



Warning

- The process of upgrading memory can potentially result in damage to the NAS and injury to the human body if not carried out correctly.
- Precisely follow the below procedures or arrange for a qualified engineer to upgrade the memory if you do not feel qualified to do so.

Upgrading Memory SOP for TS-470 & TS-470 Pro series

For purchasing memory, please contact your reseller/ agent or visit QNAP online shop: <http://shop.qnap.com>

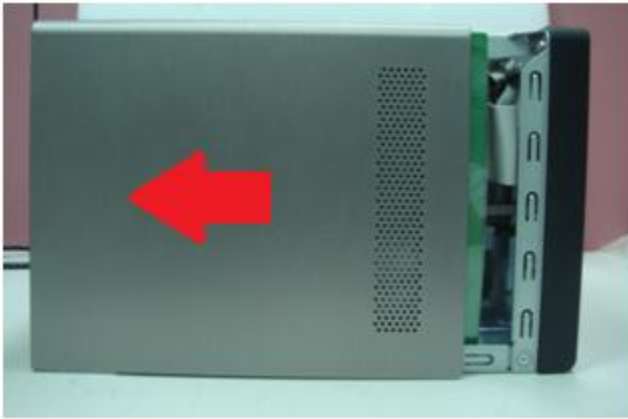
(Please note: use only the RAM module listed on the QNAP online shop. Use of any other RAM module on the NAS voids the NAS warranty.)

- A. Turn off the NAS. Remove the hard disks and disconnect the power adaptor, network cable(s), and every other connectors/ cables from the NAS.
- B. Due to the different screws used, please remember which screws match which components.
- C. Before installing the memory module, put on an antistatic wrist strap to prevent electrostatic discharge. The crocodile clip should be grounded.

1. Remove the three screws on the rear of the NAS.



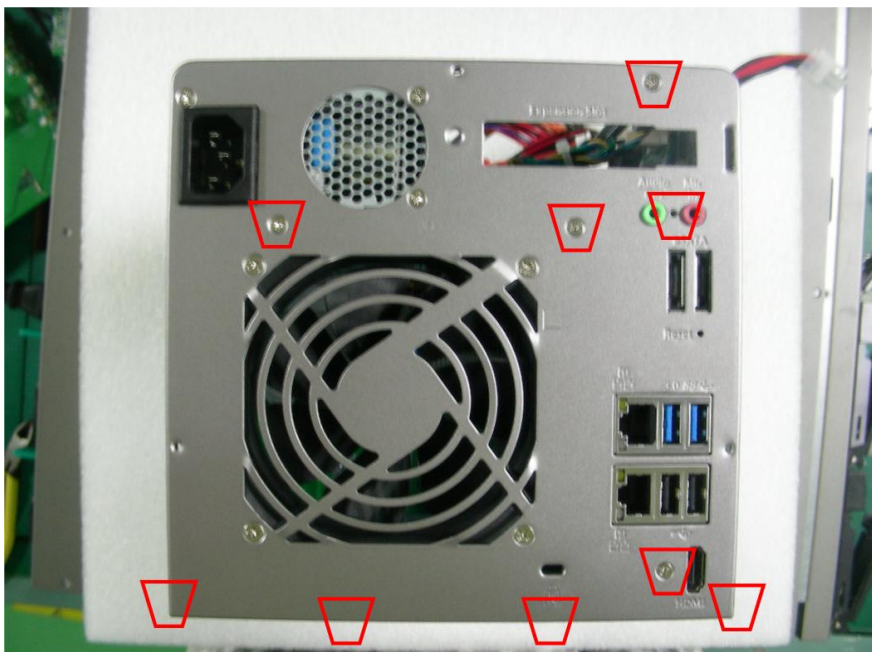
2. Gently remove the NAS case cover.



3. Disconnect the fan cables from the motherboard.



4. Remove the nine screws on the rear of the NAS.



5. Remove the two screws on the power supply.

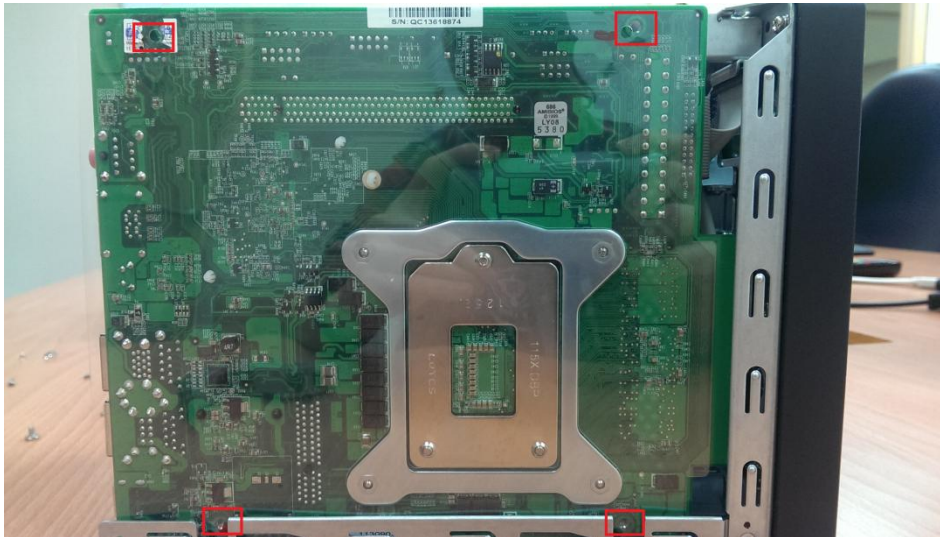


6. Remove the cable tie and disconnect the cable from back plane.



7. Remove the four screws on the motherboard. (When you loosen the top-left screw, it will void the warranty. However, if you correctly followed this guide to upgrading the memory, it will not affect your original warranty*.)

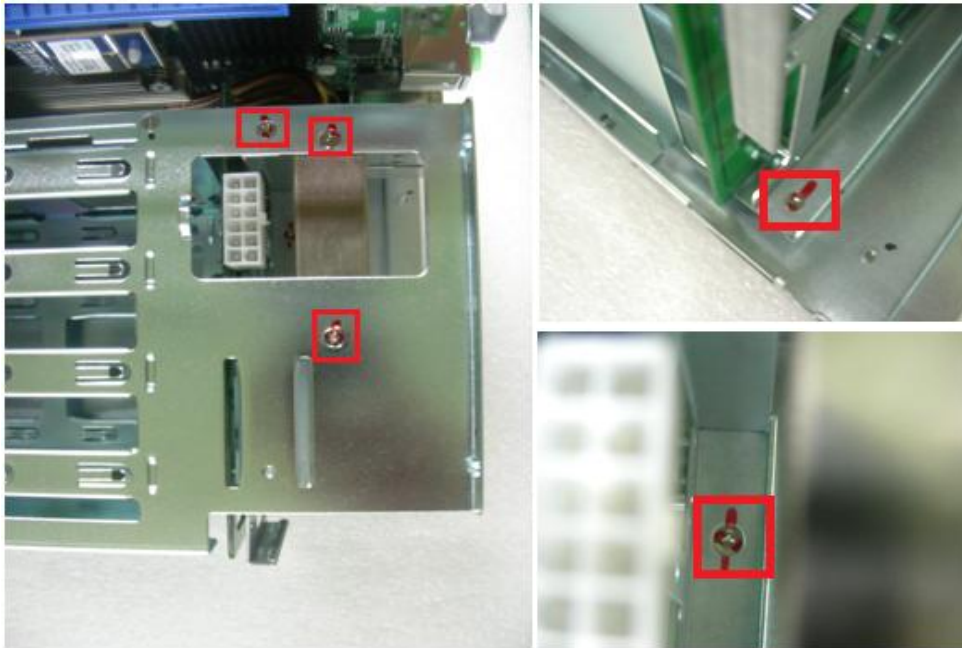
*During the process of upgrading memory, QNAP will disclaim any responsibility for product damage/malfunction if an external force damages the NAS and/or its internal components.



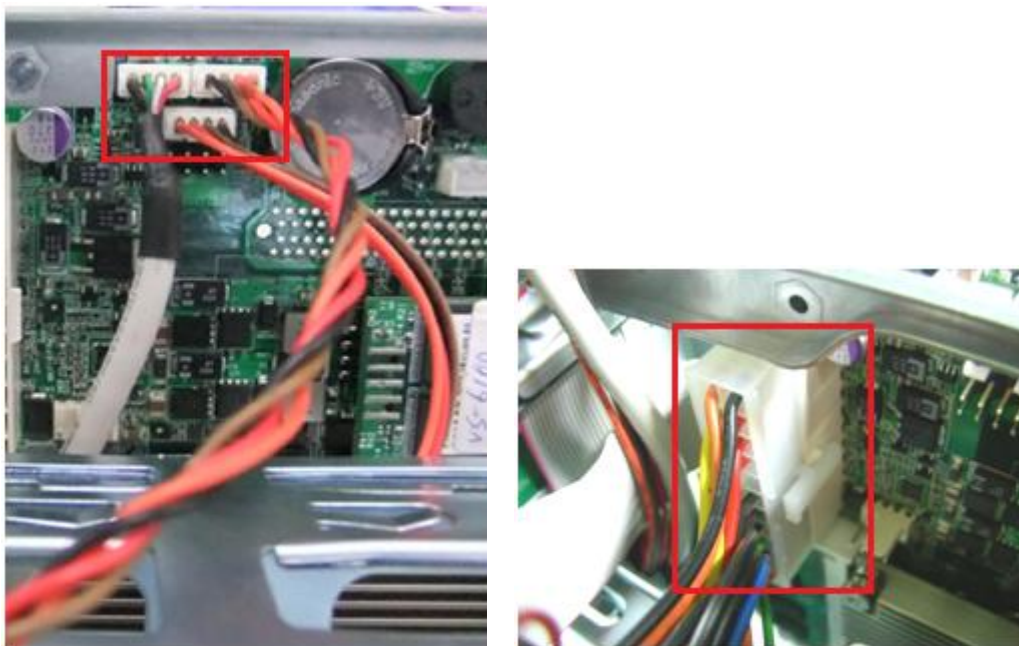
8. Remove the screw on the frame.



9. Remove the screws from the indicated areas and remove the back plane.



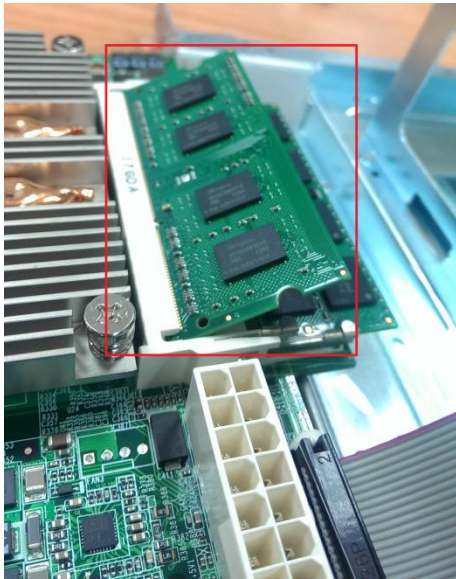
10. Disconnect all related cables from the motherboard. (Please note where the cables connect to for when you reassemble the NAS.)



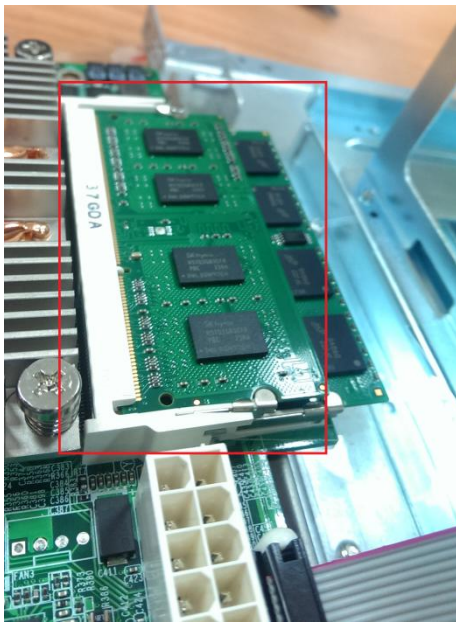
11. Gently lay down the motherboard and you will see the memory slots.



12. 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).

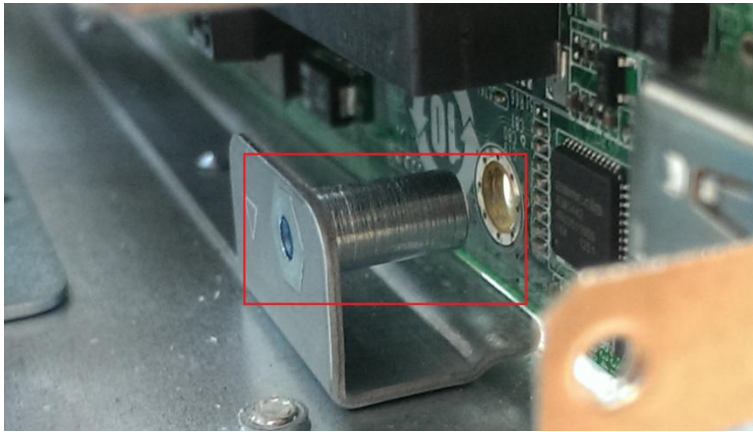


13. Gently press the memory module into the slot until it is seated fully.

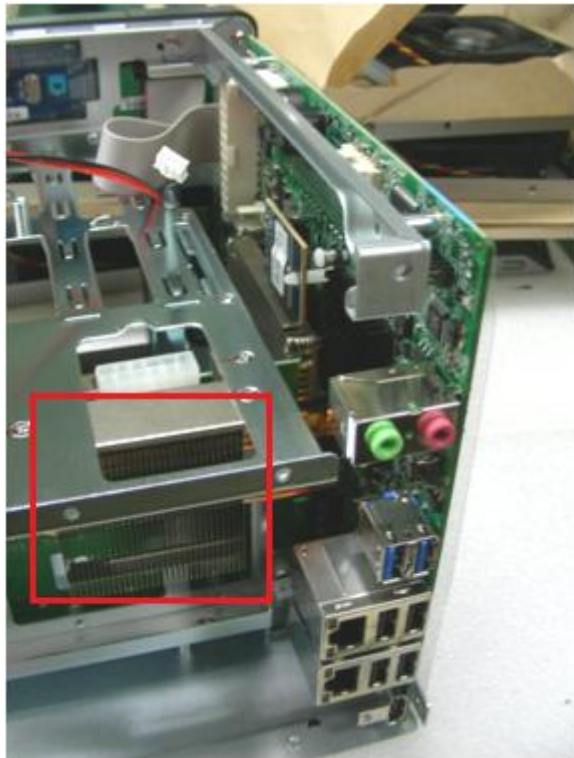


You have finished upgrading the memory. Now, please reverse this process to reassemble the NAS.

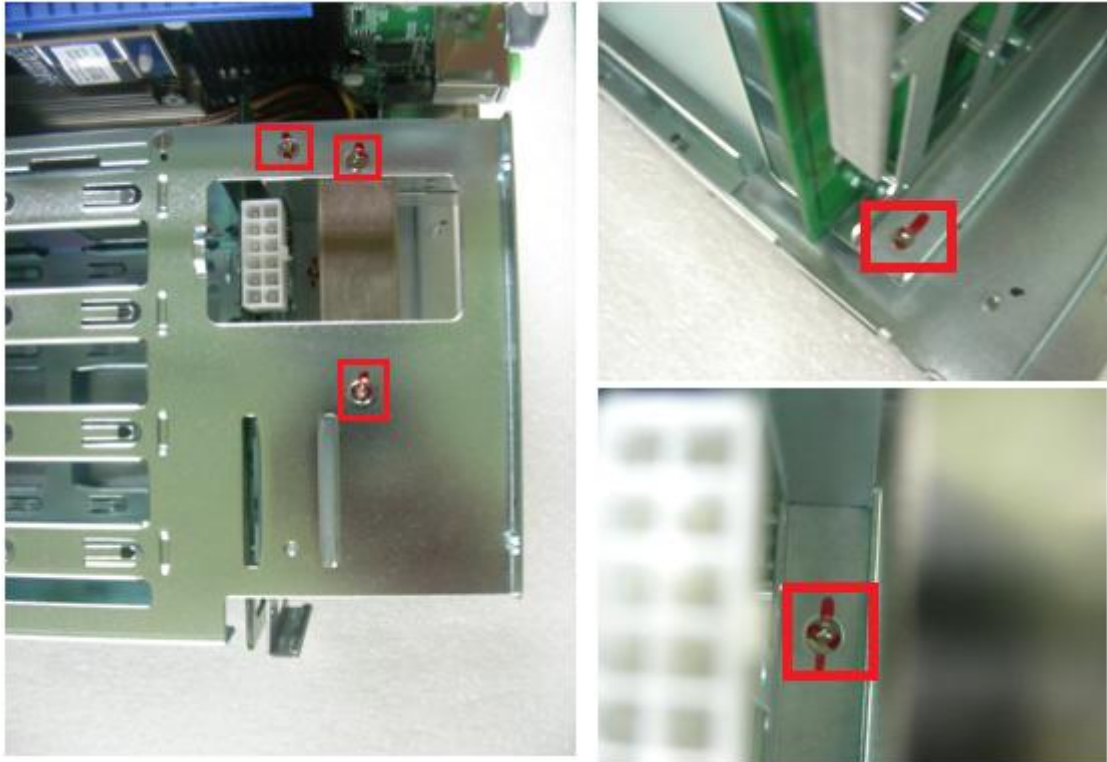
1. Please take care to not damage the motherboard when reassembling the NAS.



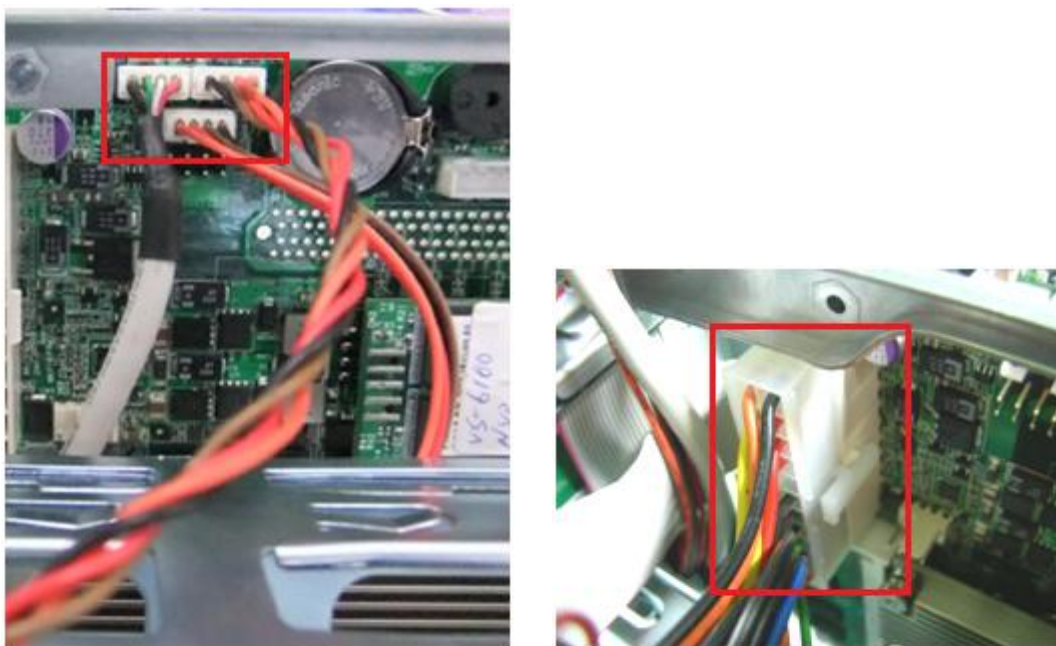
2. Please align the cooling fans first and fasten the screws.



- Put the back plane into the motherboard and fasten the screws on the highlighted areas.



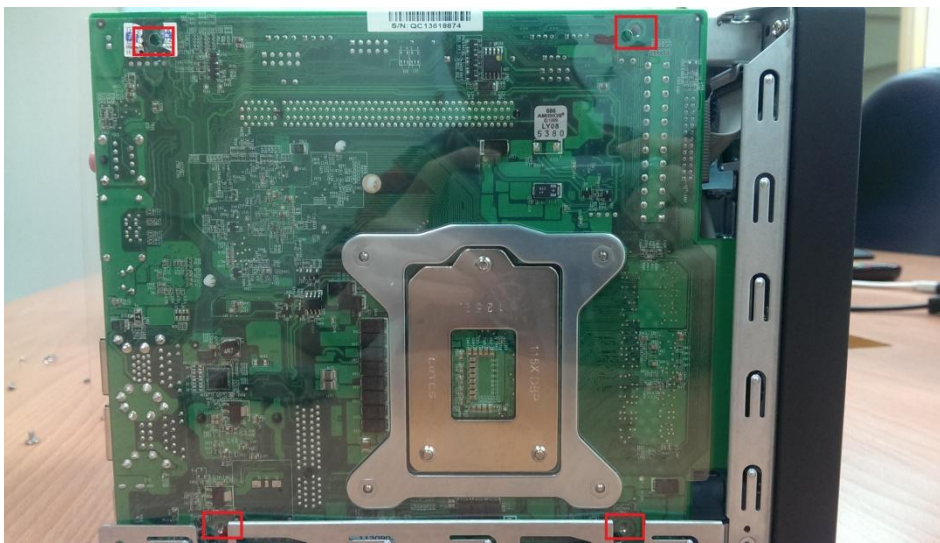
- Reconnect the cables to the motherboard. (Ensure that they are connected to their original locations. An erroneous connection may potentially cause product damage or malfunction.)



5. Fasten the screw on the frame.



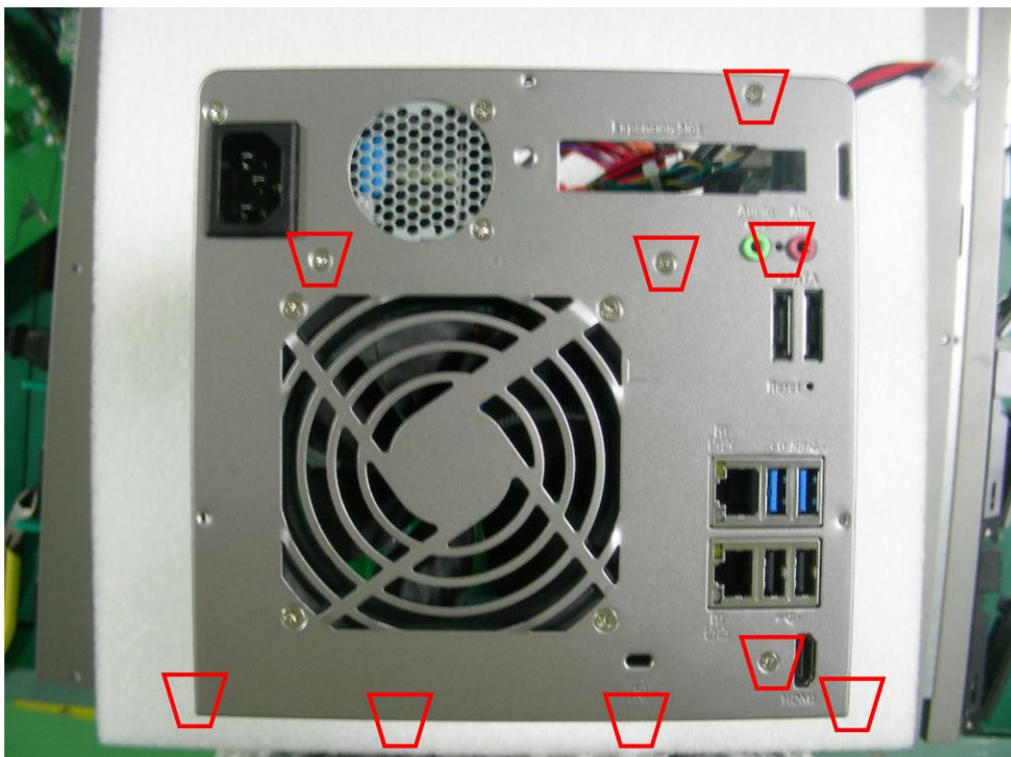
6. Fasten the screws on the motherboard.



7. Fasten the two screws on the power supply.



8. Fasten the nine screws on the rear of the NAS.



9. Close the case cover.



10. Fasten the screws on the case cover.



To check that the memory upgrade process was successful, power on the NAS and if you hear a “beep” it means that the upgrade was a success and the NAS will boot correctly. If not, you will have to power off the NAS and check that you reassembled the NAS correctly. Please check the compatibility of the memory modules with your NAS before attempting to install them.