

Pro-Seminar ETIT (2CP) - Design of a Digital Construction Kit for Playful Learning of Logic Circuits



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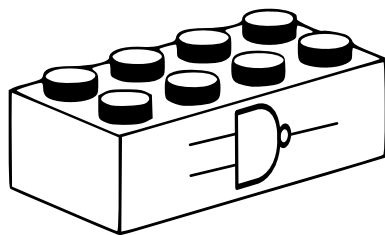
Bau eines digitalen Baukastens für das spielerische Erlernen von logischen Schaltungen
31. Oktober 2022

Description

It is important to interest children and adolescents in logical circuits at an early age to inspire the future generation of engineers playfully. Similar to how Fischertechnik and Lego deal with the topics of statics and robotics, a set of logic blocks is intended to bring the interesting topic of digital technology into children's rooms. Above all, the children themselves should benefit from this, learning the joy of technology by having fun experimenting on one hand, and on the other hand by training their logical skills.



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Tasks

Research on the current status in the field of logic construction kits. Identify competing products and their limitations to find a niche.

Develop a concept of a base plate for logic modules or base plate less design.

Elaborate on a concept of how the logic modules could be constructed and how they should be connected to the board.

Writing a report in latex and presenting in front of a small audience in German or English.