

How to apply firmware to ELGATO GSM-board PCI/ISA/K16


To execute firmware update you will need the following equipment:

- Main unit - device with installed ELGATO GSM-board(s) to be updated with firmware (only 1 GSM-board can be updated at 1 time)
- USB-Blaster (USB programming device)

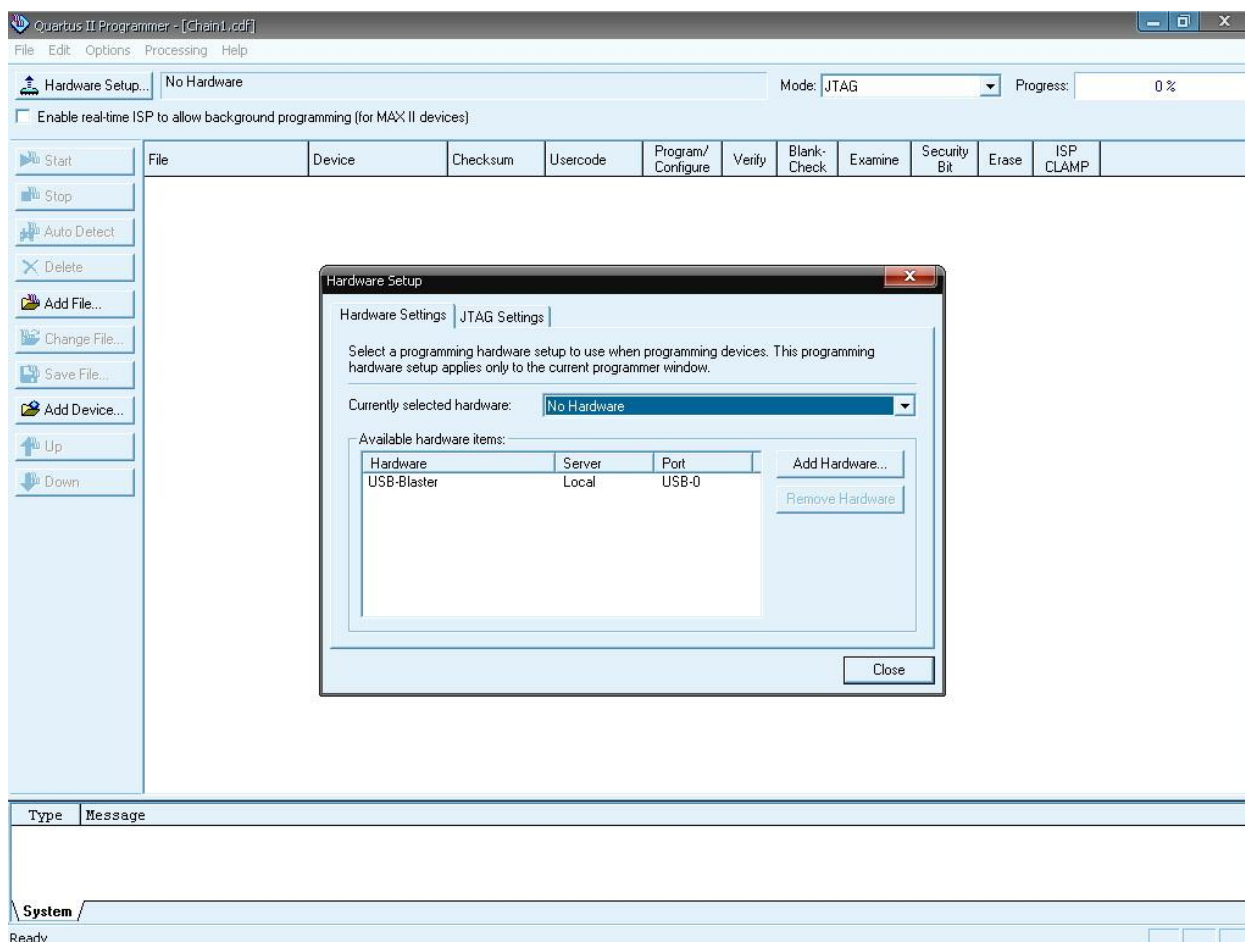


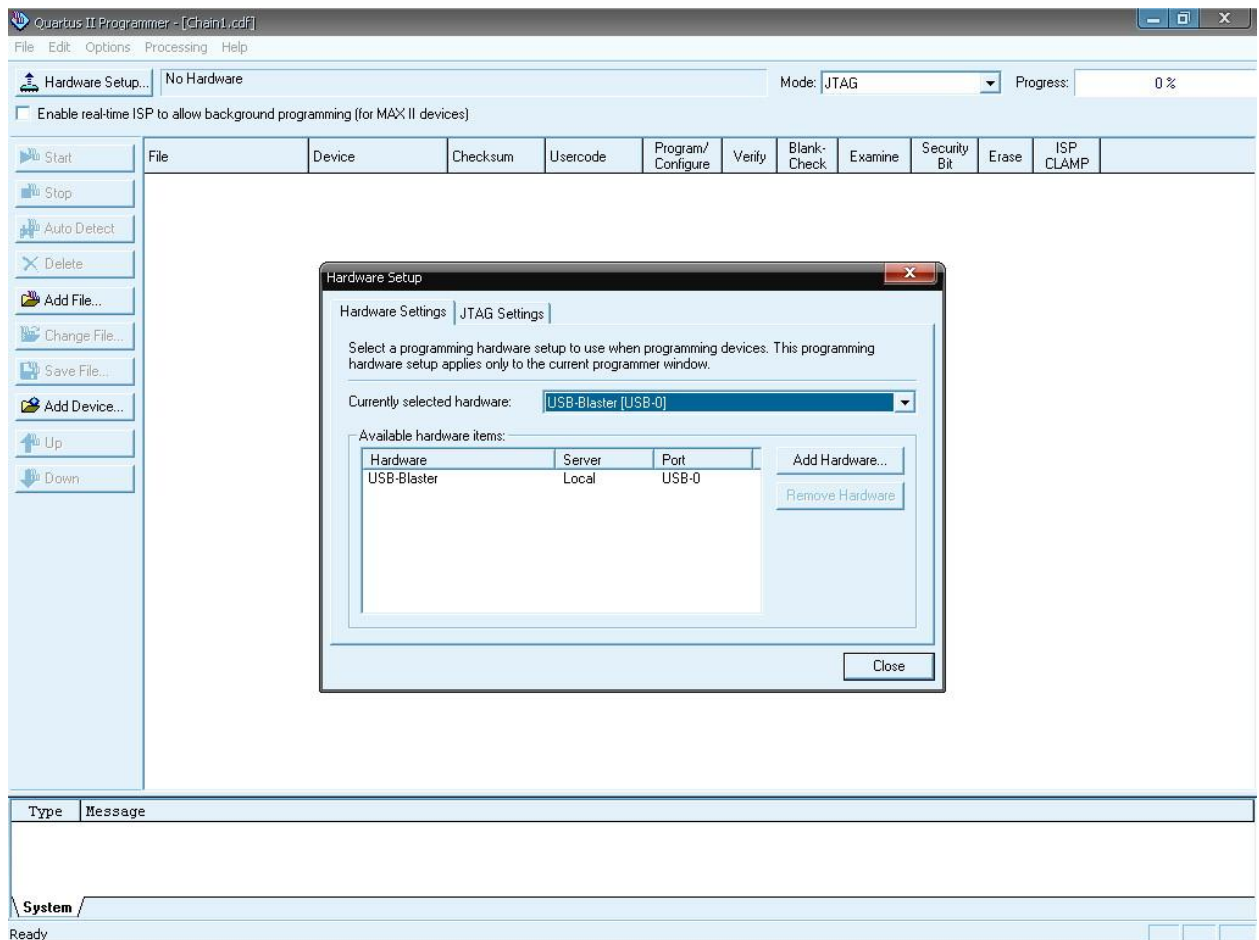
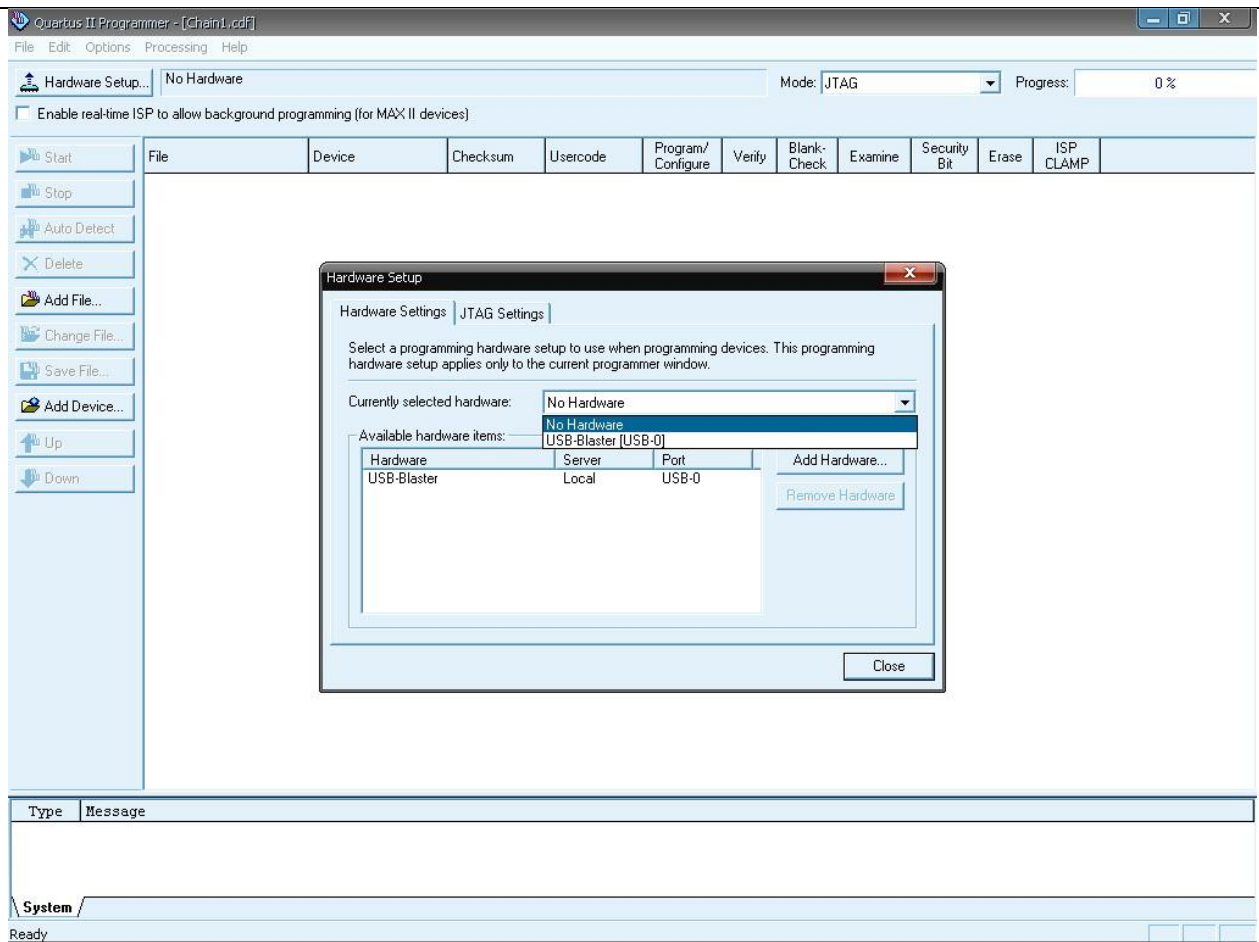
- Personal computer or Notebook (OS Windows XP) with USB-Blaster Quartus Drivers and Quartus Software installed (freely available on www.elgato.com.ua in **Download** section)
- ELGATO Firmware file

Part 1 – Initial steps

Step 1.1	Before starting any actions need to DISCONNECT power on GSM-board to be updated with firmware. This can be done by disconnecting from power source the main unit where this GSM-board is installed.
Step 1.2	Connect special multi-pin connector of programming USB-device (USB Blaster) to connector on GSM-board to be updated with firmware, like shown on photo 
Step 1.3	Connect USB-cable of USB-Blaster to working computer (OS Windows) with Quartus pre-installed drivers and software. You can download and install “ Quartus Drivers ” and “ Quartus Software ” from www.elgato.com.ua (Download section).
Step 1.4	Now start main unit with GSM-board but immediately prevent system boot by continuous pressing "PAUSE" key on keyboard (pausing boot) or "DELETE" key (entering BIOS) or with any other suitable way. This way power supplied to GSM-board(s) but system prevented from boot.

The screenshot shows the "Quartus II Programmer - [Chain1.cdf]" window. The menu bar includes File, Edit, Options, Processing, and Help. Below the menu is a toolbar with icons for Hardware Setup, Start, Stop, Auto Detect, Delete, Add File..., Change File..., Save File..., Add Device..., Up, and Down. The main area has a tab labeled "Hardware Setup..." with a dropdown menu currently set to "No Hardware". To the right of the dropdown are fields for "Mode:" (set to "JTAG") and "Progress:" (set to "0 %"). Below these is a checkbox labeled "Enable real-time ISP to allow background programming (for MAX II devices)". A table with columns: File, Device, Checksum, Usercode, Program/Configure, Verify, Blank-Check, Examine, Security Bit, Erase, and ISP CLAMP is visible. At the bottom, there is a "Type Message" section and a "System" status bar indicating "Ready".





Quartus II Programmer - [Chain1.cdf]

File Edit Options Processing Help

Hardware Setup...

USB-Blaster [USB-0]

Mode: JTAG

Progress: 0 %

☐ Enable real-time ISP to allow background programming (for MAX II devices)

Start

Stop

Auto Detect

Delete

Add File...

Change File...

Save File...

Add Device...

Up

Down

File	Device	Checksum	Usercode	Program/Configure	Verify	Blank-Check	Examine	Security Bit	Erase	ISP CLAMP
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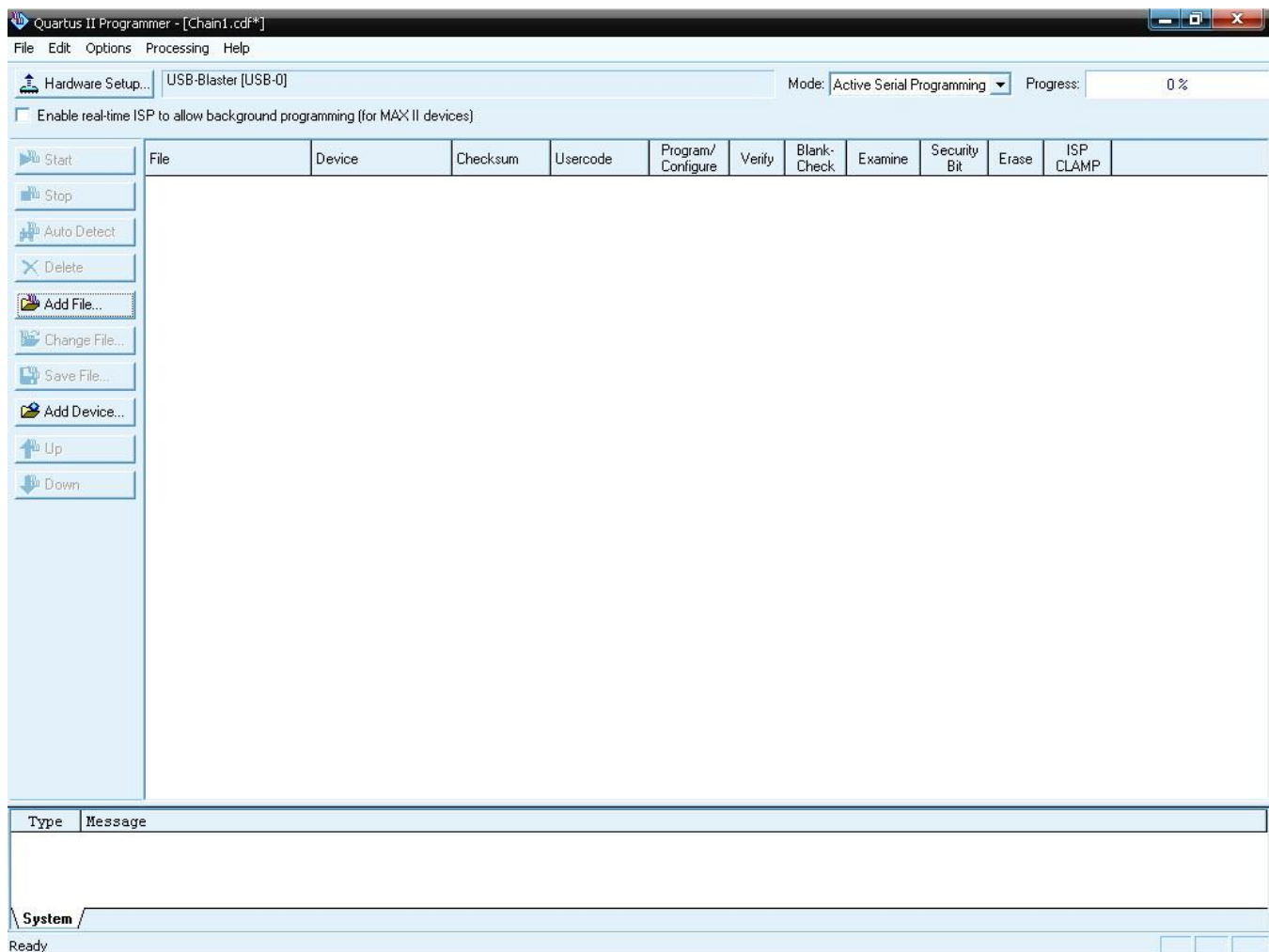
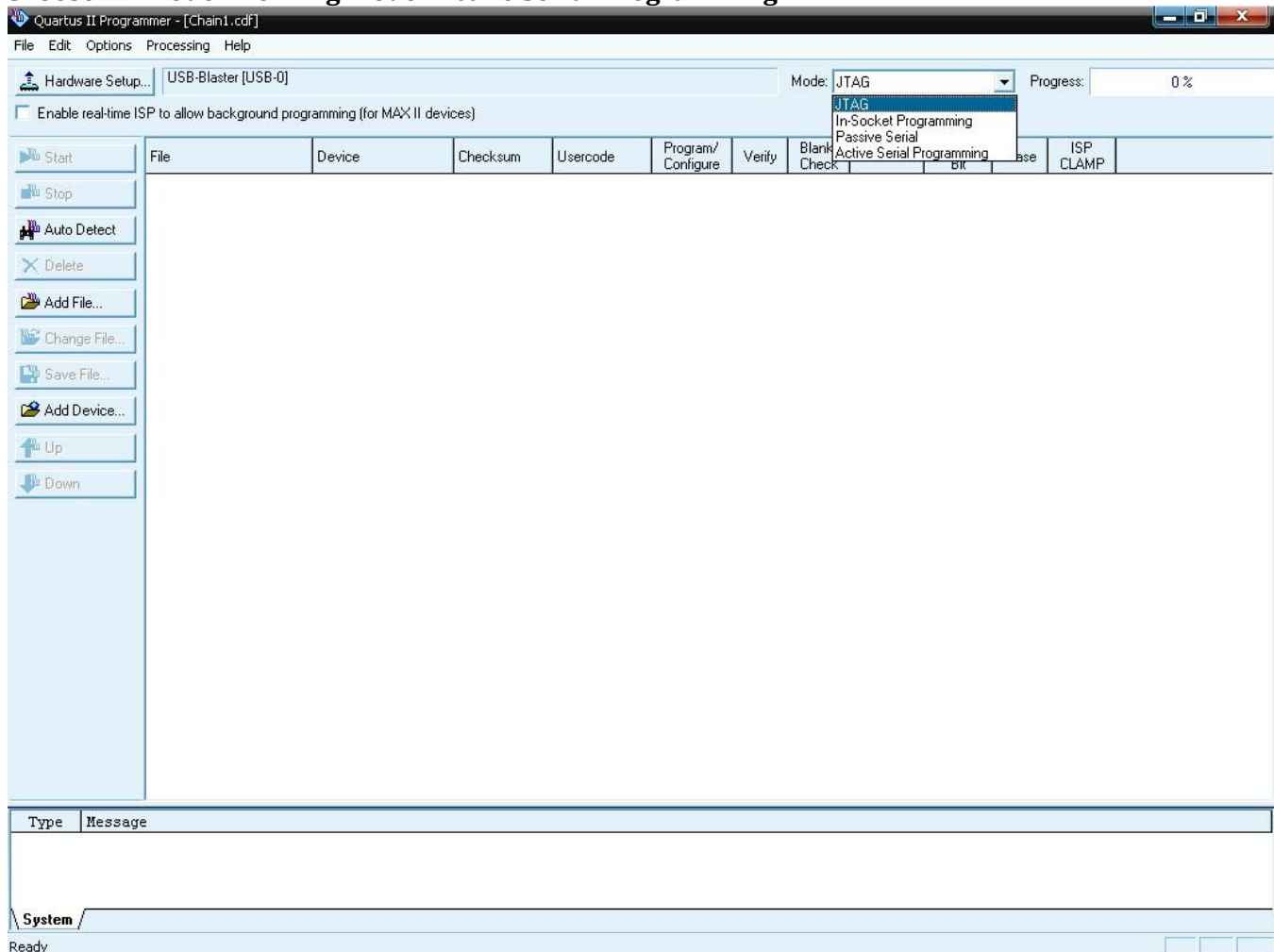
Type	Message
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System

Ready

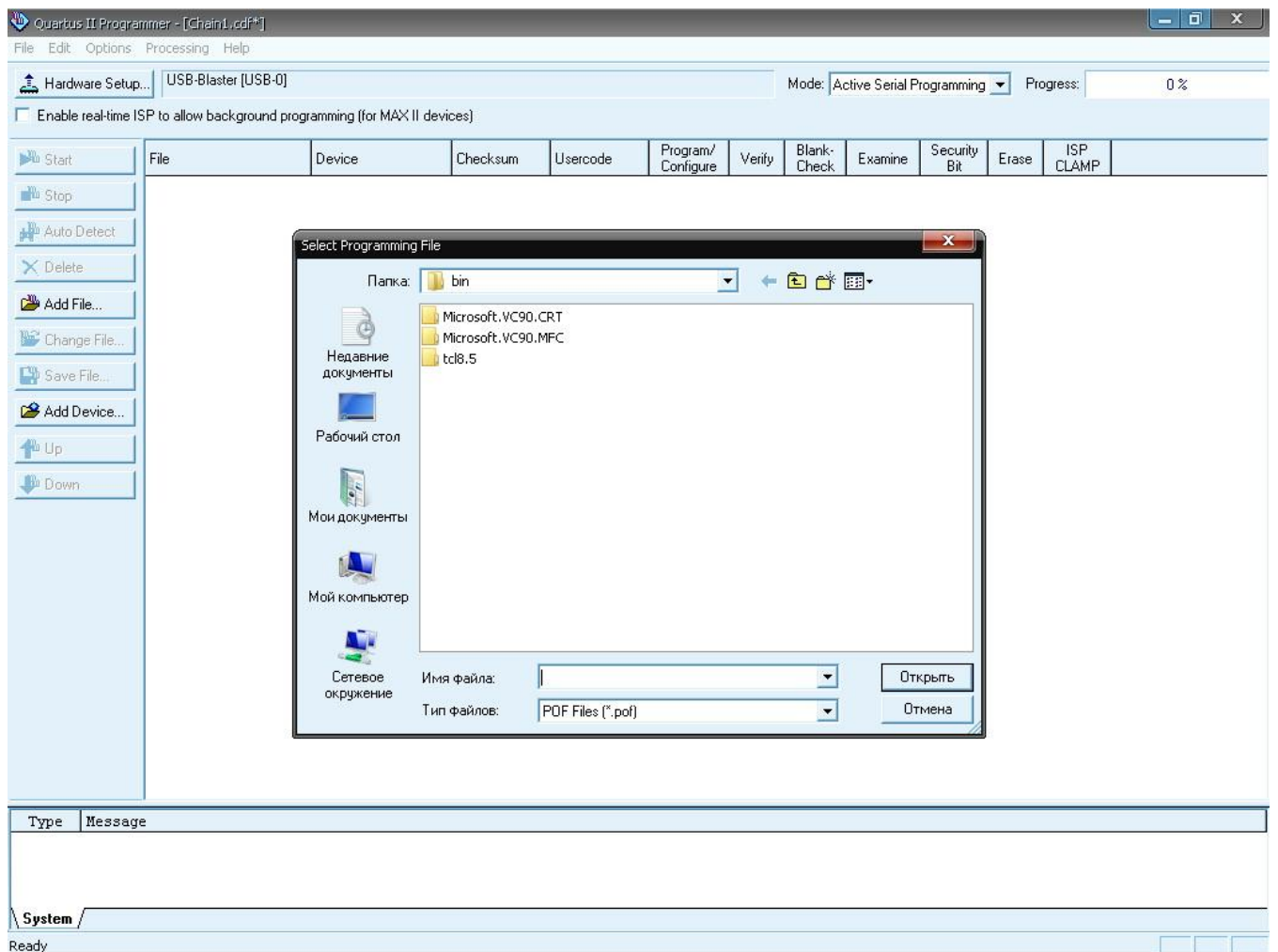
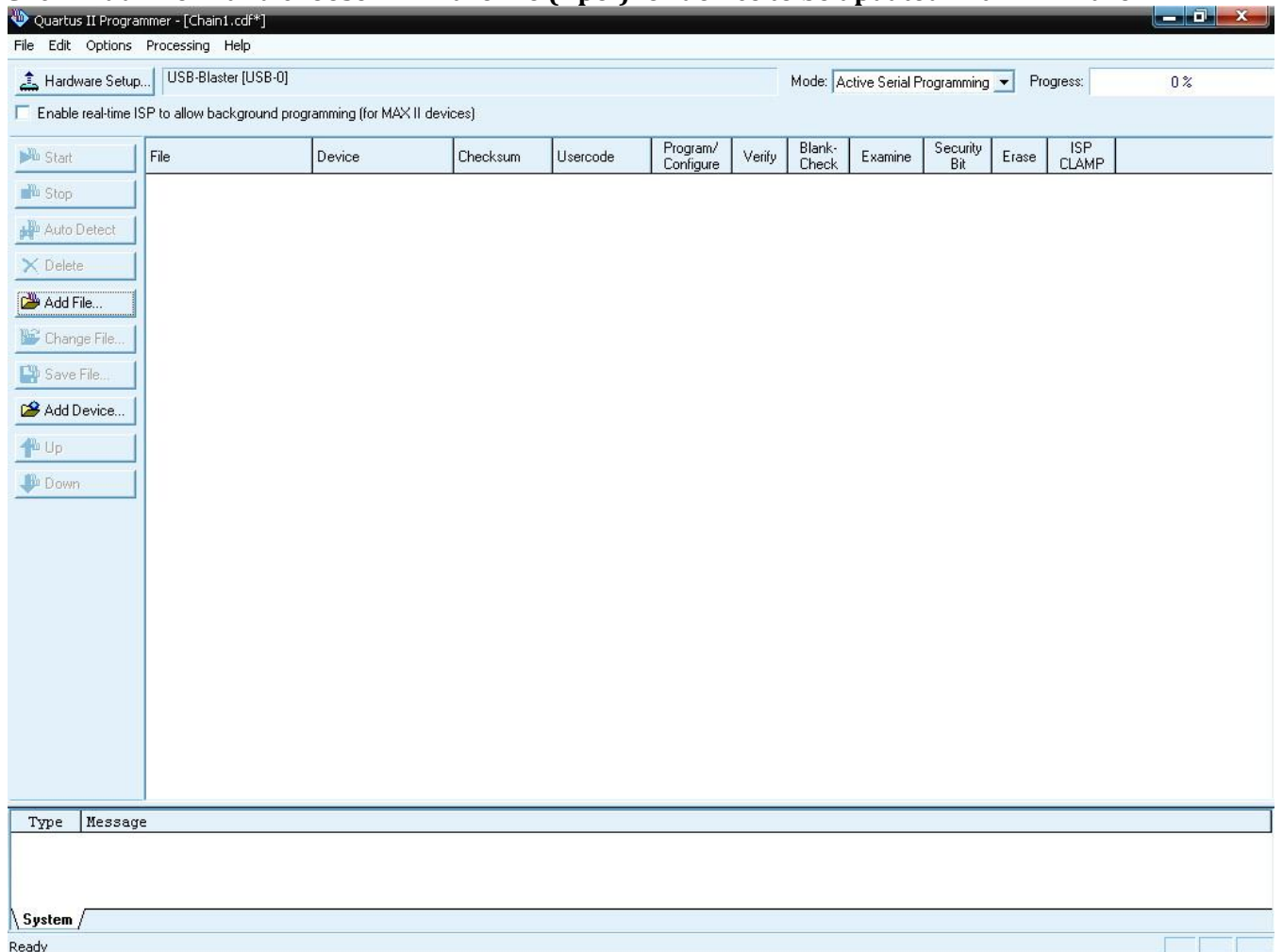
Step 2.2

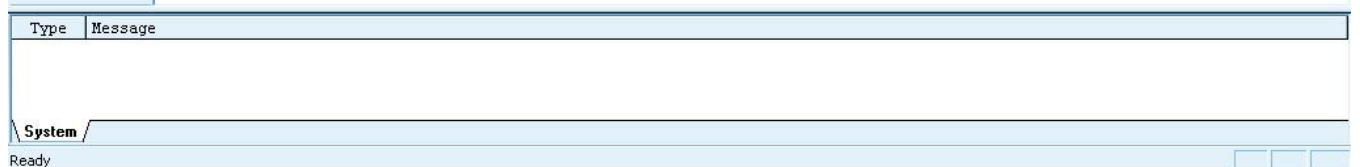
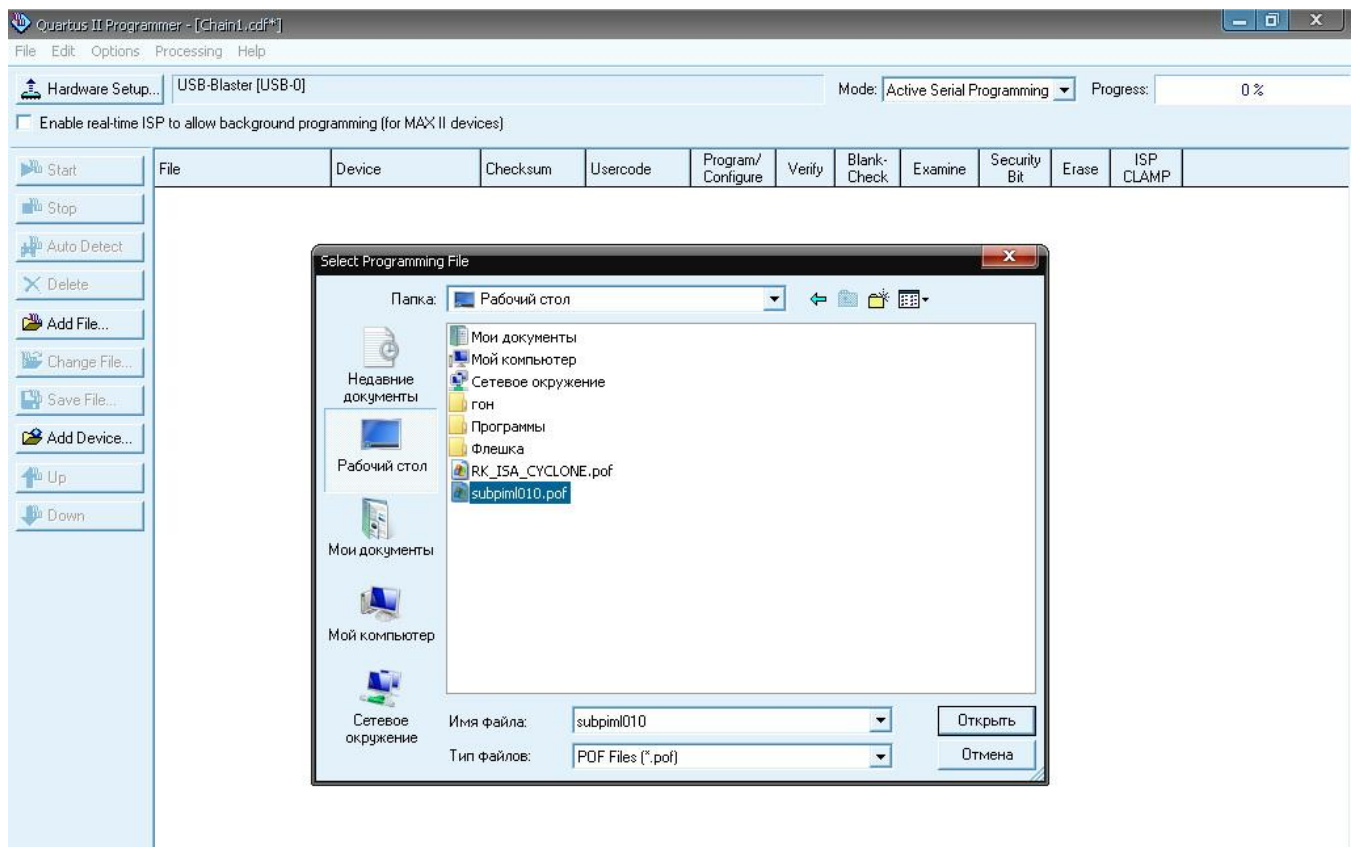
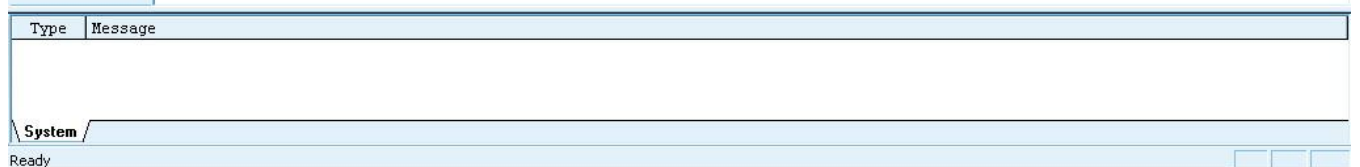
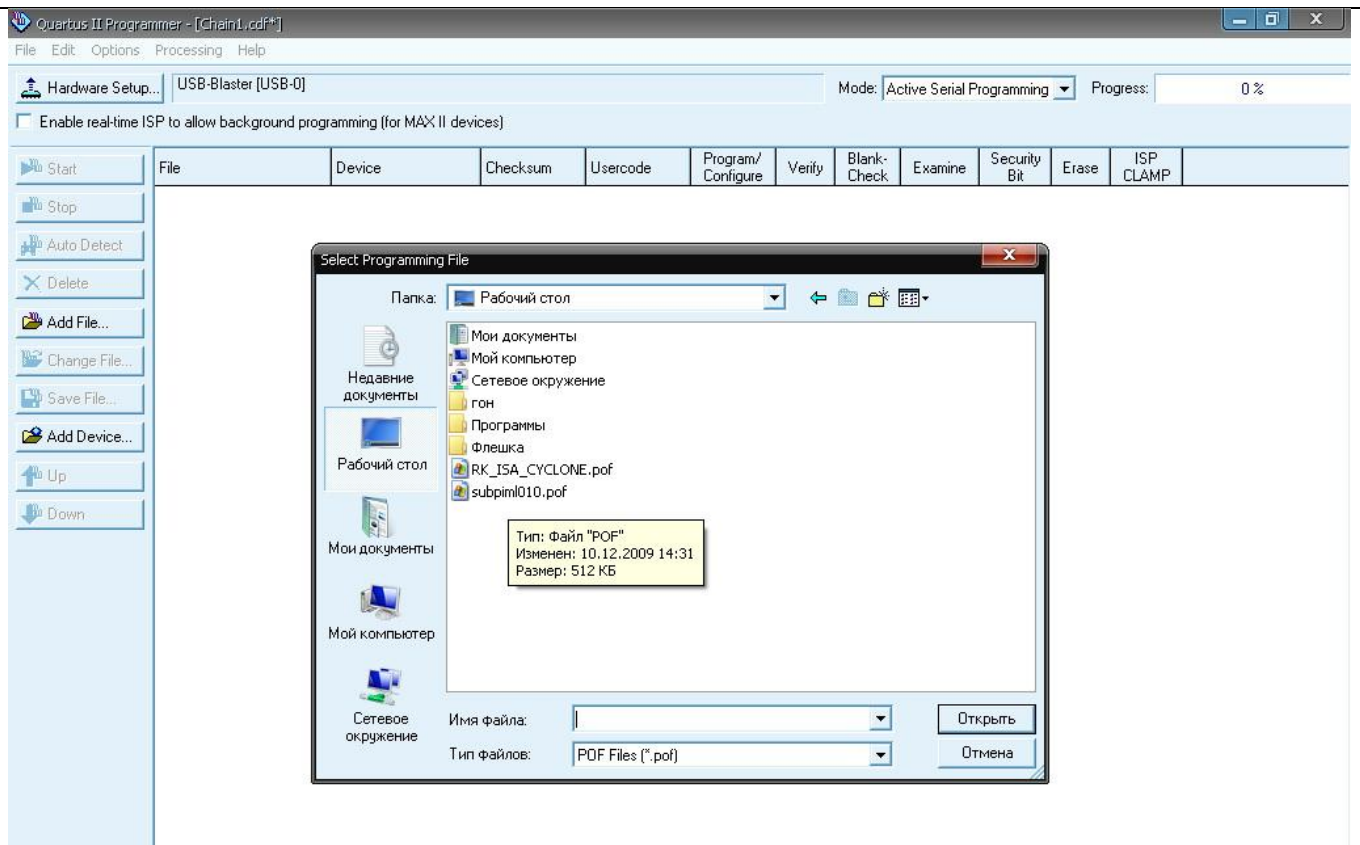
Choose in "Mode" working mode "Active Serial Programming"



Step 2.3

Click "Add File..." and choose firmware file (*.pof) for device to be updated with firmware.





Quartus II Programmer - [Chain1.cdf*]

File Edit Options Processing Help

Hardware Setup...

USB-Blaster [USB-0]

Mode: Active Serial Programming

Progress: 0 %

☐ Enable real-time ISP to allow background programming (for MAX II devices)

Start

Stop

Auto Detect

Delete

Add File...

Change File...

Save File...

Add Device...

Up

Down

File	Device	Checksum	Usercode	Program/Configure	Verify	Blank-Check	Examine	Security Bit	Erase	ISP CLAMP
C:/Documents and Setti...	EPCS4	06CF855C	00000000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

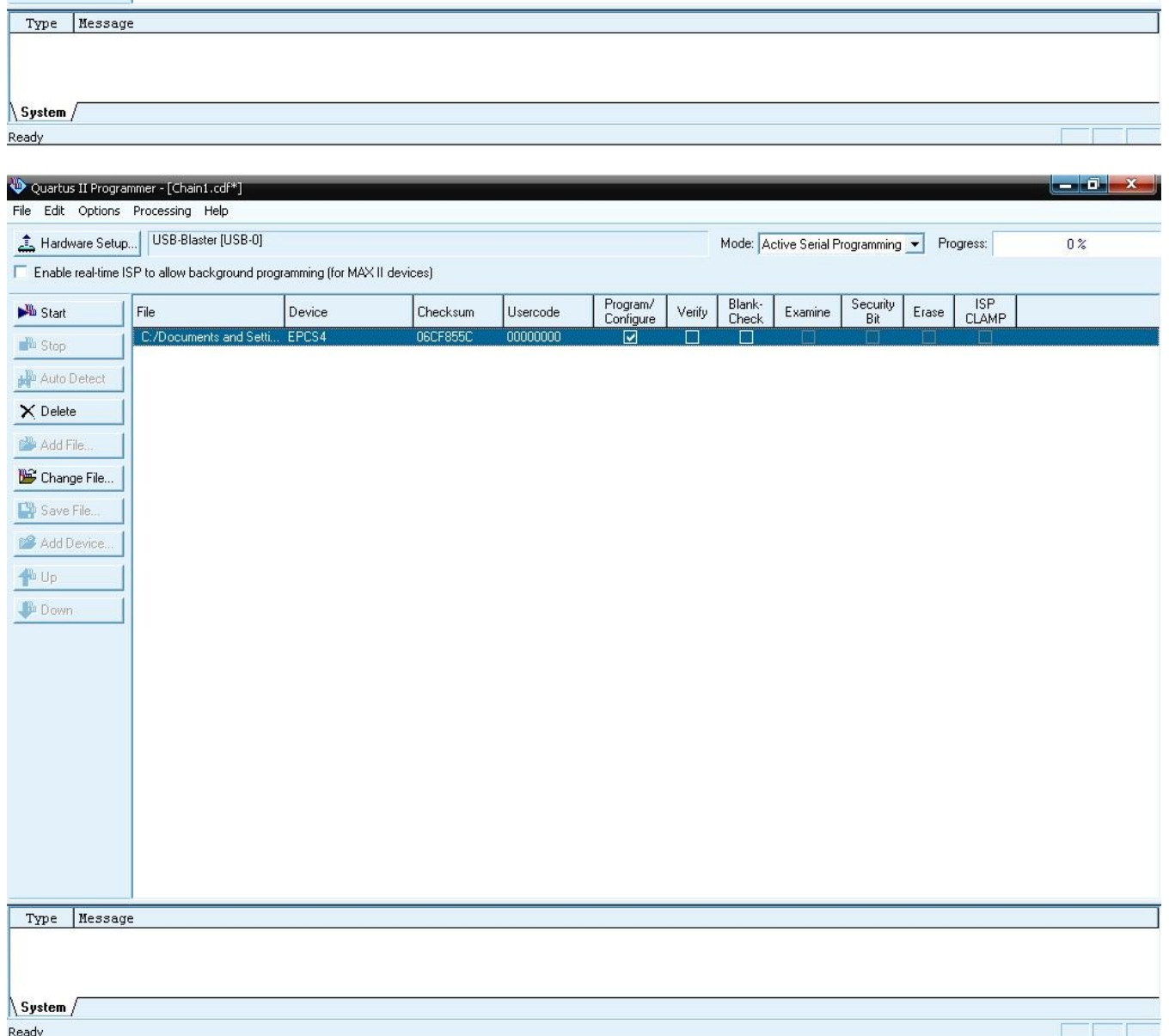
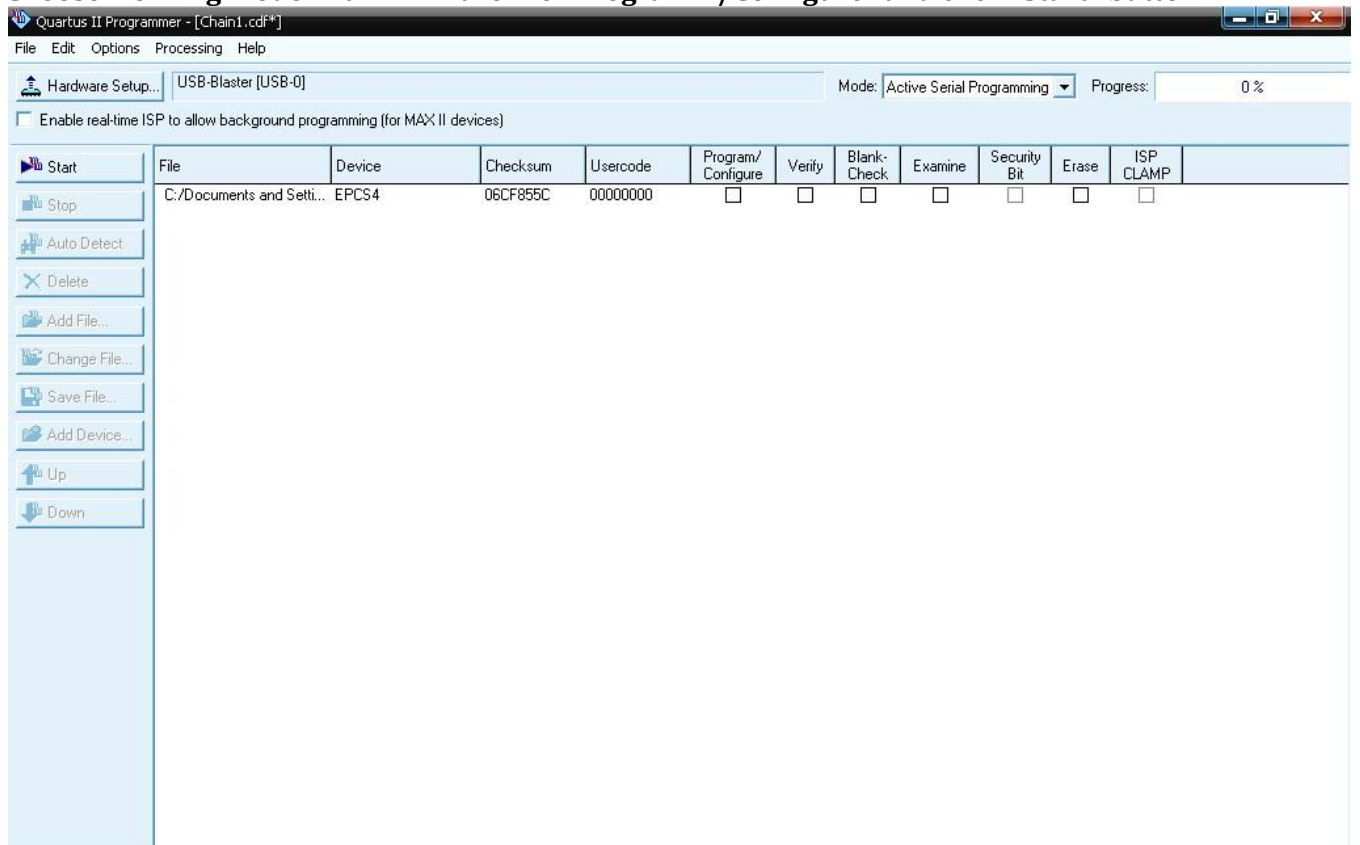
Type Message

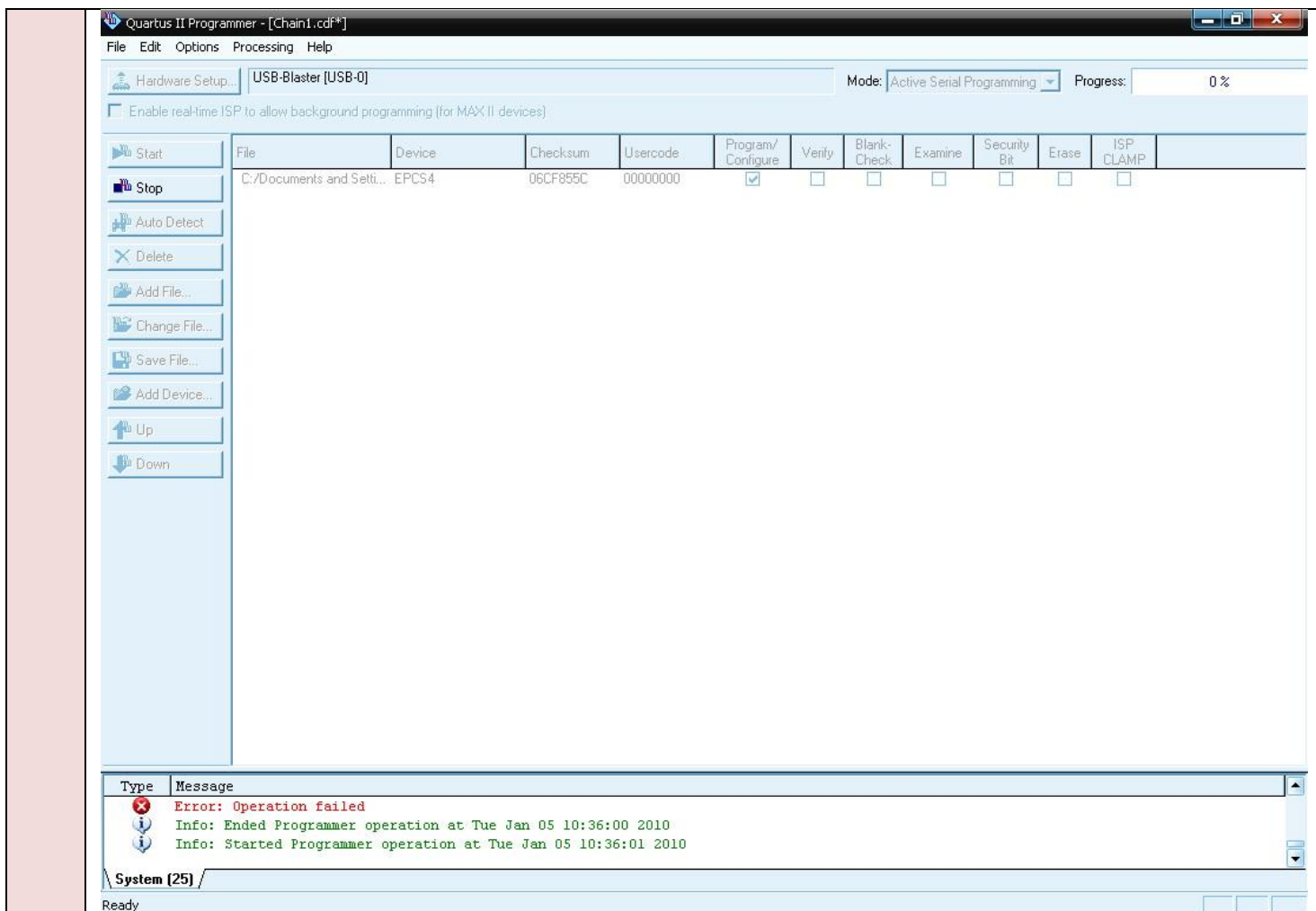
System

Ready

Step 2.4

Choose working mode with firmware file "Programm/Configure" and click "Start" button





After listed operations please turn off device which holds the GSM-board updated with new firmware, disconnect connector of USB-Blaster from GSM-board.

Firmware update for **this** GSM-board completed!