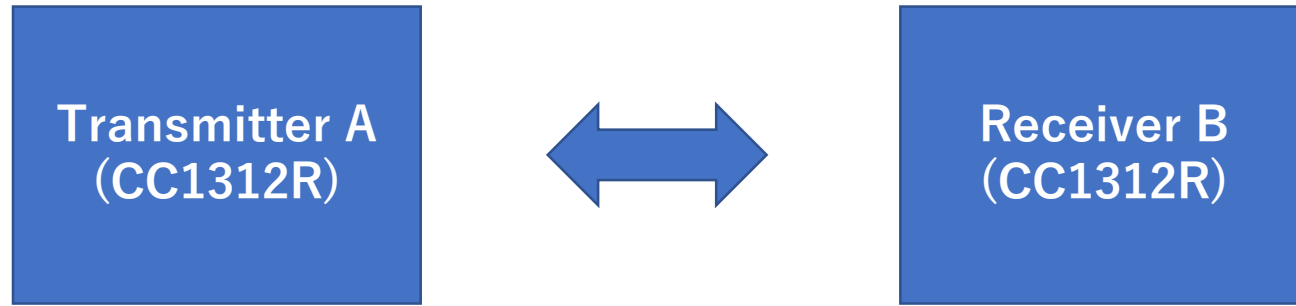


## The situation



The parameters

Frequency: 922MHz

Data rate: 600 bps and 50 kbps

Please imagine that the following flow.

1. At first Transmitter A sends a packet (CMD\_TX\_ to Receiver B.
2. Receiver B receives the packet, and then Receiver B tries to send ACK to A after carrier sense.

The **issue** is that we can observe Transmitter A continues to output power after Receiver B receives the packet.

Because of this, Receiver B observe the power of Transmitter A with carrier sense, and then Receiver B cannot send ACK.

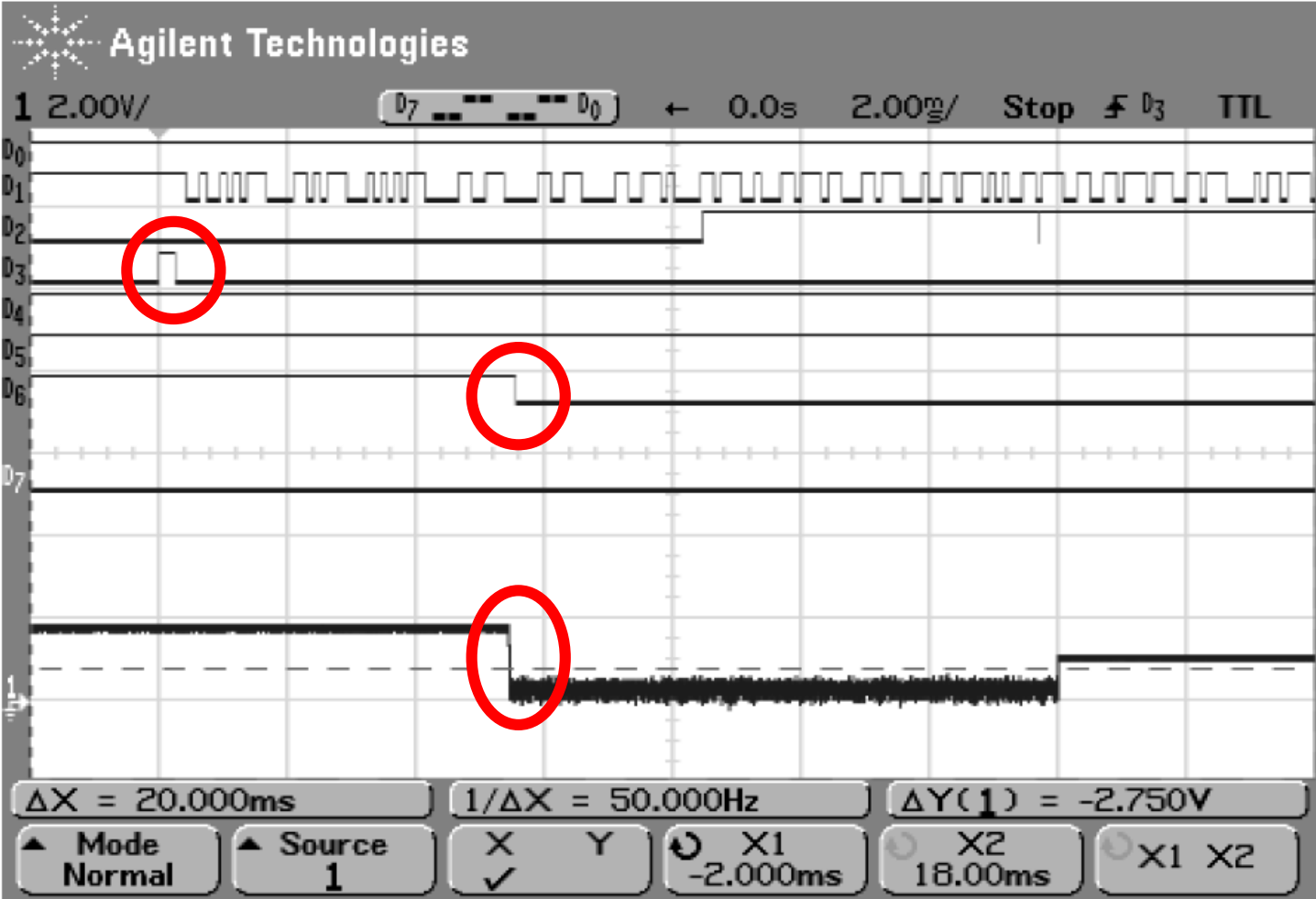
The **questions** are the following.

1. Is this normal behavior that Transmitter outputs power after completion of sending a packet?
2. How long time should Receiver B wait to do carrier sense and send ACK signal?

This seems to depend on the frequency and the data rate.

The waveform is the next slide.

# The waveform



D3 means that the receive callback function of Receiver B.

D6 means that the transmit (CMD\_PROP\_TX) function of Transmitter A. The transmit finishes at the falling edge.

We also observe the power with the spectrum analyzer in the zero span mode. We can see that fall timing is overlapping D6.

This means that Transmitter A continue to output power after Receiver B receives the packet.