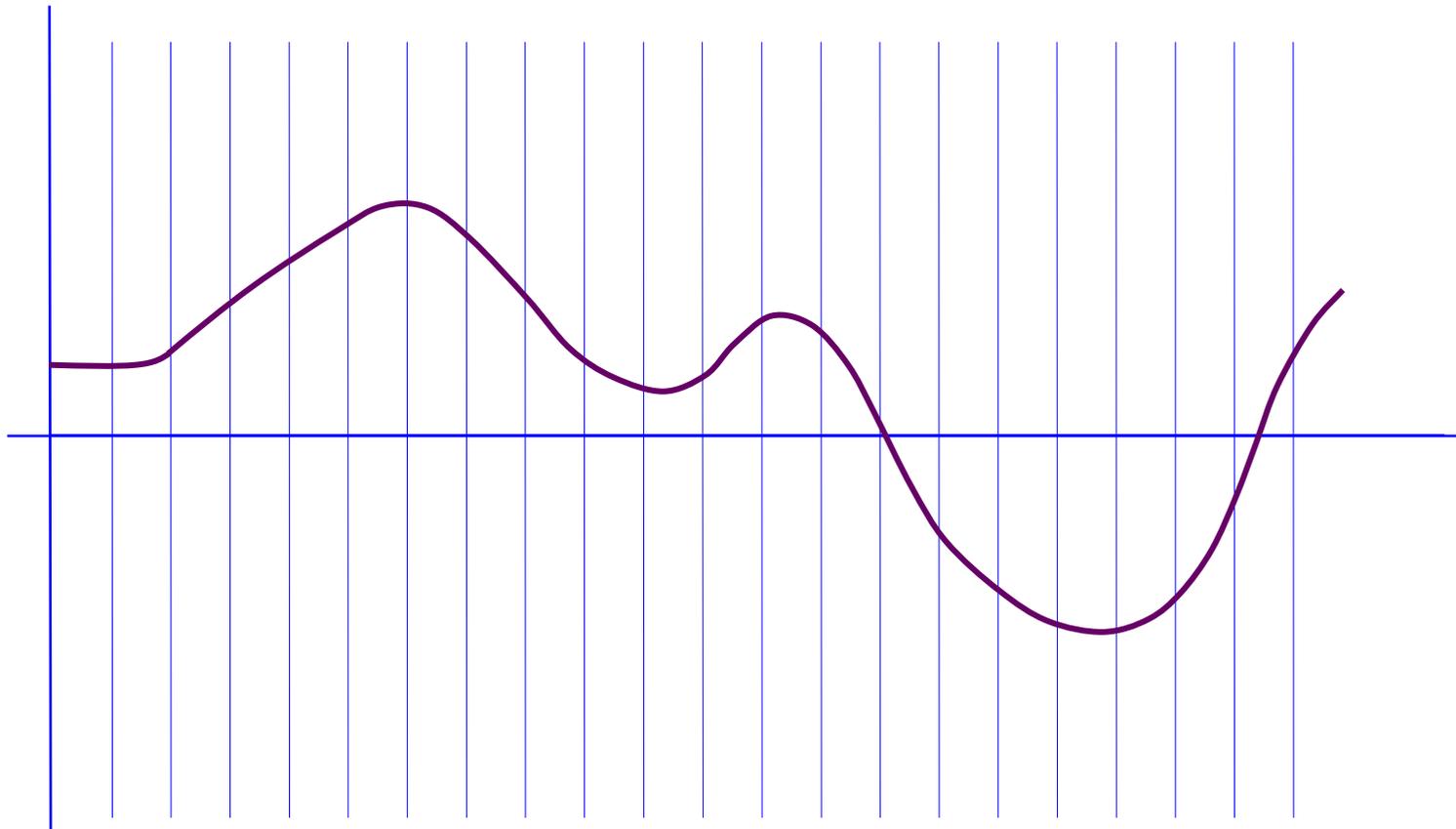


Segnale audio



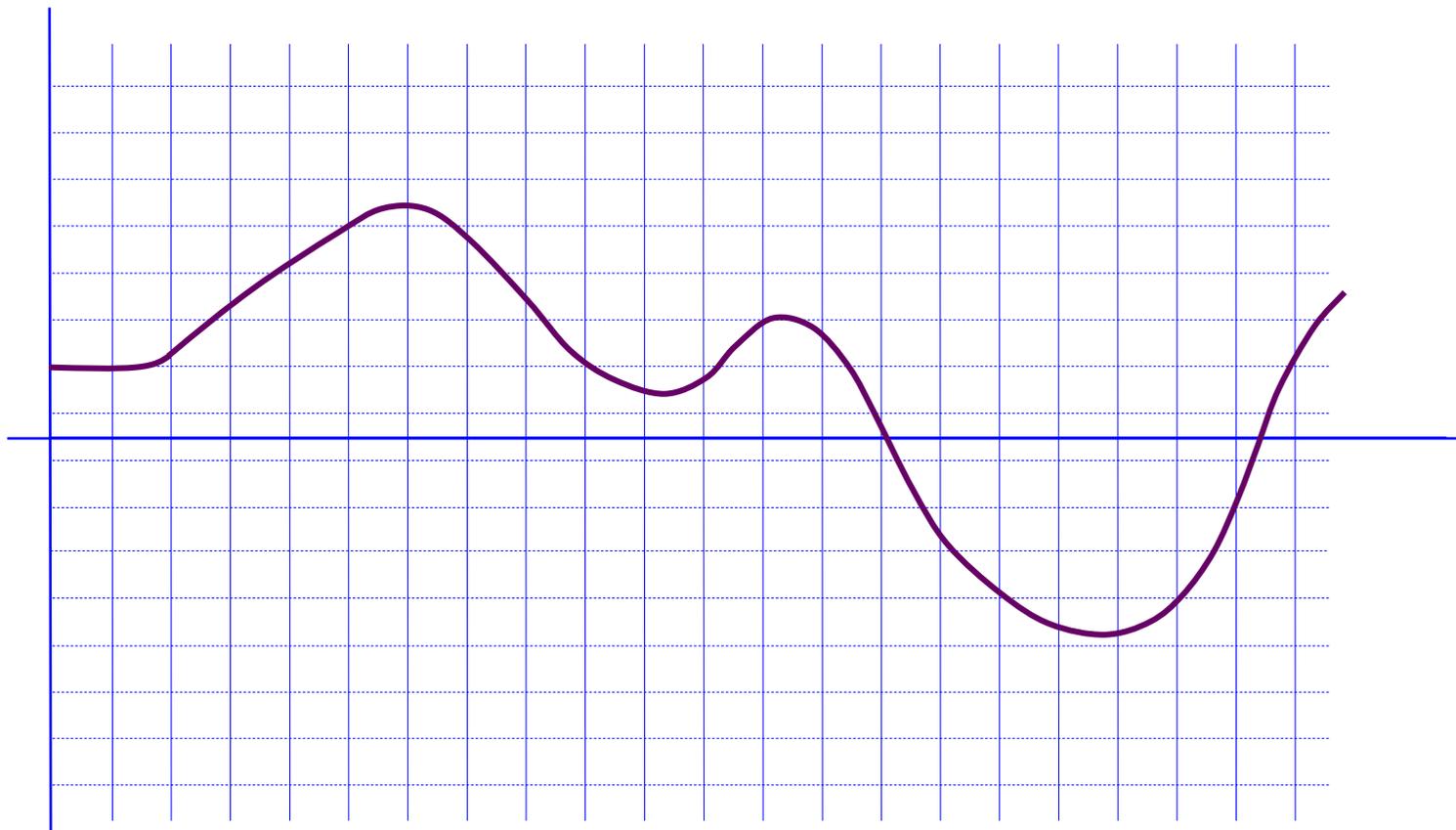


Campionamento



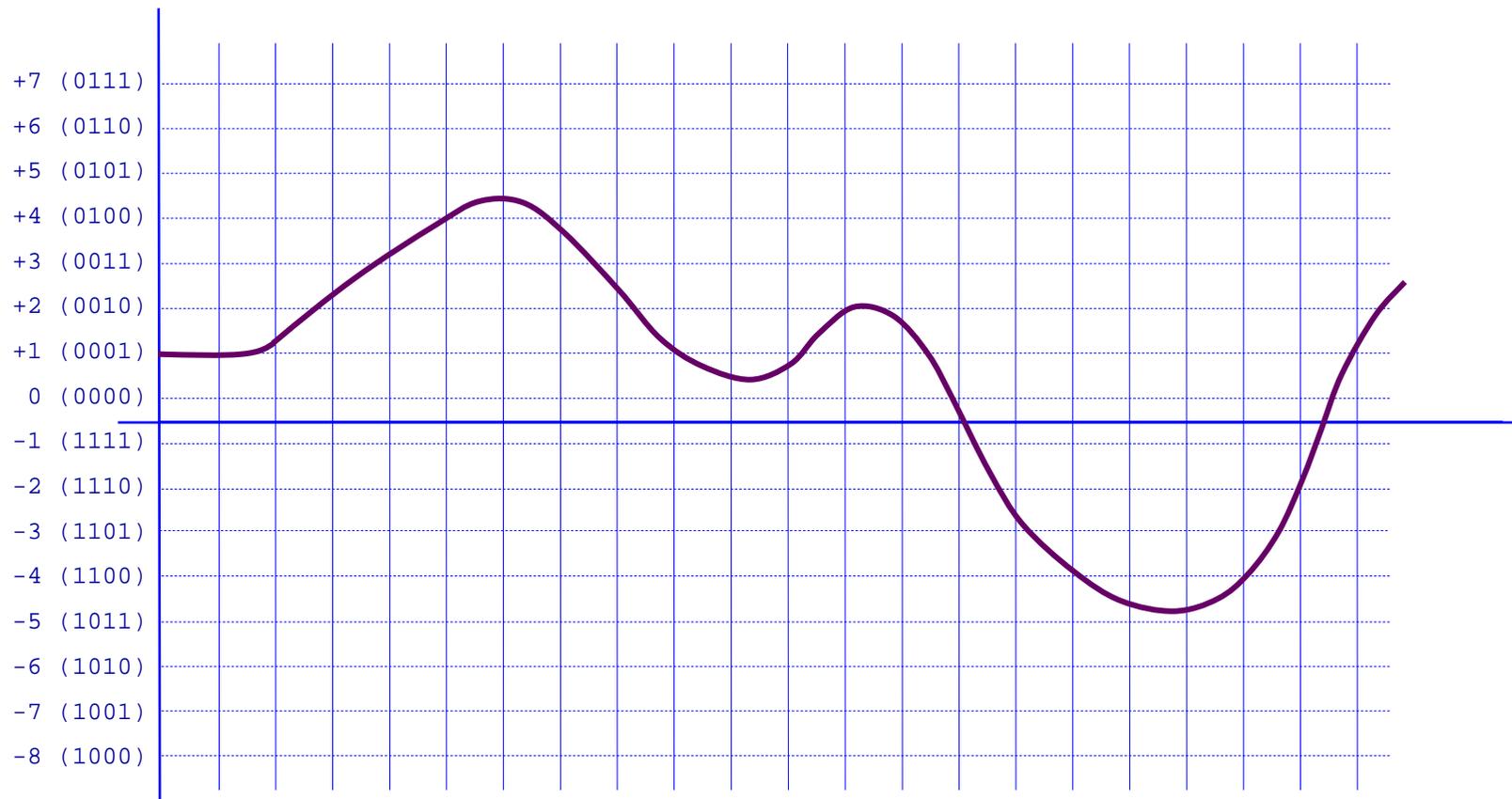


Quantizzazione lineare



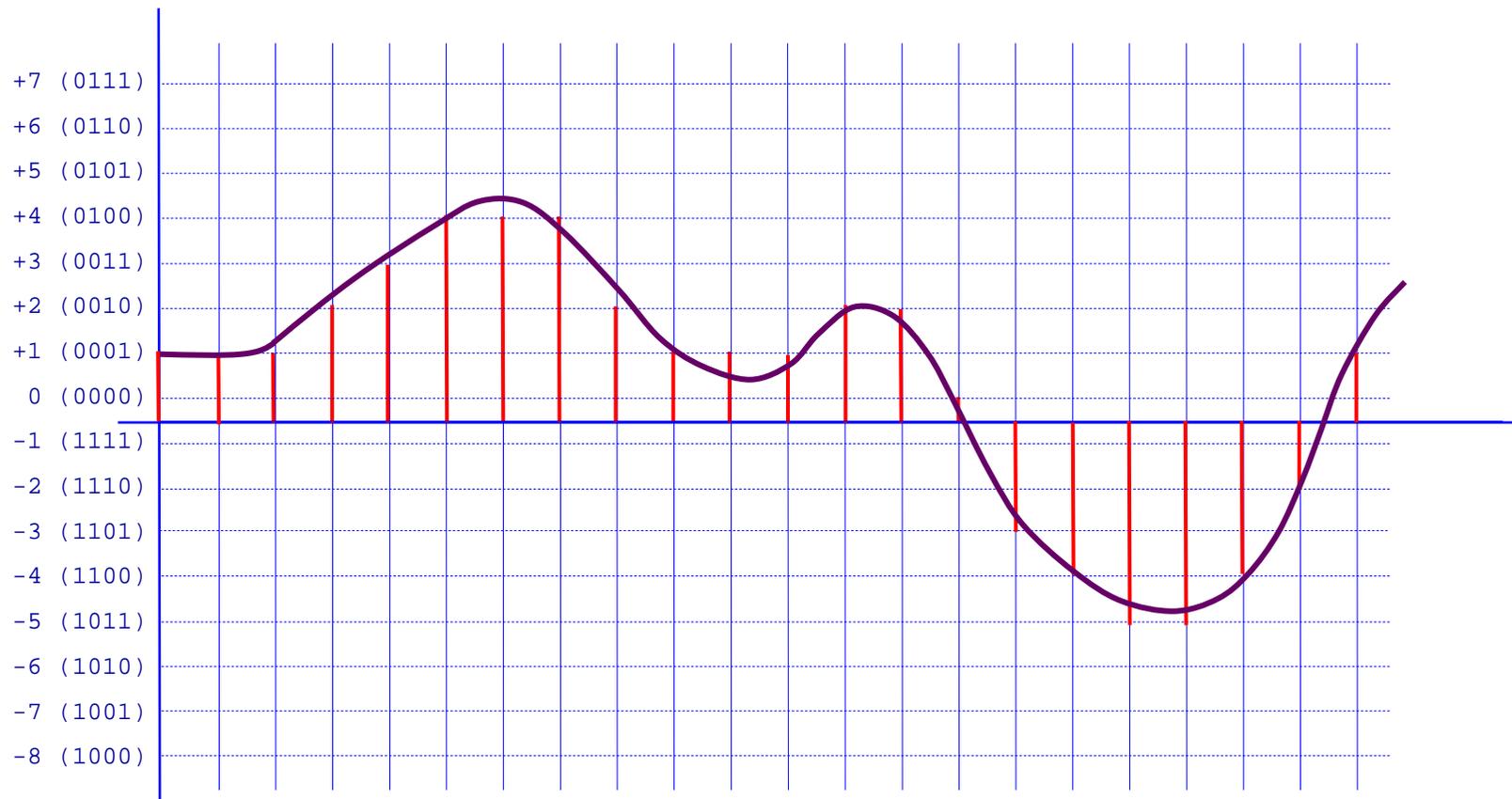


Quantizzazione lineare – 4 bit



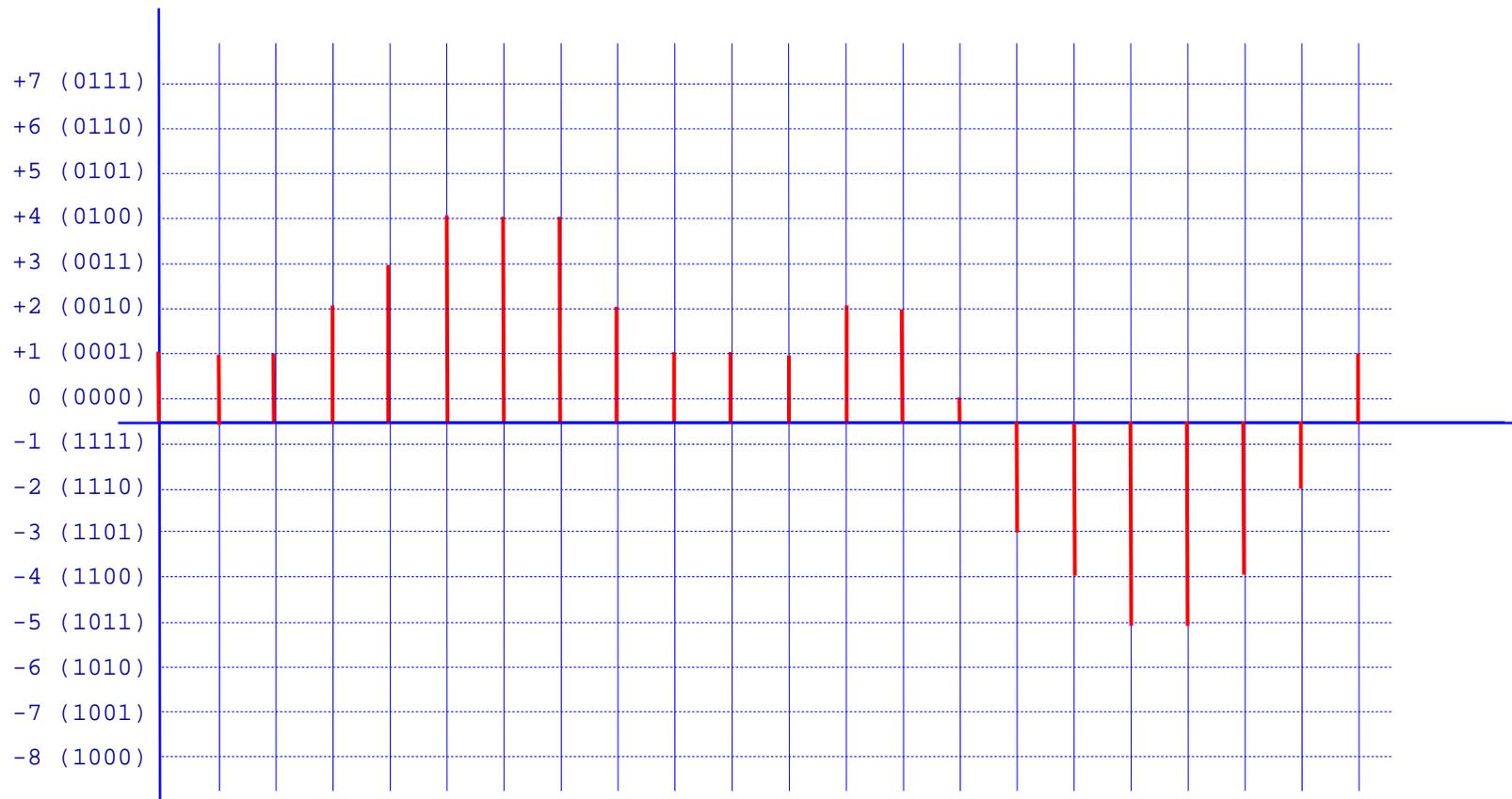


Quantizzazione lineare – 4 bit



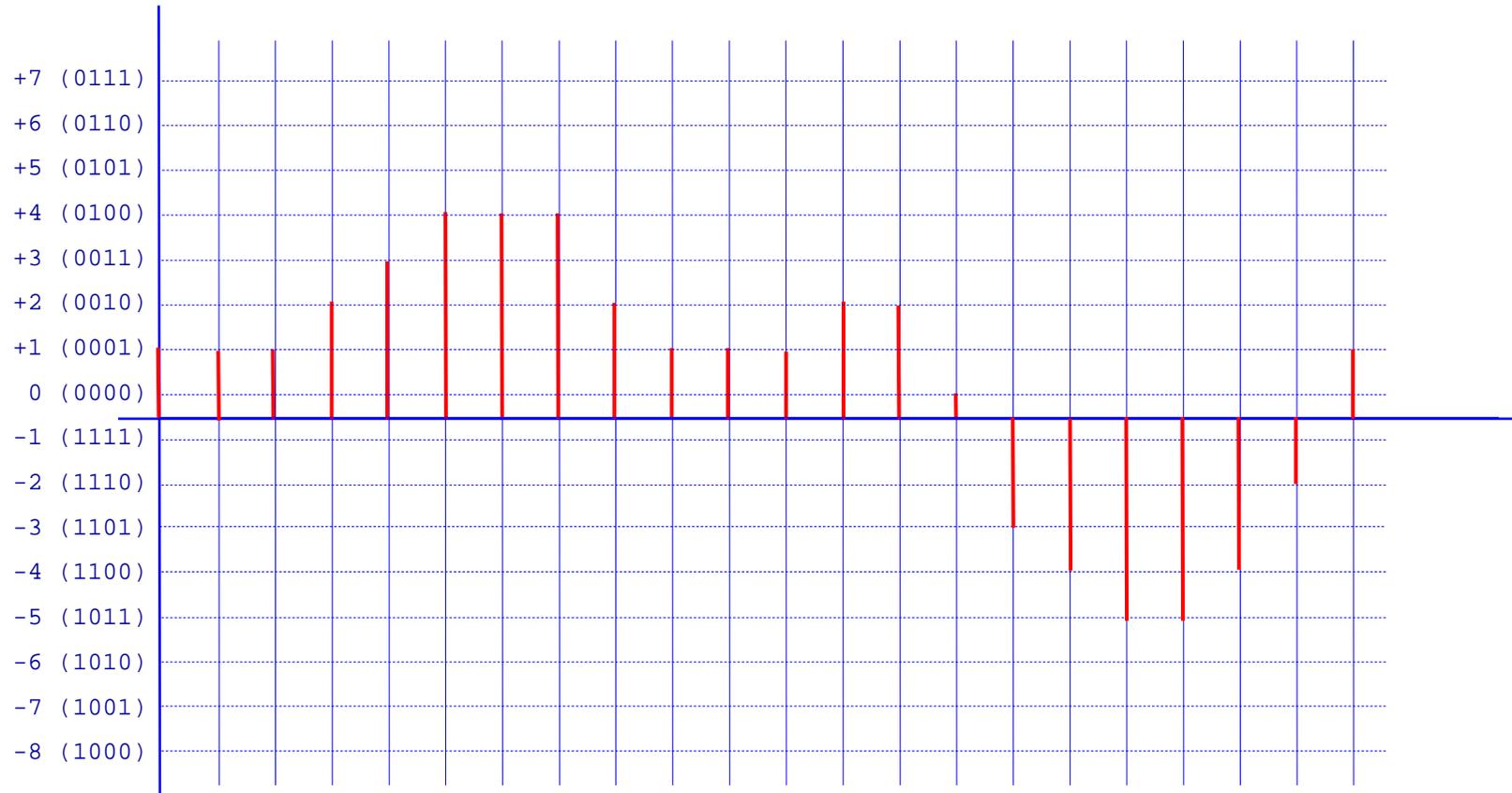


Quantizzazione lineare – 4 bit





Quantizzazione lineare - 4 bit Codifica PCM

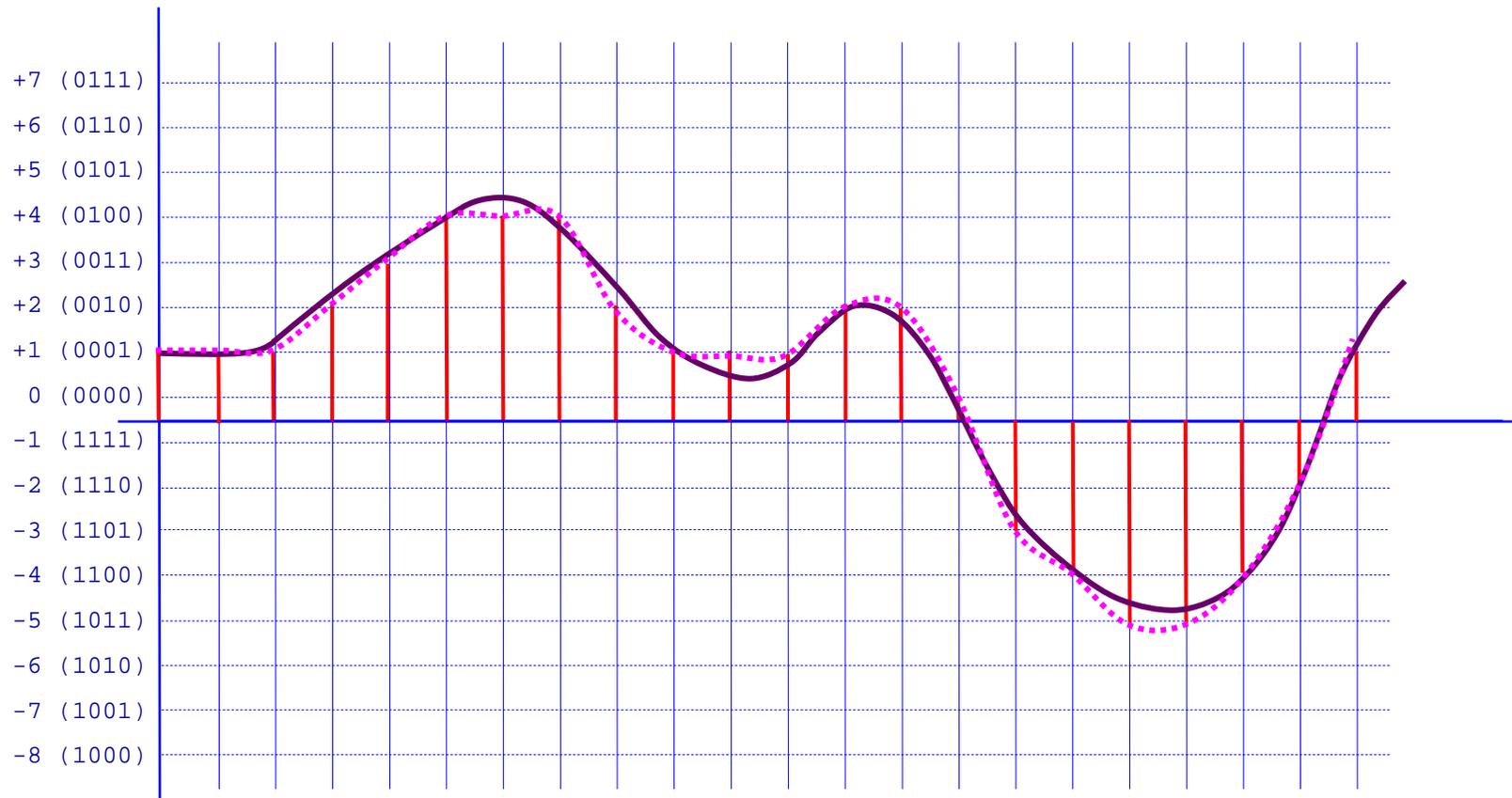


0001000100010010001101000100010000100001000100010010001001000001101110010111011110011100001

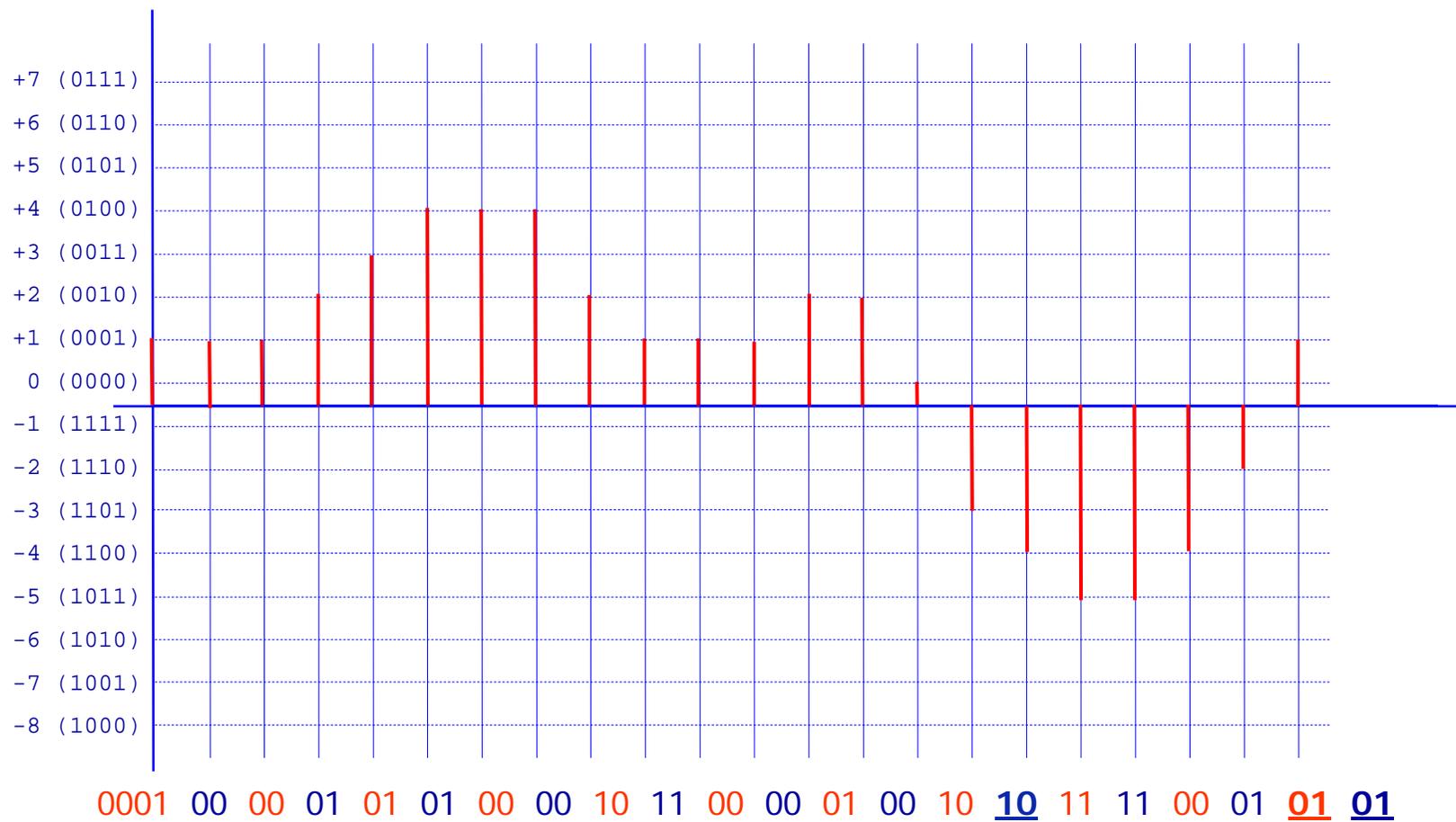
22 campioni x 4 bit = 88 bit



Quantizzazione lineare – 4 bit Decodifica PCM



Quantizzazione lineare: 4 bit Codifica DPCM a 2 bit

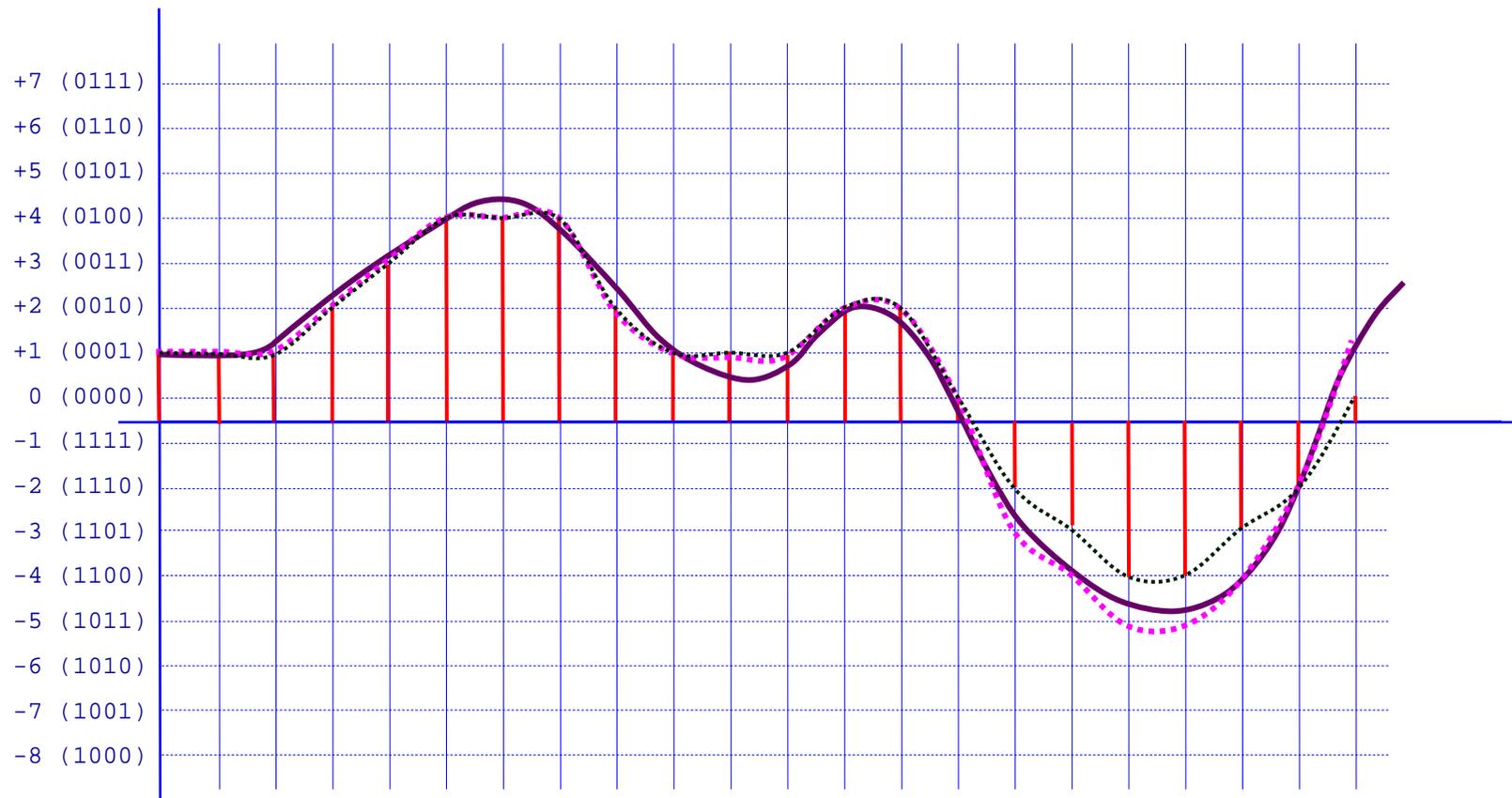


1 campione x 4 bit + 21 campioni x 2 bit = 46 bit

Fattore di compressione rispetto a PCM: $88/46 = 1,91$ (47,8%)

Problema: ??

Quantizzazione lineare: 4 bit Decodifica DPCM a 2 bit



Sequenza originale:

0001000100010010001101000100010000100001000100010010001001000001101110010111011110011100001

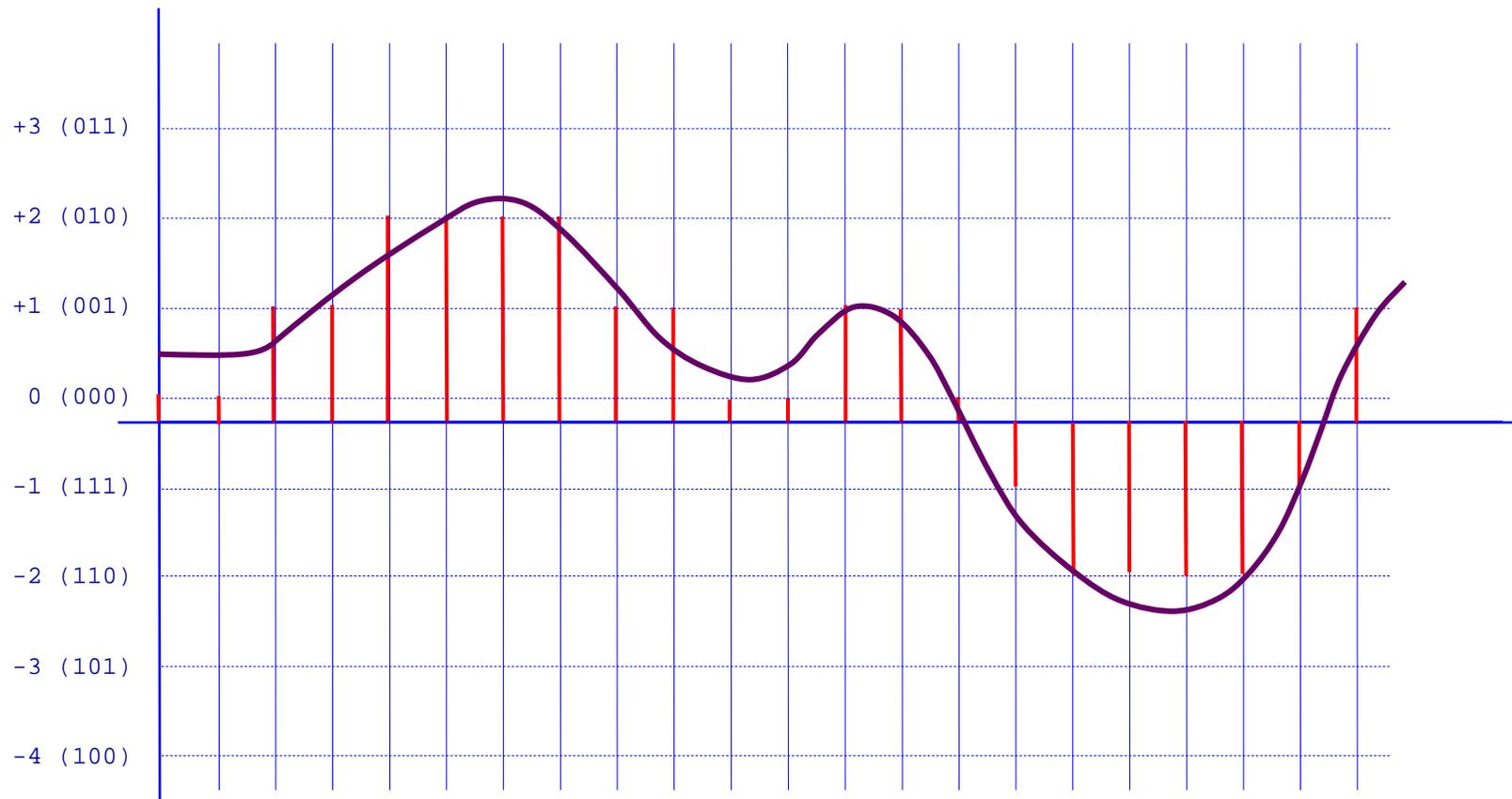
Sequenza codificata: 0001000001010100001011000001001010111100010101

Sequenza ricostruita:

0001000100010010001101000100010000100001000100010010001001000001110110111001100110111100000

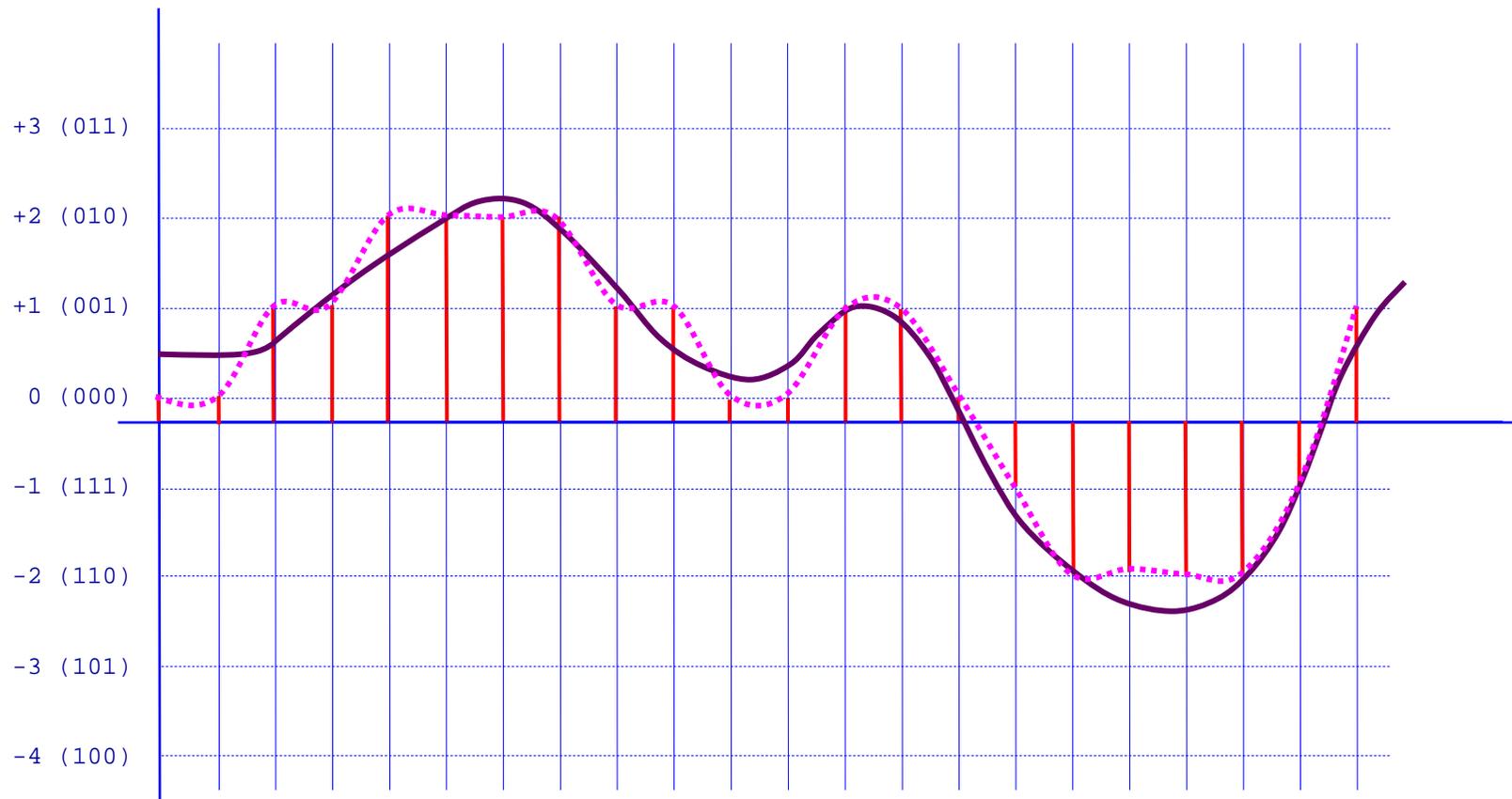


Quantizzazione lineare – 3 bit



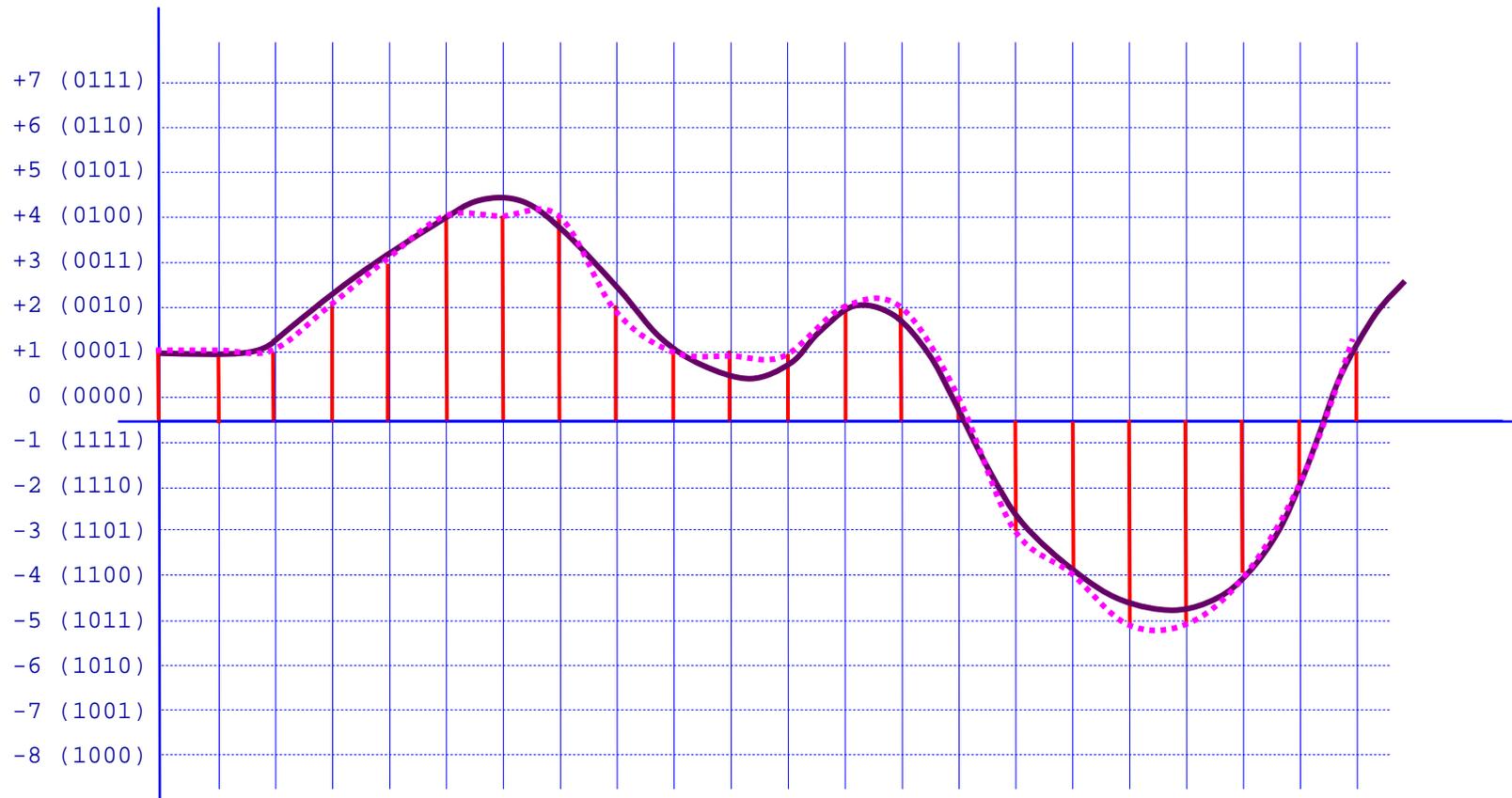
Quantizzazione lineare – 3 bit

Decodifica PCM



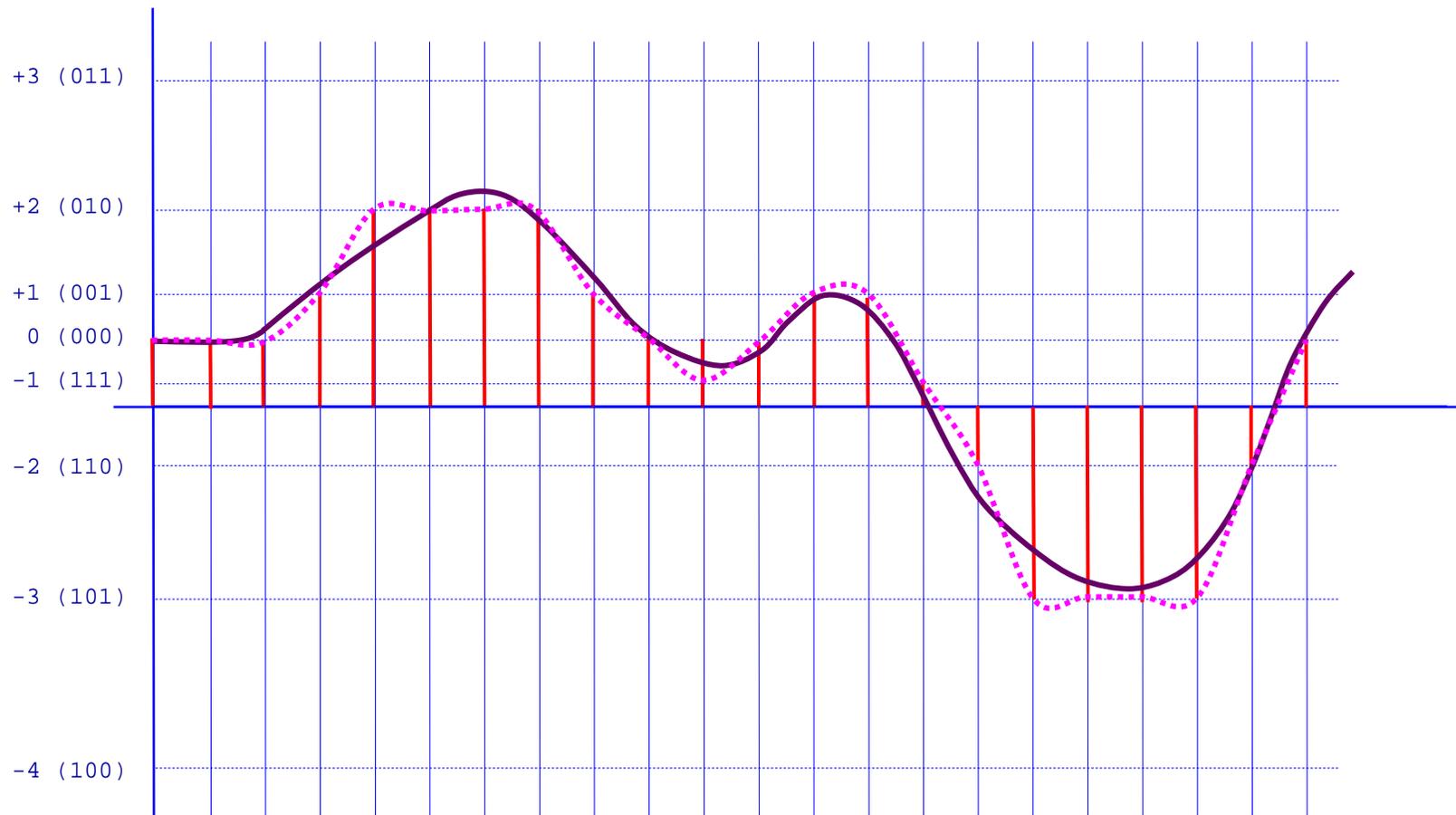


Quantizzazione lineare – 4 bit Decodifica PCM





Quantizzazione non lineare – 3 bit





Quantizzazione lineare – 3 bit

