

Upgrade Memory on QNAP Turbo NAS (RAM Module Installation)



Warning:

- The following instructions should only be performed by an authorized and trained technician.
- Strictly adhere to the instructions to install a RAM module on the NAS. Failure to do so could result in injury to human body or death.

QNAP provides different RAM modules (optional purchase) for users to upgrade the memory of Turbo NAS. Follow the steps below to install an extra memory module on the NAS to upgrade the memory.



Choose your NAS model:

- [TS-x53 Pro, SS-x53 Pro, TS-651, TS-851, TS-x69 series \(2/4/5/6/8-bay\)](#)
- [TS-x69U-RP/SP series \(4/8/12-bay\)](#)
- [TS-879U-RP, TS-1279U-RP, TS-EC879U-RP, TS-EC1279U-RP, TS-1679U-RP, TS-EC1679U-RP, TS-870U-RP, TS-1270U-RP](#)
- [TS-251, TS-451](#)

TS-x53 Pro, SS-x53 Pro, TS-651, TS-851, TS-x69 series (2/4/5/6/8-bay)

Follow the steps below to install a RAM module on the NAS.

1. Turn off the NAS. Disconnect the power adaptor, network cable(s), and any other connectors or cables from the NAS.
2. Before installing the memory module, put on an antistatic wrist strap to prevent electrostatic discharge. The crocodile clip should be connected to the ground.
3. Loosen the three screws on the rear of the NAS.



4. Remove the case cover of the NAS gently.



5. Locate the memory slot. Make sure the slot is empty.

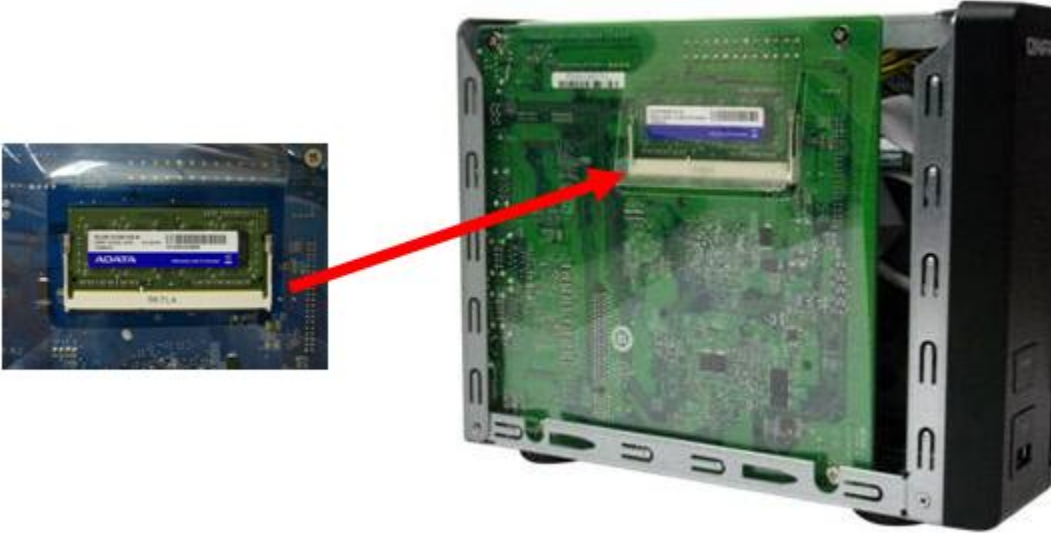
Note: For TS-x53 Pro, SS-x53 Pro, TS-651 and TS-851 models, always ensure that a memory module is installed in the Primary slot (red). If not, then the system will fail to start. When installing two memory modules, please ensure that they are the same size and ideally use the same type of RAM for both memory slots. The maximum supported memory is 8GB combined.



6. Grasp the edge of the memory module. Align the notch on the gold edge of the module with the notch in the memory slot. Slide the memory module to the slot at a 45-degree angle (approximately).



7. Gently press the memory module into the slot until it is seated fully.
8. Rotate the memory module towards the motherboard until the securing clips clicks into place.



9. Close the case cover and fasten the screws. Connect the power adaptor and cables back to the NAS.
10. To check that the memory module is recognized by the NAS, power up the NAS and login the web interface as an administrator. Go to "System Status" > "System Information" and check the total memory in "Hardware Information".

TS-x69U-RP/SP series (4/8/12-bay)

Follow the steps below to install a RAM module on the NAS.

1. Turn off the NAS. Disconnect the power adaptor, network cable(s), and any other connectors or cables from the NAS.
2. Before installing the memory module, put on an antistatic wrist strap to prevent electrostatic discharge. The crocodile clip should be connected to the ground.
3. Open the NAS.
 - a. TS-469U-RP/SP: Loosen the six screws on the top of the NAS.



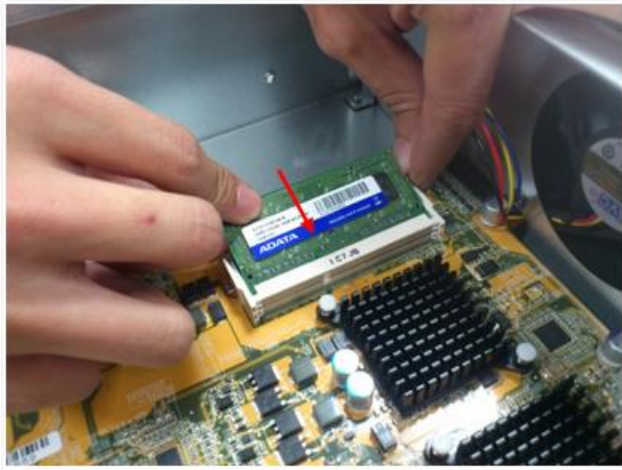
- b. TS-869U-RP and TS-1269U-RP: Loosen the two screws on the rear of the NAS.



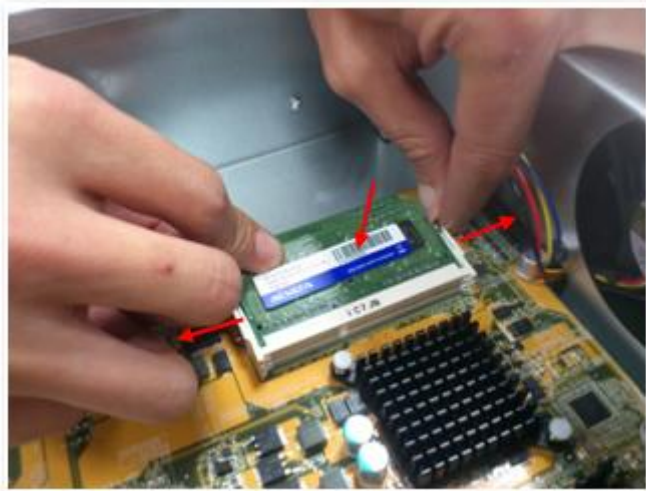
4. Open the NAS.



5. Slide the memory module to the slot at a 45-degree angle (approximately).



6. Press the memory module down while holding the clips open.



7. Make sure the memory module sits in properly with the clips in place.



8. Close the NAS cover and fasten the screws. Connect the power adaptor and cables back to the NAS.

TS-879U-RP, TS-1279U-RP, TS-EC879U-RP, TS-EC1279U-RP, TS-1679U-RP, TS-EC1679U-RP, TS-870U-RP, TS-1270U-RP

QNAP provides a 4GB DDR3* RAM module and a 4GB DDR3 ECC** RAM module (optional purchase) for users to upgrade the memory of the NAS. Insert an extra RAM module on the motherboard of the NAS to upgrade the memory. The total memory will be shown in "System Information" of the administration page.



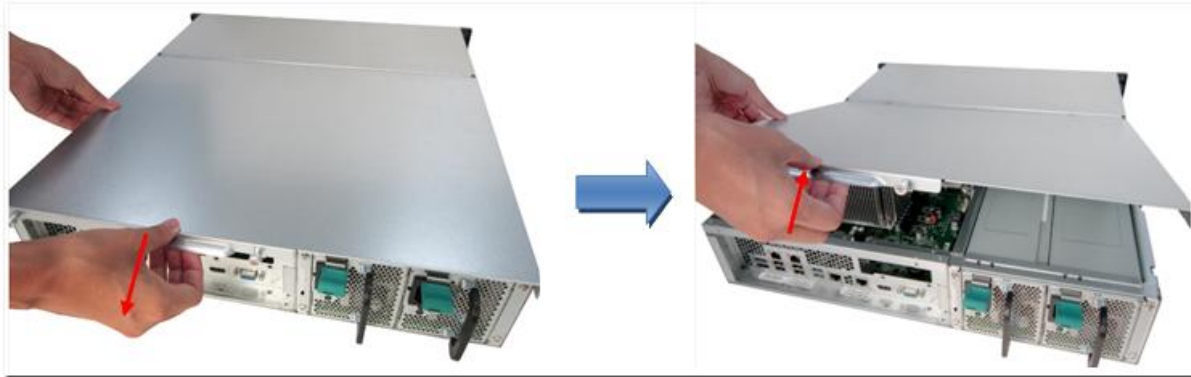
*Applied models: TS-879U-RP, TS-1279U-RP, TS-1679U-RP, TS-870U-RP, TS-1270U-RP.

**Applied models: TS-EC879U-RP, TS-EC1279U-RP, TS-EC1679U-RP.

1. Loosen the 2 screws on the rear of the NAS as shown in the illustration.



2. Hold the notch at the edge of the top cover. Remove the top cover in both hands.



3. Release the ejector clips gently by pulling them out of the sides of the RAM slot.



4. Grasp the edge of the RAM module. Align the notch on the gold edge of the RAM module with the notch in the RAM slot. Insert the RAM module to the RAM slot until it cannot go any further.



TS-251, TS-451

Follow the steps below to install a RAM module on the NAS.

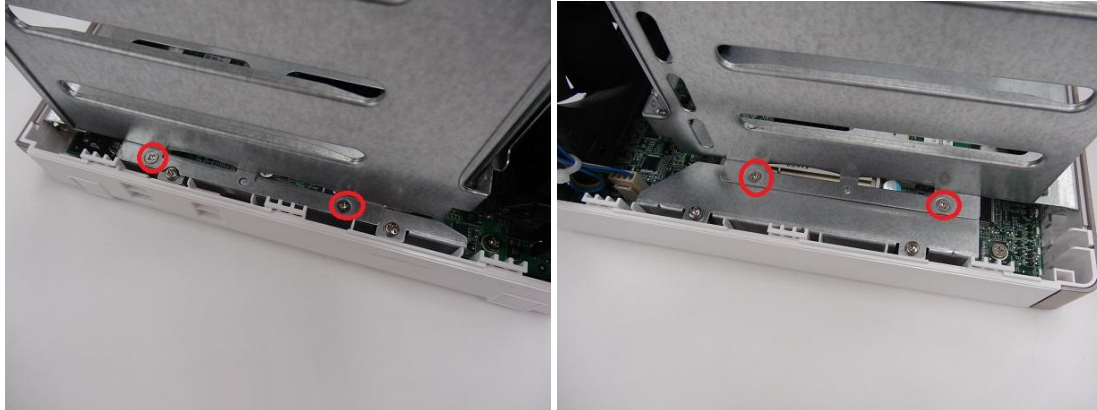
1. Turn off the NAS. Disconnect the power adaptor, network cable(s), and any other connectors/cables from the NAS.
2. Remove any installed hard drives from the NAS.
3. Before installing the memory module, put on an antistatic wrist strap to prevent electrostatic discharge. The crocodile clip should be grounded.
4. Remove the screws on the rear (top and bottom) of the NAS. If you have a 2-bay NAS, it will have **two** screws. A 4-bay NAS will **have** four.



5. Gently remove the case cover of the NAS by sliding it apart (see the underside of the NAS for visual indicators of the NAS case being locked/unlocked)



6. Remove the four inner screws (two on each side) of the hard drive cage.



7. If it is a 4-bay NAS, you will also need to remove two screws on the top of the hard drive cage.



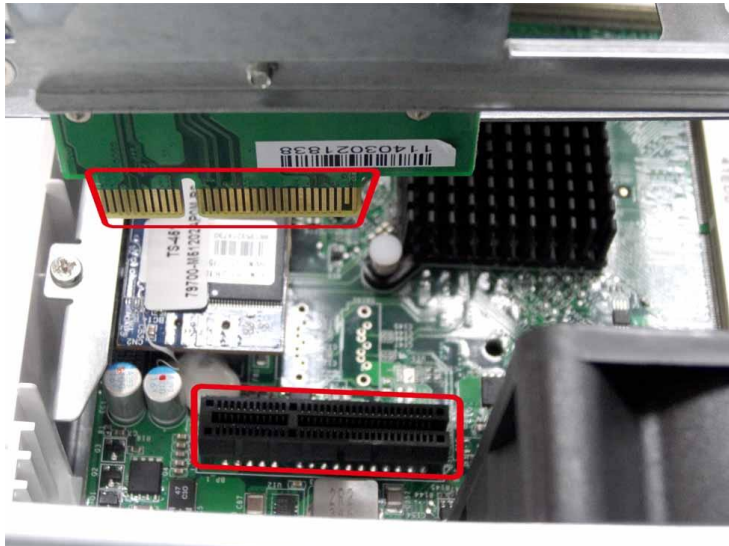
8. Gently remove the hard drive cage from the NAS by lifting it out of its slot.



9. **Always ensure that a memory module is installed in the Primary slot (red). If not, then the system will fail to start.** When installing two memory modules, please ensure that they are the same size and ideally use the same type of RAM for both memory slots. The maximum supported memory is 8GB combined.



10. Reattach the hard drive cage to the NAS. Please ensure that it correctly plugs into the slot.



11. Secure the hard drive cage by fastening the four inner screws (for the 4-bay NAS, please fasten the two additional top screws.) Then reattach the case cover of the NAS by gently sliding it back together.
12. Fasten the two/four screws onto the rear of the NAS.
13. Reinsert your hard drives to the NAS.
14. Connect the power adaptor and cables back to the NAS.

15. To check that the memory module is recognized by the NAS, power up the NAS and login the web interface as an administrator. Go to "System Status" > "System Information" and check the total memory in "Hardware Information".