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Modular logic gate emulator for online laboratory

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The pandemic year represented a challenging time for educators, a time where the classical way of teaching change from contact to remote learning. While contact lectures can be replaced by videos or video conferences, the laboratory can be replaced with simulations or by instructing the students to buy and build ad hoc systems by supplying the essential instructions. A remote assisted experiment requires to be conducted safely, the components readily available, and possibly low-cost. Technical High Schools and universities teach the logic gates and how to assemble a circuit to solve a specific function. Several licensed and free software are available for simulation, and for a hypothetical real experiment, it is necessary to supply the students with several components and tools. This project proposes performing several digital electronics experiments by using a building block, a logic gate emulator. This device can be modified according to the teacher's needs and sent to the students to do remote experiments.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

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