

# MICROPHONE AMP™

Manual

*All Mikroelektronika's development systems feature a large number of peripheral modules expanding microcontroller's range of application and making the process of program testing easier. In addition to these modules, it is also possible to use numerous additional modules linked to the development system through the I/O port connectors. Some of these additional modules can operate as stand-alone devices without being connected to the microcontroller.*

Additional Board

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# MICROPHONE AMP

The MICROPHONE AMP additional board is used to amplify audio signals detected by the microphone provided on the additional board. Detected audio signals are amplified and sent to the connector used to connect a loudspeaker. The potentiometer is used to adjust the volume of sound emitted from the loudspeaker.

## Key features:

- 3.3 to 5V power supply voltage;
- Loudspeaker impedance of 4, 8 or 16 ohm ;
- 300 to 725mW output power (depends on the power supply voltage and loudspeaker impedance); etc.



Figure 1: MICROPHONE AMP additional board

## How to connect the board?

The MICROPHONE AMP board is connected to the power supply via a screw terminal CN1. The power supply voltage has to be stabilized and in a range between 3.3 and 5V DC. The positive voltage is supplied on the VCC pin of the CN1 connector, whereas the negative voltage (ground) is supplied on the GND pin. The additional board is connected to the loudspeaker via a screw terminal CN2. When establishing connection between them, the positive terminal of the loudspeaker is connected to the OUT+ pin, whereas the negative terminal is connected to the OUT- pin of the CN2 connector.

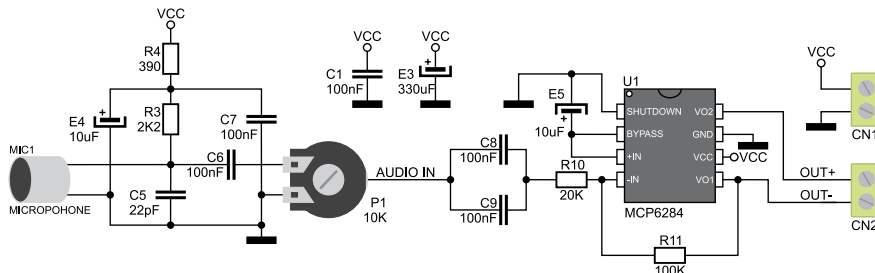
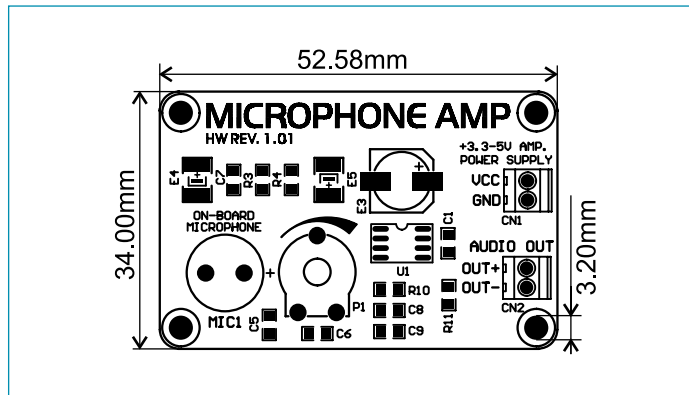


Figure 2: MICROPHONE AMP additional board connection schematic



**Figure 3:** Dimensions of the MICROPHONE AMP additional board



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