

EMISY Project 21 Portable Compass

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1 Analysis of the project

1.1 Discussion of project requirements

We need to create a simple portable compass circuit

It should:

- Use energy-saving power modes of microcontroller
- Be battery powered
- Be portable (cellphone/wrist watch)
- Communicate using graphical OLED display and two buttons keyboard

1.2 Discussion of solution

2 Detailed circuit diagram

3 Diagram

3.1 Diagram itself

3.2 Diagram description

4 Draft of the microcontroller firmware

4.1 Block diagram

4.2 Description of the algorithm