# dsPIC Ready4™

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

MikroElektronika
SOFTWARE AND HARDWARE SOLUTIONS FOR EMBEDDED WORLD ...making it simple

# dsPIC Ready4

The dsPIC Ready4 additional board is used to experiment with dsPIC® microcontrollers in DIP28 package.

### Key feature:

- Data transfer via USB-UART communication;
- Programming via the external programmer;
- Pads;
- 8 to 16V AC/DC power supply voltage;

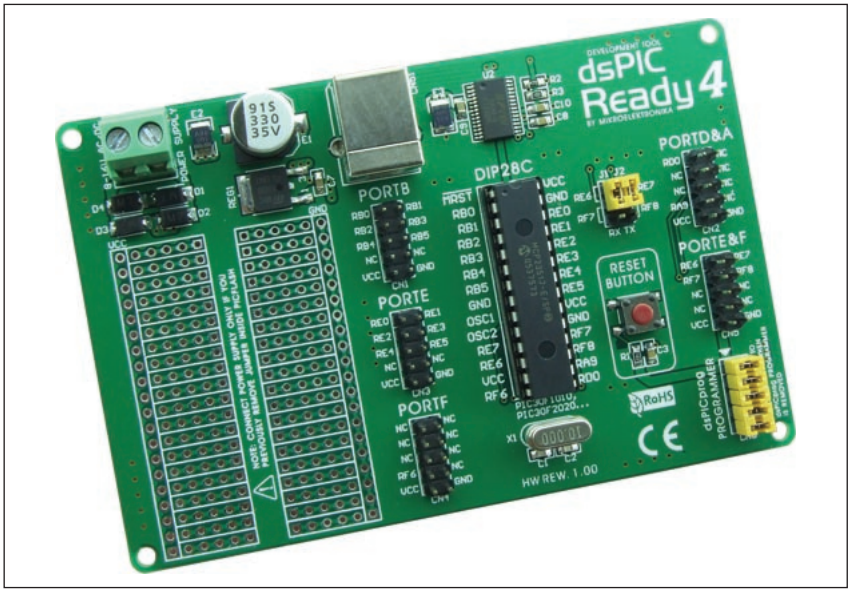


**Figure 1:** dsPIC Ready4 additional board

### How to connect the board?

The dsPIC Ready4 board features five 2x5 connectors (CN1 - CN5) that enable connection between the pins of the microcontroller plugged into the appropriate socket on the board and external devices. A 2x5 connector CN6 is used to connect the dsPICFlash programmer to the microcontroller pins used for programming. A USB connector CN51 enables connection between the additional board and a PC via the USB-UART module. In order to enable communication between the microcontroller and the USB-UART module, it is necessary to place jumpers J1 and J2 in the appropriate position. When jumpers are placed in the RE6 and RE7 positions, the RE6(RX) and RE7(TX) microcontroller pins are used. Likewise, when jumpers are placed in the RF7 and RF8 positions, the RF7(RX) and RF8(TX) microcontroller pins are used. The additional board is powered with a voltage in a range between 8 and 16V AC/DC via the CN8 connector.

### How to use the board?

In order to use the dsPIC Ready4 additional board, it is first necessary to place a microcontroller in DIP28 package into the appropriate socket supplied on the board. The microcontroller is programmed with the dsPICFlash programmer that is plugged via its IDC10 connector into a 2x5 connector CN6 supplied on the board. In order to reset the microcontroller, just press the RESET button. When the programming process is finished, it is necessary to place jumpers over the 2x5 connector CN6, Figure 1.

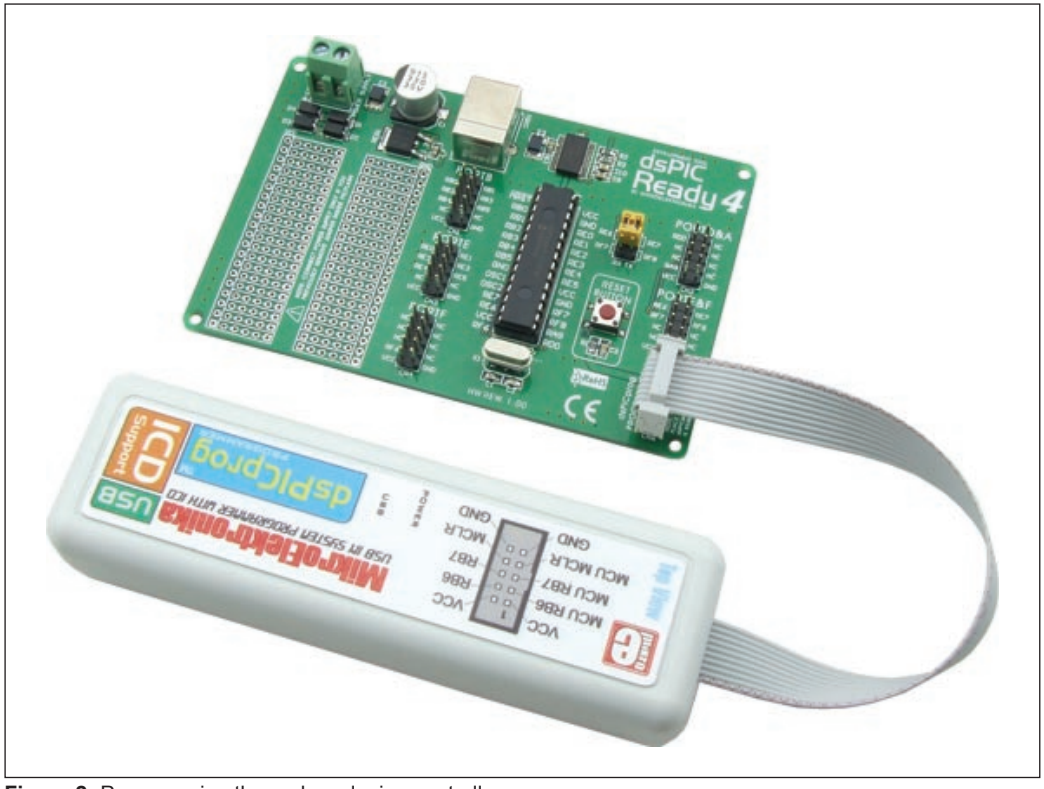


**Figure 2:** Programming the on-board microcontroller

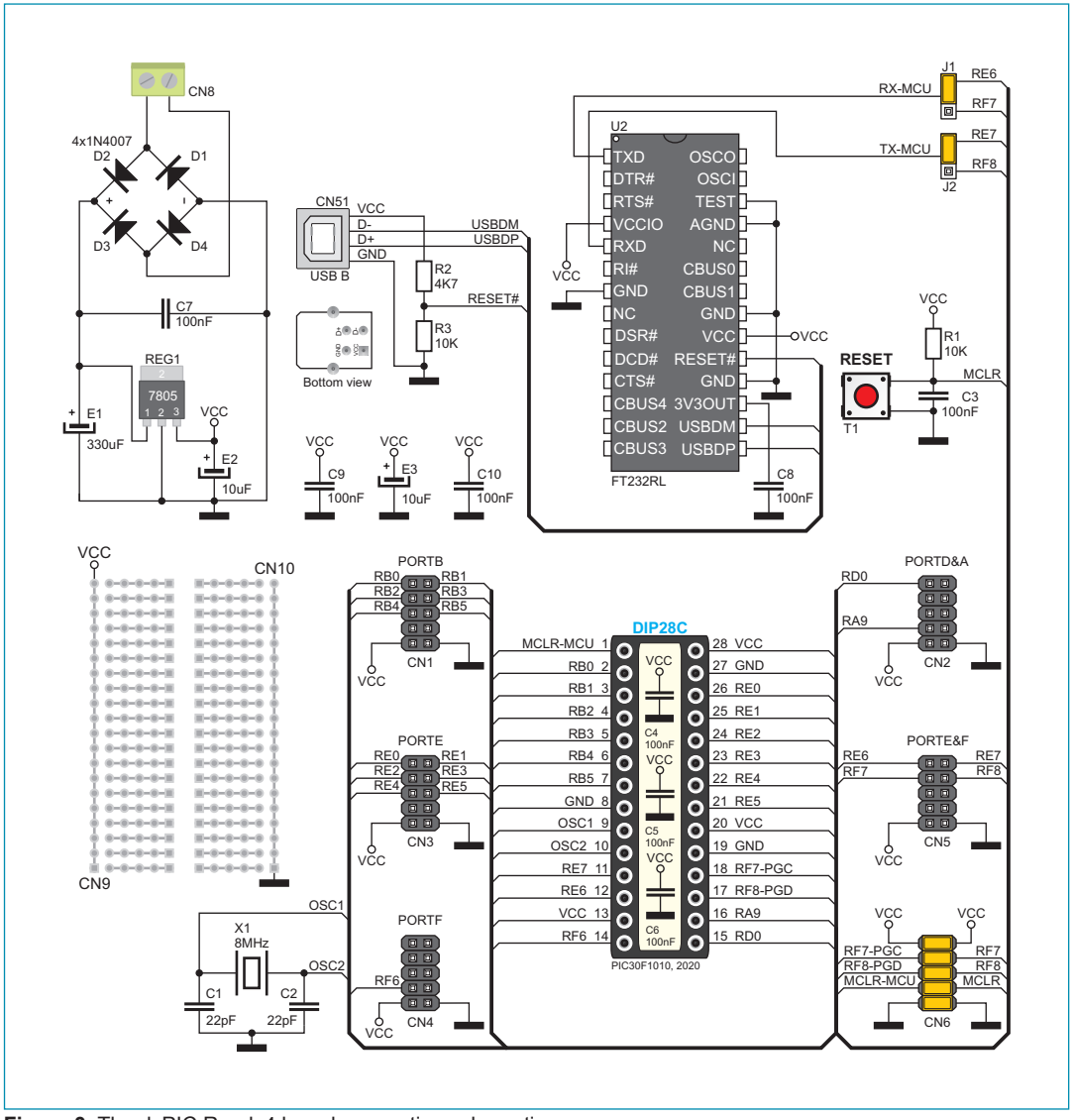


**Figure 3**: The dsPIC Ready4 board connection schematic

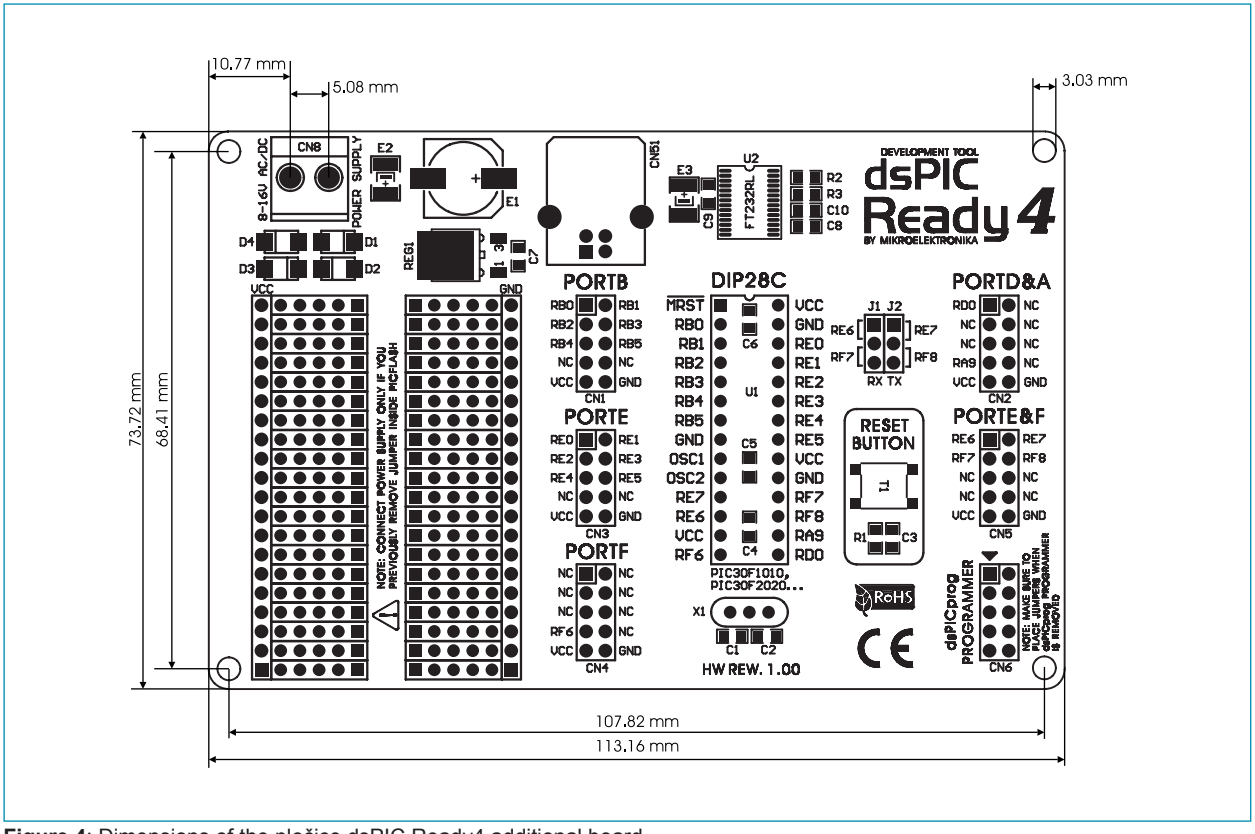


**Figure 4**: Dimensions of the pločice dsPIC Ready4 additional board

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