RTC6 Configuration Tool

Document Version 1.3

ABSTRACT

RTC6conf is a software tool to configure SCANLAB RTC6 controller boards and to display various parameters. Both PCI-Express boards (RTC6e) and Ethernet boards (RTC6eth) are supported. This document gives a short overview of how to use RTC6conf.

Following features are available:

RTC6e and RTC6eth

- Display serial number and available options such as 3D-option, Processing-on-the-fly, etc.
- Perform an option upgrade. For that purpose a license file has to be obtained from SCANLAB.
- Display the BIOS version. The BIOS is a part of the RTC6 firmware and stored in flash memory, unlike the other firmware parts that have to be downloaded to volatile memory every time the board is powered up.
- Upgrade the BIOS version.

RTC6eth only

- Search for boards in configurable network segments (subnets) and display board specific parameters.
- Display the version numbers of the stored firmware.
- Display network parameters like MAC address and current IP address.
- Display and change network settings for static IP configuration.
- Erase program and data that have been stored in standalone memory.

GRAPHICAL USER INTERFACE

RTC6conf has only one main window. On the left-hand side, a tree view allows to view available RTC6e boards, to set network parameters and to search for RTC6eth boards, and to view found RTC6eth boards.

1. Use with PCIe Boards

When an RTC6e board is selected in the tree view, its corresponding information is shown on the right-hand side of the dialog. Buttons are provided to upgrade the feature options (“UPGRADE OPTIONS”) and to flash the BIOS (“FLASH BIOS”).

Notice that the options are abbreviated (e.g. “FLY” for “Processing on the fly”). If you hover the mouse over the text, a tooltip opens showing the unabbreviated options.

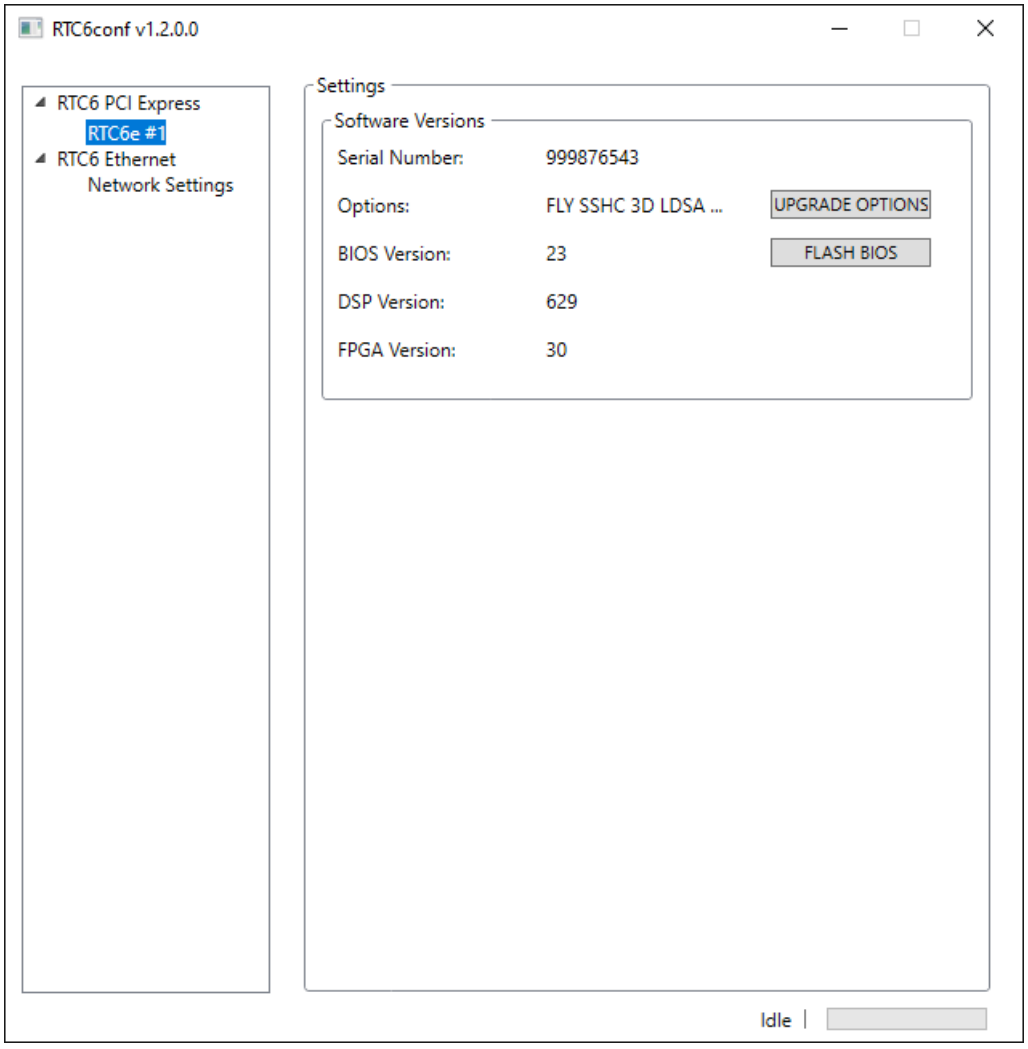


Figure 1: RTC6e Software Versions Panel

2. Use with RTC6eth Boards

2.1 Board Search

Selecting the entry “Network Settings” in the tree view, you can specify all necessary network parameters to search an RTC6eth board in a subnet.

Left-clicking the checkbox “Search enabled” enables or disables a periodic search within the given search interval. A right-click on the checkbox performs a one-time search.

The dropdown box “Search Type” allows choosing between the two search types “Broadcast” and “IP scan”. For each type, the corresponding IP addresses have to be entered in the appropriate text boxes.

To simplify the input of the search subnet’s IP address and net mask, these parameters can be determined automatically from the Windows settings. To do this, click the "Get NIC settings" button in order to populate the text fields with the determined values.

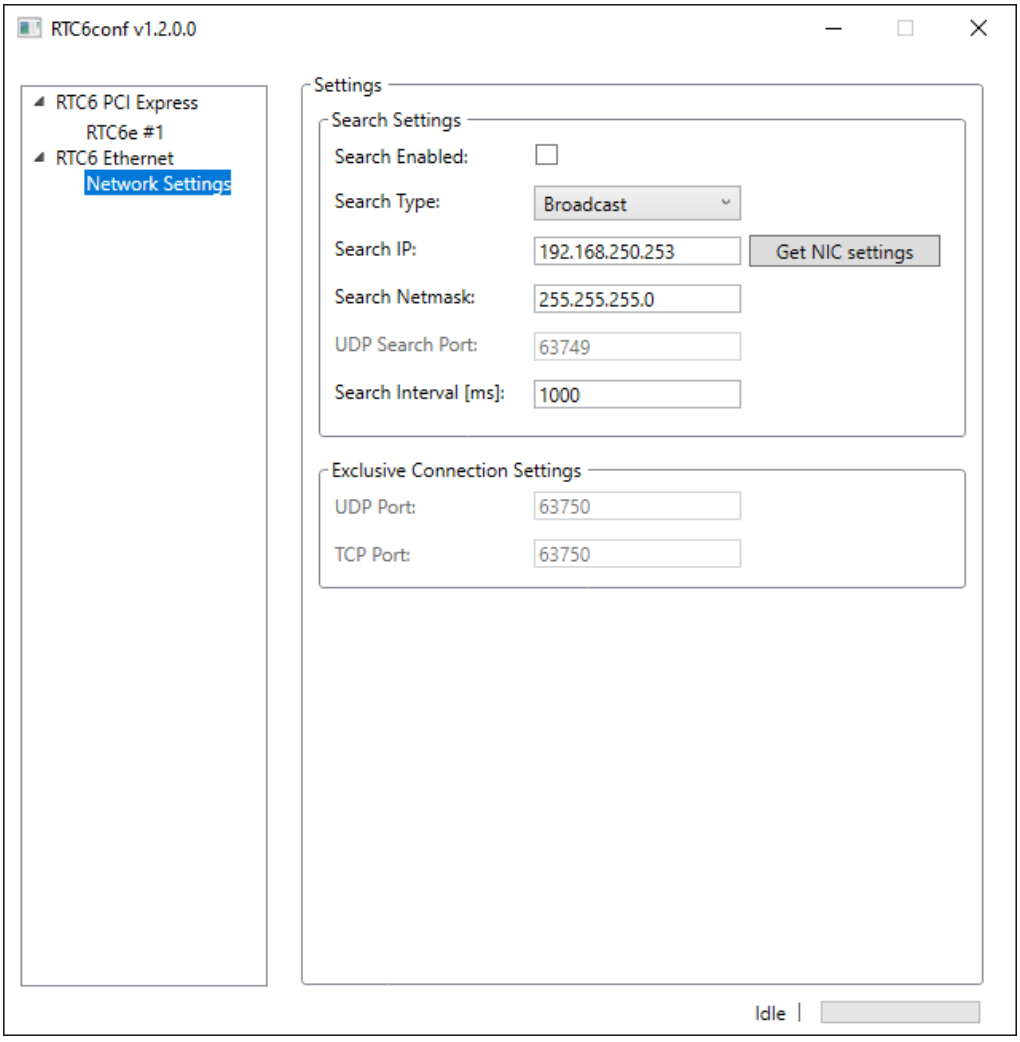


Figure 2: RTC6eth Network Settings

2.2 Board Settings

When an RTC6eth board is selected in the tree view, its corresponding information is shown on the right-hand side of the dialog. Buttons are provided to upgrade the feature options (“UPGRADE OPTIONS”), to flash the BIOS (“FLAS BIOS”) and to erase the standalone program/data (“ERASE SA MEMORY”).

An additional section displays network parameters and settings. Here you can set a static IP address configuration, consisting of the IP address, corresponding netmask and an optional gateway address. If the gateway address is zero, no gateway is used.

Click “STORE SETTINGS” to save the parameters permanently. A reboot of the board is necessary afterwards. If supported by the current firmware version, a dialog box opens to ask if an automatic reboot should be performed. Otherwise, the RTC6eth board must be power cycled manually. Make sure the jumper “FORCE DHCP” on the RTC6eth board is set correctly.

The inputs fields for the network ports are currently disabled and will be available in a future release.

