Creating a NCO on an FPGA with Python/Amaranth



Time & Frequency department

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under the direction of J.-M. Friedt and G. Goavec-Merou slides and references at

https://github.com/oscimp/amaranth_twstft

Outline

What is a NCO ?

2 Amaranth version of the NCO

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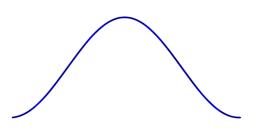


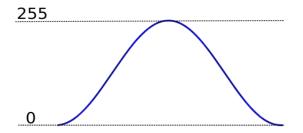
The Numerically Controlled Oscillator

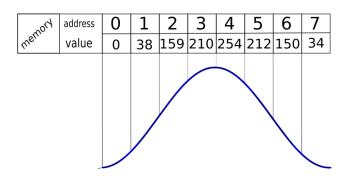


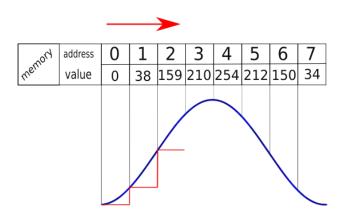
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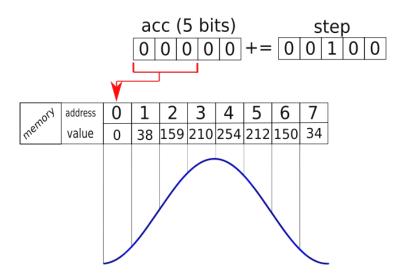
- What is a NCO ?
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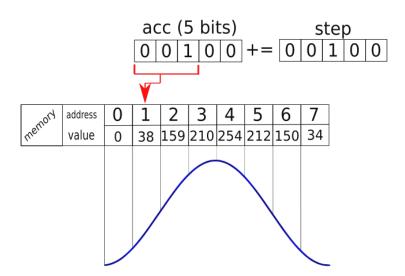


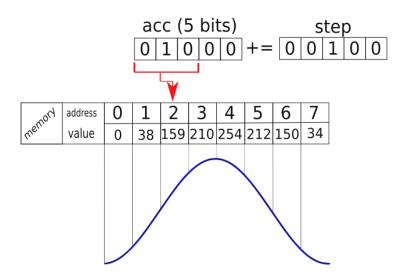


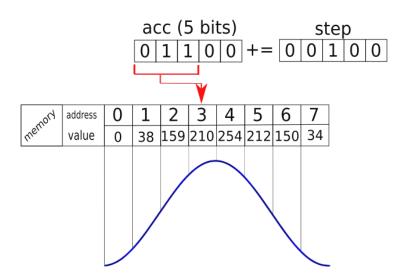


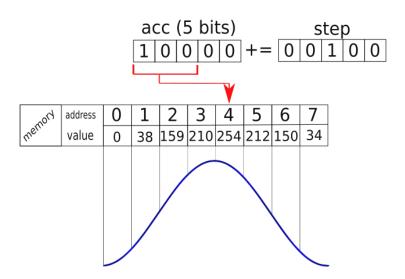


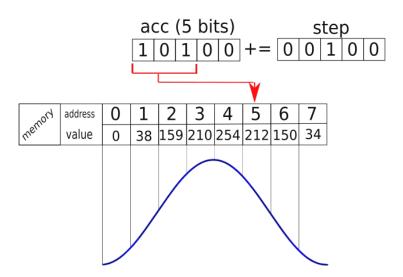


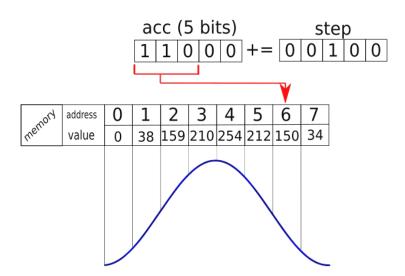


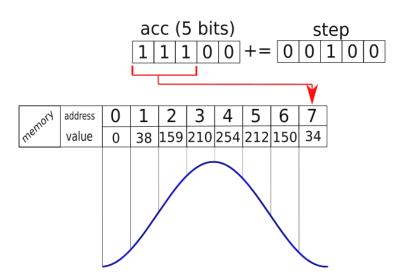


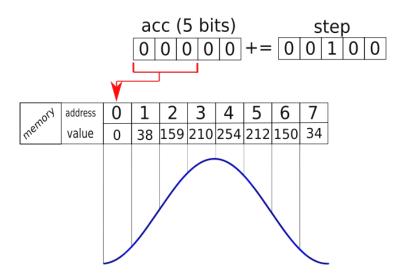


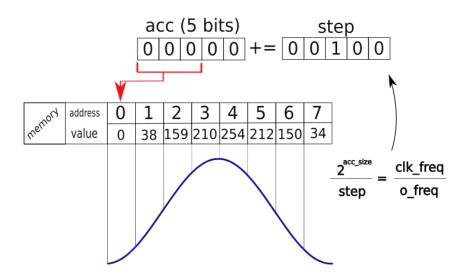


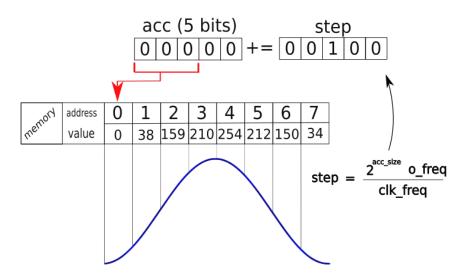


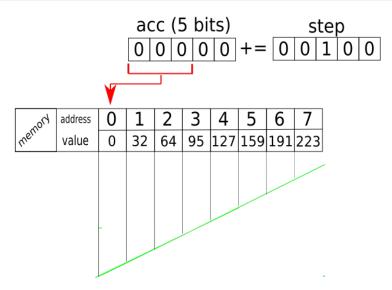












In the end...

- Overview of how a NCO works
- Describing a FPGA version of the NCO