

Annotation

During the graduation project, a universal charging device with a low power photovoltaic panel has been developed. The device is an expansion card that plugs into the Arduino Uno, which controls the correct charging algorithm for battery. From the charge controller can charge USB-devices.

Diploma project includes an explanatory note, which consists of six sections. The first one is the choice of the type of controller charging and an overview of their types and algorithms of work. In the second and third parts described structural and electrical schematic. In the fourth, the calculation of the components of the scheme is given. The fifth describes the program's algorithm. The sixth section provides the steps for building a printed circuit board, calculating the reliability of the circuit and taking steps to improve the working conditions at the workplace.

Thesis is represented by four drawings and an explanatory note for 84 p., Fig. - 24, tables - 12, sources - 20, applications - 6.