

mikroBotloader for



Ready<sup>for PIC</sup>  
BOX edition

Bootloader software represents irreplaceable tool  
for transferring program from a PC to microcontroller  
on Ready for PIC

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I want to express my thanks to you for being interested in our products and for having confidence in Mikroelektronika.

The primary aim of our company is to design and produce high quality electronic products and to constantly improve the performance thereof in order to better suit your needs.

A stylized, handwritten signature in black ink, consisting of a large 'C' followed by several loops and a long horizontal stroke.

Nebojsa Matic  
General Manager

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# 1. Programming with bootloader

For programming, microcontroller use bootloader program which is preinstalled in to MCU memory. To transfer .hex file from a PC to MCU you need bootloader software (**mikroBootloader**) which can be downloaded from:



<http://www.mikroe.com/eng/products/view/734/ready-for-pic-board/>

After software is downloaded unzip it to desired location and start mikroBootloader software.

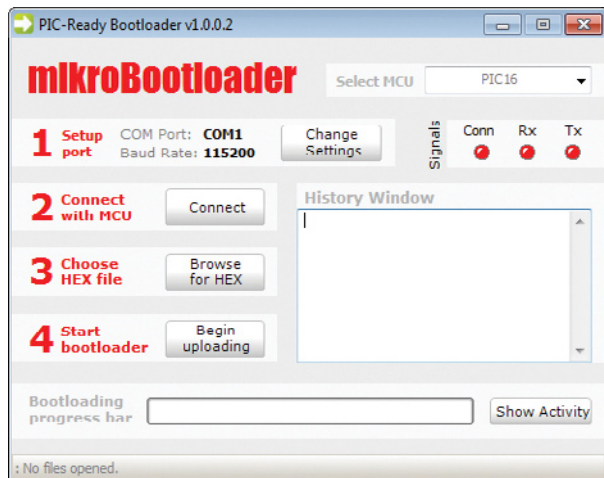
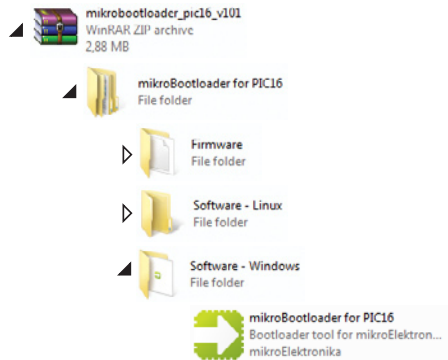


Figure 1-1: mikroBootloader software

**note**

Connect Ready for PIC with a PC before starting mikroBootloader software

# Identifying device COM port

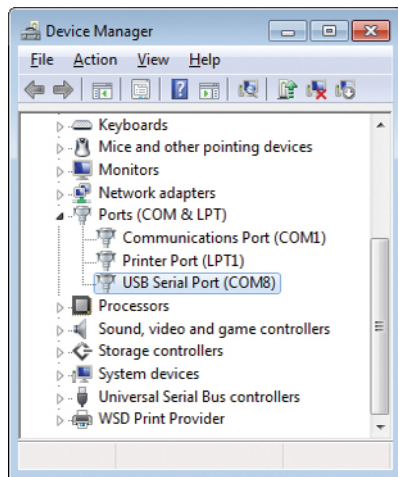


Figure 1-2: Identifying COM port

## note

*In Device Manager you can see which COM port is assigned to mikromedia (in this case COM8)*

# step 1 - Choosing COM port

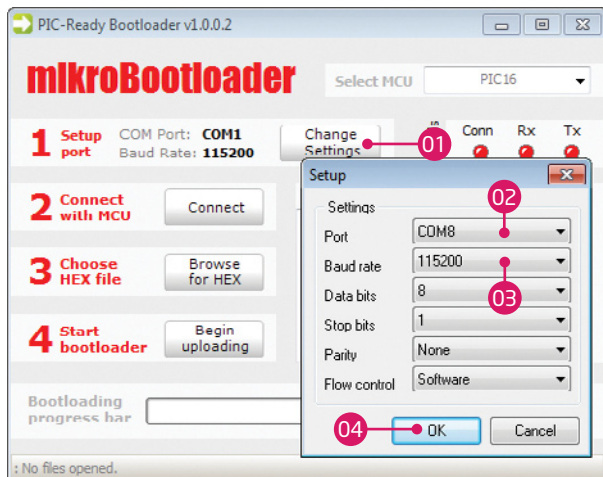


Figure 1-3: Selecting COM port

- 01 Click on Change Settings button
- 02 Select USB COM port (in this case COM8)
- 03 Set Baud rate to 115200
- 04 Click OK button

## step 2 - Connecting with a PC



Figure 1-4: Connecting Ready for PIC with mikroBootloader

- 01 MCU family is set to PIC16
- 02 Reset Ready for PIC and within 5s click on Connect button

## step 3 - Browse for .hex file

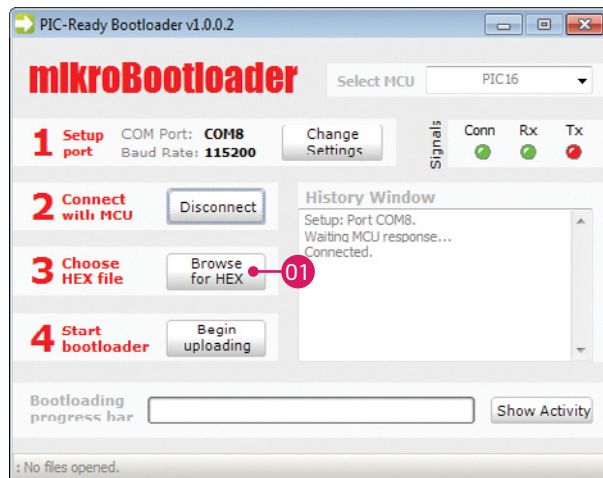


Figure 1-5: Browsing for .hex file

- 01 Click on Browse for HEX and from pop-up window (figure 3-6) select .hex file which will be uploaded to MCU memory

## step 4 - Select .hex file

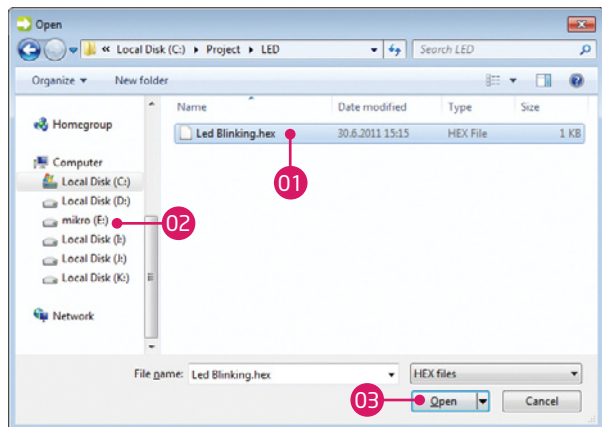


Figure 1-6: Selecting .hex file

- 01 Select desired .hex file
- 02 Folder list
- 03 Click on Open button

## step 5 - Uploading .hex file



Figure 1-7: Begin uploading

- 01 Click on Begin uploading button to start .hex file transfer from a PC to microcontroller

## step 6 - Progress bar



Figure 1-8: Bootloading progress bar

01 Via progress bar you can monitor .hex file uploading process

## step 7 - Reset MCU

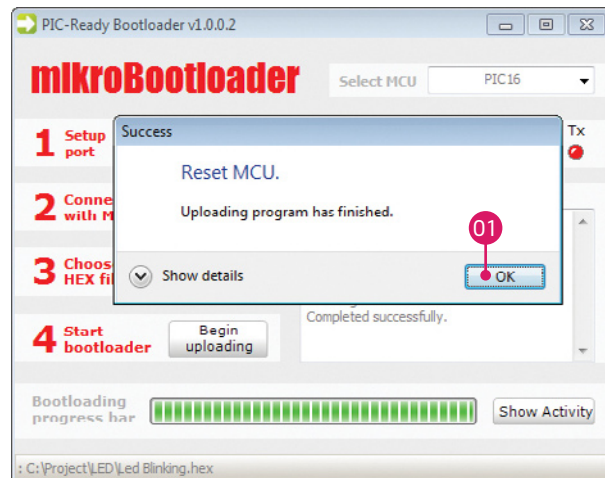
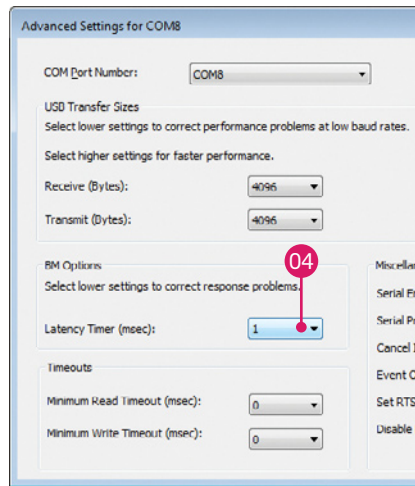
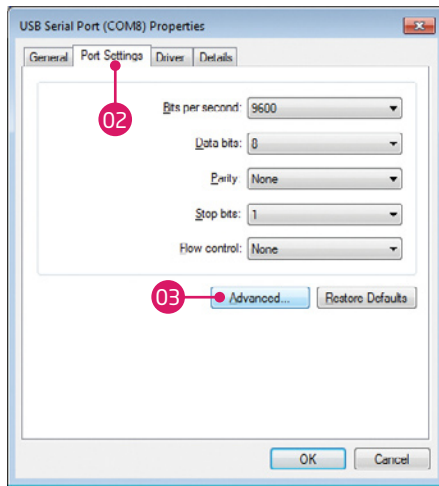
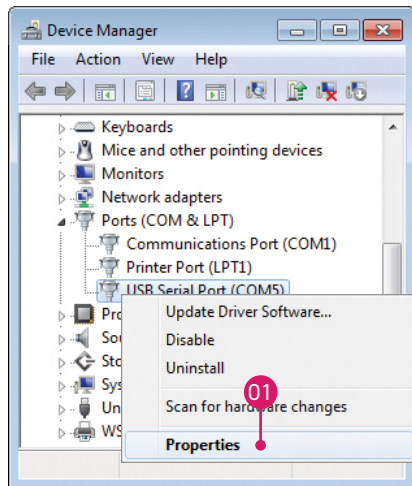


Figure 1-9: Uploading is finished

01 Click on OK button after uploading is finished. Reset MCU and you can see product of your work



# Tips and Tricks: Speed-up UART data transfer



## note

*If .hex file transfer from your PC to MCU is too slow you can try to speed-up data transfer by setting latency time of COM port to 1. To change latency time go to Device manager:*

- 01 Right click on USB Serial Port (COM8) and click on Properties
- 02 In USB Serial Port (COM8) Properties select Port Settings tab
- 03 Click on Advanced... button
- 04 Set latency Timer to 1 (or choose another value) and click on OK button

Notes:

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# Ready<sup>for PIC</sup>

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