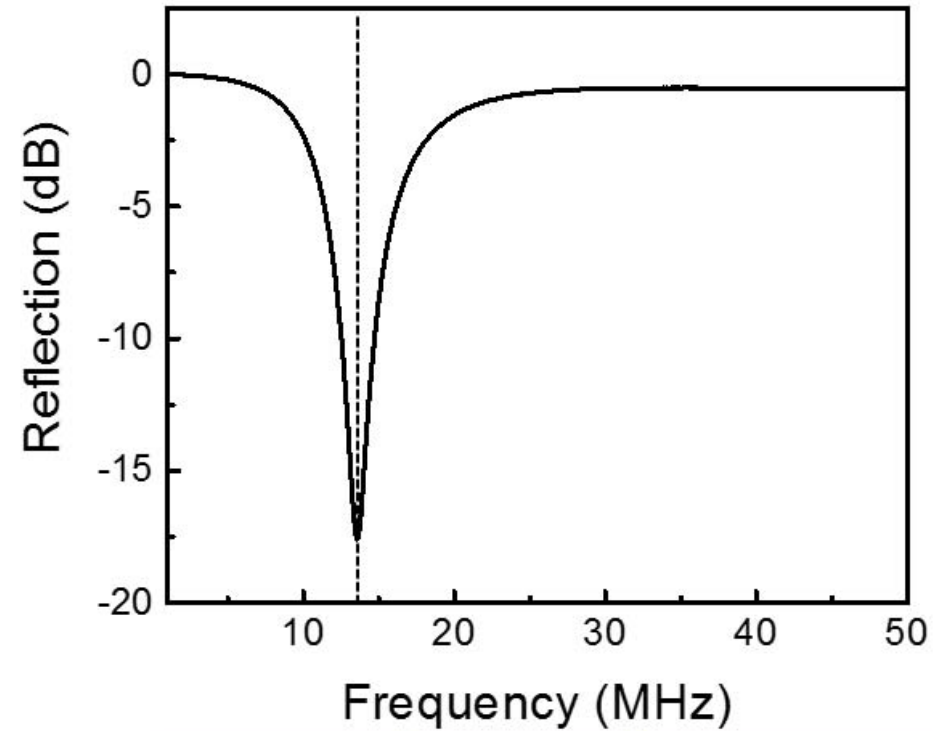
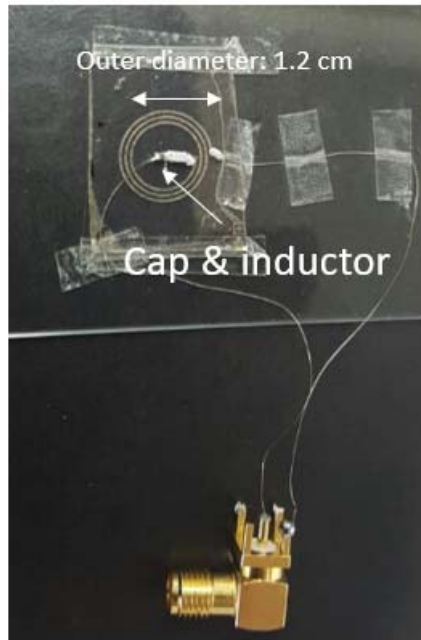


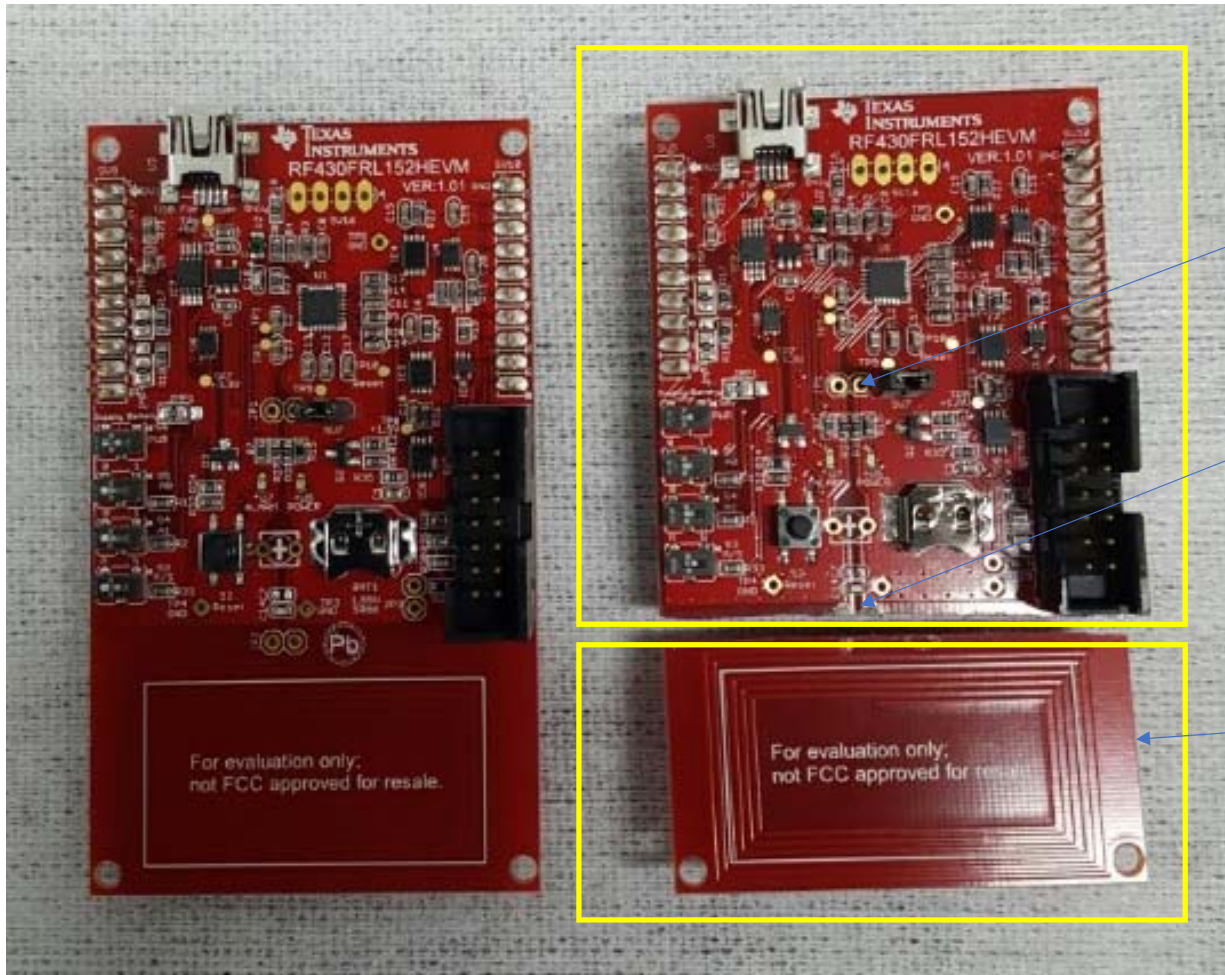
# Our fabricated antenna



S11	$F_r$ (MHz)	Reflection (dB)
	13.5	-17.6

# RF430FRL152HEVM

We connect our fabricated antenna with first zone or second zone

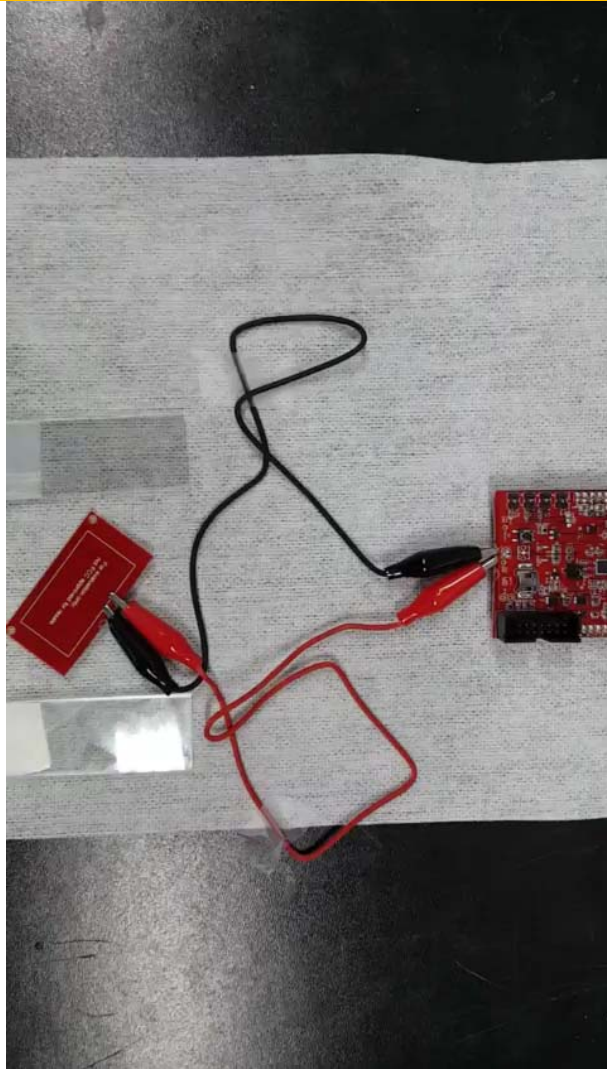


1<sup>st</sup> zone

2<sup>nd</sup> zone

We cut the built-in antenna to replace it with our antenna

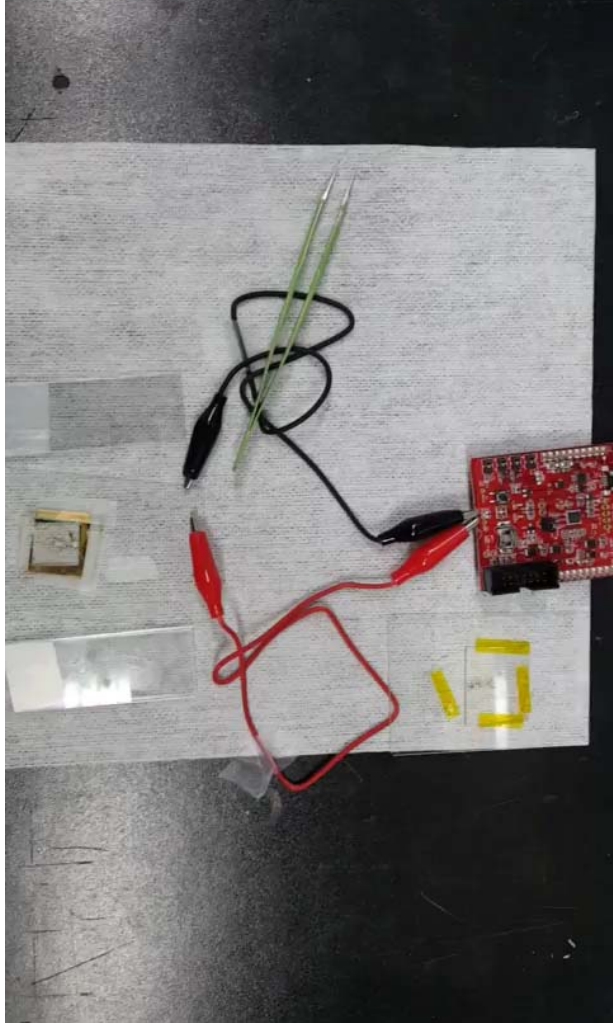
# System using Built in antenna



We first testify the built –in antenna by using smartphone application

As we can see, the smart phone application is working after place the antenna near the phone.

# System using our fabricated antenna

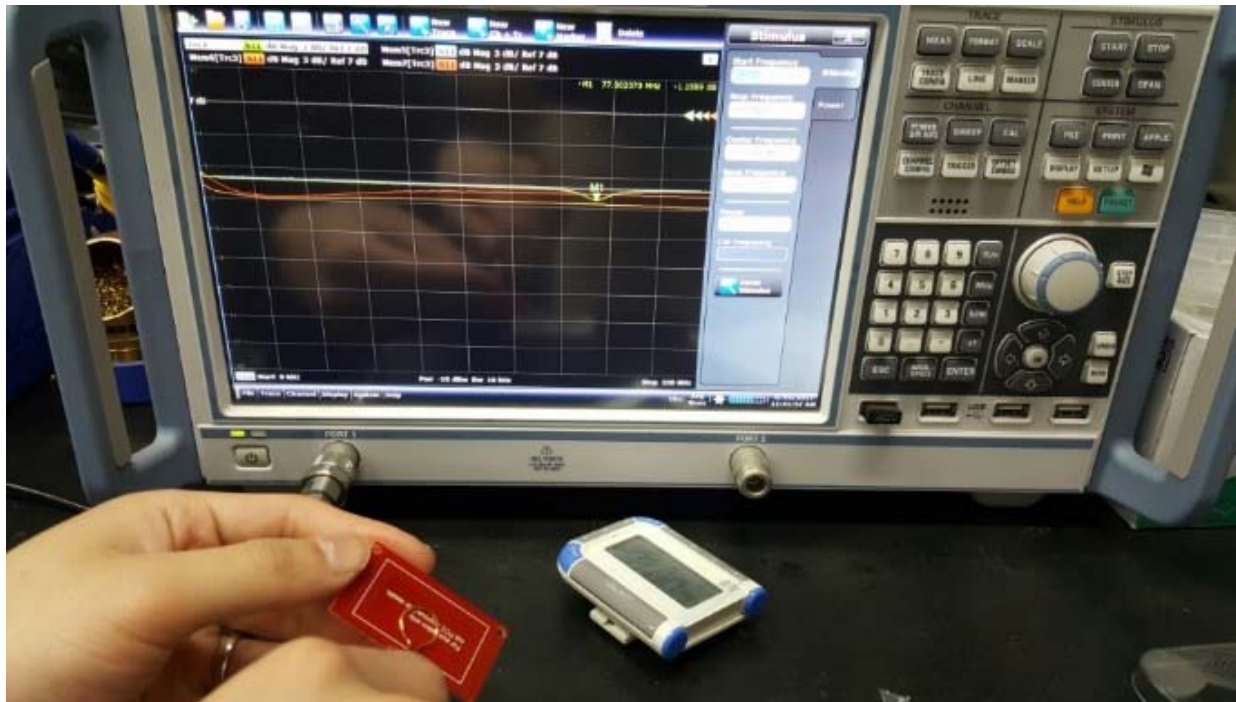


However, the module connected with our antenna is not working.

Is there any something wrong in our system?



Plus, does the built-in antenna has 13.56 MHz?



We test it with network analyzer.  
The built in antenna exhibits resonance frequency of 77 MHz.

$$f_r = 77 \text{ MHz}$$