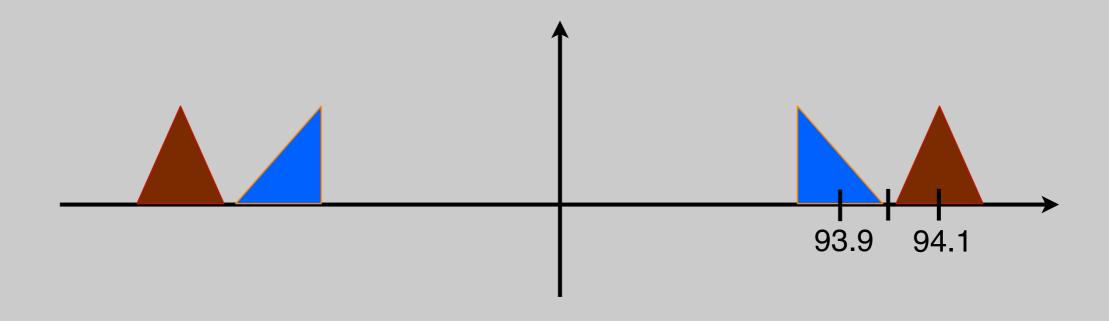
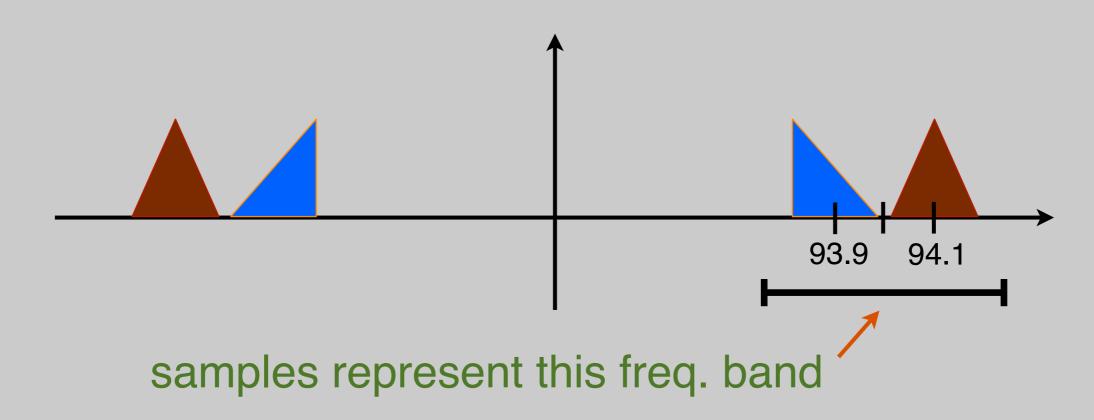
- Samples you measure from the SDR are COMPLEX! WHY?
- Aren't physical signals real??????

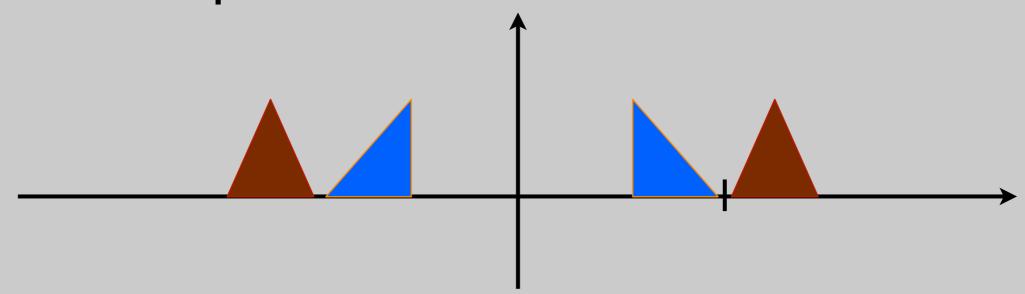
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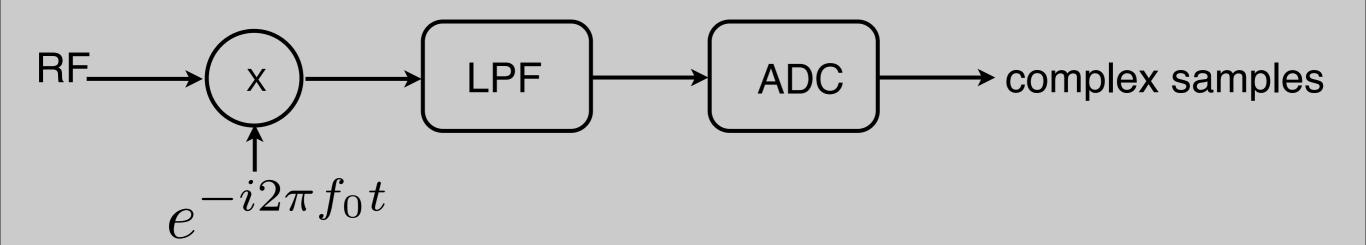


- With the SDR we look at <u>part</u> of the spectrum
- Example:

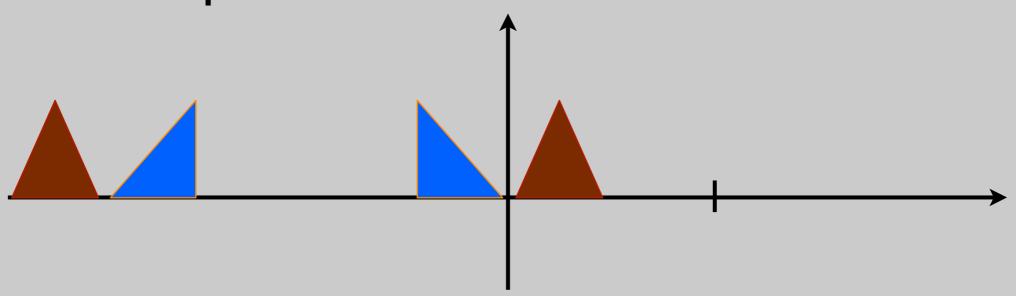


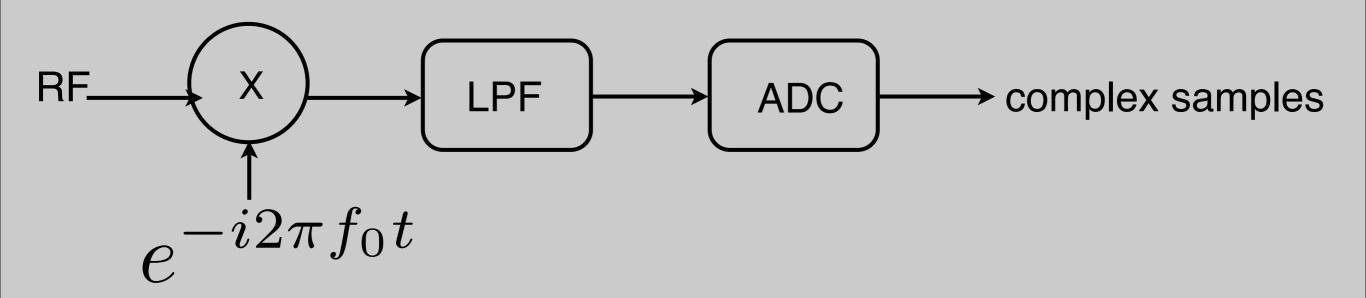
How is it implemented?



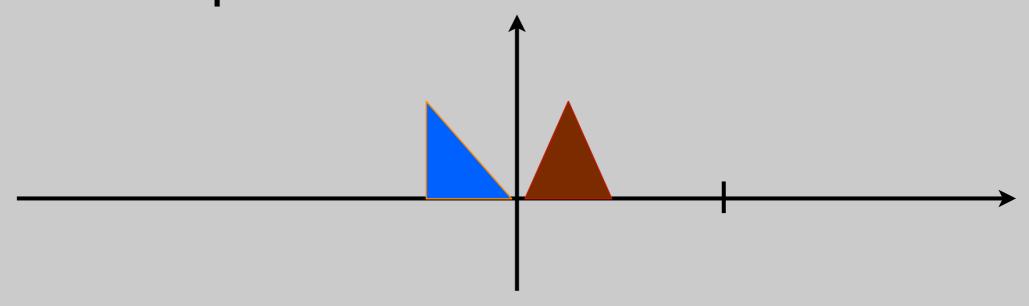


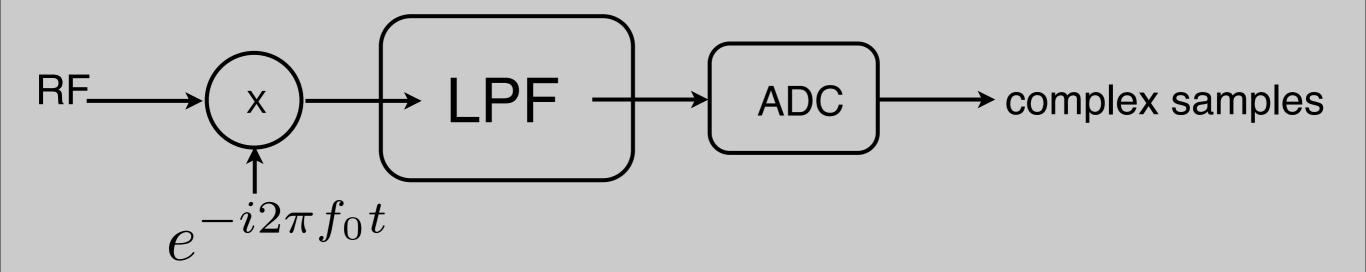
How is it implemented?

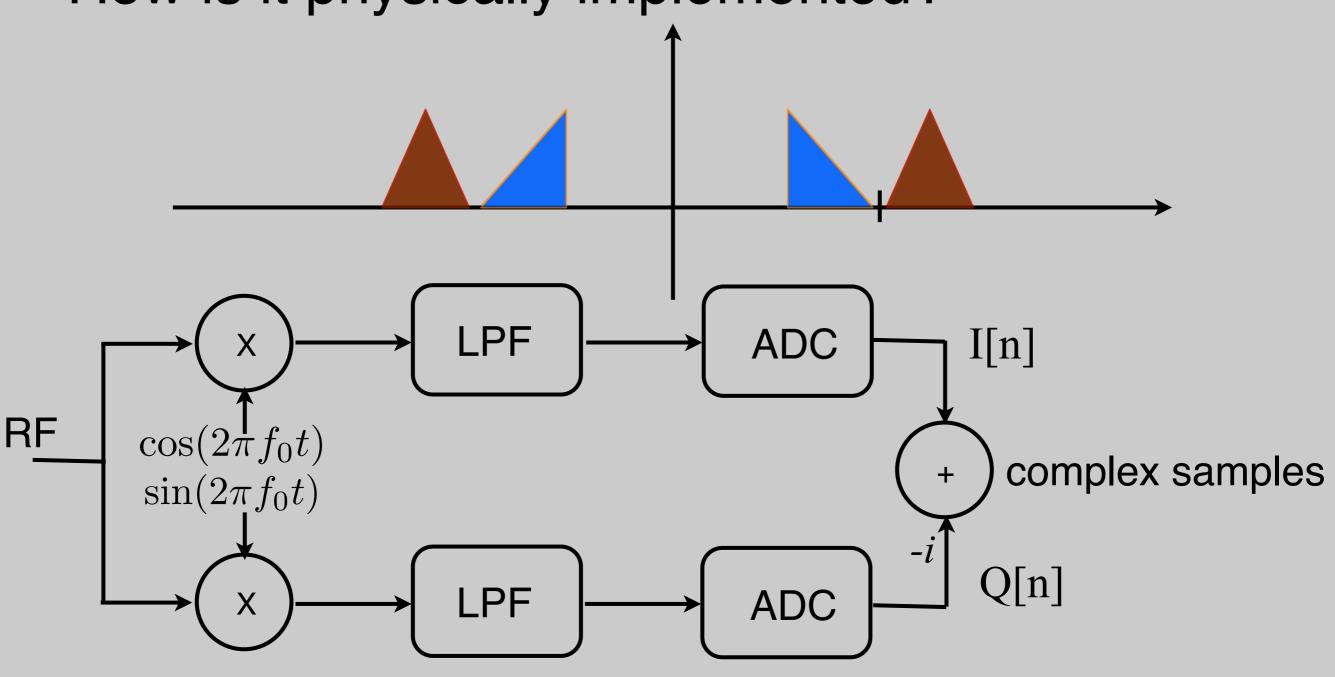




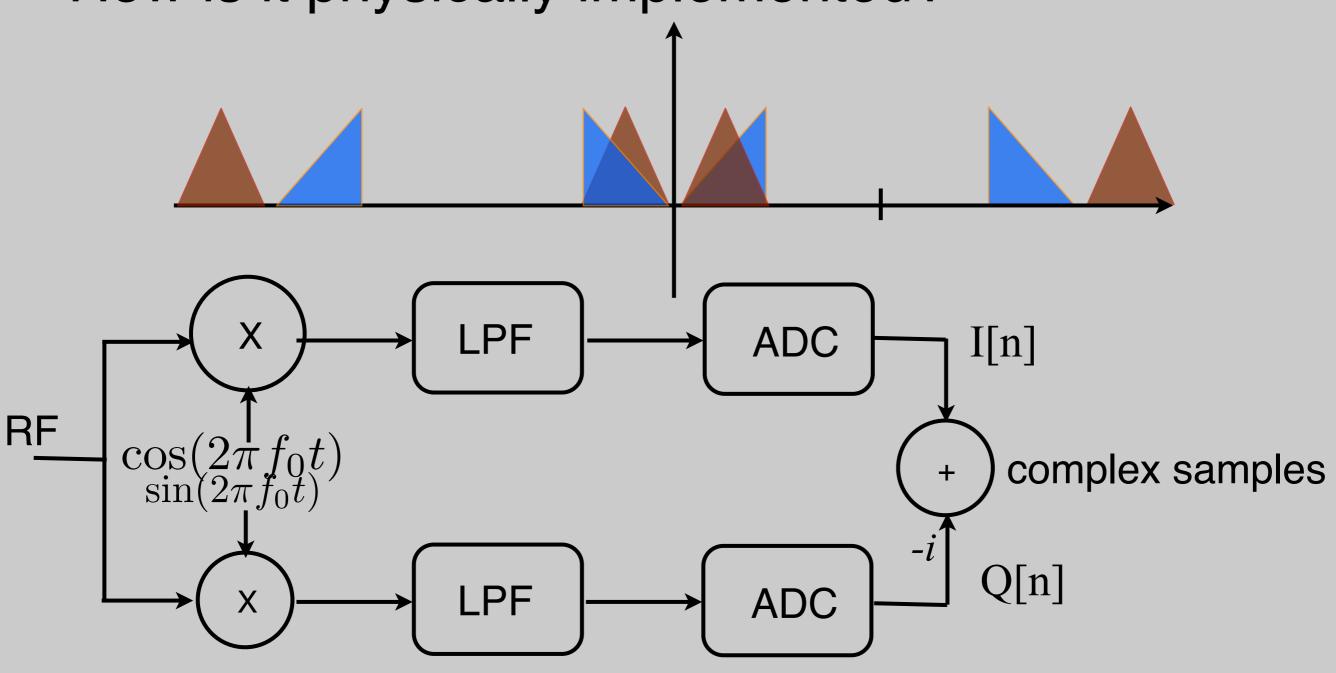
How is it implemented?



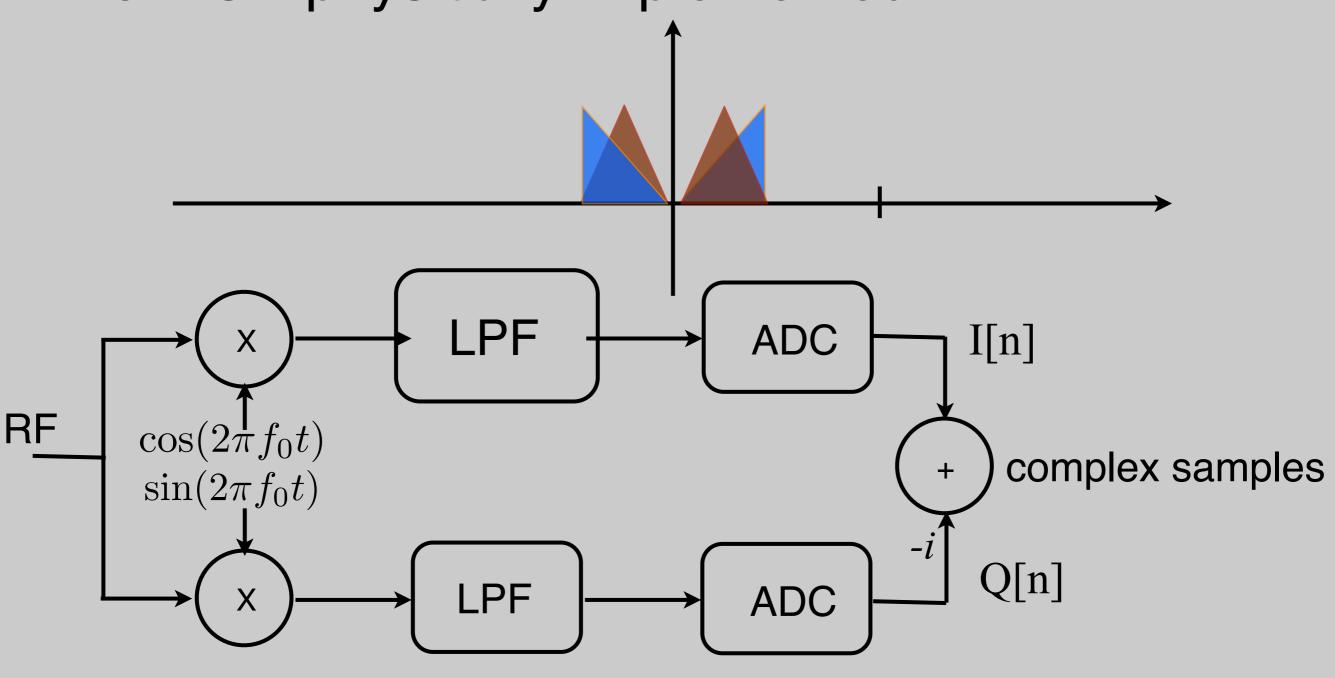




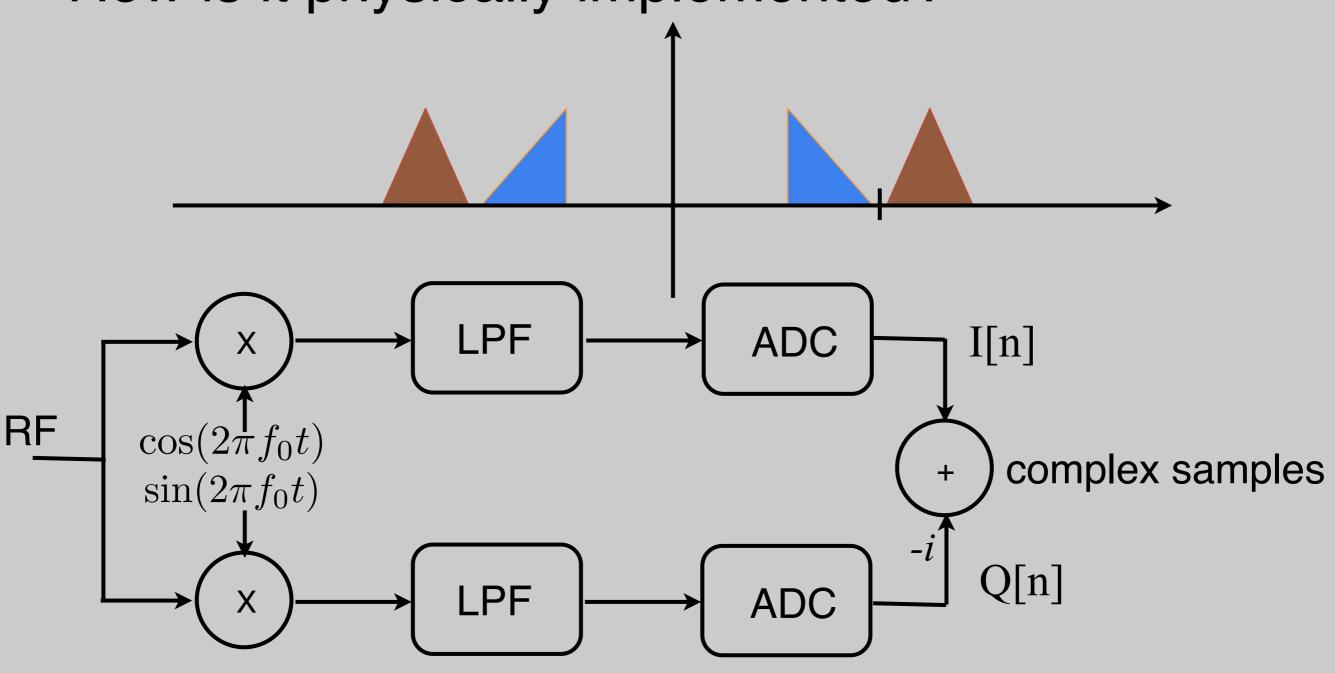
$$e^{-i2\pi f_0 t} = \cos(2\pi f_0 t) - i\sin(2\pi f_0 t)$$



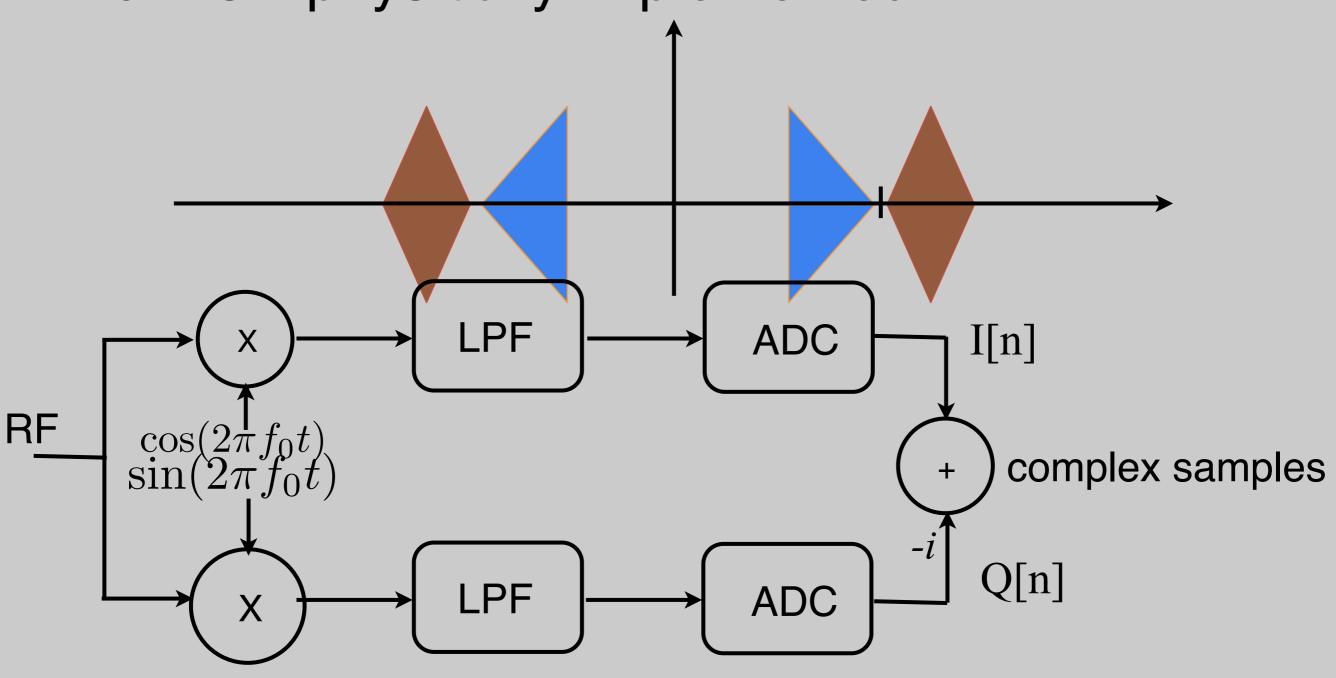
$$e^{-i2\pi f_0 t} = \cos(2\pi f_0 t) - i\sin(2\pi f_0 t)$$



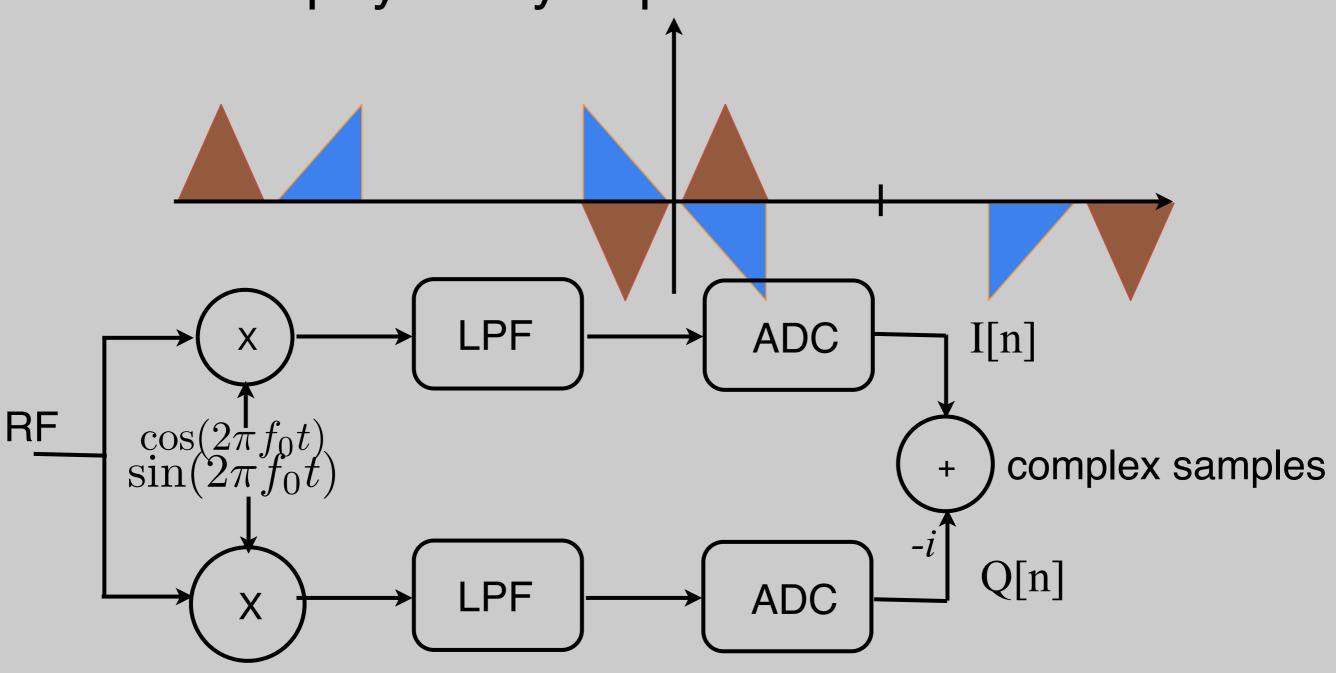
$$e^{-i2\pi f_0 t} = \cos(2\pi f_0 t) - i\sin(2\pi f_0 t)$$



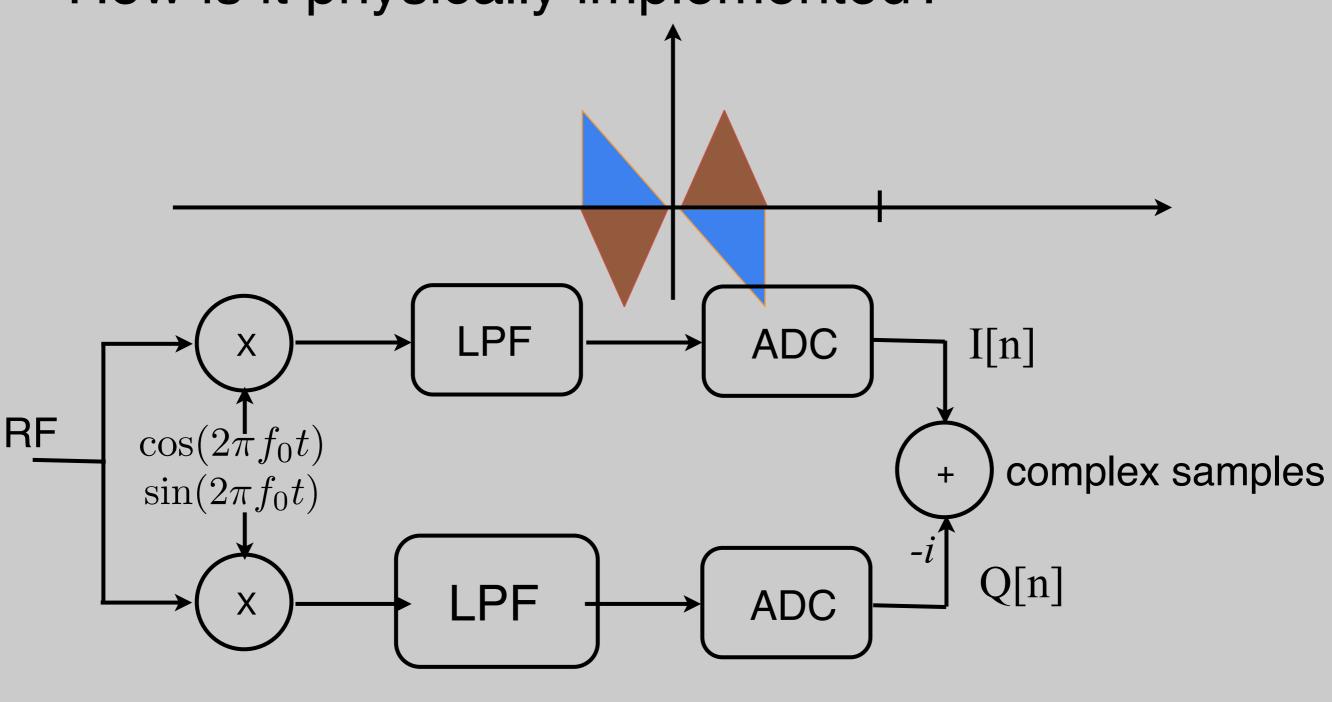
$$e^{-i2\pi f_0 t} = \cos(2\pi f_0 t) - i\sin(2\pi f_0 t)$$



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