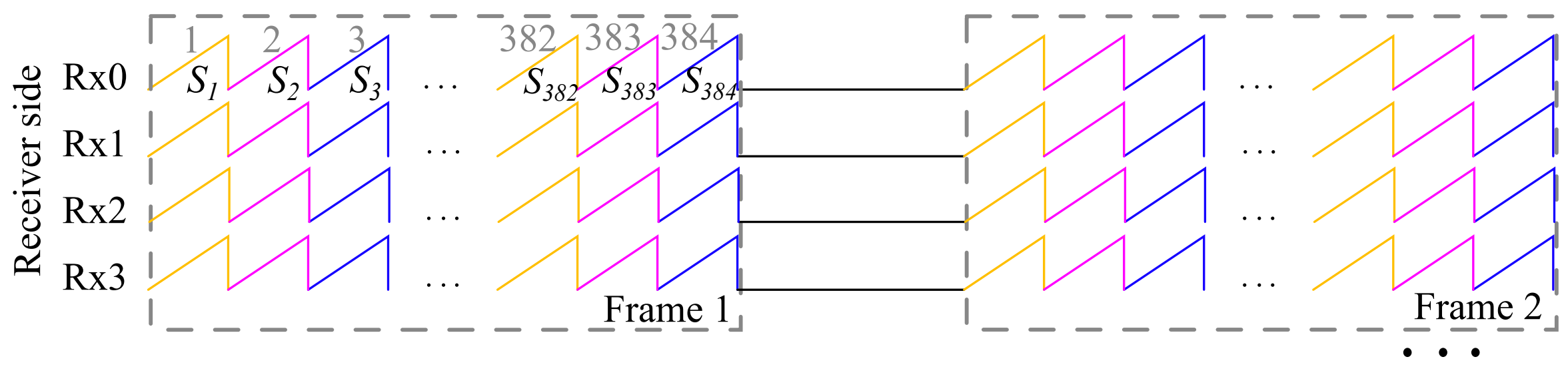
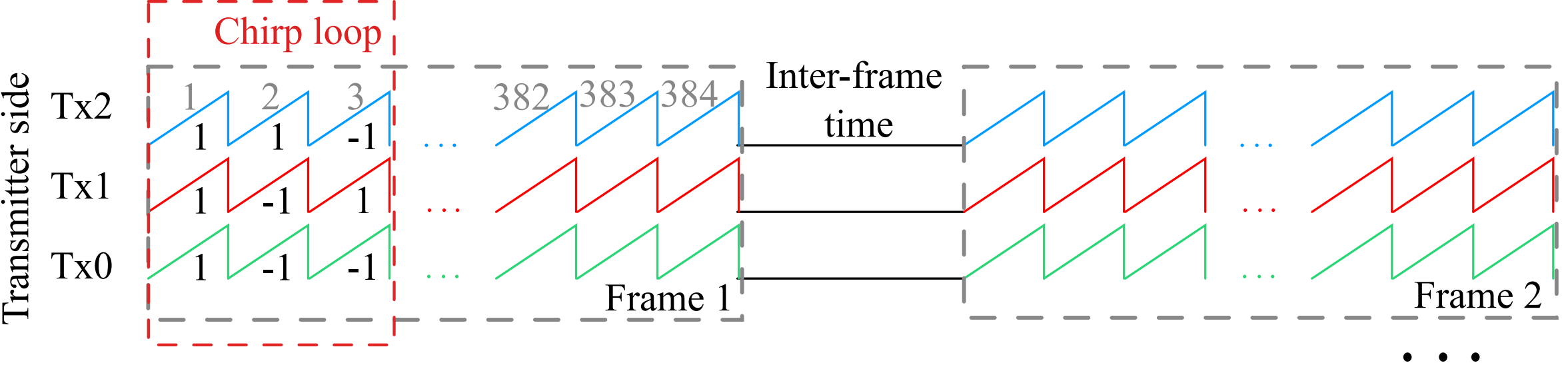


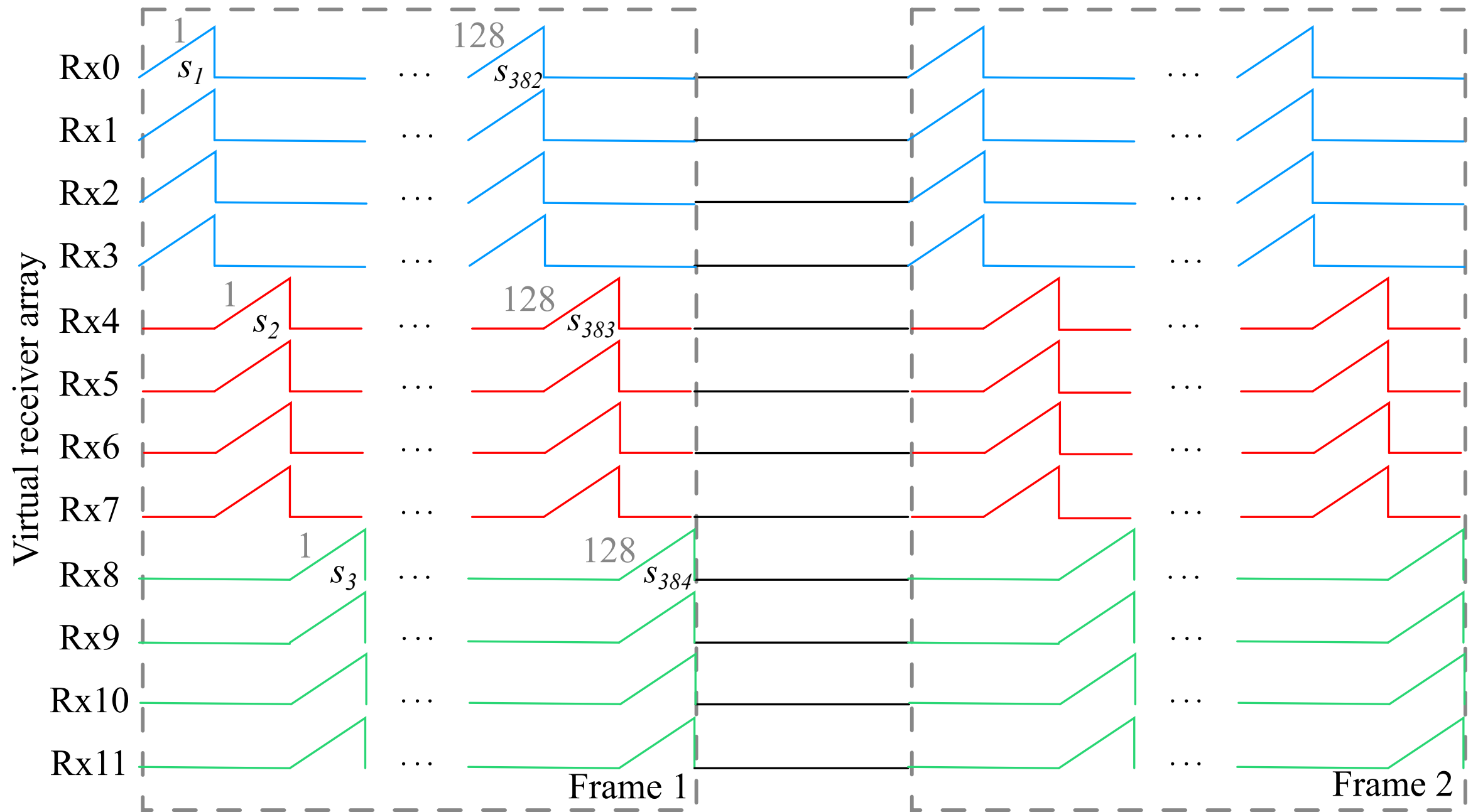


Received signal based on BPM

$$S_1 = s_1 + s_2 + s_3$$

$$S_2 = s_1 - s_2 - s_3$$

$$S_3 = -s_1 + s_2 - s_3$$



After decoding

$$s_1 = (S_1 + S_2)/2$$

First chirp of the first four virtual array receivers

$$s_2 = (S_1 + S_3)/2$$

Second chirp of the first four virtual array receivers

$$s_3 = -(S_2 + S_3)/2$$

Third chirp of the first four virtual array receivers