

Electronic Instrumentation

Problem sheet: NE555

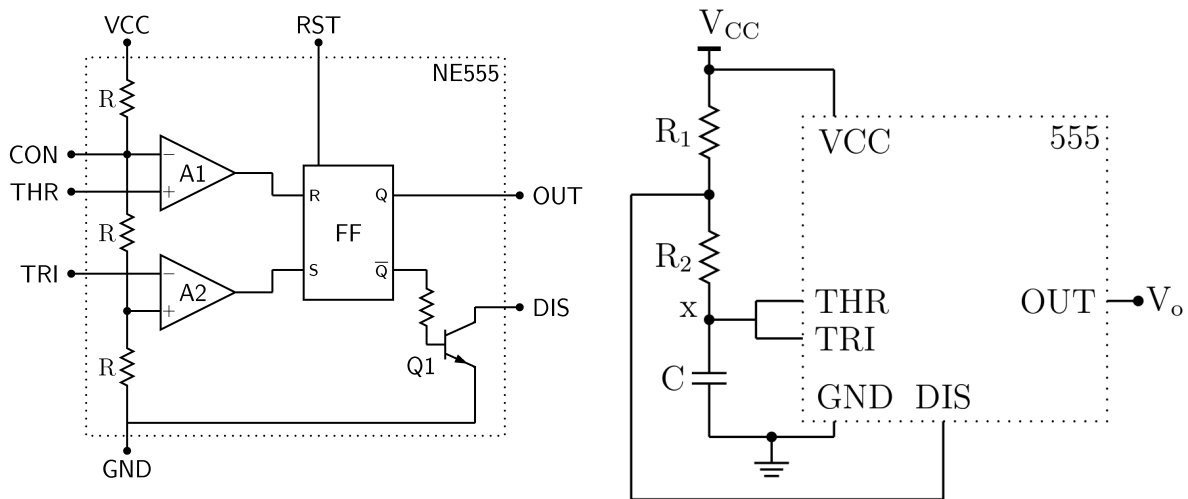
2011/2012 module 2

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MIEET 3º ano

A popular timing component is the NE555 (see image below on the left), which internally is based on two comparators and a flip-flop (they respond to changes low \rightarrow high). With this component, a multitude of useful circuits can be made.



An example is an astable circuit (oscillator), which is made by placing two resistances and a capacitor in series at the entrances, which results in a periodic binary signal at the output.

- Explain how the circuit works and design an oscillator operating at 1 kHz based on a NE555 IC.

(<http://www.uoguelph.ca/~antoon/gadgets/555/555.html>)