

RouterBOARD 493G

Quick Setup Guide and Warranty Information

Assembling the Hardware

- Insert the MiniPCI cards. RouterBOARD 493G provides three MiniPCI slots.
- Install the board in a case
- Connect antenna cables to the MiniPCI cards. Avoid powering the device with no antenna attached to the miniPCI, it can damage the cards.
- Connect other peripherals and cables. Close the case.
- Plug in power cable or PoE cable to turn on the board.

Powering

The board accepts powering from the power jack, or from the LAN1 Ethernet port:

- direct-input power jack **J1** (5.5mm outside and 2mm inside diameter, female, pin positive plug) accepts 9..28 V DC (overvoltage protection starts at 28.5V-29V).
- LAN1 Ethernet port **J604** accepts 9..28 V DC input (at the board; higher voltage is needed to compensate for power loss on long cables – at least 18V suggested) from non-standard (passive) Power over Ethernet injectors (no power over datalines). The board **does not** work with IEEE802.3af compliant 48V power injectors.

CAUTION: all power inputs are always active, but only one of them may be used at a time to avoid damage of equipment.

The maximum output of the power supply available for extension cards is normally 10W (3.0A).

Booting process

First, RouterBOOT loader is started. It displays some useful information on the onboard RS232C asynchronous serial port. The serial port is set by default to 115200bit/s, 8 data bits, 1 stop bit, no parity.

The RouterOS system will then load. It will be also indicated by two beeps.

Note that the device does not fully implement the hardware (RTS/CTS) flow control, so it is suggested to try to disable hardware flow control in the terminal emulation program in case the serial console does not work as expected, and if it does not help, make a new cable using the pinout given in the User's manual.

The loader may be configured to boot the system from the onboard NAND, and/or from network. See the respective section of User's manual on how to configure booting sequence and other BIOS parameters.

DHCP or BOOTP (configurable in loader) protocols allow the RouterBOARD RB493G to get an initial IP address, and provide the address of a TFTP server to download an ELF boot image from. It is especially useful for software installation.

See the User's manual for more information and protocol details. Note that you must connect the RouterBOARD you want to boot and the BOOTP/DHCP and TFTP servers to the same broadcast domain (i.e., there must not be any routers between them – they must be on the same Ethernet switch).

More information on connecting to the device for management:

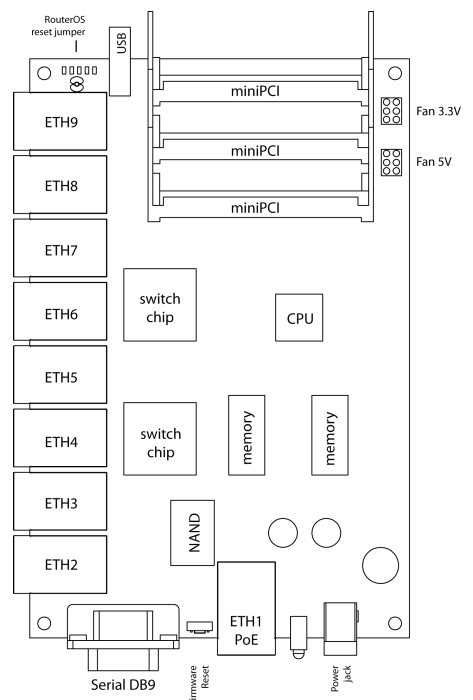
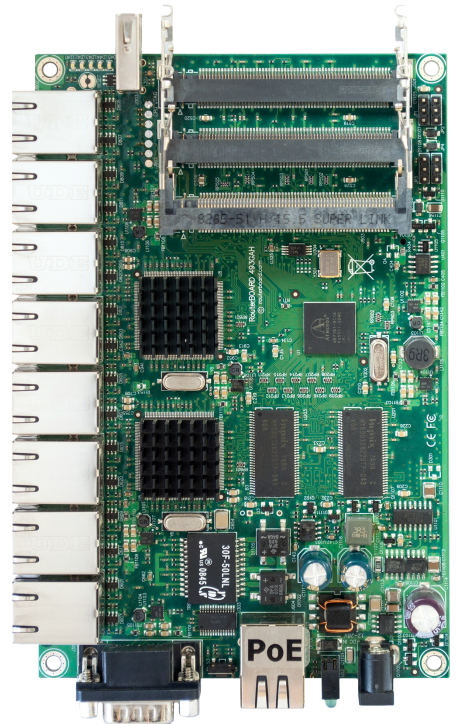
http://wiki.mikrotik.com/wiki/First_time_startup

Extension Slots and Ports

- Nine Gigabit Ethernet ports, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices. The first Ethernet port (marked with the "PoE" label and detached from the 8-port block) accepts 9..28 V DC powering from a passive PoE injector. The other eight Ethernet ports (placed as a block) **do not** support PoE powering.
- Three MiniPCI Type IIIA/IIIB ports with 3.3V power signaling.
- DB9 RS232C asynchronous serial port.

Operating System Support

Currently tested operating system is MikroTik RouterOS (starting from RouterOS version v4.10).



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Hardware. MikroTiks SIA warrants all RouterBOARD series equipment for the term of fifteen (15) months from the shipping date to be free of defects in materials and workmanship under normal use and service, except in case of damage caused by mechanical, electrical or other accidental or intended damages caused by improper use or due to wind, rain, fire or other acts of nature.

If you have purchased your product from a MikroTik Reseller, please contact the Reseller company regarding all warranty and repair issues, the following instructions apply **ONLY** if you purchased your equipment directly from MikroTik Latvia

To return failed unit or units to MikroTiks you must perform the following RMA (Return Material Authorization) procedure. Follow the instructions below to save time, efforts, avoid costs, and improve the speed of the RMA process. Take into account that all goods have one year warranty.

Instructions are located on our webpage here: <http://rma.mikrotik.com>

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