

# Serial Ethernet2™

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**

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## Serial Ethernet2

The Serial Ethernet2 additional board is used to connect a development system to the Ethernet communication network.

### Key features:

- Serial SPI communication;
- IEEE 802.3 standard supported;
- 3.3V or 5V power supply voltage;
- Voltage translators to provide systems with different voltage levels.

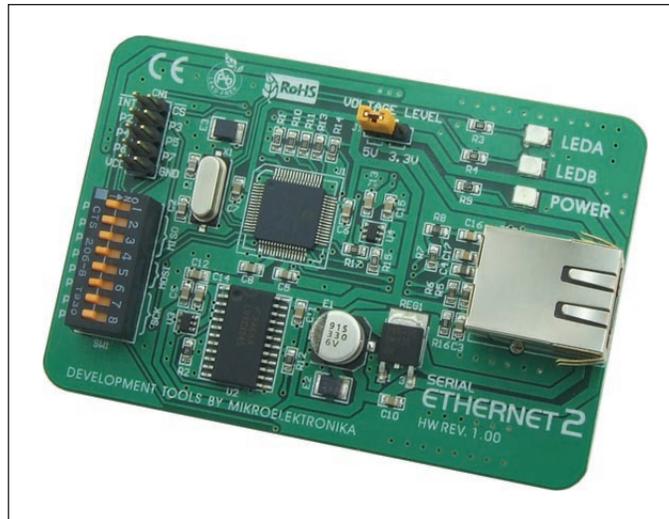


Figure 1: Serial Ethernet2 additional board

### How to connect the board?

The Serial Ethernet2 board can be easily connected to a development system via a 2x5 connector CN1. This connector is connected to a development system port that is used for serial SPI communication. Depending on the development system in use, it is necessary to set the appropriate switch on the DIP switch SW1 to the ON position, table 1. The power supply voltage of the additional board depends on the development system the board is connected to. If the board is connected to a 5V development system, jumper J1 should be placed in the 5V position. Likewise, if the board is connected to a 3.3V development system, jumper J1 should be placed in the 3.3V position. The RJ45 connector CN5 is used to establish connection between the additional board and Ethernet network. A LED marked POWER indicates whether the additional board is turned on or off. The additional board uses LEDs marked LEDA and LEDB to indicate data transfer through the Ethernet network.

	SCK	MISO	MOSI
P2		Easy dsPIC, Easy 24-33	
P3	EasyPIC, EasyLV-18F, LV18F, Easy 24-33, BigPIC		Easy dsPIC
P4		EasyPIC, EasyLV-18F, LV18F, BigPIC	
P5			EasyPIC, EasyLV-18F, LV18F, Easy 24-33, BigPIC, EasyAVR, Easy8051
P6	Easy dsPIC	EasyAVR, Easy8051	
P7	EasyAVR, Easy8051		
Position of switches on DIP switch SW1 for appropriate development system			

Table 1

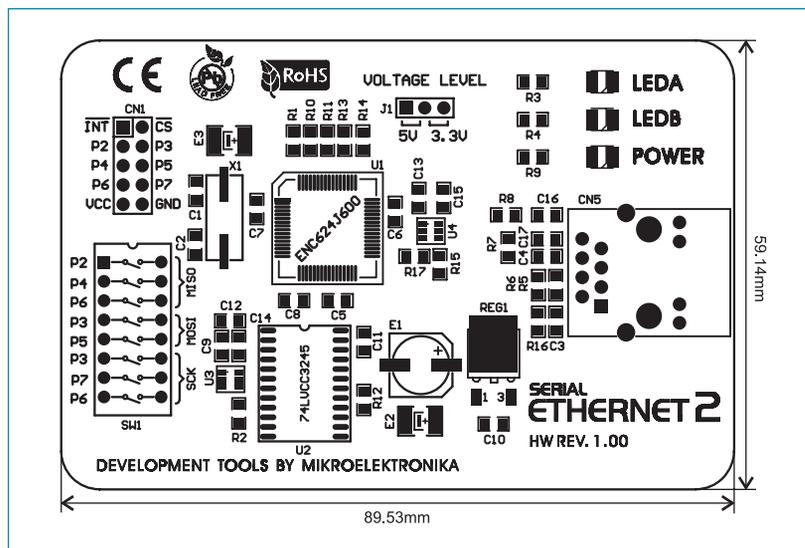


Figure 2: Dimensions of the Serial Ethernet2 additional board

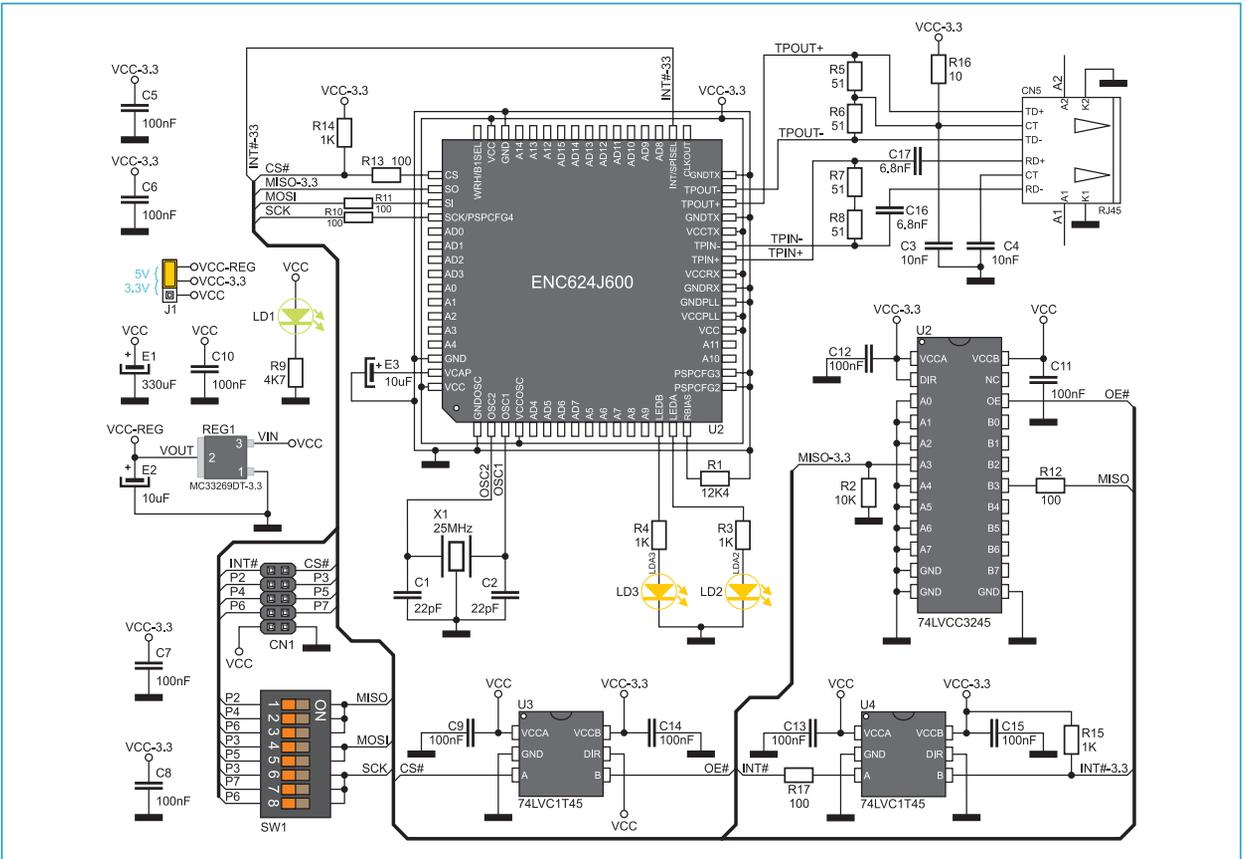


Figure 3: Serial Ethernet2 board connection schematic

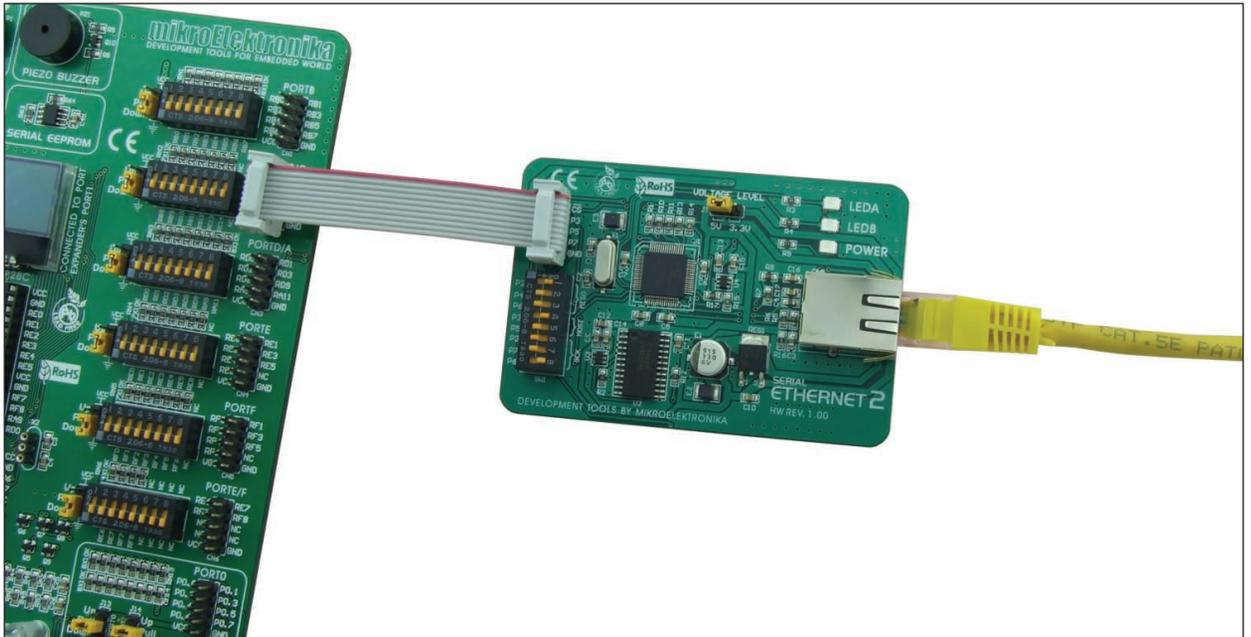


Figure 4: Serial Ethernet2 connected to a development system



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