

Summary

In the qualification work the electric drive for a mobile platform was developed. To solve the problem, the selected microcontroller, which controls the power transistors with the help of power drivers. Switching of power switches is carried out by a quasi-resonant method. It is possible to exchange data with a computer through a USB connector. Local control of the electric drive (speed setting, turning angle, etc.) is performed using the matrix keypad. A two-line LCD display is used for local information display.

In the course of work on the project, the analysis of literary sources was carried out, structural and electric principle schemes were developed, elements of calculations and simulation were carried out, printed circuit board, calculated cost, estimated reliability and considered issues of labor protection and emergency safety.

The project is presented with six drawings and an explanatory note for 90 p. tabl. - 10, pic. - 11, sources - 28, applications - 5.