

COG2x16 LCD BOARD™

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

COG2x16 LCD BOARD

The *COG2x16 LCD BOARD* additional board is a LCD used for displaying alphanumeric in two lines each containing 16 characters. The additional board is placed on the development system by connecting 2x5 female connector CN1 on the additional board to 2x5 male connector on some development system's port. Potentiometer P1 is used to adjust display contrast.

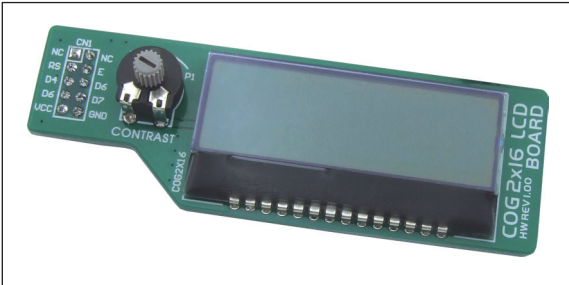


Figure 1: COG2x16 LCD BOARD

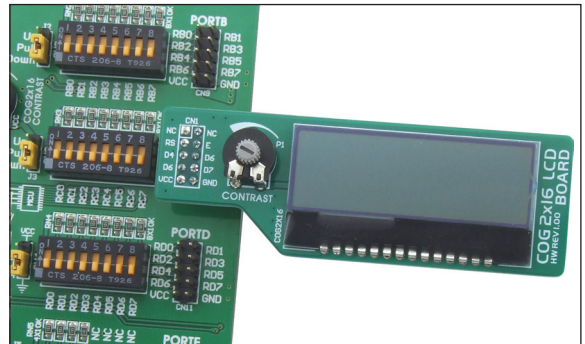


Figure 2: COG2x16 LCD BOARD placed on the development system



Figure 3: COG2x16 LCD BOARD's back side

COG 2x16 LCD BOARD pins' function:

- Vee - Display contrast regulator by changing power supply voltage via potentiometer P1
- RS - Register selection. By providing a logic one (1) on the pin, data registers will be selected. By providing logic zero (0) on the pin, instruction registers will be selected.
- R/W - Reading/Writing selection. By providing a logic one (1) on the pin, data will be read from the display. By providing a logic zero (0) on the pin, data will be displayed on the LCD.
- E - I/O enabled
- D0-D15 - Pins used for sending data to LCD

Pins D4, D5, D6 and D7 are used for receiving data sent by the microcontroller, when D0, D1, D2 and D3 pins are fed with a logic zero (0).

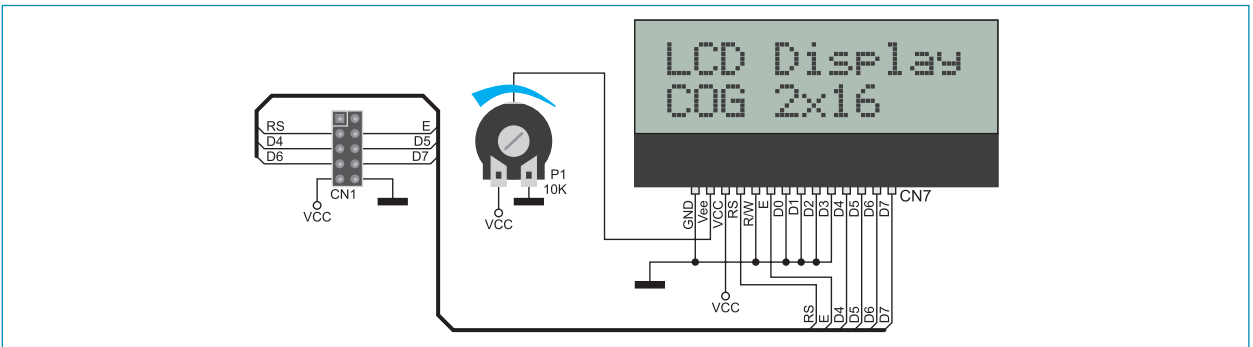


Figure 4: COG2x16 LCD BOARD connection schematic