



SYNOLOGY DS218 +: a complete disassembly in rules

Complete disassembly of the Synology DS218 + NAS.

Written By: Sébastien



© Anima Ex Machina

INTRODUCTION

Here's a step-by-step tutorial to dismount each piece of the NAS until you reach the motherboard.

'Note: the interest of this tutorial is however limited.'

Indeed, most of the components that a user can be brought to add or change are now accessible directly, without disassembly (storage disks, memory expansion).

Only one of the memory slot on the motherboard, BIOS battery, and the fan remain inaccessible directly and require the disassembly of the NAS described in this tutorial to be changed (whether they are HS or replace them not the best).

The dismantling time is estimated at one hour (a single experiment on the meter). That said, it is certainly achievable in 20/30 minutes.

The photographs were taken with an iPhone SE, using a portable LED studio.

A LEATHERMAN multi function clamp have been used for fun ...

TOOLS:

- [New Item \(1\)](#)

Step 1 — Presentation: the different faces of the case



- Here are the different interesting faces of the case: front (bay disks), rear (connectors and fan).
- This NAS DS218 + is equipped with 2 GB of RAM (6 GB max.), An INTEL Celeron J3355 64-bit Dual core processor, two bays for SATA drives.
- 1 x RJ45 Gb port.
- Kensington security incision (K-lock)
- 1 x port for power supply
- 3 x USB 3 ports (1 in front and 2 behind)
- 1 x eSATA port

Step 2 — Teardown : remove disk media



- nothing very hard ... remove the disk media by pressing "push" button.

Step 3 — Backplane and memory slot access



© Anima Ex Machina



© Anima Ex Machina

- 2 x SATA port
- Only the empty memory slot is reachable.
- The one used (memory slot) is not reachable. The case must be unmounted integraly to access to this memory slot (see step 13).

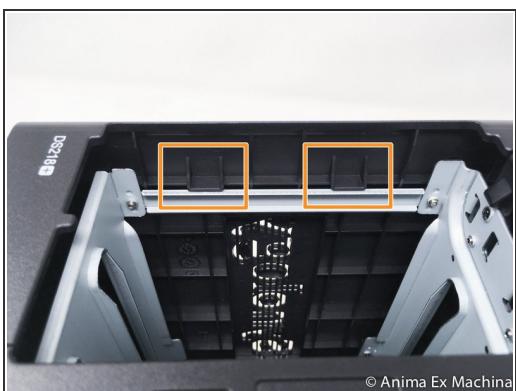
Step 4 — Case: removing the cover 1/2



© Anima Ex Machina

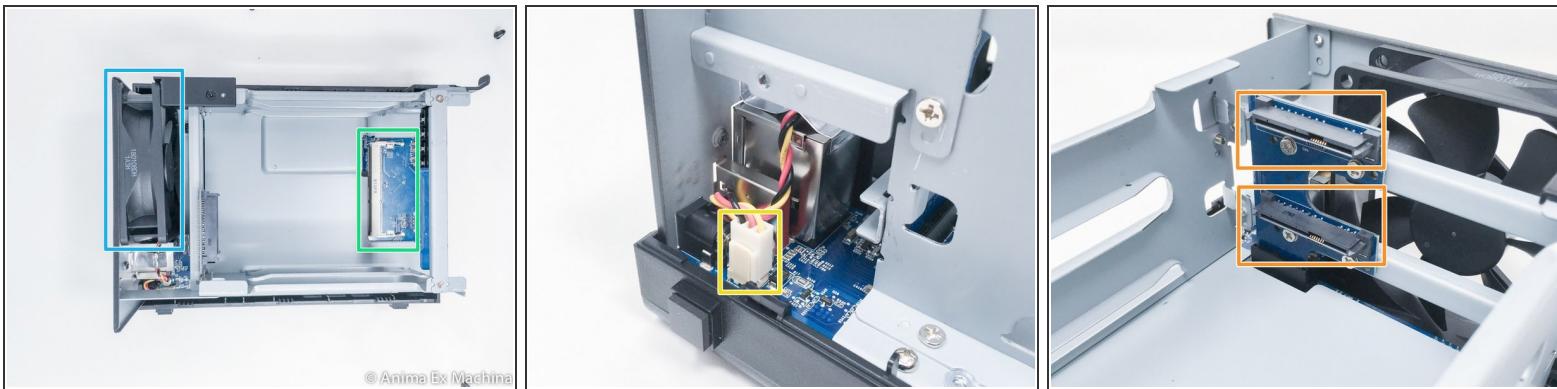
- Remove the screw on the back of the case next to Kensington incision.
- *(i)* Fan screws removal is not needed ...

Step 5 — Housing: cover removal 2/2



- Once rear screws removed ...
- there are two lock lugs (front panel left side) to unlock.
- Use a flat screwdriver to pry. Be careful not to twist the metal bar.
- Then slide the NAS in the direction of the length as in the photos.

Step 6 — Teardown: internal parts



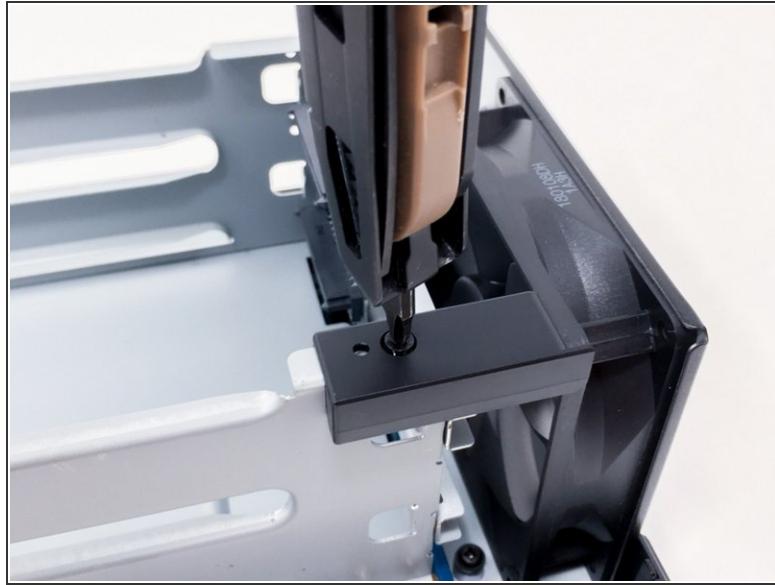
- in orange: internal SATA ports
- in yellow: fan connector
- in blu: fan
- in green: free (empty) memory slot

Step 7 — Teardown: spacer holding cage and case



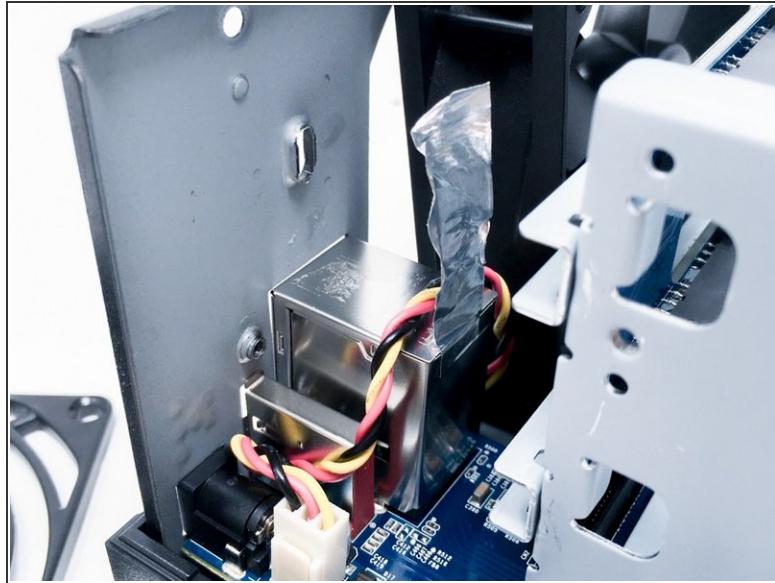
- simply unscrew the screw to remove the spacer.
- you will notice the guides (keying) to position the spacer.

Step 8 — Disassembly: spacer holding fan



- same as before ... unscrew the screw to remove the plastic spacer
- *(i)* you will also notice the keysters ...

Step 9 — Teardown: removal of the fan

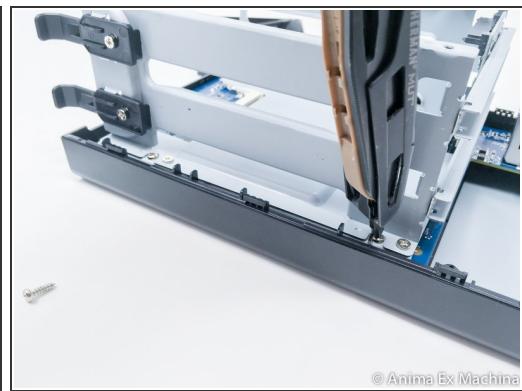
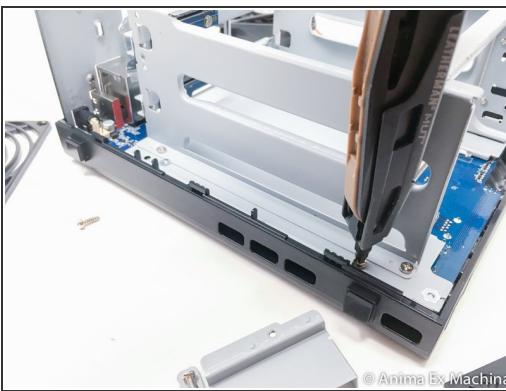


- the fan has been removed for the tutorial. This is not mandatory ... but better to have a little more room!

ⓘ Only the connector must be removed for disassembly

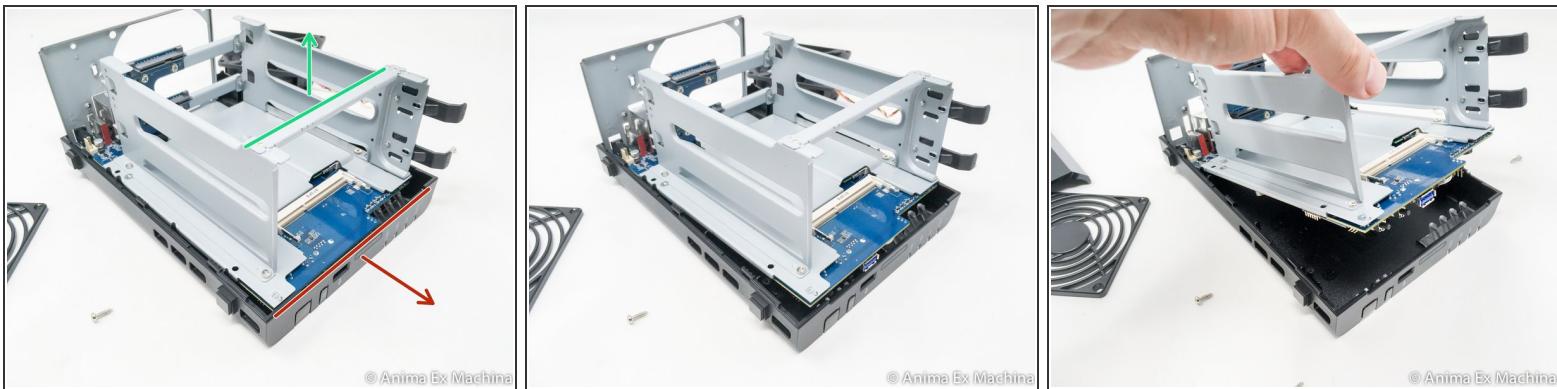
⚠ beware of the tape to take off before!

Step 10 — Teardown: removal of the motherboard 1/2



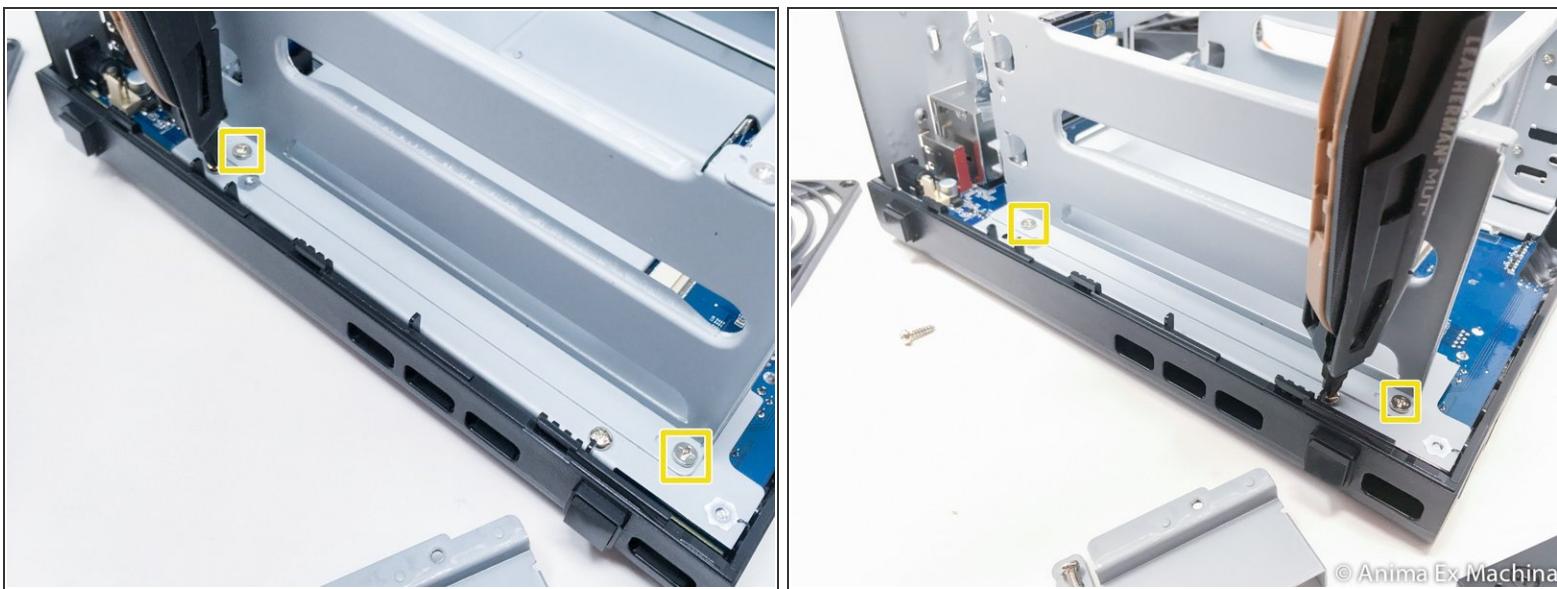
- to remove the motherboard from the box, unscrew the 4 screws as below ...

Step 11 — Teardown: removal of the motherboard 2/2



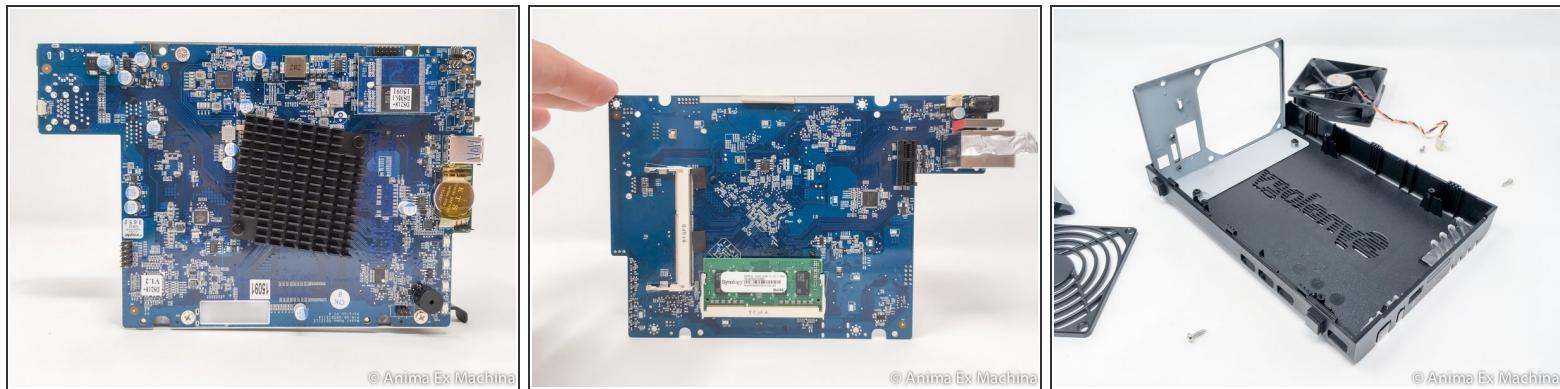
- once the screws are removed, pull the front slightly outwards ...
- (i)* This allows the front panel connectors to pass through.
- ... then lift up the motherboard by holding the disk cage.

Step 12 — Teardown: removal of the disk bay



- remove the screws marked in yellow (x4)
- (i)* no specific photographs ... nothing very complex!

Step 13 — Internal parts: case, motherboard



- 1 - motherboard (processor side)
- 2 - motherboard (memory side)
- 3 - empty case

Step 14 — Many thanks!



- photograph showing one of the phases of the NAS teardown.

To reassemble your device, follow the instructions in reverse order.