

Bitmain has closed the ability to install third-party firmware starting from March 2024, you need to downgrade the factory firmware to an earlier version in order to install the VNISH firmware

For the L7 and 19 series you can download an SD bitmain recovery image for the required miner model and control board type (Xilinx, amlogic, BB, cvitek) from **our website**: <https://vnish-firmware.com/en/bitmain-firmware-stock/> and then use the **VNISH TOOLKIT** to flash without an SD card directly to NAND. For the 21series, this archive contains a bitmain recovery image from S21,T21 from February 2024, which is flashed through a vnish toolkit. For the S21pro, S21imm models in the archive, you must use the image from S21

1. You must use a flash drive or SD card with a capacity of up to 16GB and must format it in FAT32 format. It is not recommended to use an SD card with an OTG adapter for AMLOGIC control boards instead of a flash drive .
2. Unpack the archive for your type of control board into the root of the flash drive (SD card).
3. Connect an SD card or OTG adapter with a flash drive to the turned off miner .
4. Turn on the power of the miner and wait for the green LED on the front panel to light up (and remain constantly lit) miner This will mean that the firmware process was completed successfully. This process takes no more than one minute.
5. Turn off the power of the miner and remove the SD card or OTG adapter with a flash drive from the control board.
6. Turn on the power of the miner and wait for it to load, then use **VNISH TOOLKIT** following the manual located in the archive with utility in step 5, you need to choose manually in the field "**MINER MODEL** " indicate the model of your miner . If the required model is not available, then you must leave **DETECT AUTOMATICALLY** and the firmware for S21 will be installed. In this case, you will need to additionally update via the Web interface with the Vnish firmware for your model and type of control board by downloading from the METHOD section: NAND "download Update"

Official Vnish firmware: <https://vnish-firmware.com/en/>