

How to Upgrade a regular Meteobridge “NANO” to a “NANO SD”

The upgrade is done in two or three simple steps. First you have to insert the microSD card into the NANO, then you have to update the NANO firmware if it has a firmware below version 1.3

Step 1: SD card insertion

Please notice that you will need an industrial grade microSD card in SLC technology and with a size of at least 1GB (2 GB recommended). Be prepared that such a microSD card will cost you around \$ 50. When you compare these costs with the hassle of loosing data and replacing consumer microSD cards after failure you should definitely not think twice and go with the industrial SLC ones. Tested and accepted SLC cards are:

- swissbit SFSD1024N1BM1TO-I-DF-221-STD (microSD Card, 1 GB, SLC Flash, -40°C - 85°C)
- swissbit SFSD2048N1BM1MT-I-ME-221-STD (microSD Card, 2 GB, SLC Flash, -40°C - 85°C)
- swissbit SFSD2048N1BM1MT-E-ME-221-STD (microSD Card, 2 GB, SLC Flash, -25°C - 85°C)
- ATP AF2GUDI (microSD Card, 2 GB, SLC Flash, -40°C - 80°C)
- Cactus KS2GRIT-803M (microSD Card, 2 GB, SLC Flash, -45°C - 90°C)

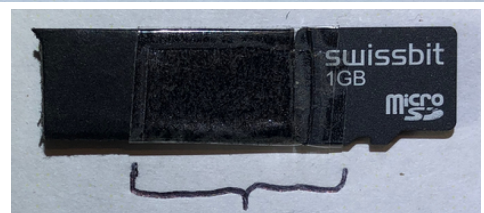
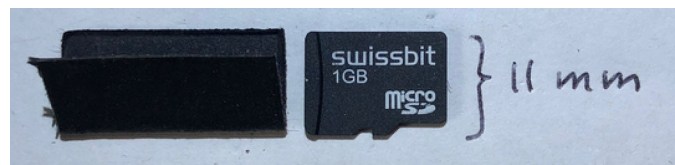
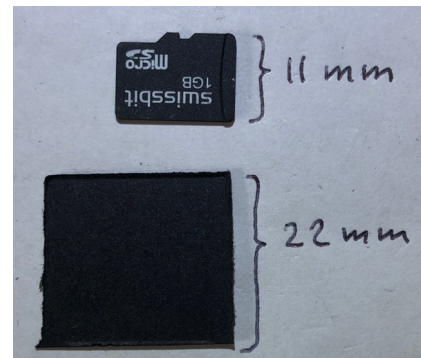
Currently operation of the NANO SD is limited to these models only!

The NANO has a rather hidden micro SD card slot between the VoCore2 CPU module and the base PCB. In order to get the microSD card inserted you need some tooling:

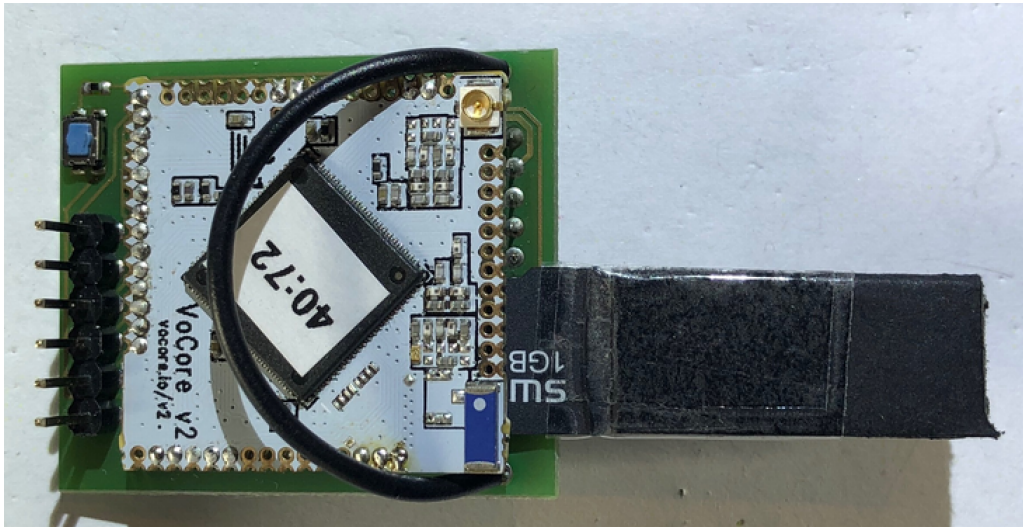
- card board in size 22 x 22 mm, about 0.5 mm thick, or a similar piece of paper
- transparent adhesive tape (like “tesa Film”)
- scissors

Insertion is done in these simple steps (or you can watch this youtube tutorial video https://youtu.be/O56lw3C3_T4):

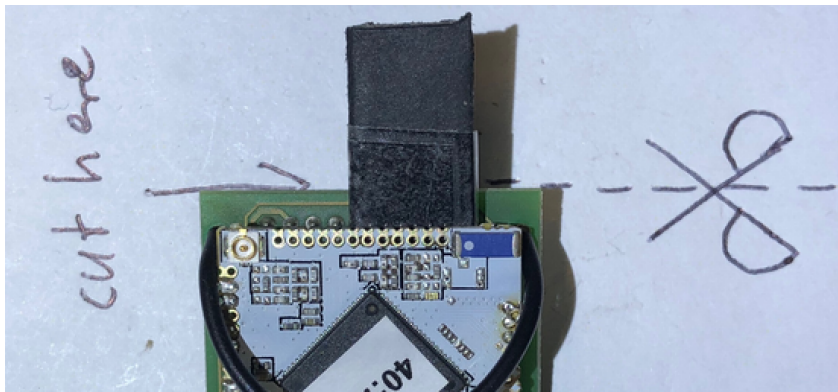
1. Console housing the NANO is powered down. NANO is pulled out with black strap.
2. As we need the cardboard to be about 1 mm thick, the cardboard is folded to a 22 x 11 mm piece. Folded cardboard does now fit the 11 mm width of the microSD card.
3. Cardboard and microSD card are positioned side by side but do not overlap. With the help of some adhesive tape the cardboard and the microSD card are fixed on that position. The adhesive tape does about two rounds (4cm) until it is cut off. Please notice that the tape is covering only the leading “s” of “swissbit” It should not go beyond that.



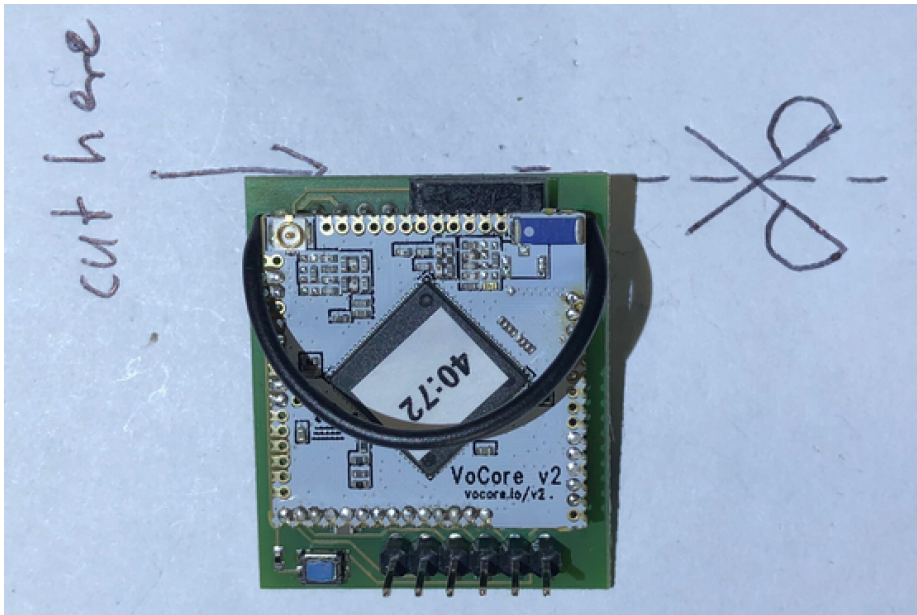
4. Now microSD card can be rather easily inserted into the NANO SD card slot. Position the SD card as shown in the picture below.



5. Insert the microSD card by gently pushing it into the NANO. You should feel it moving into the SD card socket. When done the SD card should have a firm seating and can be gently pulled out again. When you are sure you have inserted it correctly, cut off the overlapping cardboard.



6. Picture below shows how it should look in the end. The remaining cardboard that still connects with the SD card helps you to easily pull out the SD card if needed.



Step 2: Firmware Update

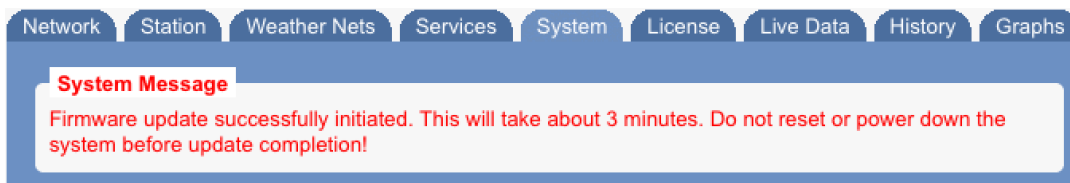
As with all firmware flashing there is a certain risk to brick the unit, when you have a power outage during the flashing process for example. We don't give any guarantee that flashing will work, but as you are willing to pimp your NANO yourself, you have already decided to be fearless ;-)

When you insert the NANO into the console and power the console again, you can check on "System" tab if a firmware update is needed. If you already have version 1.3 or newer you can skip over to step 3.

If a firmware update is needed you will see an "FW update" button next to the firmware version information.



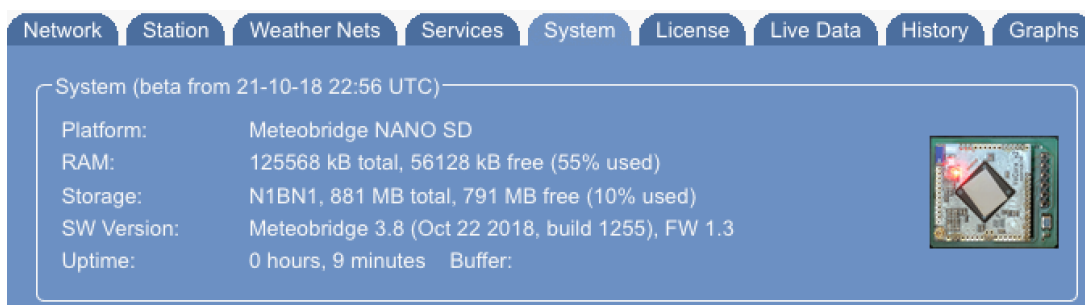
To update firmware please press "FW update" button and confirm the pop-up dialog.



About three minutes later the NANO will show up as a "NANO SD" and you are done.

Step 3: Test

Insert the NANO back to the console and power up the console again (if you have not already done that in step 2). When you reach out for the NANO "System" tab you should now see that it is a "NANO SD" and provides an additional line for showing available storage.



Congratulations, you have pimped your NANO to a "NANO SD"! Enjoy...