

EDUCATIONAL ELECTRONIC DEVICE FOR ENGINEERING TEACHING

Description:

The present invention consists of a printed circuit board with a large number of educational functionalities that can be manufactured in a small size and at low cost. The board is equipped with a series of specific electronic components so that, once connected to a microcontroller that meets the minimum requirements, and to a sufficient power supply for its total consumption, it allows the performance of a wide variety of practical educational exercises for engineering subjects, much higher than that found in existing devices of similar requirements, cost and size, and in some cases unprecedented in this type of invention.

Keywords:

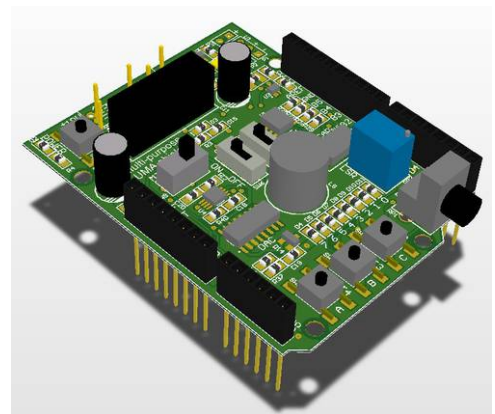
[Electronics](#), [Electronics Devices](#), [Microcontroller](#), [Engineering](#), [Engineering Education](#)

Sectors:

[Electronics](#), [Engineering](#)

Areas:

[Hardware / Devices / Components](#), [Electronics](#), [Technological Improvements](#), [Education](#)



Advantages:

The invention has the following advantages: -It allows the realization of educational experiences with low-cost microcontrollers that are not available in other solutions in the same sector of the technique with the same cost and size. -It can perform temporal analysis and control of time-invariant continuous linear systems, something unprecedented in other solutions in the aforementioned sector. -Data acquisition can be done by means of a low-cost microcontroller, something also unprecedented. -Allows the control of a wide variety of devices external to the invention through analog connections with them, both input and output. -Cover educational experiences in a diversity of engineering branches much greater than other solutions: control engineering, data acquisition, real-time systems, embedded systems, robotics, systems programming, etc.

Uses and Applications:

The invention is intended for the engineering education sector; It can be used in a multitude of branches of engineering, from a professional level to postgraduate training, and in a variety of subjects.

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