



In Circuit Emulator for Atmel AVR microcontrollers

Firmware upgrade



Introduction

Firmware upgrading is done automatically, when AVR Studio detects that firmware version in JTAGCable II is older then version of AVR Studio. You can't continue working with JTAGcable II without firmware update.

Important:

Programmer COM port number, have to be selected as COM4 or lower. For COM5 and greater numbers, AVR Studio will not upgrade firmware. See procedure for COM port number change at end of this document.

Procedure for automatic firmware upgrade

After connecting to JTAGcable II, AVR Studio detects old firmware version and show a dialog asking for upgrade.



After accepting, another dialog will show up. If "Hex file" field is empty click "Browse..." button and point path to "Upgrade.ebn" file in "JTAG ICE" folder of your AVR Studio install folder. (Typical path is "C:\Program Files\Atmel\AVR Tools\JTAGICE")



AVR AVRprog		
Hex file		
C:\Program Files\	\Upgrade.ebn	
Browse		Exit
Flash		
Program	Verify	Read
EEPROM		
Program	Verify	Read
Device		
ATmega16	v	Advanced

"Program" button in "Flash" group will upload correct version of firmware. After finished uploading, JTAGcable II have to be restarted (by disconnecting and connecting again USB cable). Programmer is now ready for further usage.

If during update error occur (This may happen if communication during uploading will fail, or wrong file will be uploaded) you will have to manually upgrade JTAGcable II firmware.

Procedure for manual firmware upgrade

- 1. Connect JTAGcable II to traget board, which have own power supply and posibility to switch it on/off.
- 2. Turn off target board power supply.
- 3. Disconnect USB cable from JTAGcable II.
- 4. Connect USB cabel to JTAGcable II, yellow LED should blink.
- 5. In about 2.5 seconds turn on target board power supply, yellow LED should blink few times.
- 6. Disconnect JTAGcable II from target board.
- 7. In "AVR Studio" menu choose Tools \rightarrow AVR Prog.
- 8. Click "Browse" button and locate "Upgrade.ebn" file in "JTAG ICE" folder of your AVR Studio install folder. (Typical path is "C:\Program Files\Atmel\AVR Tools\JTAGICE")
- 9. Click "Program" button in "Flash" group.
- 10. If programming is completed close "AVRprog" window.
- 11. Disconnect USB cable from JTAGcable II.



Procedure for programmer COM port number change

- Connect JTAGcable II to PC.
 Open "Control Panel".
- 3. Open "System".
- 4. Choose "Hardware".
- Open "Device manager".
 In Ports group find "Propox JTAGcable II Serial Port".

🚇 Menedżer urządzeń	
Plik Akcja Widok Pomoc	
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🖃 🏰 Inne urządzenia	
Kontroler RAID	
H H H Karty sieciowe	
H Wiatury	
🛨 🧐 Kontrolery azwięku, wideo i gier	
Kontrolery nosta magistrali IEEE 1394	
E Controlery IDE ATA/ATAPI	
Kontrolery uniwersalnei magistrali szeregowei	
The Mysz i ippe urządzenia wskazujące	
E V Porty (COM LET)	
Port drukarki (IPT1)	
Port komunikacyjny (COM1)	
Port komunikacyjny (COM2)	
Propox JTAGcable II Serial Port (COM6)	_
+ A Procesory	
🛨 🤐 Stacje dyskietek	~



- 7. Right click on it, and choose "Properties".
 8. Choose "Port Settings" tab.
 9. Click on "Advanced..." button.
 10. Choose COM port number with 1 to 4 range.

Advanced Settings for COM6			?×
COM Port Number: USB Transfer Sizes Select lower settings to correct performance problems at low b Select higher settings for faster performance. Receive (Bytes): Transmit (Bytes): 64	oaud rates.	OK Canci Defau	el Its
BM Options	Miscellaneous Options		
Latency Timer (msec):	Serial Printer Cancel If Power Off		
Timeouts Minimum Read Timeout (msec): 0 • Minimum Write Timeout (msec): 0 •	Event On Surprise Removal Set RTS On Close Disable Modem Ctrl At Startup		

11. Accept choice with OK and close not needed windows.

